NextEra Blythe Solar Energy Center, LLC

California Energy Commission
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April 11, 2013

Mary Dyas
Compliance Project Manager
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814-5512

Re: NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC's REVISED PETITION TO AMEND - CONVERSION TO PV BLYTHE SOLAR POWER PROJECT DOCKET NO. (09-AFC-6C)

Dear Ms. Dyas,

NextEra Blythe Solar Energy Center, LLC (NextEra Blythe Solar), a wholly owned subsidiary of NextEra Energy Resources, LLC is the current owner of the Blythe Solar Power Project (BSPP). A Petition to Amend (PTA) the BSPP for conversion to photovoltaic (PV) technology was submitted to the CEC on June 28, 2012 by Palo Verde Solar I, LLC, the then current owner (09-AFC-6C). Since the time of that submittal NextEra Blythe Solar acquired the BSPP and has been working to refine the design of the project and revise the PTA consistent with its objectives for the site.

NextEra Blythe Solar hereby submits twelve (12) hard copies and six (6) CDs of this Revised PTA to convert the BSPP from concentrating solar thermal to photovoltaic electrical generating technology. The original PTA was, and this Revised PTA is, filed pursuant to California Public Resources Code Section 25500.1.

In order to facilitate CEC review a "redlined" and a "clean" version of the Revised PTA are included. NextEra Blythe Solar recommends that CEC Staff focus their review on the "clean" version; however, as needed, the "redlined" version will enable the CEC to easily see where NextEra Blythe Solar has modified the original PTA. The Revised Petition provides a complete description of the Modified Project, compares potential environmental impacts between the Modified Project and the Approved Project, and proposes modifications to the Conditions of Certification to reflect the change in project design and reduction in potential impacts.

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.

Sincerely,

Gregory Schneck
Vice President

BLYTHE SOLAR POWER PROJECT

REVISED PETITION FOR AMENDMENT

Submitted by:

NextEra Blythe Solar Energy Center, LLC

Submitted to:

California Energy Commission

April 2013

Prepared by: TETRA TECH WorleyParsons resources & energy AECOM

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ABBREVIATIONS AND ACRONYMS

°C	degrees Celsius
°F	degrees Fahrenheit
AC	alternating current
ACC	air cooled condenser
AF	acre-feet
AFB	Air Force Base
AFC	Application for Certification
AFY	acre-feet per year
AO	Authorized Officer
Applicant	NextEra Blythe Solar
BLM	Bureau of Land Management
BMP	Best Management Practices
BMSP	Blythe Mesa Solar Project
BSPP	Blythe Solar Power Project
CAISO	California Independent System Operator
CARB	California Air Resources Board
CDCA	California Desert Conservation Area
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CdTe	cadmium telluride
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CNDDB	California National Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COC	Condition of Certification
Commission	California Energy Commission
CPM	Compliance Project Manager
CRMMP	Cultural Resources Mitigation and Monitoring Plan
CRS	Colorado River Substation
CRS	Cultural Resource Specialist
CSP	concentrating solar thermal collection
CY	cubic yard
DAS	data acquisition system
DC	direct current
DDWW	desert dry wash woodland
DEIS	Draft Environmental Impact Statement
DESCP	Drainage, Erosion, and Sediment Control Plan
DHS	Department of Health Services
DPM	diesel particulate matter
EAP	Emergency Action Plan
EDI	electrodeionization

EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FERC	Federal Energy Regulatory Commission
gen-tie	generation tie line
GHG	greenhouse gas
gpd	gallons per day
gpm	gallons per minute
hp	horsepower
HRA	health risk assessment
HTF	heat transfer fluid
I-10	Interstate 10
kV	kilovolt
LGIA	Large Generator Interconnection Agreement
LORS	Laws, Ordinances, Regulations, and Standards
M	meter
MDAQMD	Mohave Desert Air Quality Management District
MFTL	Mohave fringe toed lizard
MSEP	McCoy Solar Energy Project
MW	megawatt
N_2O	nitrous oxide
NEPA	National Environmental Policy Act
NextEra Blythe Solar	NextEra Blythe Solar Energy Center, LLC
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
OEHHA	Office of Environmental Health Hazard Assessment
O&M	operations and maintenance
PA	Plan Amendment
PCS	Power Conversion Station
PEIS	Programmatic Environmental Impact Statement
PER	Programmatic Environmental Report
PM_{10}	particulate matter of 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PPA	Prehistoric Project Archaeologist
PPE	personal protective equipment
PQAD	Prehistoric Quarries Archaeological District
PSPP	Palen Solar Power Project
PTA	Petition to Amend
PV	photovoltaic
PVSI	Palo Verde Solar I, LLC
RCALUC	Riverside County Airport Land Use Commission
REAT	Renewable Energy Action Team
ROD	Record of Decision
ROG	reactive organic gas
ROW	right-of-way
ROWD	Report of Waste Discharge

RRG	Renewable Resources Group
RSEP	Rice Solar Energy Project
RWQCB	Regional Water Quality Control Board
SA	Staff Assessment
SCADA	Supervisory Control and Data Acquisition
SCE	Southern California Edison
SEZ	Solar Energy Zone
SF_6	sulfur hexafluoride
SUT	step-up transformer
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VMT	vehicle mile traveled
WBO	Western burrowing owl
WDR	Waste Discharge Requirements
WIL	Wildlife Investigations Lab

Section 1 INTRODUCTION

1.1 BACKGROUND

NextEra Blythe Solar Energy Center, LLC (NextEra Blythe Solar), a wholly owned subsidiary of NextEra Energy Resources LLC, is the current owner of the Blythe Solar Power Project (BSPP). A Petition to Amend (PTA) the BSPP for conversion to photovoltaic (PV) technology was submitted to the California Energy Commission (Commission or CEC) on June 28, 2012. This document is a revision to the June 28 PTA.

NextEra Blythe Solar files this revised PTA to convert the electrical generating technology from concentrating solar thermal collection (CSP) and steam turbine technology of the BSPP to PV solar technology. Throughout this document, the 1,000 megawatt (MW) solar thermal project is referred to as the "Approved Project" and the PV project is referred to as the "Modified Project." The BSPP is located at 1000 Dracker Drive, Blythe, California 92225 in Riverside, California, on land administered by the Bureau of Land Management (BLM). The project will be located within the boundaries of the previously issued Right-of-Way (ROW) Grant (CACA 048811). The proposed project site is located 8 miles west of Blythe, California and 3 miles north of Interstate 10 (I-10). Current access to the site is from Exit #232, Airport/Mesa Drive on I-10 via Mesa Drive Road. The BSPP site is located within the Palo Verde Area Plan of Riverside County.

Palo Verde Solar I, LLC (PVSI) submitted an Application for Certification (AFC) for the BSPP to the Commission on August 24, 2009 (09-AFC-6). In 2008, PVSI's predecessor-in-interest filed a 299 ROW Grant Application with the BLM to develop the BSPP on public lands. Consistent with a Memorandum of Understanding between the BLM and the CEC, the agencies prepared a joint environmental compliance document to address the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) for the BSPP. Specifically, a Staff Assessment/Draft Environmental Impact Statement (SA/DEIS) was prepared and was circulated for agency and public review and comment between March 19, 2010, and June 17, 2010. The BLM and the CEC prepared separate final documents for compliance with NEPA and CEQA, respectively. The CEC issued its Final Decision on September 15, 2010. The BLM published the Plan Amendment/Record of Decision (PA/ROD) on October 22, 2010 and issued the ROW Grant on November 4, 2010.

The Final Decision allowed the BSPP to be constructed in phases. PVSI obtained a Notice To Proceed for construction of Phase 1A of the BSPP on November 4, 2010 and immediately began construction. PVSI continued construction of portions of Phase 1A until August 2011. On August 25, 2011, PVSI sent a letter to the Commission and to BLM outlining that it would cease construction activities on the BSPP site and would seek to amend the ROW Grant and the Final Decision to allow construction and

operation of PV technology on the site. This letter outlined maintenance activities that would continue on site to ensure site security and prevent off-site environmental impacts. The BLM and Commission approved a maintenance plan and associated activities on September 8, 2011. PVSI maintained the site until the project was sold to NextEra Blythe Solar. In September 2012, NextEra Blythe Solar received CEC/BLM approval of a revised maintenance plan, and in December 2012 NextEra Blythe Solar completed a key component of that plan which involved dismantling several miles of desert tortoise/silt fencing.

In November 2011, BSPP completed the acquisition of 858.5 agency-approved acres of off-site mitigation land – 89.5 acres more than the 769 acres required for Phase 1A per Condition of Certification (COC) BIO-28.

1.2 ORGANIZATION OF THIS PETITION

This section provides an introduction to the project, discusses the authority for the Commission to exercise jurisdiction over this Petition, outlines the purpose and need of the Petition, and outlines the benefits from the BSPP after modification.

Section 2 of the Petition describes the modifications proposed to convert the BSPP to PV technology as well as the modifications to the project footprint.

Sections 3, 4, 5, and 6 contain analysis of the proposed modifications comparing the potential environmental impacts from the modified PV configuration to the potential environmental impacts of the original project as approved in the Commission Final Decision. These sections also include an update of laws, ordinances, regulations or standards applicable to the PV configuration where applicable. Where appropriate each technical section proposes modifications to the Conditions of Certification contained in the Commission Final Decision.

Section 7 discusses any potential effects on nearby property owners.

Section 8 contains conclusions and recommended findings for Commission consideration.

1.3 LEGISLATIVE CHANGES TO COMMISSION JURISDICTION

On October 4, 2011, the Legislature passed and the Governor signed into law SB 226 (Simitian). SB 226 added Section 25500.1 to the Public Resources Code which authorized the Commission to review and amend a License for a solar thermal power plant to the use of PV technology. Section 25500.1 applied to projects that met certain requirements. The BSPP meets all of the requirements of Section 2550.1. In accordance with Section (d) of Section 25500.1, the Commission shall process a

petition submitted under this section pursuant to Section 1769 of Title 20 of the California Code of Regulations.

1.4 PURPOSE AND NEED FOR AMENDMENT

PVSI originally proposed the use of concentrating solar technology for the BSPP site. At the time, PVSI was owned by Solar Millennium AG, which had the rights to a particular type of HelioTrough design that it was attempting to develop in the United States. Well after the Commission issued its Final Decision in 2010, Solar Millennium AG filed insolvency proceedings in Germany. As discussed in Section 1.1 above, the BSPP has been acquired by NextEra Blythe Solar. NextEra Blythe Solar desires to convert the solar generation technology from CSP to PV. This information was not known or anticipated at the time the Commission issued its Final Decision.

1.5 PROJECT AMENDMENT BENEFITS

The BSPP site has received a Commission Final Decision and a BLM ROW Grant. The Amendments proposed in this Petition provide an opportunity to deliver up to 485 MW of renewable power to Californians without the need to permit a new site. In addition, as described in this Petition the use of PV technology reduces the visibility of the project by significantly reducing the project footprint, removing four power blocks and associated 120-foot tall cooling towers, reducing the overall height of the solar collectors by approximately 15 feet, and removing heat transfer fluid (HTF) from the system. The use of a previously permitted site as reconfigured to further lessen environmental impacts with an approved Large Generator Interconnection Agreement (LGIA) is a responsible approach to helping California achieve its Renewable Portfolio Standards and beyond.

1.6 SCOPE OF ANALYSIS

Pursuant to Public Resources Code Section 25500.1, the Commission should process this Petition in accordance with Section 1769 of its regulations and the well-established principles of practice the Commission has followed when processing other petitions. This Petition has been prepared in accordance with those principles, focusing on comparing the modifications proposed herein to the Approved Project as described in the Commission Final Decision.

1.7 UPDATES TO THE PROJECT'S CUMULATIVE SCENARIO

A Cumulative Scenario for the Project was established during the SA of the BSPP and ultimately incorporated in the Final Commission Decision, and included a list of existing and future foreseeable projects in the vicinity of the Project. As part of this Amendment effort, a search was performed for new reasonably foreseeable future projects with the potential to increase the cumulative impacts described in the Commission Decision. It should be noted that the Area of Potential Effect varies among resource areas and, as

such, no standardized area was analyzed. A search of Riverside County and City of Blythe available permit filings has not revealed any additional projects that were not already included in the original Cumulative Impact analysis included in the BSPP Final Decision.

Section 2 DESCRIPTION OF PROJECT AMENDMENT

This section provides a description of the proposed modifications to the BSPP. The Final Decision describes the BSPP as a nominally rated 1,000 MW solar thermal generating plant using four solar fields of concentrating parabolic trough mirrors and four power blocks. The Commission Final Decision includes a description of the linear facilities including a transmission line interconnecting to the Colorado River Substation (CRS), primary and secondary access roads, telecommunication facilities, and a natural gas pipeline. For convenience, the term "Approved Project" refers to the BSPP as described in the Commission Final Decision. The terms "Project Modifications", "Modified Project" or "Project" refer to the BSPP as proposed in this Petition.

2.1 GENERAL PROJECT DESCRIPTION

2.1.1 Description of Approved Project

The Commission issued a Final Decision for the BSPP, which included a description of the BSPP as a solar thermal generating facility that would consist of four adjacent, independent units of 250 MW nominal capacity each for a total nominal capacity of 1,000 MW. The Approved Project would have utilized solar parabolic trough technology to generate electricity. With this technology, arrays of parabolic mirrors collect heat energy from the sun and refocus the radiation on a receiver tube located at the focal point of the parabola. A HTF is brought to high temperature (750 degrees Fahrenheit [°F]) as it circulates through the receiver tubes. The HTF is then piped through a series of heat exchangers where it releases its stored heat to generate high pressure steam. The steam is then fed to a traditional steam turbine generator where electricity is produced. Individual components of the Approved Project included:

- Solar Field and Power Block #1 (northeast);
- Solar Field and Power Block #2 (northwest);
- Solar Field and Power Block #3 (southwest);
- Solar Field and Power Block #4 (southeast);
- Access road from and including upgraded portion of Black Rock Road to on-site office;
- Warehouse/maintenance building, assembly hall, and laydown area;
- Telecommunications lines;
- Natural gas pipeline;
- Concrete batch plant;
- Fuel depot;
- On-site transmission facilities, including central internal switchyard;

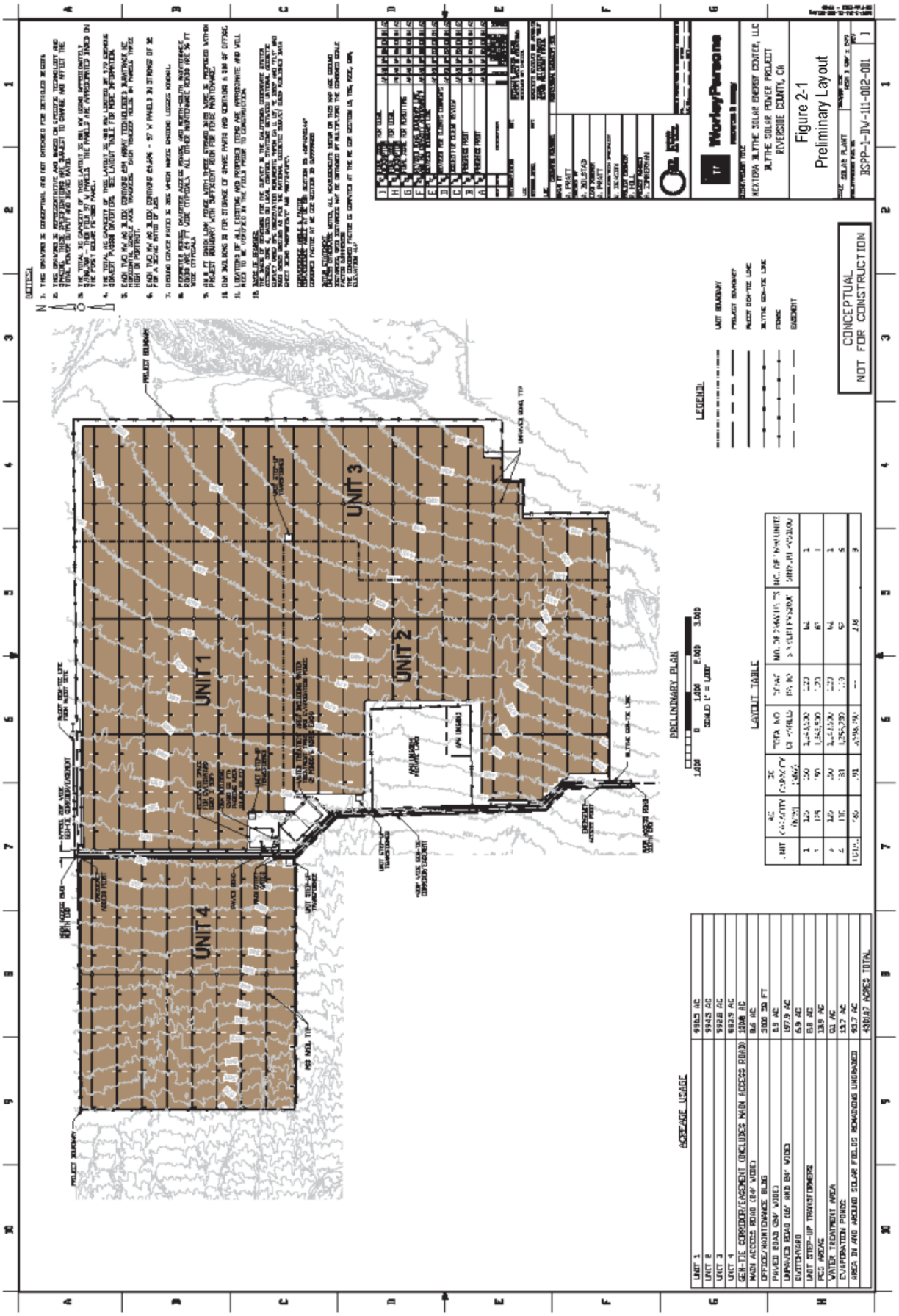
- 230 kilovolt (kV) double circuit gen-tie line interconnecting to the CRS;
- Groundwater wells used for water supply; and
- Distribution/construction power line.

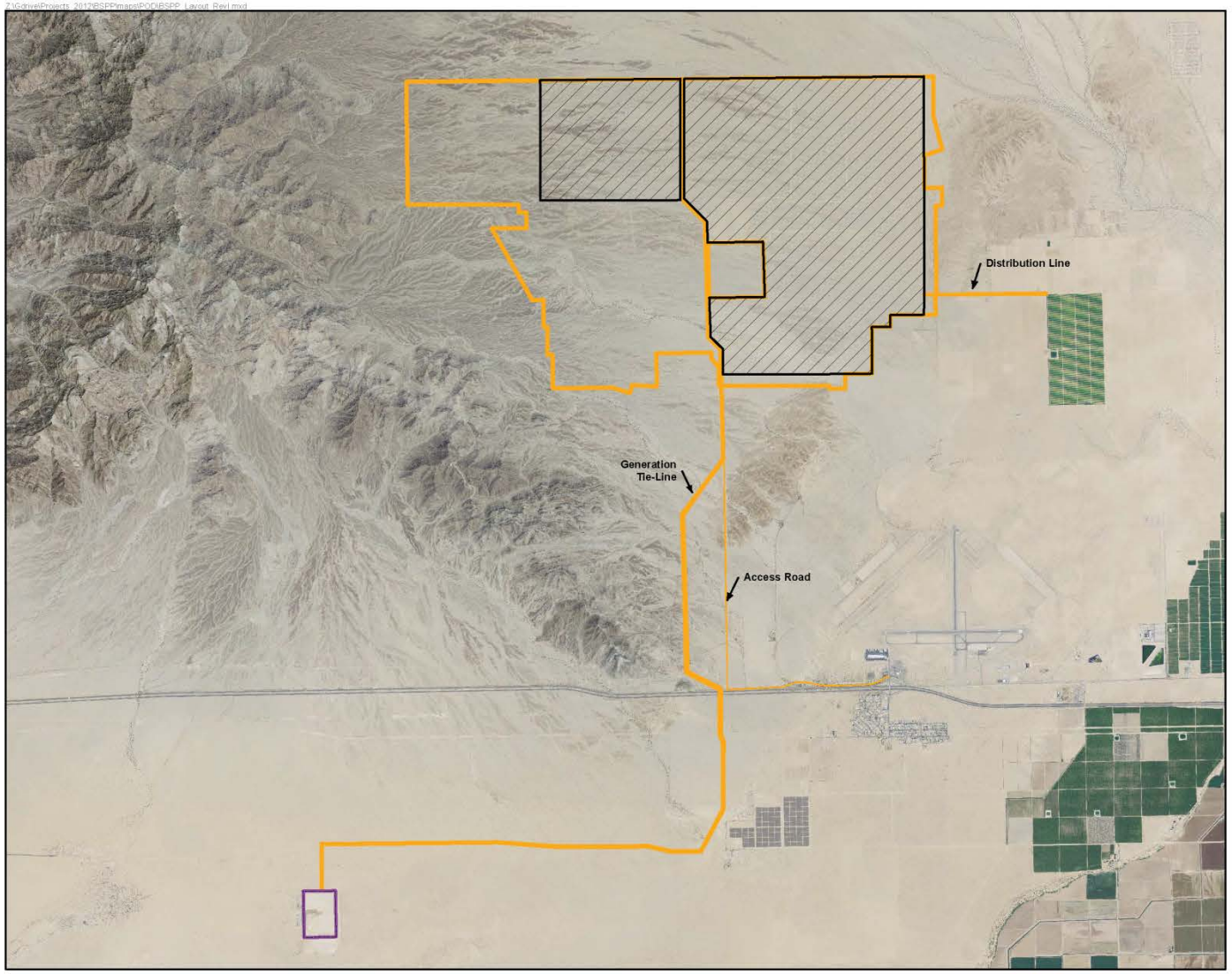
2.1.2 Description of Modified Project

The Modified Project includes replacing the solar thermal technology completely with PV generating technology and reducing the physical size of the Project. Linear access to the site would be the same as the Approved Project, and the BSPP would continue to interconnect to the regional transmission grid via the same proposed gen-tie line to Southern California Edison's (SCE's) CRS, which is currently under construction.

NextEra Blythe Solar (Applicant) proposes to develop BSPP in four operational phases designed to generate a total of approximately 485 MW nominal of electricity. The first three units (phases) would consist of approximately 125 MW alternating current (AC) of nominal electricity each. The fourth unit would generate approximately 110 MW AC, as shown on the Preliminary Layout, Figure 2-1. Note that the exact location of the boundaries between units is likely to change during final design. The transmission corridor is located in the center of the site with the exact location to be determined during final design. Because of the industry's rapid development and advancement in PV technology, the equipment shown for each unit is only representative of one type of technology that could be selected in the final design. NextEra Blythe Solar has not selected the specific PV modules nor has it decided on whether a tracker system, fixed tilt system, or combination of the two systems would be installed. Therefore, the analysis of the impacts associated with the Modified Project assumes a worst-case in terms of the technology employed. As described in Sections 3, 4, 5, and 6 the potential effects from each system are analyzed. NextEra Blythe Solar is requesting the Final Decision be amended in such a way as to allow the specific combination of technologies to be selected prior to construction without the need for filing another amendment. During operations, all four units would share an operations and maintenance (O&M) facility, one on-site switchyard, access and maintenance roads (either dirt, gravel, or paved), perimeter fencing and other ancillary security facilities, and a 230 kV gen-tie line. Figure 2-2 shows the overall Modified Project features.

The Modified Project would be located entirely on public land within BLM ROW #CACA – 048811. The total proposed acreage for the solar plant site is approximately 4,070 acres excluding linear facilities outside of the proposed solar plant site. Appendix A contains the legal description showing the current ROW request to BLM for the BSPP. Table 2-1 shows the estimated land disturbance for the solar plant site and the linear corridor, broken down into construction units and disturbance type.


UNIT 1
UNIT 2
UNIT 3
UNIT 4
PROJECT BOUNDARY
UNPAVED ROAD, TYP
MAIN ACCESS ROAD
EMERGENCY ACCESS POINT
UNIT STEP-UP TRANSFORMERS
PCG AREAS
WATER TREATMENT AREA
EVAPORATION PONDS
AREA IN AND AROUND SOLAR FIELDS REMAINING UNGRADED
LEGEND
UNIT BOUNDARY
PROJECT BOUNDARY
FENCE
EASEMENT
PRELIMINARY PLAN
1,400 0 1,400 2,800 5,600
SCALE: 1" = 1,400'
LAYOUT TABLE
ACREAGE USAGE
UNIT 1 998.3 AC
UNIT 2 994.5 AC
UNIT 3 992.8 AC
UNIT 4 883.9 AC
GEN-TIE CORRIDOR/EASEMENT (INCLUDES MAIN ACCESS ROAD) 104.8 AC
MAIN ACCESS ROAD (24' WIDE) 9.6 AC
OFFICE/MAINTENANCE BLDG 3300 SQ FT
PAVED ROAD (24' WIDE) 3.9 AC
UNPAVED ROAD (16' AND 24' WIDE) 197.9 AC
SWITCHYARD 6.9 AC
UNIT STEP-UP TRANSFORMERS 8.8 AC
PCG AREAS 13.8 AC
WATER TREATMENT AREA 0.1 AC
EVAPORATION PONDS 13.7 AC
AREA IN AND AROUND SOLAR FIELDS REMAINING UNGRADED 93.7 AC
4318.7 ACRES TOTAL
CONCEPTUAL
NOT FOR CONSTRUCTION
MERIDIAN BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT
RIVERSIDE COUNTY, CA
Figure 2-1
Preliminary Layout
BSPP-1-DV-111-002-001



BLYTHE SOLAR POWER PROJECT
RIVERSIDE COUNTY, CA

Legend

- Approved Solar Thermal Project Boundary/Features
- Modified Project- PV Technology, 4,070 acres (Reduced from 6,831 acres)
- SCE Colorado River Substation

0 2,500 5,000 10,000
Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, Tt, Worley Parsons

FIGURE 2-2
PROJECT FEATURES

TETRA TECH

TABLE 2-1
ESTIMATED LAND DISTURBANCE ACREAGE FOR THE BLYTHE SOLAR ENERGY PROJECT

Solar Plant Site	Unit 1 (Ac)[a]	Unit 2 (Ac)[a]	Unit 3 (Ac)[a]	Unit 4 (Ac)[a]	Totals (Ac)
Solar Field (includes solar panels and trackers, the inverter pad areas, the maintenance roads between the solar arrays and any drainage features within the interior edge of the 24' perimeter road)	976.3	979.5	976.2	862.0	3,794.0
Perimeter / Fence Maintenance Road (assumes 24 ft wide road, approximately 2.8 miles for Unit 1, 3.69 miles for Unit 2, 3.96 miles for Unit 3, 4.7 miles for Unit 4 and area between fence and property boundary)	16.3	14.3	16.6	15.7	62.9
On-site Switchyard	6.9	0.0	0.0	0.0	6.9
Shared Water Treatment Area / Evaporation Ponds	13.8	0.0	0.0	0.0	13.8
Shared O&M Building (approximately 3,000 square feet) and Parking Area (approximately 10,000 square feet)	0.3	0.0	0.0	0.0	0.3
Unused areas within Solar Plant Site Boundary between fence and exterior edge of 24' wide perimeter roads and areas around site facilities (counted as disturbed within site)	51.7	59.8	72.1	8.4	192.0
Subtotal Disturbed Areas Per Unit	*1,065.2*	*1,053.6*	*1,064.9*	*886.1*	4,069.8
Temporary Laydown Area, Unit 1/Unit 2/Unit 3/Unit 4 (converted to permanent solar field area at end of construction)[b]	15.0	15.0	15.0	15.0	60.0
Total Disturbed Area Within Solar Plant Site Boundary	4,069.8				
Previously Mitigated Area Within Solar Plant Site Boundary [d]	448.7	186.7	56.3	0.0	691.7
Total Disturbed Area Minus Mitigated Acreage Within Solar Plant Site Boundary	3,378.1				

Linear Facilities (Outside Solar Plant Site)	Permanent (Ac)	Temporary (Ac)	Totals (Ac)
North Linear Corridor (From Gen-tie Entrance into Project Switchyard to Northern Boundary)[e]			
Public Access Road from Gen-tie Entrance into Switchyard to Northern Boundary (4,878 LF long 24' wide two track disturbance through linear corridor)	2.7	0.0	2.7
Unused Area from Gen-tie Entrance into Switchyard to Northern Boundary (counted as disturbed)	19.7	0.0	19.7
South Linear Corridor (From Gen-tie Entrance into Project Switchyard to Colorado River Substation)			
Main Access Road from Unit 1/ Unit 4 Gates to Black Rock Road (24,459 LF long 24' wide road with 3' shoulders)	16.8	0.0	16.8
Gen-tie Support Poles from Project Switchyard to CRS (assumes 56 monopoles or H-frame poles to be spaced about 800' apart, each foundation requiring 50' by 50' temporary disturbance and 12' by 12' permanent disturbance) [c]	0.2	3.2	3.4
Gen-tie pole spur roads from Project Switchyard to CRS (56 poles times 15' wide by 100' long)	1.9	0.0	1.9
Gen-tie maintenance road from Project Switchyard to CRS (where not coincident with Main Access Road)(40,940 LF 24' wide corridor)	22.6	0.0	22.6
String Pulling Sites (assumes 38 pulling sites 100' by 300', not including pole disturbances listed previously)	0.0	26.2	26.2
Gen-tie line Construction Laydown/Assembly Areas [b]	0.0	3.0	3.0

Linear Facilities (Outside Solar Plant Site)	Permanent (Ac)	Temporary (Ac)	Totals (Ac)
Distribution Line (Lemon Grove to Eastern BSPP Boundary)			
Distribution Line Poles (assumes 40 poles to be spaced about 150' apart along 5,967' long line, each requiring 25' by 25' temporary disturbance and 3' by 3' permanent disturbance)	0.1	0.6	0.7
Distribution Line Spur Roads (assumes 40 spur roads corresponding to every pole, 12 ft wide and approximately 120 ft long) [(c)]	1.3	0.0	1.3
Distribution Line Maintenance Road (assumes 5,967 LF long road from Lemon Grove to site boundary 24' wide with 3' shoulders)	4.1	0.0	4.1
Subtotal for Linear Facilities Disturbed Area (Temporary and Permanent)	*69.4*	*30.0*	99.4
Previously Mitigated Area within Linear Facility Corridor (Ac) [(d)]	77.3		
Total Linear Facilities Disturbed Areas Minus Mitigation Acreage Outside Solar Plant Site	22.1		

Solar Plant Site and Linear Facility Combined Totals	Total (Ac)
Permanent Disturbed Area	4,139.3
Disturbed Area (Temporary and Permanent)	4,169.3
Total Previously Mitigated Area	769.0
Permanent and Temporary Minus Total Previously Mitigated Area	3,400.3

NOTES:

[a] These acreages are based on the configuration as shown on the General Arrangement.
[b] These acreages are not included in totals because area is within land that would be affected by other solar plant site facilities.
[c] The temporary disturbance for gen-tie line and distribution line poles does not include the permanent disturbance or the portion of the spur road that would be coincident with the pole construction area.
[d] These lands are already disturbed and/or mitigated for and not included in the total acreage.
[e] This part of linear corridor will not need to be constructed until Unit 4 is built.

Assuming that required transmission upgrades and permits are in place and construction progresses as planned, the first phase of the modified 485 MW solar PV energy-generating Project could start construction on the Project site as early as mid-2014. Subsequent phases would be constructed in phased stages, moving across the site with potential overlap for the start of the next phase prior to completion of the previous phase, and would continue to support the commercial operation dates for the phases. The entire project is expected to be completed within 48 months of the start of construction of the first phase.

For ease of review, we have included the following list to identify the primary modifications to the Approved Project:

- The previously planned four power blocks (which each included a steam turbine, evaporation pond, auxiliary boiler, air-cooled condenser, and equipment) and structures have been eliminated.
- The Land Treatment Units for HTF have been eliminated.
- The HelioTrough energy collection systems and associated HTF piping systems have been eliminated and replaced with PV panels configured for either horizontal tracking or fixed tilt operations.
- The substation has been replaced by a switchyard which is located near the center of the disturbance area.
- The large assembly hall has been eliminated.
- The concrete batch plant has been eliminated.
- The natural gas line has been eliminated.
- The water treatment system has been reduced in size to accommodate a reduction in water usage. Consequently, the associated waste quantities have been reduced and the number of evaporation ponds have been reduced from eight ponds to two.
- The large drainage structures surrounding the site has been eliminated, although smaller drainage features may be required.
- The amount of mass grading has been greatly reduced.
- The Project footprint has been modified to allow transmission and access road corridors to accommodate the NextEra McCoy and the EDF projects proposed to the north of the BSPP.
- Water use during construction has been reduced from approximately 4,100 acre-feet (AF) to 700 to 1,200 AF.
- Water use during operations has been reduced from approximately 600 acre-feet per year (AFY) to between 30 to 40 AFY.

The list above largely encompasses the items that were eliminated or reduced by the switch in technology from parabolic trough/concentrating solar thermal to PV technology. There would also be a significant reduction in the Project footprint. There are new elements of the Modified Project related to the PV technology (e.g., inverters, solar panels, an O&M building, etc.). These elements and the currently proposed PV Project are described in greater detail in this section of the Petition.

2.2 PHOTOVOLTAIC TECHNOLOGY

The BSPP would involve the installation of PV modules with the capacity to generate a total of 485 MW of power under peak solar conditions. This Petition is based on current technology and installation methodology as well as cost and efficiency considerations.

Inverter hardware would be located in each Power Conversion Station (PCS), which would convert the direct current (DC) electric input into grid-quality AC electric output.

The PV modules that make up the arrays have the capability to convert the sun's energy into DC electricity, each producing a relatively small amount of electricity, about several hundred watts each at rated conditions. Modules are electrically connected in series and parallel arrangements. A series arrangement increases the collective output voltage and a parallel arrangement increases the current to the desired levels for the DC collection system.

The modules being considered for this Modified Project are produced by a number of manufacturers of both crystalline silicon and thin film modules. Brief descriptions of these technologies are included in Section 2.2.1. This technology is changing rapidly primarily in the areas of cost and efficiency. For reasons of availability to support the Modified Project delivery requirements and to allow NextEra Blythe Solar to capitalize on the latest technological advances, multiple manufacturing sources might be utilized.

At this time NextEra Blythe Solar has not selected whether it would install a fixed tilt or single axis tracking modular system or a combination of both systems. Refer to Section 2.2.2 for descriptions of these support systems. While both systems are similar in how they generate and distribute electricity, the orientation and technique for collection of the sun's energy are different.

2.2.1 Photovoltaic Modules

The solar PV modules, also referred to as panels, convert solar energy into DC electricity. Different materials display different electricity generation efficiencies; higher efficiency panels produce more electricity per given area, but cost more per panel area. Materials commonly used for PV solar cells include monocrystalline silicon, polycrystalline silicon, amorphous silicon, cadmium telluride (CdTe), and copper indium gallium selenide. Several of the PV cells currently available are manufactured from bulk materials that are cut into very thin wafers, i.e., between 180 to 240 micrometers thick. Others are constructed from thin-film layers. NextEra Blythe Solar is considering the installation of both polycrystalline and CdTe solar cells. Both technologies are proven and viable for utility-scale PV plants. Characteristics of typical panels are given in Table 2-2.

TABLE 2-2
TYPICAL PV PANEL CHARACTERISTICS

Typical Panel Physical and Electrical Characteristics	Thin Film (CdTe) (First Solar FS Series 3)	Polycrystalline (Yingli Solar YGE 300 Series)
Length	1.2 m	1.97 m
Width	0.6 m	0.99 m
Weight	12 kg	26.8 kg

Typical Panel Physical and Electrical Characteristics	Thin Film (CdTe) (First Solar FS Series 3)	Polycrystalline (Yingli Solar YGE 300 Series)
Cell Type	CdS/CdTe semiconductor, 154 active cells	72 multicrystalline cells
Frame Material	None	Anodized aluminum alloy, silver, clear
Cover Type	3.2 mm heat strengthened front glass laminated to 3.2 mm tempered black glass	Low-iron tempered glass
Nominal Power	92.5 W	300 W
Efficiency	~12.8%	~15.4%
Voltage at Pmax	47.7 V	36.7 V
Current at Pmax	1.94 A	8.17 A
Open Circuit Voltage	60.5 V	46.3 V
Short Circuit Current	2.11 A	8.77 A
Maximum System Voltage	1000 V DC	1000 V DC
Temperature Coefficient of Pmpp	-0.25%/°C	-0.45%/°C

Silicon is the traditional material choice for PV panel cells, and NextEra Blythe Solar is considering polycrystalline silicon PV modules for use at the BSPP. NextEra Blythe Solar is also considering the use of thin film CdTe panels as one of its technology options. A CdTe solar panel uses solar cells constructed in a thin semiconductor layer (also known as a "thin film") to absorb and convert sunlight into electricity. If thin film CdTe panels are used, NextEra Blythe Solar would ensure that the vendor offers a PV module recycling program through which any module may be returned for recycling.

The system would incorporate high-efficiency commercially available solar PV panels that are Underwriters Laboratory-listed or approved by another recognized testing laboratory. By design, the solar PV panels absorb sunlight to generate electrical output and, therefore, are manufactured with anti-reflective glass to maximize the electrical output capacity. In addition, due to the limited rotation angles, the solar PV panels are not designed for reflecting the sun's rays upon any ground-based observer off-site. These panels would be protected from impact by tempered glass, and would have factory applied ultraviolet and weather-resistant "quick connect" wire connectors.

PV modules can be mounted together in different configurations or "blocks" (also referred to as "arrays") depending on the equipment selected. The BSPP arrays primarily would be organized into approximately 2 MW blocks, with some additional arrays configured in smaller capacity blocks to utilize land space efficiently. Although the acreage of each block would depend on the technology, spacing, mounting equipment, and other design criteria subject to change in detailed engineering, each full-size 2 MW block is expected to cover approximately 15 acres.

Since the electrical ratings for the panels, inverters, and other PV equipment vary based on the manufacturer, the DC collection design also varies depending on the chosen

technology. The PV modules would be electrically connected in series, and groups of these series-connected modules would be connected by wire harnesses to the combiner boxes. The combiner boxes in turn feed an inverter in the PCS via DC cables. The PCS would be located within each block, and would be on concrete vaults, slabs, or pier foundations. The PCS would include the inverters and step-up transformers (SUTs) required for converting the low voltage DC electricity to medium voltage AC electricity. Refer to Section 2.2.4.1 for further descriptions of the DC collection system.

The transformers in the PCS step up the voltage from the inverter AC output to that required by the on-site AC collection system. The AC collection system conducts the electricity from each PCS at 34.5 kV to the feeder circuit breakers and the 34.5/230 kV unit SUTs for each 125 MW or 110MW unit. Overhead or underground lines then conduct the electricity from the SUTs to the on-site switchyard. The electricity is then routed to the CRS via the gen-tie line. Refer to Section 2.2.4.2 for further descriptions of the AC collection system.

2.2.2 Panel Supporting System

2.2.2.1 Fixed Tilt System

A fixed tilt racking system utilizes a metal framework structure or support table to which the modules are attached. The PV panels are mounted on the rack in a permanent "fixed" position tilted towards the south at approximately 30 degrees to optimize production throughout the year without any mechanical movement. These racks are simple, open "table" constructions. A fixed tilt system can generally follow the slope of the terrain which simplifies grading requirements. The support posts may vary in height above the ground surface to accommodate the variations in terrain. The total height of the structure with panels would be approximately 9 feet depending on the racking system configuration and tilt angle selected.

2.2.2.2 Single-Axis Tracking System

A single-axis tracking system optimizes production by rotating the panels to follow the path of the sun throughout the day. The central axis of the tracking structure is oriented north to south and is constructed to rotate the panels east to west while limiting self-shading between rows. The system utilizes a method called "back-tracking" which consists of rotating the panels back toward a more horizontal position to avoid shadowing between the adjacent panels in the early morning and late afternoon hours of operation.

Each tracking assembly consists of one or two steel torque tubes, supported by posts, on which rests the frames for the PV modules. Each tracker holds 30 to 90 PV modules mounted on this metal framework structure; the wide range is due to the variation in tracker and module technology. The steel structure would be able to withstand high-

wind conditions (up to 90 miles per hour), site-specific wind gust and aerodynamic pressure effects, and seismic events.

One of two types of single-axis tracking systems would be selected for the BSPP. Tracker Option 1 is a “ganged system” that would use one motor to control multiple rows of PV modules through a series of mechanical linkages and gearboxes. By comparison, Tracker Option 2, a stand-alone tracker system, would use a single motor and gearbox for each row of PV modules.

The drive unit typically consists of a bi-directional AC motor or a hydraulic system utilizing biodegradable fluid. The drive unit would be connected to an industrial-grade variable-frequency drive that translates commands from the control computer.

The tracker controller would be a self-contained industrial-grade control computer that would incorporate all of the software needed to operate the drive system. The controller would display a combination of calibration parameters and status values, providing field personnel with a user-friendly configuration and diagnostic interface. The controller monitor would enable field adjustment, calibration, and testing. The single-axis tracking control system also communicates with, and receives instructions from, the central control system via a Supervisory Control and Data Acquisition (SCADA) system.

2.2.2.3 System Foundations

Both single-axis tracking and fixed tilt mounting systems are supported by steel posts spaced approximately 10 feet apart. The support posts generally project 5 to 6 feet above the ground and are typically vibrational driven to an approximate depth of 8 to 10 feet into the ground depending on site geotechnical characteristics and racking system design. However, depending on the final PV technology and vendor selected as well as local soil conditions, the design of the support structures could vary. Typical installations of this type are constructed using steel piles or concrete foundations. Steel piles may be driven, screwed, or grouted. Driven steel pile foundations typically are galvanized and used where high load bearing capacities are required. The pile is driven using a hydraulic ram where up to two workers are required. Soil disturbance would be restricted to the pile insertion location with temporary disturbance from the hydraulic ram machinery, which is about the size of a small tractor. Screw piles, if used, would be driven into the ground with a truck-mounted auger requiring two or three workers. Screw piles create a similar soil disturbance footprint as driven piles. Grouted steel piles, if used, would require pre-drilling with auger equipment so that the pile could be inserted into the cleaned hole. The pile then would be grouted into place from bottom to top until grout flows out of the top of the hole. Soil disturbance would be the same as the previous steel pile descriptions with additional disturbance from the soil removal and insertion of grout at the pile location. Concrete foundations avoid ground penetration by withstanding the design loads from the weight of the concrete itself. Concrete requires

time to cure and can be pre-cast and transported to the site or poured in place for installation. Concrete foundations reduce the ground penetration, but increase the permanent disturbance. All driven post support structures are not considered permanent foundations, enabling complete removal when the BSPP is decommissioned.

2.2.3 Panel Access

The spacing between the rows of tracking units or fixed mounts is dependent on site-specific features and would be identified in the final design. NextEra Blythe Solar's preliminary configuration indicates the spacing allows for at least 10 feet of clearance for maintenance vehicles and panel access.

The PV arrays and PCS would be accessible by two access corridors, one in a north-south direction approximately every 3,000 feet of nominal 16 foot width and the other in an east-west alignment passing every PCS unit of nominal 24 foot width. These access corridors would consist of unpaved compacted road base and would be used only as necessary during O&M activities.

2.2.4 Solar Field DC Collection and Power Conversion

2.2.4.1 DC Collection

The PV modules would be electrically connected in series by the PV connectors and connected in parallel by wire harnesses that conduct DC electricity to the combiner boxes. Each combiner box would collect power from several rows of modules and feed a PCS via cables placed in covered underground trenches (or within above ground cable trays or conduits in limited circumstances where underground trenching is determined not to be practical). The DC trenches would be approximately 3 feet deep and from 1.5 to 2.5 feet wide. The bottom of each trench would be filled with clean fill surrounding the DC cables and the remainder of the trench would be back-filled with native soil and compacted to 90 percent (95 percent when crossing under roadways). Power screeners could be used on site for a limited period of time (less than 1 year) to extract the required clean fill from native soils for use as bedding material in the trenches. A power screener is a motorized piece of equipment that uses moving screens to filter soils to a particular granularity.

2.2.4.2 AC Collection

Each PCS comprises an inverter package consisting of multiple inverters connected to adjacent transformer(s). An overhead shade would cover the inverters or a common equipment enclosure would include multiple inverters. The individual inverter packages would be approximately 7 feet tall, and the transformer exterior to the enclosure would be approximately 6.5 feet tall. The overhead shade would be 10 to 12 feet tall. The equipment enclosure, if utilized, would be up to approximately 35 feet long by 10 feet

wide by 10 feet tall. In the PCS, the inverters would change the DC output from the combiner boxes to AC electricity. Integrated with the inverter, a data acquisition system (DAS) would utilize a data logger and sensors to record AC power output. Other integrated components may include equipment to record weather conditions, including ambient temperature measured in degrees Celsius (°C), incoming solar radiation measured in watts per square meter, and wind speed measured in meters per second. The DAS would enable system data transfer and performance monitoring via the proposed O&M facility.

The resulting AC current from each individual inverter would be routed through underground AC cables (or within above ground conduits in limited circumstances where underground trenching is determined not to be practical) to an oil-filled, medium voltage, step-up transformer positioned within secondary containment. Based on preliminary design, the 265 volt output from an inverter would be stepped up (increased) to the desired AC collection system voltage of 34.5 kV by the transformer. The medium voltage transformer would be placed on a pre-cast concrete pad or other foundation delivered by flatbed truck during construction.

Multiple PCS blocks (approximately 10 MW total) would form a lateral configuration and transmit the AC power at 34.5 kV via aboveground double circuit monopoles or underground lines in covered trenches (or within aboveground conduits in limited circumstances where underground trenching is determined not to be practical). Lateral conductors would be combined into an aboveground or underground feeder line (24 to 26 MW) that would transmit the AC power to the feeder circuit breakers and SUTs. Each SUT would step up the voltage to 230 kV before transmitting the power to the on-site switchyard in either aboveground or underground lines. As applicable, AC trenches would be approximately 3 feet deep and from 8 inches to 6.5 feet wide and also would be used to house fiber optic cables for communication. The bottoms of the trenches would be filled with sand surrounding the fiber optic cables, and the remainder of the trench would be back-filled with native soil and compacted.

The on-site electrical collection system is designed to minimize electrical losses within the BSPP prior to delivery to the on-site switchyard. The on-site switchyard would include a series of switches and circuit breakers that switch or provide disconnect service for the electricity before the power is conducted along the 230 kV interconnect with the SCE regional transmission grid at the CRS via the 230 kV gen-tie line.

2.3 SITE ACCESS

The Modified Project would utilize the same existing roads to reach the site as described in the Final Decision. Access to the BSPP would be via a new road (Dracker Drive) heading north from the frontage road (Black Rock Road). Dracker Drive would be accessed from a section of Black Rock Road, along I-10, from the plant access road to

the Airport/Mesa Drive exit. As part of the Notice to Proceed issued for BSPP Phase 1A of the CSP design, Dracker Drive has been constructed in dirt form from Black Rock Road to the approximate mid-point of the solar plant site, and this stretch of existing dirt road would be retained and improved for access to the Modified Project. The road would be paved from the entrance off of Black Rock Road north to the gates opening to Unit 1 and Unit 4.

2.4 TRANSMISSION SYSTEM INTERCONNECTION

The gen-tie route remains largely unchanged from the Approved Project. It would proceed in a southerly direction, cross over I-10, and turn westward to the CRS, which is currently under construction. The metering point would be located in the switchyard on the Project site. The gen-tie line would be owned and operated by NextEra Blythe Solar.

The 230 kV double circuit transmission line would be constructed on self-supporting monopole structures of heights up to approximately 145 feet, except where Federal Aviation Administration (FAA) regulations and any applicable Riverside County Airport Land Use Commission (RCALUC) guidelines near the airport require shorter and/or H-frame structures. An area of approximately 50 by 50 feet (0.06 acre) per structure may be temporarily disturbed during construction. An area of 100 by 300 feet would be temporarily disturbed for the pull sites.

The required ROW width for the gen-tie is approximately 120 feet. Where larger H-frame structures are used it is approximately 250 feet. The average span length between the transmission structures vary from approximately 800 feet for the 70-foot tall H-frame structures up to 1,200 feet for the self-supporting tubular steel 145-foot tall monopole structures. The gen-tie line would be constructed using “strong” tubular towers at the cornering points of the line, which would have sufficient strength without guy wires. The former owner of BSPP spent significant time in 2010 working with the FAA and RCALUC to minimize aviation-related impacts created by the Project and its gen-tie structures. The variation in height and other items were incorporated into the gen-tie design to accommodate FAA and RCALUC concerns. It should be noted that the change in technology to PV would reduce or eliminate other aviation-related concerns. For example, the removal of the air cooled condensers would eliminate prior concerns relating to upward thermal plume potential effects on aircraft. The switch in technology also removes the presence of HTF at the site which significantly reduces the fire hazards of the Modified Project.

The Modified Project was included in the “Transition Cluster” in the new Generation Interconnection Process Reform process. The Phase One Study results for the Transition Cluster were released in August 2009. The Phase Two Study results for the Transition Cluster were released in July 2010. California Independent System Operator

(CAISO), SCE, and the Applicant executed a LGIA in November 2010, which was approved by the Federal Energy Regulatory Commission (FERC) in March 2011. SCE and CAISO have completed studying the effect of switching solar technologies and whether the change impacts the previous interconnection studies and have concluded that 485 MW of PV is acceptable. The LGIA would need to be amended to address the technology switch. The LGIA amendment, once executed, would require FERC review and approval.

2.5 ANCILLARY FACILITIES

2.5.1 Telecommunications Facilities

The Modified Project switchyard would require the same new telecommunication infrastructure as the originally Approved Project. The telecommunication facilities would be installed to provide a protective relay circuit and a SCADA circuit together with data and telephone services. Voice and data communications for plant operations would be installed for use during construction and operations. The routing for this cable would end at the existing infrastructure near Mesa Drive. In addition, the BSPP has two other telecommunications lines required by CAISO to provide operational data to the CRS. The primary transmission-related telecommunications line would be strung overhead along the same poles as the 230 kV gen-tie line to the CRS. The redundant transmission-related telecommunications cable would be buried cable similar to the BSPP's telecommunications cable. The routing for both of the buried telecommunications cables would be adjacent to the site access road for the portion north of I-10. The redundant telecommunications line continues south of I-10 to the CRS following the route of the gen-tie line, while the BSPP's telecommunications cable follows Black Rock Road to Mesa Drive.

2.5.2 Operations and Maintenance Facility

The BSPP would likely include an approximately 3,000-square-foot O&M building located on BLM-administered land near the center of the site and would be shared for services to all units. The building would provide an administration area, a work area for performing minor repairs, and a storage area for spare parts, transformer oil, and other incidental chemicals. The administration area would be air conditioned and include offices, conference rooms, a break room, rest rooms, and locker rooms with showers.

The building would be supported on reinforced concrete mat foundations or individual spread footings as determined during detailed design. Excavation for the footings would be approximately 2 feet deep. Excavation within the perimeter of the building would be approximately 1 foot deep. An aggregate or stone base would be laid after excavation. The floor would consist of a 6-inch reinforced concrete slab. Concrete for this slab would come from the Blythe area.

The O&M building would be a pre-engineered metal building approximately 17 feet high at its peak with a neutral-colored metal siding and roof to minimize visual impact. The building's maintenance area would include roll-up doors to provide equipment access as well as personnel access doors. An approximately 10,000-square-foot parking area would be provided at the O&M building.

2.5.3 Meteorological Station

NextEra Blythe Solar would not modify its approved meteorological station.

2.5.4 Anemometers

Depending on the final design of the equipment, the solar arrays may be installed with tracker anemometer towers, which measure and communicate wind speed data to the tracker controllers for solar array panel tracker positioning in the event of high winds. Each tower would measure approximately 30 feet in height, and would be installed within the arrays within the facility site.

2.5.5 Fencing and Site Security

For public safety and site security, the BSPP would have fencing around the site and access would be controlled via gates located at the entrances to the facility consistent with the Approved Project. The two main site gates (located at Units 1 and 4) would be either a motor-operated swing or rolling-type security access gate, and would be monitored through a security camera, swipe card, or other mechanism that would control and monitor access. There would be a guard shack at the main facility gate during construction. Access through the main gates would be controlled during construction and operation of the BSPP to prevent unauthorized access to the solar plant site. All facility personnel, contractors, and visitors would be logged in and out of the facility. A secondary access gate, similar in construction to the main gate, would be used for emergency purposes only. A fire department Knox Box or other access device and emergency contact placard would be provided at the main gate and secondary access gate to provide emergency access.

Fencing would be installed around the solar plant site perimeter, substations, and around the evaporation pond described in accordance with the existing Conditions of Certification. Individual units may be fenced with perimeter fencing as the construction and operation of the facility is phased. Security fencing would be chain-link, approximately 8 feet tall, with 3-strand barbed wire. Some modifications would be needed in areas of storm water inflow and outflow from the solar field to allow for high flow events. The security fencing would be constructed slightly inside the solar plant site boundary to allow room for on-foot fence maintenance on the outside of the fence if necessary. Fencing would be designed to resist all wind or other loads imposed on the fence. Tortoise fencing would be installed 1 foot below the ground surface and 2 feet

above the ground surface, using a fencing type recommended by the United States Fish and Wildlife Service (USFWS) and in accordance with the existing Conditions of Certification.

2.5.6 Temporary Construction Workspace, Yards, and Staging Areas

Temporary construction facilities would be built for materials storage, storage of equipment, for field fabrication facilities, and a construction office complex for employee work areas on the Project during construction consistent with the Approved Project. Additionally, there would be a number of construction staging areas within the site boundaries that would be utilized throughout the approximately 48-month Project construction period and then be decommissioned and/or replaced by arrays. Construction area lighting would be provided.

The staging areas would include material laydown and storage areas and an equipment assembly area. During construction, the area near the location of the O&M facility would also contain a guard shack, construction trailers, construction worker parking, and portable toilet facilities that would serve the Project's sanitation needs during construction. Temporary construction fencing would surround this area and the guard shack would be manned to provide security during construction. Additionally, the Project would no longer include the large assembly hall structure originally planned to assemble the HelioTrough structures.

In addition to the permanent plant roads and parking, construction roads and parking would be required to provide access to construction facilities and the laydown area. Construction parking space would be provided near the construction office complex. These temporary roads may be all-weather gravel surfaced and of sufficient width and location to accommodate efficient use and traffic pattern. The parking area would have barriers to control parking pattern and locations.

2.5.7 Distribution/Construction Power

The proposed SCE distribution line would provide construction power and electrical service to the O & M building, in the same manner as the Approved Project. See Figure 2-2 for the general location of the distribution line.

2.6 FIRE PROTECTION

Fires are most likely to be introduced from human activity, and also could occur as a result of lightning strikes or equipment malfunctions. Project-related fire-protection activities would be taken to limit personnel injury, property loss, and Project downtime resulting from a fire. During construction, a water truck or other portable trailer-mounted water tank would be kept on-site and available to workers for use in extinguishing small man-made fires. Fire watches would be required during hot work on-site. An Emergency

Action Plan (EAP) would designate responsibilities and actions to be taken in the event of a fire or other emergency during construction. The EAP, including fire prevention and suppression, and a worker safety plan would be provided to BLM and local fire departments for approval before the receipt of a Notice to Proceed. During O&M of the BSPP, fire protection systems for the solar plant site would include a fire protection water system for protection of the O&M building, including portable fire extinguishers and possibly hydrants. The fire protection water system would be supplied from an approximately 20,000 gallon raw and fire water storage tank located on the solar plant site near the O&M area.

To decrease the risk of fire during O&M of the Project, all vegetation underneath the panels would be managed via either mechanical mowing/trimming or with a BLM-approved herbicide in accordance with guidance provided in the Final *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (PEIS)* and the *Final Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Report* (PER) (BLM 2007).[1] A pre-emergent herbicide would be applied in the spring, and spot foliar applications may be used throughout the year to manage invasive vegetation.

The Final Decision outlines that Riverside County Fire Department would provide fire protection services to the BSPP. With the elimination of the risks associated with use of HTF, the impacts to Riverside County would be reduced from the previous analysis, and it may be that the City of Blythe Fire Department can adequately provide fire protection services. NextEra Blythe Solar will work with the Riverside County Fire Department and/or the City of Blythe Fire Department to negotiate an appropriate mitigation fee, if needed, to offset the impacts to the applicable fire department(s) from the reduced risk posed by the Modified Project.

2.7 WATER SUPPLY AND USAGE

2.7.1 Water Supply and Use

The BSPP Final Decision allowed the construction of several wells to produce up to 600 AFY for operations and up to 4,100 AF for construction. Up to three wells are

[1] The Record of Decision associated with the PER (72 FR 57065-01), published October 5, 2007, outlines the herbicides that are approved for use on public lands, including 14 herbicides with the following USEPA registered active ingredients: 2, 4-D, bromacil, chlorsulfuron, clopyralid, dicamba, diuron, glyphosate, hexazinone, imazapyr, metsulfuron methyl, picloram, sulfometuron methyl, tebuthiuron, and triclopyr identifies the states where the active ingredients are approved. It also identified six herbicide active ingredients that are not permitted for use on BLM lands unless a need is shown by the BLM and updated risk assessments for human health and ecological risks are assessed. The six precluded active ingredients are: 2, 4-DP, asulam, atrazine, fosamine, mefluidide, and simazine.

anticipated for the Modified Project and would be constructed in the same manner as outlined in the Final Decision.

Water from the proposed wells would be tested for and meet the domestic water quality and monitoring standards for constituents as required by the California Code of Regulations (22 Cal. Code Regs. §64400.80 et seq.). Regulated wells must be sampled for bacteriological quality once a month and the results submitted to the California Department of Health Services (DHS). The wells also must be monitored for inorganic chemicals once and organic chemicals quarterly during the year as designated by the DHS based on historical monitoring frequency and laboratory capacity. NextEra Blythe Solar would sample and conduct groundwater quality monitoring consistent with the Waste Discharge Requirements provided in Appendix H.

2.7.2 Construction-related Water Needs

Construction-related water use would support site preparation and grading activities. During earthwork for the grading of access roads, foundations, equipment pads, and other components, the primary uses of water would be for compaction and dust control. Smaller quantities would be required for preparation of the concrete required for building foundations and other minor uses. Subsequent to the earthwork activities, the primary water use would be for dust suppression. During the approximately 48-month construction period for all units, an estimated total of between 700 and 1,200 AF of water would be needed for such uses as soil compaction, dust control, and sanitary needs for construction of the BSPP, depending on the configuration selected. The majority of the construction water use would occur during site earthwork operations. Water would be needed for dust abatement and moisture conditioning of soils to facilitate overland travel during construction of the transmission line for the various alternatives. Water would be stored on-site during construction using either temporary construction ponds or tanks.

Drinking (potable) water would be supplied for construction workers on-site, and is estimated to be approximately 10,000 gallons per month (approximately 0.5 AFY), varying seasonally and by work activities. The potable water could be brought to the site by tanker truck, or groundwater could be used with a package water treatment system to treat the water to meet potable standards.

2.7.3 Operation and Maintenance-related Water Needs

Water quality is expected to be unsuitable for potable use without treatment since it contains between 730 and 3,100 milligrams per liter of total dissolved solids. Consequently, NextEra Blythe Solar is considering options for treatment of groundwater or the importation of trucked potable water to meet the Modified Project's potable water requirements for O&M. If the groundwater option is selected, water would be treated

with a conventional package water treatment system to assure that any drinking water meets potable standards.

Either a reverse osmosis/electrodeionization (EDI) system or a deep bed demineralizer system would be used for other (non-drinking water) purposes. The water treatment system design has not been developed, but could include either a trailer-mounted water treatment system or a free-standing facility. The water treatment system would supply water for the BSPP for the purposes and in the amounts indicated in Table 2-3.

A trailer-mounted water treatment system is a totally enclosed, self-contained, containerized water treatment system. This system would include filters and demineralizer vessels. These systems typically are leased with a service contract, contain all the necessary supplies for operation, and are taken off-site for the regular regeneration and periodic maintenance that is required. No wastewater discharge is expected with the trailer-mounted treatment system.

TABLE 2-3
OPERATION AND MAINTENANCE-RELATED WATER USE

Water Use		PV Module Cleaning [(a)]				Misc O&M Total [(b)]	Potable Total [(c)]
		Per Unit		Total Plant			
		Min	Max	Min	Max		
Annualized Average	Rate (gpd)	7,000	7,800	28,000	32,000	3,500	450
Estimated Peak	Rate (gpd)	24,000	26,900	58,400	64,900	20,000	500-600
Estimated Annual	Use (AFY)	7.5	9.0	25	35	4.5	0.5

NOTES:

(a) Water consumption based on the volume of water required to wash the panels approximately twice per year

(b) Miscellaneous O&M activities include fire water, dust suppression, etc.

(c) Potable water used based on 7 day work week with 20 on-site personnel

The water treatment area would be constructed near the middle of the solar plant site which would contain the water treatment and storage equipment. It would be an area up to a maximum of 3 acres excluding any area needed for the evaporation ponds if utilized. A free-standing water treatment facility would contain different equipment from the trailer-mounted system. It would be constructed on-site in an enclosure for permanent use. The enclosure would be a pre-fabricated steel building on a concrete foundation with a maximum height of 17 feet. The water treatment equipment would include pumps, filters, biocide or ozone injection, and a reverse osmosis/EDI system. The water treatment facility would house the filter replacements and tools needed for periodic maintenance of the system. Wastewater discharge would be non-hazardous, have a maximum quantity of up to 60 gallons per minute (gpm), and be produced primarily from the reverse osmosis reject. One or more on-site evaporation ponds (up to 12 acres total) would be required for disposal of the wastewater and would be

constructed, operated and maintained, and ultimately removed from the water treatment area within the solar plant site boundary. The evaporation ponds would be netted if required by the regulatory agencies.

There would be three tanks on-site for the storage of the raw and fire water, potable water, and demineralized water for the BSPP. The raw water tank storage capacity also would provide the fire water supply. This tank would hold approximately 20,000 gallons. It would be constructed of bolted or welded steel and painted with a non-reflective coating to blend with the surrounding environment. The potable water tank would be of similar construction with a maximum volume of 7,500 gallons. The demineralized water tanks with a total capacity of up to 100,000 gallons would store water to be used for panel washing. They would be stainless steel and painted with a non-reflective coating.

The panels would be cleaned on an as-needed basis, depending on the frequency of rainfall, proximity of arrays to airborne particulates, and other factors. NextEra Blythe Solar assumes that panel washing would occur in the fall and spring and take approximately 20 days to complete per unit per wash. Panel washing for all units could take a total of 150 to 160 days per year to complete. Approximately 25 to 35 AFY for the entire Modified Project would be required to wash the panels.

Based on the anticipated uses (including drinking water, showers, restroom facilities, panel washing, dust suppression, and fire supply, among other uses), the estimated quantity of water needed for O&M of the BSPP would be approximately 4.5 AFY, including a total of 0.5 AFY of potable water. The primary use of water during O&M-related activities would be for panel washing and dust control (the proposed PV technology requires no water for the generation of electricity).

A BLM-approved dust suppressant would be applied to control dust. Water could be used to supplement the dust suppressant in some areas on a limited basis; the amount of water used depends on the type of suppressant used and the manufacturer's recommendations. The concentrate from a reverse osmosis treatment unit (if required for on-site water treatment) might be used for dust control by blending it with water from the on-site water wells.

2.8 CONSTRUCTION

This section describes the construction activities of the Modified Project. The construction of the Project would begin once all applicable approvals and permits have been obtained and is currently anticipated to be as early as June 2014. After the preconstruction surveys, construction mobilization, and site preparation are completed, construction of the BSPP and gen-tie line would begin. Work would be completed in phased stages moving across the site so that completion of one phase is closely followed by the beginning of the next. Construction of all of the phases is anticipated to take approximately 48 months from the commencement of the construction process to

completion of the BSPP and gen-tie line. Figure 2-3 shows the construction phases and project features associated with the phases.

2.8.1 Construction Workforce Numbers

Typical construction work schedules are expected to be between 8 and 12 hours per day, Monday through Friday, from 7:00 am to 10:00 pm. The work schedule may be modified throughout the year to account for changing weather conditions (e.g., starting the workday earlier in the summer months to avoid work during the hottest part of the day for health and safety reasons). In the event that construction work takes place outside these typical hours, activities would comply with Riverside County standards for construction noise levels. For safety reasons, certain construction tasks, including final electrical terminations, must be performed after dark when no energy is being produced. The BSPP would use restricted nighttime task lighting during construction. Sufficient lighting would be used in order to both provide a safe workplace and maintain energy efficiency, and lights would be focused downward, shielded, and directed toward the interior of the site to minimize light exposure to areas outside the construction area.

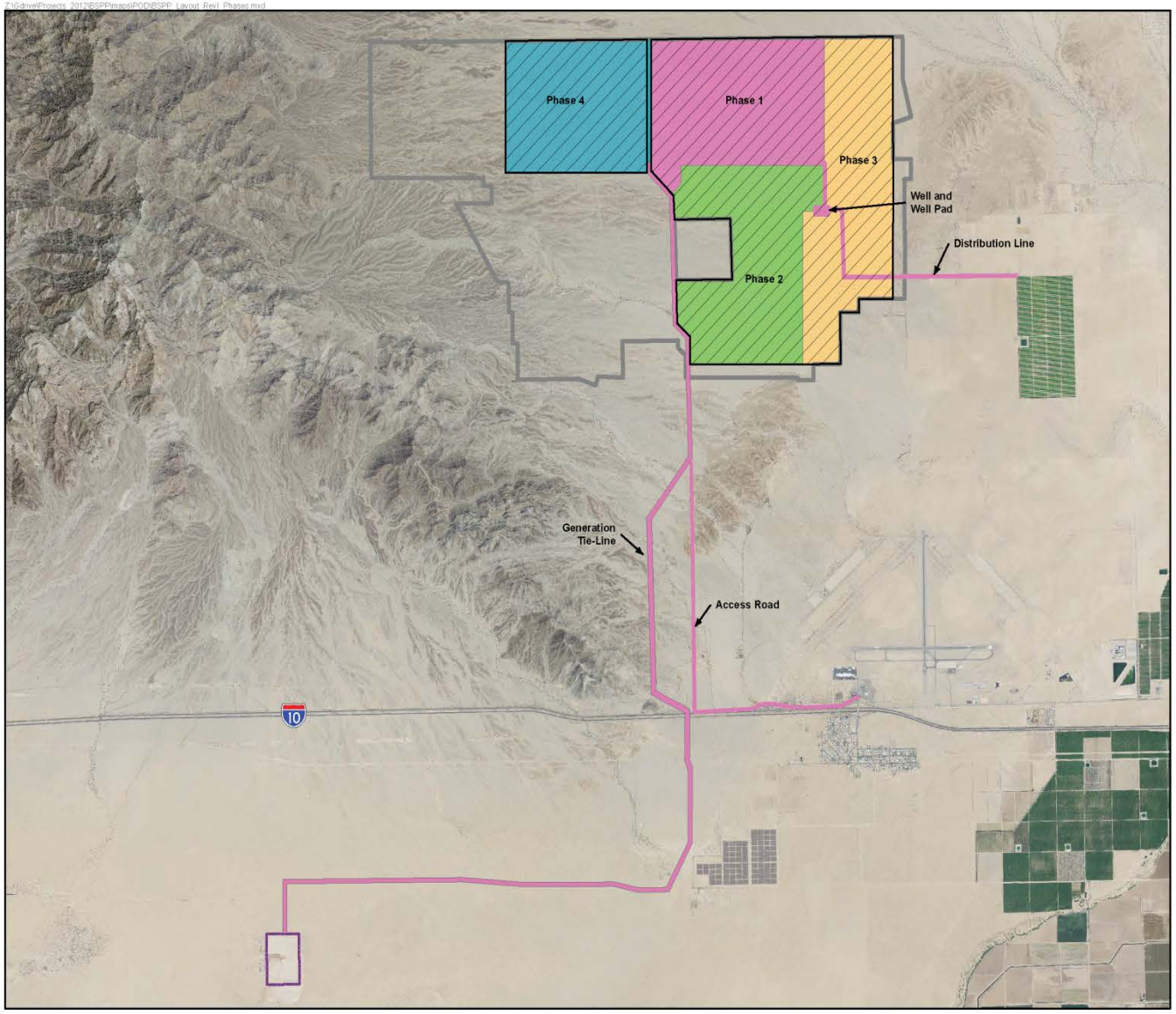
The construction would take place in phases and it is expected that the grading of the next phase would take place shortly after erection of the previous phase begins. A preliminary construction schedule is presented with the air quality emissions calculations in Appendix E.

During Project construction, the workforce is expected to average approximately 250 to 430 employees over the 48-month construction period, with a peak workforce of approximately 619 employees during Months 20 through 22 of the construction period. The Project construction workforce would be recruited from within Riverside County and elsewhere in the surrounding region to the extent practicable.

2.8.2 Construction Equipment/Vehicles

Most construction equipment and vehicles would be brought to the BSPP at the beginning of the construction process during construction mobilization and would remain on site throughout the duration of the construction activities for which they were needed. Generally, the equipment and vehicles would not be driven on public roads while in use for the Project. In addition to construction worker commuting vehicles, as discussed above, construction traffic would include periodic truck deliveries of materials and supplies, recyclables, trash, and other truck shipments.

Truck access to the site would be from I-10 and then via Mesa Drive Road to Black Rock Road. Construction truck deliveries and shipments would typically avoid the peak traffic hours in the morning and evening, so it is unlikely that Project deliveries would represent a substantial increase in traffic volumes during peak commuting hours. Materials would typically be delivered starting 2 weeks before the start of the associated



BLYTHE SOLAR
POWER PROJECT
RIVERSIDE COUNTY, CA

Legend

- Approved Solar Thermal Project Boundary
- Modified PV Solar Plant Site
  4,070 acres (reduced from 6,831 acres)
- SCE Colorado River Substation

Project Phasing

- Phase 1
- Phase 2
- Phase 3
- Phase 4

0 2,500 5,000 10,000
Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, TTEC

FIGURE 2-3
PROJECT PHASING

TETRA TECH

task with the exception of electrical gear (PCSs, PV combining switchgear, etc.), which would be drop-shipped just prior to installation. An estimate of the types of construction equipment is presented in Appendix E.

2.8.3 Site Clearing, Grading, and Compaction

NextEra Blythe Solar would utilize site preparation techniques that adequately prepare the site for safe and efficient and operation of PV arrays while allowing water to flow across the site with negligible impact on surface water flow upstream and downstream of the site. The planned approach to Project site preparation is primarily for only clearing and mowing of the site with minimal overall mass grading. In select areas the limited use of "disc and roll" and micrograding techniques may be utilized, reflecting the results of field testing of various site preparation techniques at an off-site location by one of the PV manufacturers. Large scale grading would only be used in areas where site topography requires smoothing for external fencelines and roads or where grading is needed for buildings or other Project structures. The descriptions below reflect the worst case grading scenario.

2.8.3.1 Clearing

Vegetation would be cleared from roadways, access ways, and where concrete foundations are used for inverter equipment, substations, and the O&M building. Vegetation would be cleared for construction of the drainage controls. Vegetation would be mowed as necessary in the remainder of the solar plant site. Organic matter would be mulched and redistributed within the construction area (except in trenches and under equipment foundations). Plant root systems would be left in place to provide soil stability except where grading and trenching are required for placement of solar module foundations, underground electric lines, inverter and transformer pads, road and access ways, and other facilities. During the site clearing process, the site would also be cleared of refuse, as necessary. Refuse materials encountered would be recycled or disposed.

2.8.3.2 Grading

The cut and fill depths across the site would be minimized, and it is expected that no import or export of soil material would be required. Preliminary conservative grading estimates are presented below in Table 2-4, which are based on our interpretation of the Preliminary Geotechnical Investigation performed for the Approved Project by Kleinfelder dated September 23, 2009.

TABLE 2-4
ESTIMATED GRADING

Unit	Cut (cubic yards)[ab]	Fill (cubic yards)
1	181,400	129,400
2	113,700	91,000
3	114,000	91,200
4	99,400	79,500
Total	508,500	391,100

NOTE:

a Excess cut would be dispersed on site at any localized low spots within the solar field that do not significantly impact surface hydrology.

b The cut volumes include the soil that would be over excavated, scarified and left in place for all roads per our interpretation of the Kleinfelder Preliminary Geotechnical Investigation dated September 23, 2009. The volume of cut that is scarified and left in place accounts for 334,400 CY of the total 508,500 CY of cut volume.

The estimates of cut and fill in Table 2-4 are much less than the Approved Project which involved cut and fill volumes of approximately 8.3 million cubic yards. Any excess cut would be dispersed on site at any localized low spots within the solar field so that the total amount of cut and fill would be balanced on site. Appendix B contains the preliminary Grading and Drainage Plan.

In dispersed sections of the solar array field, there would be limited use of scrapers to perform micrograding. This technique is referred to as "isolated cut/fill." In general, portions of the site would be contoured to a smooth grade; the macro-level topography and storm water drainage would remain unchanged. This technique would only be utilized in areas where existing grade cannot accommodate perimeter fencing, roads, or other equipment or structures.

Work over the grading period would typically be paced so that grading of an area takes place shortly before trenching and post installation are ready to begin. This would minimize the area of open, uncovered ground present at any one time during construction, and thereby minimize dust and erosion issues.

2.8.3.3 Erosion Control

The Modified Project would utilize site preparation techniques that allow water to sheet flow across the site with negligible impact on surface water flow upstream and downstream of the site.

Based on a preliminary grading plan, NextEra Blythe Solar commissioned a hydrologic evaluation contained in Appendix C. NextEra Blythe Solar's final design would implement site design and protective erosion and drainage control design measures during construction and operation that would minimize dust and erosion issues. Storm water flow would be managed to prevent downstream erosion and channelization.

Minimal grading, erosion control design features, storm water mitigation measures, and other protective measures (including minimizing disturbance and compaction to the extent feasible) would enable historic levels of runoff off site to be maintained at the BSPP and in downstream areas. While the final grading design has not been completed, the amount of grading is considerably less than the Approved Project and there is no need for the large drainage structures that were originally designed for the Approved Project.

NextEra Blythe Solar would prepare and implement a construction Drainage, Erosion and Sediment Control Plan (DESCP) prior to the commencement of soil disturbance activities associated with Project construction. The DESCP would describe construction Best Management Practices (BMPs) to manage storm water on the site to both protect the site and to minimize downstream erosion and sedimentation.

Several erosion control measures are planned for implementation during construction including stabilization of the heavily-used construction entrance area, employing a concrete wash-out area, as needed, and tire washes near the entrance to existing roadways. Silt fences are proposed for erosion control along neighboring properties.

The approximate percentage of the BSPP site that would be covered with impervious surfaces (inverter foundations, etc.) would constitute a fraction of 1 percent of the total surface area of the site. The final site plan would be based on a detailed topographic survey of the site, as well as detailed hydrologic and topographic studies that would be performed as a part of the permitting and engineering design process.

2.8.4 System Installation

Depending on the final PV technology and vendor selected, the design of the tracking support structures could vary. Typical installations of this type are constructed using steel piles or concrete foundations. Steel piles may be driven, screwed, or grouted. Driven steel pile foundations typically are galvanized and used where high load bearing capacities are required. The pile is driven using a hydraulic ram where up to two workers are required. Soil disturbance would be restricted to the pile insertion location with temporary disturbance from the hydraulic ram machinery, which is about the size of a small tractor. Screw piles, if used, would be driven into the ground with a truck-mounted auger requiring two or three personnel. Screw piles create a similar soil disturbance footprint as driven piles. Grouted steel piles, if used, would require pre-drilling with auger equipment so that the pile could be inserted into the cleaned hole. The pile then would be grouted into place from bottom to top until grout flows out of the top of the hole. Soil disturbance would be the same as the previous steel pile descriptions with additional disturbance from the soil removal and insertion of grout at the pile location. Concrete foundations avoid ground penetration by withstanding the design loads from the weight of the concrete itself. Concrete requires time to cure and

can be pre-cast and transported to the site or poured in place for installation. Concrete foundations reduce the ground penetration, but increase the permanent disturbance.

The design method and installation time of the support structures would depend on the support structure and block design with driven piles being the fastest preferred installation method. Final construction and installation details would be determined in the detailed design of the Project.

Solar PV panels would be manufactured off-site and shipped to the site ready for installation. Concrete pads for the drive motors, if utilized, would be either pre-cast or post and brought to the site via flatbed truck. Once most of the components have been placed on their respective foundations, the electricians and instrumentation installers would run the electrical cabling throughout the solar field. After the equipment is connected, electrical service would be verified, motors checked, and control logic verified. As the solar arrays are installed, the balance of the systems would continue to be constructed and installed and the electrical power and instrumentation would be placed. Once all of the individual systems have been tested, integrated testing of the BSPP unit would occur.

2.9 PROJECT OPERATION AND MAINTENANCE

2.9.1 Operation and Maintenance Workforce

Approximately 15 to 20 permanent, full-time personnel would be employed at the solar plant site during daytime working hours assuming all units are operational. Temporary personnel would be employed, as needed, during seasonal periods when panel washing is required. Monthly visual inspections and annual (minimum) preventive maintenance would be performed. In accordance with United States Department of Labor, Occupational Safety and Health Administration safety regulations, at least two qualified personnel would be present during all energized electrical maintenance activities at the facility. Site security systems would be monitored regularly by on-site personnel and an off-site 24-hour Remote Operations Center.

2.9.2 Automated Facility Control and Monitoring System

The proposed facility control and monitoring system would have two primary components: an on-site SCADA system and the accompanying sensor network. The on-site SCADA system would offer near real-time readings of the monitored devices, as well as control capabilities for the devices where applicable. Off-site monitoring/data trending systems would collect historical data for remote monitoring and analysis. For example, personnel at the Remote Operations Center would provide continuous 24/7/365 monitoring coverage of Project facilities and would respond to real-time alerts and system upsets using advanced monitoring applications that reside on the servers in their network.

2.9.3 Panel Washing

PV panel washing would be performed by seasonal maintenance crews in the fall and spring, taking approximately 20 to 40 days to complete each unit. Approximately 50,000 gallons per day (gpd) per unit would be required for this purpose. Several types of systems are currently available; most involve spraying filtered water onto the modules from a portable tank mounted in the bed of a pickup truck. Sometimes brushes, rods, or circular cleaning heads are used to remove debris. Surfactants would not be used in these procedures. The process water would be allowed to run off the modules and evaporate or percolate into the ground.

2.9.4 Road Maintenance

Paved roads would be maintained to preserve the asphalt surface from degradation. Maintenance would include seal coating the asphalt surface every 2 to 5 years to prevent decay and oxidization. Potholes or other damage would be repaired as soon as practical.

Unpaved roads would be maintained regularly to control the flow of water on and around the road, remove obstacles, and maintain a solid surface. Maintenance would be completed by conducting regular surveys to inspect the conditions of the road surfaces; blading, grading, or compacting the road surfaces to preserve a minimally sloped and smooth planed surface; and applying dust palliatives or aggregate base as needed to reduce dust and erosion.

2.10 HAZARDOUS MATERIALS MANAGEMENT

2.10.1 Waste and Hazardous Materials Management

2.10.1.1 Wastewater

Two separate wastewater collection systems would be provided as part of the Modified Project: one for sanitary wastes and another to address the water treatment system wastewater.

The sanitary wastewater system would collect sanitary wastewater at the O&M building. Portable chemical toilets would be provided for workers in the solar fields. The sanitary wastewater from sinks, toilets, showers, other sanitary facilities in the O&M building would be discharged to a sanitary septic system and on-site leach field. The septic system would be designed and permitted in accordance with state and county regulations.

On-site water treatment would discharge minimal wastewater (up to 60 gpm). The Final Decision allows for each power block to have two 4-acre evaporation ponds for a total of eight 4-acre evaporation ponds. Waste Discharge Requirements for the ponds were

included in the Final Decision and suggested revisions to those requirements are included in Appendix H. Based on analysis of need for the Modified Project, the BSPP could require up to a total of 12 acres of evaporation ponds. The evaporation ponds would be located near the water treatment area and would be netted if required by the regulatory agencies.

The average pond depth design could be up to 8 feet and residual precipitated solids would be removed approximately every 8 to 10 years, as needed, to maintain a solids depth no greater than 3 feet for operational and safety purposes. The precipitated solids would be sampled and analyzed to meet the characterization requirements of the receiving disposal facility. The characteristics of the precipitated solids would determine the transportation and disposal methodology. It is anticipated the pond solids and other non-hazardous wastes would be classified as Class II non-hazardous industrial waste. Pond solids would be tested using appropriate test methods in advance of removal from the evaporation ponds to confirm this determination; however, preliminary estimates show the material would be non-hazardous.

2.10.1.2 Solid (Non-Hazardous) Waste

Construction, operation, maintenance, and decommissioning of the BSPP would generate non-hazardous solid wastes typical of power generation or other industrial facilities. Solar plant-related wastes generated during all phases of the Project would include oily rags, worn or broken metal and machine parts, defective or broken electrical materials, other scrap metal and plastic, insulation material, empty containers, paper, glass, and other miscellaneous solid wastes including the typical refuse generated by workers. These materials would be disposed by means of contracted refuse collection and recycling services. Waste collection and disposal would be in accordance with applicable regulatory requirements to minimize health and safety effects.

Information on universal wastes anticipated to be generated during Project construction is provided in Table 2-5. Universal wastes and unusable materials would be handled, stored, and managed per California Universal Waste requirements.

O&M of the Project would generate sanitary wastewater, non-hazardous wastes, and require small quantities of hazardous wastes for use and consumption. O&M of the Project's linear facilities (e.g., the gen-tie line) would generate minimal quantities of waste. The types of waste and their estimated volumes are summarized in Table 2-6.

Facility construction, operation, maintenance, and decommissioning would generate wastes that require proper management and in some cases off-site disposal. There are seven permitted Class III landfills located in the county within approximately 145 miles of the Project site. There are two major permitted Class I hazardous waste landfills located in California, located approximately 350 and 400 road miles from the site, respectively.

TABLE 2-5
SUMMARY OF CONSTRUCTION WASTE STREAMS USAGE, STORAGE, AND MANAGEMENT METHODS

Waste Stream and Classification[a]	Origin and Composition	Estimated Amount	Estimated Frequency of Generation	On-Site Treatment	Waste Management Method/Off-Site Treatment
Construction waste – Hazardous	Empty hazardous material containers	1 cubic yard per week (cy/wk)	Intermittent	None. Accumulate on site for <90 days	Return to vendor or dispose at permitted hazardous waste disposal facility
Construction waste – Hazardous	Solvents/cleaning chemicals, used oil, paint, oily rags	175 gallons	Every 90 days	None. Accumulate on site for <90 days	Recycle or use for energy recovery
Spent batteries – Universal Waste	Lead acid, alkaline type	20 in 2 years	Intermittent	None. Accumulate on site for <90 days	Recycle
Construction waste – Non-hazardous	Scrap wood, concrete, steel, glass, plastic, paper	40 cy/wk	Intermittent	None	Recycle wherever possible, otherwise dispose to Class III landfill
Sanitary waste – Non-hazardous	Portable Chemical Toilets – Sanitary Waste	200 gallons/ day	Periodically pumped to tanker truck by licensed contractors	None	Ship to sanitary wastewater treatment plant
Office waste – Non-hazardous	Paper, aluminum, food	1 cy/wk	Intermittent	None	Recycle or dispose to Class III landfill

NOTE:
a Classification under 22 California Code of Regulations (CCR) §66261.20 et seq.

TABLE 2-6
SUMMARY OF OPERATION WASTE STREAMS AND MANAGEMENT METHODS

Waste Stream and Classification[a]	Origin and Composition	Estimated Amount	Estimated Frequency of Generation	Waste Management Method	
				On site	Off site
Used Hydraulic Fluid, Oils and Grease – Non-RCRA[b] Hazardous	Tracker drives and electrical equipment	50,000 gallon initial fill 1,000 gallons/ year refill	Intermittent	Accumulated for <90 days	Recycle
Lubricating oil – Non-RCRA Hazardous	Tracker drives and equipment	300 gallon tank/year	Intermittent	Accumulated for <90 days	Recycle

Waste Stream and Classification[a]	Origin and Composition	Estimated Amount	Estimated Frequency of Generation	Waste Management Method	
				On site	Off site
Oily rags, oil absorbent, and oil filters – Non-RCRA Hazardous	Various	One 55-gallon drum per month	Intermittent	Accumulated for <90 days	Sent off site for recovery or disposed at Class I landfill
Sodium hypochlorite 12.5 percent solution (bleach) – Non-RCRA Hazardous	Disinfectant for potable water	4 gallon refill supply	Intermittent	Accumulated for <90 days 1,000 gallon storage tank	Sent off site for recovery or disposed at Class I landfill
Spent batteries – Universal Waste	Rechargeable and household	<10/month	Continuous	Accumulate for <1 year	Recycle
Spent batteries – Hazardous	Lead acid	20 every 2 years	Intermittent	Accumulated for <90 days	Recycle
Spent fluorescent bulbs – Universal Waste	Facility lighting	<50 per year	Intermittent	Accumulate for <1 year	Recycle
Sanitary wastewater – Nonhazardous	Toilets, washrooms	250 gallons/day	Continuous	Septic leach field	None

NOTES:

a Classification under 22 CCR §66261.20 et seq.

b Resource Conservation and Recovery Act

2.10.1.3 Hazardous Materials Management

During construction, all hazardous materials would be stored on-site in storage tanks, vessels, or other appropriate containers specifically designed for the characteristics of the materials to be stored. The storage facilities would include secondary containment in case of tank or vessel failure. Construction- and decommissioning-related hazardous materials used for development of the Project would include gasoline, diesel fuel, oil, lubricants, and small quantities of solvents and paints. Material Safety Data Sheets for all applicable materials present on-site would be readily available to on-site personnel.

Fueling of some construction vehicles would occur in the construction area. Other mobile equipment would return to the laydown area for refueling. Special procedures would be identified to minimize the potential for fuel spills, and spill control kits would be carried on all refueling vehicles for activities such as refueling, vehicle or equipment maintenance procedures, waste removal, and tank clean-out. Fuel for construction equipment could be provided by a fuel truck or could be stored on-site in aboveground double-walled storage tanks with built-in containment.

A Spill Prevention and Management Plan would include procedures, methods, and equipment supplied during construction to prevent discharges from reaching waters of

the state. The plan would be certified by a Registered Professional Engineer and a complete copy of it would be maintained on-site.

During BSPP operation, a variety of chemicals and hazardous materials would be stored and used at the facility. Chemicals would be stored inside the O&M building or water treatment area as appropriate to prevent exposure to the elements and to reduce the potential for accidental releases, and in appropriate chemical storage containers. Bulk chemicals would be stored in storage tanks; other chemicals would be stored in returnable delivery containers. Chemical storage and chemical feed areas would be designed to contain leaks and spills. Containment berm and drain piping design would accommodate a full-tank capacity spill without overflowing the containment berms. For multiple tanks located within the same bermed area, the capacity of the largest single tank would determine the volume of the bermed area and drain piping. The transport, storage, handling, and use of all chemicals would be conducted in accordance with applicable laws, ordinances, regulations, and standards.

The quantities of hazardous materials stored on-site would be evaluated to identify the required usage and to maintain sufficient inventories to meet use rates without stockpiling excess chemicals. Chemicals that could be present during construction, operation, and maintenance of the BSPP are included in Table 2-7.

TABLE 2-7
SUMMARY OF SPECIAL HANDLING PRECAUTIONS FOR LARGE QUANTITY HAZARDOUS MATERIALS

Hazardous Material	Use	Relative Toxicity[a] and Hazard Class[b]	Permissible Exposure Limit	Storage Description; Capacity	Storage Practices and Special Handling Precautions
Carbon Dioxide		Low toxicity; Hazard class – Nonflammable gas	TLV: 5,000 ppm (9,000 mg/m^3) TWA	Carbon steel tank, 15 tons maximum on-site inventory	Carbon steel tank with crash posts.
Diesel Fuel	Equipment refueling	Low toxicity; Hazard class – Combustible liquid	PEL: none established TLV: 100 mg/m^3	Carbon steel tank (3,600 gallons)	Secondary containment, overfill protection, vapor recovery, spill kit.
Hydraulic fluid (if applicable)	Tracker drive units	Low to moderate toxicity; Hazard class – Class IIIB combustible liquid	TWA (oil mist): 5 mg/m^3 STEL: 10 mg/m^3	Hydraulic drive tank, approximately 20 gallons per tracker drive unit (if applicable) throughout solar field. Carbon steel tank, maintenance inventory in 55 gallon steel drums.	Found only in equipment with a small maintenance inventory. Maintenance inventory stored within secondary containment; alternative measures to secondary containment for equipment would be implemented at the project.
Lube Oil	Lubricate rotating equipment (*e.g.,* tracker drive units)	Low toxicity Hazard class – NA	None established	Carbon steel tank, maintenance inventory in 55 gallon steel drums.	Secondary containment for tank and for maintenance inventory.
Mineral Insulating Oil	Transformers/ switchyard	Low toxicity Hazard class – NA	None established	Carbon steel transformers; total on-site inventory of approximately 250,000 gallons (each 1 megavolt-ampere transformer contains approximately 500 gallons). Carbon steel tank, maintenance inventory in 55 gallon steel drums.	Used only in transformers, secondary containment for each transformer. Maintenance inventory stored within secondary containment; alternative measures to secondary containment for equipment would be implemented at the project.
Soil stabilizer Active ingredient: acrylic or vinyl acetate polymer or equivalent		Non-toxic; Hazard class – NA	None established	No on-site storage, supplied in 55 gallon drums or 400 gallon totes, used immediately	No excess inventory stored on-site.
Sulfur Hexafluoride	230 kV breaker insulating medium			Contained within switchyard equipment; maximum of 7,500 lbs	Inventory management.

Hazardous Material	Use	Relative Toxicity[a] and Hazard Class[b]	Permissible Exposure Limit	Storage Description; Capacity	Storage Practices and Special Handling Precautions
Acetylene	Welding gas	Moderate toxicity; Hazard class – Toxic	PEL: none established	Steel cylinders; 200 cubic foot each, 600 cubic foot total on site	Inventory management, isolated from incompatible chemicals.
Argon	Welding gas	Low toxicity; Hazard class – Nonflammable gas	PEL: none established	Steel cylinders; 200 cubic foot each, 600 cubic foot total on site	Inventory management.
Oxygen	Welding gas	Low toxicity; Hazard class – Oxidizer	PEL: none established	Steel cylinders; 200 cubic foot each, 600 cubic foot total on site	Inventory management, isolated from incompatible chemicals.
Sodium Hypochlorite 12.5 percent solution (bleach)	Disinfectant for potable water	Low toxicity; Hazard class – Oxidizer	PEL: none established	Plastic 1 gallon containers	Inventory management, isolated from incompatible chemicals.

NOTES:

[a] Low toxicity is used to describe materials with a National Fire Protection Association (NFPA) Health rating of 0 or 1. Moderate toxicity is used describe materials with an NFPA rating of 2. High toxicity is used to describe materials with an NFPA rating of 3. Extreme toxicity is used to describe materials with an NFPA rating of 4.

[b] NA denotes materials that do not meet the criteria for any hazard class defined in the 1997 Uniform Fire Code.

If a portable, trailer-mounted water treatment system would meet the BSPP flow and water quality demands described above, then no additional chemicals would be required for maintenance and regeneration of the system other than as indicated for disinfection of the system and related piping facilities. However, if a site-specific water treatment system is used, then the regeneration process could require additional chemicals to maintain its performance. Such chemicals could include sodium hydroxide solution, sodium hypochlorite solution, and/or sulfuric acid solution.

NextEra Blythe Solar would develop and implement a variety of plans and programs to ensure safe handling, storage, and use of hazardous materials (e.g., Hazardous Material Business Plan). Solar plant personnel would be supplied with appropriate personal protective equipment (PPE) and would be properly trained in the use of PPE as well as the handling, use, and cleanup of hazardous materials used at the facility and the procedures to be followed in the event of a leak or spill. Adequate supplies of appropriate cleanup materials would be stored on-site.

In addition to the chemicals listed above, small quantities (less than 55 gallons, 500 pounds, or 200 cubic feet [for gases]) of janitorial supplies, office supplies, laboratory supplies, paint, degreasers, herbicides, pesticides, air conditioning fluids (chlorofluorocarbons or CFCs), gasoline, hydraulic fluid, propane, and welding rods typical of those purchased from retail outlets also could be stored and used at the facility. These materials would be stored in the maintenance warehouse or office building. Flammable materials (e.g., paints or solvents) would be stored in flammable material storage cabinet(s) with built-in containment sumps. The remainder of the materials would be stored on shelves, as appropriate.

2.10.1.4 Weed Management

A weed management plan has been developed for the BSPP and is currently under review with the BLM. A portion of the Approved Project was previously disturbed by PVSI. The need for the plan is to reduce and control invasive plants such as Saharan mustard (*Brassica tournefortii*), with some patches of non-native grasses, including all brome species (*Bromus* spp.), and Mediterranean grass (*Schismus* spp.) within the disturbed areas of the BSPP ROW.

There are several regulatory drivers that require the control of invasive and noxious weeds including both project-specific and federal requirements. Weed management methods are consistent with existing and proposed future site conditions, biology of the identified weed species, and environmental context of the BSPP. Weed management methods for the BSPP include the following:

- Preventive Measures
- Eradication and Control Methods

Table 2-8 shows the types of pesticides currently being used which would continue to be used in the future.

TABLE 2-8
PESTICIDE APPLICATION (INCLUDING MIXTURES AND SURFACTANTS)

	Trade Names	Common Names	EPA Registration No.	Manufacturer	Formulations (Liquid or Granular)	Method of Application
1	RoundPRO Herbicide	Same	524-475	Monsanto	Liquid	Backpack sprayers and truck mounted spray-rig
2	Triclopyr	Pathfinder™ or Garlon 4	62719-40	Dow AgroSciences	Liquid	Backpack sprayers, small tank sprayers (2- to 3-gallon), or small hand sprayers, wipe/paint
3	Glyphosate	Rodeo™ or Aquamaster™	62719-324	Dow AgroSciences	Liquid	Backpack sprayers, small tank sprayers (2- to 3-gallon), or small hand sprayers

MAXIMUM RATE OF APPLICATION	
USE UNIT ON LABEL	**POUNDS ACID EQUIVALENT/ACRE**
1. RoundPRO – 1.25 gallons/acres	5.0 lbs. a.e./acre
2. Triclophyr – 0.5 gallons/acres	2.0 lbs. a.e./acre
3. Glyphosate – 1.25 gallons/acres	5.0 lbs. a.e./acre

2.10.1.5 Hazardous Waste

Similar to the Approved Project, small quantities of hazardous wastes would be generated during Modified Project construction, operation, maintenance, and decommissioning. Hazardous wastes generated during the construction phase would include substances such as paint and primer, thinners, and solvents. Hazardous solid and liquid waste streams that would be generated during operation of the Project include substances such as used hydraulic fluids, used oils, greases, filters, etc., as well as spent cleaning solutions and spent batteries. Hazardous wastes generated during decommissioning would include substances such as carbon dioxide, diesel fuel, hydraulic fuel, and lube oil. To the extent possible, all hazardous wastes would be recycled.

NextEra Blythe Solar or its contractor would obtain a hazardous waste generator identification number from the California Environmental Protection Agency, Department of Toxic Substances Control prior to generating any hazardous waste. All spills would be reported to BLM and the county. Spills greater than 25 gallons would be reported to the Regional Water Quality Control Board (RWQCB). A sampling and cleanup report would be prepared and sent to the RWQCB to document each spill and clean up. Each

spill, regardless of amount, would be cleaned up within 48 hours and a spill report completed. Copies of all spill and cleanup reports would be kept on-site.

2.11 FACILITY CLOSURE

The standards applied to closure of the facility for the Modified Project would not be different from those applicable to the Approved Project.

The principal materials incorporated into the PV arrays include glass, steel, and various semiconductor metals. The module production process is designed to minimize waste generation and maximize the recyclability and reusability of component materials. Some manufacturers employ the compound CdTe as the semiconductor material. Cadmium telluride is a stable compound consisting of cadmium (Cd) and tellurium (Te). Cd, produced primarily as a byproduct of zinc refining, is a human carcinogen as an independent element; however, when combined with Te, a byproduct of copper refining, it forms the stable, non-hazardous compound CdTe. In module manufacturing the CdTe is safely sequestered for the over 30-year lifetime of the module, after which it is recycled for use in new solar modules or other new products. If the BSPP selects panels that incorporate CdTe, it would participate in the manufacturer's recycling program. An analysis of CdTe is included in Section 4.5 of this Petition.

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Section 3 ENGINEERING ANALYSIS

The following sections provide a description of the modifications proposed to the BSPP as they may affect the assumptions, rationale, and Conditions of Certification in the Final Decision. As discussed in Section 2 of this Petition, NextEra Blythe Solar has not yet selected the exact combination of fixed tilt and single access tracking PV modules for the site. Such selection will be made as part of the final design of the BSPP. However, where there are differences between the two systems, NextEra Blythe Solar has included a comparison of each for the Commission to consider a "worst-case" for each technical area.

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3.1 FACILITY DESIGN, EFFICIENCY, AND RELIABILITY

This section outlines the portions of the Modified Project that may affect the analysis, rationale, conclusions, and Conditions of Certification contained in the Final Decision for the Approved Project.

3.1.1 Overview of Approved Project

The Approved Project was originally licensed as a nominally rated 1000 MW solar thermal facility to be developed in four independent units, each with a capability of generating up to 250 MW with traditional steam turbine technology. The Approved Project would interconnect with a double circuit 230 kV transmission gen-tie line to the CRS which is already under construction.

The Approved Project would have utilized solar parabolic trough technology to generate electricity. With this technology, arrays of parabolic mirrors collect heat energy from the sun and refocus the radiation on a receiver tube located at the focal point of the parabola. A HTF is brought to high temperature (750°F) as it circulates through the receiver tubes. The HTF is then piped through a series of heat exchangers where it releases its stored heat to generate high pressure steam. The steam is then fed to a traditional steam turbine generator where electricity is produced. Individual components of the Approved Project included:

- Solar Field and Power Block #1 (northeast);
- Solar Field and Power Block #2 (northwest);
- Solar Field and Power Block #3 (southwest);
- Solar Field and Power Block #4 (southeast);
- Access road from and including upgraded portion of Black Rock Road to on-site office;
- Warehouse/maintenance building, assembly hall and laydown area;
- Telecommunications lines;
- Natural gas pipeline;
- Concrete batch plant;
- Fuel depot;
- On-site transmission facilities, including central internal switchyard;
- 230 kV double circuit transmission line interconnecting to the CRS (gen-tie line);
- Groundwater wells used for water supply; and
- Distribution/construction power line.

3.1.2 Relevant Modifications to Project Description

The primary modifications relevant to Facility Design, Efficiency, and Reliability are the following:

- The previously planned four power blocks (which each included a steam turbine, auxiliary boiler, air-cooled condenser, and equipment) and structures have been eliminated.
- The Land Treatment Units for HTF have been eliminated.
- The HelioTrough energy collection systems have been eliminated and replaced with PV panels configured for either horizontal tracking or fixed tilt operations.
- The substation has been replaced with a switchyard which is located near the center of the disturbance area.
- The large assembly hall has been eliminated.
- The concrete batch plant has been eliminated.
- The natural gas line has been eliminated.
- The water treatment system has been reduced in size to accommodate a reduction in water usage. Consequently, the associated waste quantities have been reduced and the number of evaporation ponds has been reduced from eight ponds to two.
- The large drainage structures surrounding the site have been eliminated, although smaller drainage features may be required.
- The amount of mass grading has been greatly reduced.
- The project footprint has been modified to allow transmission and access road corridors to accommodate the NextEra McCoy and future projects proposed to the north of the BSPP.
- Water use during construction has been reduced from approximately 4,100 AF to 700 to 1,200 AF.
- Water use during operations has been reduced from approximately 600 AFY to between 30 to 40 AFY.

3.1.3 Power Plant Efficiency

The Modified Project will represent an efficient use of land to generate clean, renewable solar power. To ensure flexibility in the specific technology/panel vender selected during final design, the project description presented in this PTA is based on the most efficient use of land for a thin film tracker scenario.

3.1.4 Power Plant Reliability

For practical purposes, a reliable power plant is one that is available when called upon to operate. The evidence shows that delivering acceptable reliability entails: (1) adequate levels of equipment availability; (2) plant maintainability with on-going maintenance; (3) fuel and water availability; and (4) resistance to natural hazards.

The Modified Project would consist of large numbers of small, easily replaceable components, primarily PV panels. Availability and reliability is expected to match the performance of conventional power plants. Manufacturers of PV modules typically offer 12 year warranties against failure, and 25 year warranties on sustained performance. The Modified Project would meet the same reliability considerations as the Approved Project.

3.1.5 Compliance with LORS

The Commission Final Decision concluded that, with implementation of the Conditions of Certification, the Approved Project would comply with all applicable Laws, Ordinances, Regulations, and Standards (LORS). No LORS have been identified that are uniquely applicable to PV. In fact, some of the LORS that would have been applicable to the Approved Project, such as those associated with the design of the facility components using natural gas or HTF, would no longer be applicable to the Modified Project. As with the Approved Project, the Modified Project would comply with all applicable LORS.

3.1.6 Conditions of Certification

Proposed Revisions to GEN-2

Rationale:

Condition of Certification **GEN-2** contains a table of major structures associated with the Approved Project. Many of these structures do not apply to PV technology. The table should be replaced as follows:

Equipment/System	Quantity (Plant)
PV Modules	6,000,000
PV Racking Systems[(a)]	71,500
Step-up Transformer Unit Foundations and Connections	4
Power Conversion Stations, Foundations and Connections	250
Met Station Foundations and Connections	4
Circuit-Breaker Foundations and Connections	29
Operation and Maintenance Facility Building Structure, Foundation and Connections	1
Raw/Fire Water Tank Structure, Foundation and Connections	1
Demineralized Water Tank Structure, Foundation and Connections	1
Potable Water Tank Structure Foundation and Connections	1

Equipment/System	Quantity (Plant)
Drainage Systems (including sanitary drain and waste	1 Lot
HVAC Systems	1 Lot
Temperature Control and Ventilation Systems (including water and septic connections)	1 Lot
Building Energy Conservation Systems	1 Lot
Switchboards, Buses and Towers for Operations	1 Lot
Electrical Cables / Duct Banks	4 Lots

NOTE:

[(a)] PV equipment quantities are based on the existing plant layouts

Proposed Revisions to GEN-5

Rationale:

Condition of Certification **GEN-5** calls for a design engineer that is "fully competent and proficient in the design of power plant structures and equipment supports." A PV project lacks conventional power plant structures and equipment supports, making this part of the condition unnecessary.

The wording should be changed to, "…a design engineer who is either a structural engineer or a civil engineer fully competent and proficient in the design of PV plants and equipment support."

Proposed Revisions to MECH-1

Rationale:

Condition of Certification **MECH-1** lists several LORS that may no longer be applicable to the construction of a project that uses PV instead of solar thermal technology. The list of applicable standards should be modified as follows:

- ~~American National Standards Institute (ANSI) B31.1 (Power Piping Code);~~
- ~~ANSI B31.2 (Fuel Gas Piping Code);~~
- ~~ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);~~
- ~~ANSI B31.8 (Gas Transmission and Distribution Piping Code);~~
- Title 24, California Code of Regulations, Part 5 (California Plumbing Code);
- Title 24, California Code of Regulations, Part 6 (California Energy Code for building energy conservation systems and temperature control and ventilation systems);
- Title 24, California Code of Regulations, Part 2 (California Building Code); and
- Riverside County codes.

Proposed Elimination of MECH-2

Rationale:

Similarly, Condition of Certification **MECH-2 l**ists requirements for pressure vessels which will not be a part of the PV project. This COC should be deleted.

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3.2 TRANSMISSION SYSTEM ENGINEERING

This section outlines the portions of the Modified Project that may affect the analysis, rationale, conclusions, and Conditions of Certification contained in the Final Decision for the Approved Project.

3.2.1 Overview of Approved Project

The Approved Project was originally licensed as a nominally rated 1,000 MW solar thermal facility to be developed in four independent units, each with a capability of generating up to 250 MW with traditional steam turbine technology. The Approved Project would interconnect with a double circuit 230 kV transmission gen-tie line to the CRS which is already under construction.

The Commission approved a previous amendment on August 24, 2011 to the Approved Project to accommodate the relocation of the CRS. CAISO, SCE, and PVSI executed a LGIA in November 2010, which was approved by FERC in March 2011. SCE and CAISO have completed studying the effect of switching solar technologies and whether the change impacts the previous interconnection studies and have concluded that the 485 MW of PV is acceptable. The LGIA would need to be amended to address the technology switch. The LGIA amendment, once executed, would require FERC review and approval.

3.2.2 Relevant Modifications to Project Description

The Modified Project will eliminate the power blocks and the CSP generation technology will be replaced with PV. The switchyard will be modified to accommodate this change. A preliminary one-line diagram and a preliminary layout of the proposed switchyard are presented in Appendix D.

3.2.3 Compliance with LORS

The Modified Project will comply with all transmission system engineering related laws, ordinances, regulations and standards. This will be ensured by enforcement of the existing Conditions of Certification as modified below. Evidence that the Modified Project can safely interconnect with the CAISO system at the CRS will be demonstrated by the LGIA, when amended.

3.2.4 Conditions of Certification

Proposed Revisions to ELEC-1

Rationale:

Condition of Certification **ELEC-1** lists voltages that do not apply to a PV project.

It is recommended that A.1 be modified to read: “one-line diagrams for the 34.5 kV systems and typical one-line diagrams for all systems under 34.5 kV and over 240 V; and”

It is recommended that B.5 be modified to read: “coordination study calculations for fuses, circuit breakers, and protective relay settings for all AC systems under 34.5 kV and over 240 V;”.

A. Final plant design plans shall include:
   1. one-line diagrams for the ~~13.8-kV, 4.16-kV, and 480 V systems~~**34.5 kV systems and typical one-line diagrams for all systems under 34.5 kV and over 240 V** ; and
   2. system grounding drawings.

B. Final plant calculations must establish:
   1. short-circuit ratings of plant equipment;
   2. ampacity of feeder cables;
   3. voltage drop in feeder cables;
   4. system grounding requirements;
   5. coordination study calculations for fuses, circuit breakers, and protective relay settings for ~~the 13.8-kV, 4.16-kV, and 480 V systems;~~ **all AC systems under 34.5 kV and over 240 V;**
   6. system grounding requirements; and
   7. lighting energy calculations.

3.3 TRANSMISSION LINE SAFETY AND NUISANCE

There will be no changes to the Commission's assumptions, analysis, rationale, or Conditions of Certification as a result of the Modified Project to the technical area of Transmission Line Safety and Nuisance because the Approved transmission line is not changing.

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Section 4 PUBLIC HEALTH AND SAFETY

The following sections provide a description of the modifications proposed to the BSPP as they may affect the assumptions, rationale, and Conditions of Certification in the Commission Final Decision. As discussed in Section 2 of this Petition, NextEra Blythe Solar has not yet selected the exact combination of fixed tilt and single access tracking PV modules for the site. Such selection will be made as part of the final design of the BSPP. However, where there are differences between the two systems, NextEra Blythe Solar has included a comparison of each for the Commission to consider a "worse-case" for each technical area. Table 4.0-1 presents a summary of the anticipated differences in impacts associated with the modular systems. As shown in Table 4.0-1, the relative difference in impacts of either fixed-tilt or tracking PV systems or a combination of both systems is insignificant. Furthermore, either type of PV system is expected to have lower impacts than the Approved Project.

Ultimately the selection of either fixed-tilt or tracking PV systems or a combination of both systems will not affect the amount of land that is assumed to be considered impacted and upon which mitigation is based, the construction methodologies or types or quantities of equipment necessary to construct the project and therefore construction emissions will be the same, or the hazardous materials or waste generated. There will be a nearly imperceptible difference in the noise generated by the small motors used for the tracking system. A tracking system will present variable orientation of the panels to the sun; however, any type of PV panel is designed to minimize reflection and the visual impacts associated with the Modified Project are based on a "worst case" tracking orientation.

TABLE 4.0-1
COMPARISON OF IMPACTS OF FIXED-TILT, TRACKING, AND COMBINATION OF BOTH PV SYSTEMS

Issue	Tracker Only	Fixed-Tilt Only	Combination of Tracker and Fixed-Tilt	Impacts Lower than Approved Project?
Air Quality, GHG and Public Health	Same	Same	Same	Yes
Worker Safety/Fire Protection	Same	Same	Same	Yes
Hazardous Materials Management	Same	Same	Same	Yes
Waste Management	Same[(a)]	Same[(a)]	Same[(a)]	Yes
Biological Resources	Same	Same	Same	Yes
Water Resources	Same	Same	Same	Yes
Cultural Resources	Same	Same	Same	Yes
Geological and Paleontological Resources	Same	Same	Same	Yes
Soil Resources	Same	Same	Same	Yes
Land Use	Same	Same	Same	Yes
Traffic and Transportation	Same	Same	Same	Yes

Issue	Tracker Only	Fixed-Tilt Only	Combination of Tracker and Fixed-Tilt	Impacts Lower than Approved Project?
Socioeconomics	Same	Same	Same	Yes
Noise and Vibration	Tracking motors are a minor source of noise[(b)]	Slightly less as there would be no motors	Slightly greater than Fixed-Tilt only and slightly lower than Tracker only	Yes[(b)]
Visual Resources	Panels would move and would present different sun angles	Slightly less as the panels would not move	Slightly greater than Fixed-Tilt only and slightly lower than Tracker only	Yes[(c)]

NOTES:

[(a)] If NextEra Blythe Solar selects panels that incorporate Cadmium Telluride (CdTe), it would participate in the manufacturer's recycling program. However, presence of this material is considered to be less of a waste management issue than dealing with the heat transfer fluid used for the Approved Project.

[(b)] Tracking motors are significantly less noisy than the steam turbine and air cooled condenser that were part of the Approved Project.

[(c)] Any type of PV panel will have substantially less potential for visual impacts than parabolic mirrors as PV panels are designed to be non-reflective.

4.1 GREENHOUSE GAS EMISSIONS

This section provides estimates of GHG emissions associated with the construction and operation of the Modified Project. As described below, impacts of the Modified Project with respect to GHG emissions are expected to be less than those of the Approved Project and will remain less than significant.

4.1.1 Summary of Project Changes Related to GHG Emissions

The changes proposed for the Modified Project that would reduce greenhouse gas (GHG) emissions include the following:

- The elimination of the solar thermal technology eliminates the GHG emissions associated with the combustion of natural gas by auxiliary boilers for freeze protection of the HTF.
- A reduction in the construction period from 69 months to up to 48 months.
- A reduction in the amount of grading needed in the solar field, as well as a smaller Project footprint.
- A reduction in the construction workforce from an average of approximately 604 daily construction workers, with a peak daily workforce of 1,004, to an average of 250 to 430 daily construction workers, with a peak daily workforce of 619.
- A reduction in the hiring of about 221 permanent, full-time employees to hiring 15 to 20 permanent, full-time employees for project operations. Temporary personnel would be employed, as needed, during seasonal periods when panel washing is required.

4.1.2 Reduction in GHG Impacts

GHG emissions from construction equipment were calculated by multiplying total operating hours by emission factors. Emission factors for carbon dioxide (CO_2) and methane (CH_4) were calculated with the OFFROAD2007[2] model for calendar year 2014. Nitrous oxide (N_2O) emission factors were calculated as 2.6 grams per gallon from Table 13.7 of 2013 Climate Action Registry Default Emission Factors. Fuel consumption for calculating N_2O emissions was calculated by dividing total daily state-wide fuel

[2] CARB released the OFFROAD 2011 off-road equipment emissions model in September 2011. The OFFROAD 2011 model was developed primarily to support CARB regulatory activities to reduce emissions from in-use off-road equipment. The OFFROAD 2011 model does not include emissions and emission factors for all of the types of construction equipment that are anticipated to be used for construction activities for the Modified Project. It also does not include emissions of greenhouse gases. Because of the limitations in the OFFROAD 2011 model, it was not used for these analyses. Emission factors calculated using the OFFROAD 2011 model are generally lower than emission factors calculated using the OFFROAD 2007 model. Therefore, use of the emission factors calculated using the OFFROAD 2007 model provides a conservative estimate of emissions.

consumption, calculated with the OFFROAD2007 model for 2014, by total daily state-wide operating hours, also calculated with the OFFROAD2007 model for 2014. All the calculations were made by the equipment types and horsepower ranges used in the OFFROAD2007 model. Additionally, it was assumed that all applicable equipment would have engines that would meet Tier 3 emission standards at a minimum, so model-year specific outputs from the OFFROAD2007 model were used for the earliest model year that would be required to meet the Tier 3 standards.

GHG emissions from motor vehicles during construction were calculated by multiplying total vehicle-mile-traveled (VMT) by emission factors. CO_2 emission factors were calculated by dividing total daily emissions in Riverside County by vehicle class in 2014 calculated with the EMFAC2011 model by total daily VMT in Riverside County by vehicle class in 2014 calculated with the EMFAC2011 model. CH_4 emissions from gasoline fueled vehicles were calculated using a similar method with the EMFAC2011-LDV model, which can report CH4 emissions. CH_4 emission factors for diesel-fueled vehicles were calculated as 0.0408 x total organic gases emission factors, N_2O emission factors for gasoline-fueled vehicles were calculated as 0.0416 x nitrogen oxide (NO_x) emission factors, and N_2O emission factors for diesel-fueled vehicles were calculated from 0.3316 grams/gallon. The off-site motor vehicle trips for the delivery of the PV panels to the site were calculated as the total miles from the presumed point of origin in Long Beach, California. The procedures to calculate CH_4 emissions for diesel vehicles and N_2O emission factors for both gasoline and diesel vehicles are based on recommendations from California Air Resources Board (CARB).

A similar approach was used for GHG emissions from motor vehicles during operation, except that emissions were calculated for 2018, and on-site motor vehicles were assumed to be 2018 model year. The emissions factors were multiplied by annual VMT to calculate annual GHG emission.

4.1.2.1 Summary of GHG Construction Emissions

Table 4.1-1 presents a summary of the estimates of GHG emissions for the 48 month construction phase of the Modified Project (total of on-site and off-site emissions) compared to the Approved Project. The emissions spreadsheets with the detailed calculations of the GHG emissions are provided in Appendix E.

TABLE 4.1-1
COMPARISON OF GHG CONSTRUCTION EMISSIONS ESTIMATES

Source	Modified Project	Approved Project[(a)]
	Metric Tons CO_2e	
On-Site Construction Equipment	5,200	70,700
On-Site Motor Vehicles	700	1,800
Off-Site Motor Vehicles[(b)]	48,200*	34,400
Total CO_2e	54,100	103,900

NOTE:

[(a)] Source: California Energy Commission, 2010

[(b)] Modified Project off-site motor vehicle GHG emissions are greater than Approved Project because the Approved Project only included delivery vehicle mileage in the vicinity of the project. Based on the current methodology requested by CEC staff, the delivery vehicle mileage for the Modified Project is based on a trip length from the point of origin within California, e.g., PV panels were assumed to be delivered to the site from the Port of Long Beach. Even with this methodology adjustment, total GHG emissions for the Modified Project are about half of the GHG emissions from the Approved Project.

4.1.2.2 Summary of GHG Operation Emissions

Table 4.1-2 presents the estimates of GHG emissions for the operation phase of the Modified Project (total of on-site and offsite emissions), and compares these emissions to those of the Approved Project. The GHG emissions estimate of 125 metric tons carbon dioxide equivalent (CO_2e) per year for operation of the Modified Project is substantially less than the GHG operation estimate of 14,789 metric tons CO_2e per year contained in the Final Decision for the Approved Project.

TABLE 4.1-2
COMPARISON OF GHG OPERATION EMISSIONS ESTIMATES

	Modified Project	Approved Project[(a)]
Source	Metric Tons CO_2e per Year	
On-Site Equipment[(b)]	6	13,167
On-Site Maintenance Vehicles	17	226
Delivery Vehicles	10	164
Employee Vehicles	92	1,208
Equipment Leakage (SF_6)	--[(c)]	24
Total CO_2e	125	14,789

NOTES:

[(a)] Source: California Energy Commission, 2010

[(b)] On-site equipment during operations includes a portable light plant generator for the Modified Project, and four each Auxiliary boilers, emergency generators and fire water pumps for the Approved Project

[(c)] An overly conservative emissions methodology for leakage of SF_6 from circuit breakers and electrical equipment was assumed for the Approved Project. It is assumed that hermetically sealed circuit breakers would be used for the Modified Project.

4.1.3 Compliance with LORS

There are no changes in LORS that would be applicable to the Modified Project. Therefore, the analysis contained in the Final Decision should remain unchanged for the Modified Project.

4.1.4 Conditions of Certification

There were no Conditions of Certification imposed on the Approved Project in the area of GHG emissions. Consequently, no changes or additions are necessary for the Modified Project.

LITERATURE CITED

California Energy Commission, 2010. Blythe Solar Power Project Commission Decision. CEC-800-2010-009-CMF. pp. 113 - 115.

4.2 AIR QUALITY

This section provides estimates of criteria pollutant emissions associated with the construction and operation of the Modified Project.

Emissions modeling was not conducted for the construction phase of the Modified Project since many of the construction activities associated with grading of the site were similar to the Approved Project, but in all cases the on-site emissions of criteria pollutants are less than in the Approved Project. Therefore, the modeled impacts associated with construction of the Modified Project are assumed to be at most equal, and more likely substantially less, than in the Approved Project, as discussed in Section 4.2.2.

Emissions modeling was not conducted for operation and maintenance of the Modified Project because the discontinued use of the solar thermal technology eliminates the emissions associated with the use of HTF, the combustion of natural gas, and the intensive mirror washing program of the Approved Project. The air quality emissions for O&M of the Modified Project are estimated to be a fraction of those of the Approved Project, as discussed in Section 4.2.3.

4.2.1 Summary of Project Changes Related to Air Quality

The changes proposed for the Modified Project that would reduce affects to air quality include the following:

- The elimination of the solar thermal technology dramatically reduces the operational and maintenance emissions associated with the Project due to the following:
  - HTF will no longer be used, so the extensive piping throughout the solar field and the ullage systems will not be installed;
  - The auxiliary boilers which burn natural gas and are used for freeze protection of the HTF and cold startup of the steam generators will no longer be needed;
  - Emergency generators and fire water pump engines which burn diesel fuel are no longer planned in the power block area; and
  - PV panels require much less frequent washing (e.g., at most quarterly) rather than the intensive weekly mirror washing program.
- Emissions during the construction period are also substantially reduced due to the following factors:
  - The Project footprint is reduced from 6,831 acres to 4,070 acres;
  - The length of the time needed for construction is decreased from 69 months to up to 48 months;

- Since PV panels do not require a nearly flat surface, substantially less grading of the Project footprint is planned;
- The cut and fill amount is reduced from approximately 8.3 million cubic yards to approximately 0.9 million cubic yards;
- The Project will not utilize an on-site concrete batch plant or fuel depot (diesel fuel will be obtained from fueling trucks brought on-site and gasoline will be obtained from a nearby gasoline station in Blythe); and
- A natural gas pipeline will not be constructed.

4.2.2 Summary of Construction Emissions

The methodology for calculating criteria pollutants impacts during construction is described below in Section 4.2.2.1. The estimated emissions from construction of the Modified Project are presented in Section 4.2.2.2 and the detailed emissions calculations are provided in Appendix E.

4.2.2.1 Construction Emissions Calculation Methodology

Emissions from construction equipment were calculated by multiplying operating hours by emission factors, in pounds per hour calculated with OFFROAD2007 for calendar year 2014 and assuming all equipment engines would meet Tier 3 emission standards. Emissions from motor vehicles were calculated by multiplying VMT by emission factors calculated with EMFAC2011[3] for 2014 in Riverside County.

Fugitive particulate dust emissions for vehicles traveling on unpaved roads and paved roads were calculated by multiplying VMT on unpaved and paved roads by emission factors calculated using equations in U.S. Environmental Protection Agency's (EPA's) Compilation of Air Pollutant Emission Factors (AP-42). It was estimated that emissions on unpaved roads would be reduced by 81 percent by limiting speeds to 15 miles per hour and watering twice per day. Fugitive dust emissions from earthwork activities were calculated by multiplying activity levels by emission factors calculated using equations in AP-42. The activities included soil dropping and bulldozing, grading, and scraping. It was assumed that watering would be used to maintain soil at a moisture level of at least 15 percent.

[3] CARB released the OFFROAD 2011 off-road equipment emissions model in September 2011. The OFFROAD 2011 model was developed primarily to support CARB regulatory activities to reduce emissions from in-use off-road equipment. The OFFROAD 2011 model does not include emissions and emission factors for all of the types of construction equipment that are anticipated to be used for construction activities for the Modified Project. It also does not include emissions of CO, SO_2 or greenhouse gases. Because of the limitations in the OFFROAD 2011 model, it was not used for these analyses. Emission factors calculated using the OFFROAD 2011 model are generally lower than emission factors calculated using the OFFROAD 2007 model. Therefore, use of the emission factors calculated using the OFFROAD 2007 model provides a conservative estimate of emissions.

Fugitive reactive organic gas (ROG) emissions from asphaltic paving were calculated by multiplying the area paved by an emission factor from CalEEMod.

4.2.2.2 Construction Emissions

Table 4.2-1 presents the estimated maximum daily emissions and Table 4.2-2 presents the maximum annual emissions generated during construction of the Modified Project. A comparison between the maximum daily and annual on-site emissions generated during construction of the Modified Project and the Approved Project are shown in Table 4.2-3.

TABLE 4.2-1
MAXIMUM DAILY MODIFIED PROJECT PLANT SITE CONSTRUCTION EMISSIONS SUMMARY

Source	Emissions (lb/day)					
	CO	ROG	NO_x	SO_x	PM_{10}	$PM_{2.5}$
On-site Emissions						
Equipment Exhaust	53.7	14.3	113.8	0.2	4.4	4.0
Motor Vehicle Exhaust	1.2	0.3	8.7	0.0	0.3	0.3
Paving Fugitive ROG	--	0.3	--	--	--	--
Motor Vehicle Fugitive Dust	--	--	--	--	598.5	59.9
Earthwork Fugitive Dust	--	--	--	--	75.9	23.1
Total On-site Emissions	54.9	14.9	122.5	0.2	679.1	87.4
Offsite Emissions						
Total Offsite Emissions [(a)]	304.2	40.4	333.3	0.7	25.2	12.5

NOTE:

[(a)] Offsite emissions reflect employee and delivery truck on-road emissions within the Mojave Desert Air Basin related to grading and construction of the power plant facilities and do not include construction of the linear facilities (i.e., the access road and transmission line).

TABLE 4.2-2
MAXIMUM ANNUAL MODIFIED PROJECT PLANT SITE CONSTRUCTION EMISSIONS SUMMARY

Source	Emissions (tons/year)					
	CO	ROG	NO_x	SO_x	PM_{10}	$PM_{2.5}$
On-site Emissions						
Equipment Exhaust	5.6	1.5	12.4	0.0	0.4	0.5
Motor Vehicle Exhaust	0.1	0.0	1.0	0.0	0.0	0.0
Paving Fugitive ROG	--	0.0	--	--	--	--
Motor Vehicle Fugitive dust	--	--	--	--	60.5	5.9
Earthwork Fugitive dust	--	--	--	--	8.6	2.8
Total On-site Emissions	5.8	1.6	13.4	0.0	69.5	9.2
Offsite Emissions						
Total Offsite Emissions [(a)]	31.7	4.3	39.7	0.1	2.8	1.4

NOTE:

[(a)] Offsite emissions reflect employee and delivery truck on-road emissions within the Mojave Desert Air Basin related to grading and construction of the power plant facilities and do not include construction of the linear facilities (i.e., the access road and transmission line).

TABLE 4.2-3
COMPARISON OF ON-SITE CONSTRUCTION EMISSIONS FOR MODIFIED VS. APPROVED PROJECT

	Plant Site Construction Emissions					
	CO	**ROG**	**NO_x**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Plant Site Construction Emissions (lb/day)						
Modified Project (Table 4.2-1)	54.9	14.9	122.5	0.2	679.1	87.4
Approved Project [(a)]	*488.8*	*95.3*	*878.2*	*1.9*	*920.9*	*186.2*
Maximum Annual Plant Site Construction Emissions (tons/year)						
Modified Project (Table 4.2-2)	5.8	1.6	13.4	0.0	69.5	9.2
Approved Project [(a)]	*57.7*	*11.5*	*101.9*	*0.2*	*103.2*	*21.2*

NOTE:

[(a)] Emissions for the Approved Project are from Air Quality Table 6 and Table 7 of the CEC's Revised Staff Assessment for the Blythe Solar Power Project, June 2010.

As shown in Table 4.2-3, in comparison to the Approved Project, the Modified Project would generate substantially lower on-site emissions on a daily and annual basis due to the reduced size of the site and the reduced earthwork activities. The maximum daily PM_{10} fugitive dust emissions show the least reduction between the Approved and Modified Projects because the emissions are reflective of the grading period, which will consist of the same types of activities and equipment in either case. Fugitive dust from both construction equipment and motor vehicle use on unpaved areas reflect over 93 percent of the total PM_{10} emissions for both the Modified and the Approved Project.

The construction modeling was not redone for the Modified Project. Since the same grading techniques and types construction equipment would be used in both cases, the modeling scenarios would be basically the same, but with much lower emissions. For the Approved Project, the modeling analysis demonstrated compliance with applicable ambient air quality standards for all pollutants except PM_{10}, which was exceeded because the background value chosen was already well over the California standards. Since the Applicant is not proposing changes to any PM_{10}-related mitigation measures, there does not appear to be a good reason to remodel PM_{10} impacts.

The NO_2 and $PM_{2.5}$ impacts for the Approved Project were close (99 percent) to the applicable short-term (1-hour and 24-hour, respectively) standards. Since the maximum daily emissions for the Modified Project of NO_x and $PM_{2.5}$ are 14 percent and 47 percent of these pollutant emissions for the Approved Project, it is safe to assume that the modeling analyses using the same conservative assumptions would show compliance with these standards by a wider margin. Similarly, the Modified Project's contribution to the PM_{10} impacts can be expected to decrease by roughly the same 74 percent on a daily basis and 67 percent on an annual basis as the emissions do. Therefore, impacts would remain less than significant with the implementation of the mitigation measures as required by Commission Conditions of Certification AQ-SC1 through AQ-SC5.

4.2.3 Summary of Operations and Maintenance Emissions

The methodology for calculating criteria pollutant emissions during operations is described below in Section 4.2.3.1. The estimated emissions from O&M of the Modified Project are presented in Section 4.2.2.3 and the detailed emissions calculations are provided in Appendix E.

4.2.3.1 O&M Emissions Calculation Methodology

As with vehicle emissions during the construction phase, emissions from motor vehicles during the operation phase were calculated by multiplying VMT by emission factors calculated with EMFAC2011 for 2014 in Riverside County. Fugitive dust emissions for vehicles traveling on unpaved roads and paved roads were calculated by multiplying VMT on unpaved and paved roads by emission factors calculated using equations in EPA's AP-42.

4.2.3.2 O&M Emissions

The maximum daily and annual O&M emissions for the Modified Project are shown in Tables 4.2-4 and 4.2-5, respectively. A comparison between the maximum daily and annual on-site emissions generated during O&M of the Modified Project and the Approved Project are shown in Table 4.2-6.

TABLE 4.2-4
MAXIMUM DAILY O&M EMISSIONS SUMMARY

Source	Emissions (lb/day)					
	CO	ROG	NO_x	SO_x	PM_{10}	$PM_{2.5}$
On-Site Emissions						
On-site Equipment [(a)]	--	--	--	--	--	--
Off-Road Equipment	0.7	0.1	1.03	0.0	0.0	0.0
On-site Motor Vehicle Exhaust	0.1	0.0	0.07	0.0	0.0	0.0
On-site Vehicle Fugitive Dust	--	--	--	--	48.6	4.9
Total On-site Emissions	0.8	0.1	1.1	0.0	48.6	4.9
Offsite Emissions						
Total Offsite Emissions [(b)]	7.0	0.9	2.2	0.0	0.6	0.2

NOTE:

[(a)] On-site equipment for the Modified Project consists of a 30 hp portable light plant generator with negligible emissions.
[(b)] Offsite emissions reflect employee and delivery truck on-road emissions within the Mojave Desert Air Basin

TABLE 4.2-5
MAXIMUM ANNUAL O&M EMISSIONS SUMMARY

Source	Emissions (tons/year)					
	CO	ROG	NO_x	SO_x	PM_{10}	$PM_{2.5}$
On-site Emissions						
On-site Equipment [(a)]	--	--	--	--	--	--
Off-Road Equipment	0.0	0.0	0.1	0.0	0.0	0.0
On-site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0
On-site Vehicle Fugitive Dust	--	--	--	--	6.7	0.7
Total On-site Emissions	0.1	0.0	0.1	0.0	6.7	0.7
Offsite Emissions						
Total Offsite Emissions [(b)]	0.9	0.1	0.1	0.0	0.1	0.0

NOTE:

[(a)] On-site equipment for the Modified Project consists of a 30 hp portable light plant generator with negligible emissions.
[(b)] Offsite emissions reflect employee and delivery truck on-road emissions within the Mojave Desert Air Basin

As shown in Table 4.2-6, the O&M emissions for the Modified Project are only a fraction of those from the Approved Project. A breakdown of the on-site equipment and maintenance vehicle emissions (primary associated with the mirror washing) is provided for the Approved Project, and a further breakdown can be found in the CEC's Revised Staff Assessment (CEC 2010). The lower on-site emissions of the Modified Project are primarily due to the elimination of the equipment in each of the power blocks at the facility and the fact that the intensive mirror washing to support solar thermal technology is no longer needed.

Similar to the construction phase, modeling during O&M was not redone for the Modified Project. As shown in Table 4.2-6, the daily and annual emissions from both the stationary equipment and the maintenance vehicles for the Modified Project are less than 9 percent (in most cases less than 1 percent) of the emissions for the Approved Project. The modeling analysis for the Approved Project from O&M emissions resulted in similar impacts to those discussed above for the construction phase, and like construction, with the substantially reduced emissions from the Modified Project, impacts would remain less than significant with the implementation of the mitigation measures as required by Commission Conditions of Certification **AQ-SC6** and **AQ-SC7**.

TABLE 4.2-6
COMPARISON OF ON-SITE O&M EMISSIONS FOR MODIFIED VERSUS APPROVED PROJECT

	Emissions					
	CO	ROG	NO_x	SO_x	PM_{10}	$PM_{2.5}$
Maximum Daily O&M Emissions (lb/day)						
Total Modified Project (Table 4.2-4)	0.8	0.1	1.1	0.0	48.6	4.9
Total Approved Project On-site Equipment [(a b)]	*143.5*	*219.6*	*145.5*	*0.64*	*25.8*	*25.6*
Total Approved Project Maintenance Vehicles (Exhaust and Fugitive Dust)[(b)]	*1.34*	*0.23*	*2.25*	*0.02*	*809.8*	*81.1*
Total Approved Project [(b)]	*144.8*	*219.9*	*147.8*	*0.7*	*835.6*	*106.7*

	Emissions					
	CO	**ROG**	**NO_x**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Maximum Annual O&M Emissions (tons/year)						
Total Modified Project (Table 4.2-5)	0.1	0.0	0.1	0.0	6.7	0.7
Total Approved Project On-site Equipment [a b]	*6.38*	*35.35*	*4.46*	*0.00*	*1.85*	*1.85*
Total Approved Project Maintenance Vehicles (Exhaust and Fugitive Dust [b]	*0.15*	*0.02*	*0.22*	*0.00*	*72.7*	*7.3*
Total Approved Project [b]	*6.5*	*35.4*	*4.7*	*0.0*	*74.5*	*9.1*

NOTES:

[a] On-site equipment for the Approved Project consists of four auxiliary boilers, four emergency generators, four fire water pumps, four auxiliary cooling towers, HTF ullage system vents and piping, and fuel depot emissions.

[b] Emissions for the Approved Project are from Air Quality Table 8 and Table 9 of the CEC's Revised Staff Assessment for the Blythe Solar Power Project, June 2010.

4.2.4 Compliance With LORS

The Modified Project will not be required to submit an application for a Determination Of Compliance with the Mojave Desert Air Quality Management District (MDAQMD) because it will not have any permanent emission sources that would require permits under MDAQMD rules (The 30 horsepower [hp] light plant generator is below the 50 hp threshold at which a permit is required).

4.2.5 Conditions of Certification

Conditions of Certification **AQ-SC8** and **AQ-1** through **AQ-64** should be deleted as they are no longer applicable to the Modified Project because the BSPP will no longer have equipment that requires MDAQMD or federal air permits.

Condition of Certification **AQ-SC6** should be revised as follows to reflect that the Modified Project will not incorporate mirrors.

AQ-SC6 The project owner, when obtaining dedicated on-road or off-road vehicles for ~~mirror~~ **panel** washing activities and other facility maintenance activities, shall only obtain vehicles that meet California on-road vehicle emission standards or appropriate U.S.EPA/California off-road engine emission standards for the latest model year available when obtained.

LITERATURE CITED

California Energy Commission. 2010. REVISED Energy Commission Staff Assessment, publication number CEC-700-2010-004-REV1. Posted: June 4.

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4.3 PUBLIC HEALTH

This section provides a public health impact analysis associated with construction emissions for the Modified Project. As described below, public health-related impacts of the Modified Project are expected to be less than those of the Approved Project and will remain less than significant. The public health impact analysis for O&M of the Modified Project is not provided because with the elimination of the solar thermal technology, the emissions associated with the use of HTF, the consumption of natural gas, and the intensive mirror washing program are no longer present. Therefore, the potential public health impacts associated with emissions during operation and maintenance of the Modified Project are estimated to be a fraction of those of the Approved Project.

However, since the emissions associated with construction activities for the Modified Project are expected to be similar to those evaluated for the Approved Project, a revised health risk assessment (HRA) was performed for the Modified Project. The revised HRA provided below is based on the updated construction schedule and construction emissions for the currently proposed Modified Project.

4.3.1 Summary of Project Changes Related to Public Health

The changes proposed for the Modified Project that would reduce effects to public health include the following:

- A reduction in the construction period from 69 months to up to 48 months.
- A reduction in the construction workforce from an average of approximately 604 daily construction workers, with a peak daily workforce of 1,004, to an average of 250 to 430 daily construction workers, with a peak daily workforce of 619.
- A reduction in the area disturbed from 6,831 acres to 4,070 acres.
- A reduction in the cut and fill amount from approximately 8.3 million cubic yards to approximately 0.9 million cubic yards.

4.3.2 Reduction in Public Health Impacts

The screening risk calculation for construction impacts (i.e., diesel equipment particulate matter emissions and the inhalation pathway assumption) is presented in Table 4.3-1. Consistent with the previous project analysis, no sensitive receptors were noted within a 3-mile radius of the plant site. In addition to the HRA done for the Approved Project, a revised HRA was submitted in June 2012. That June 2012 HRA assumed a construction period of 6.25 years and total Diesel Particulate Matter (DPM) emissions of 21.5 tons. The construction of the currently proposed Modified Project will be over a period of up to 48 months (4 years) and total DPM emissions will be 1.81 tons, which is less than 9 percent of the DPM emissions estimated in the June 2012 HRA. The

combustion source impacts in the June 2012 HRA were scaled by this factor to determine the updated DPM concentration for the Modified Project. The cancer risk over the 4 year period from DPM emissions was calculated based on the Revised Technical Support Document for Exposure Assessment and Stochastic Analysis (OEHHA 2012). The resulting impacts to public health are much less than the applicable significance level of 10 in a million cancer risk and 1.0 hazard index. These impacts are well below those of the Approved Project which was found to have a maximum potential cancer risk of 1.1 in a million. Thus, during the construction phase of the Modified Project, no impacts to public health are expected to occur.

TABLE 4.3-1
CONSTRUCTION RISK SUMMARY

Parameter	MIR Receptor #1	MIR Receptor #2
Receptor Location	Fence line	Nearest Residential
MIR Receptor Coordinates (UTM meters-NAD83)	705922, 3727306	710535, 3721040
Cancer Risk (per million 4 years)	0.61	0.01
Chronic HI	0.001	0.000

NOTES:

The maximum on-site diesel exhaust period emissions (total tons over four years) were used for risk evaluation purposes. Maximum annual DPM combustion source impacts are 0.00303 ug/m^3 for the fenceline receptor, and 0.00006 ug/m^3 for the nearest residential receptor.

4.3.3 Compliance With LORS

There are no public health related LORS that would be applicable to the Modified Project solely as a result of its conversion to PV technology. Therefore, the Commission Final Decision that the BSPP would comply with all public health related LORS would still be applicable.

4.3.4 Conditions of Certification

The Commission Final Decision includes Condition of Certification **PUBLIC HEALTH-1** which applied solely to use the cooling tower. Since the Modified Project will not construct or operate any cooling towers, this Condition of Certification should be deleted.

LITERATURE CITED

California Office of Environmental Health Hazard Assessment (OEHHA), 2012. Revised Technical Support Document for Exposure Assessment and Stochastic Analysis. Available online at: http://www.oehha.ca.gov/air/hot_spots/tsd082712.html

4.4 WORKER SAFETY/FIRE PROTECTION

This section discusses the reduction in impacts to worker safety and fire protection for the Modified Project.

4.4.1 Project Changes Related to Worker Safety and Fire Protection

The Modified Project proposes to utilize either fixed tilt or single-axis tracking PV modules for the Modified Project's electrical generation. The elimination of all solar thermal technology (including the equipment within the four power blocks) would result in the elimination of combustion of natural gas and the transport and storage of HTF. These components, along with the potential for workers to be exposed to Valley Fever and unexploded ordnance, were the focus of potential impacts to worker safety and fire protection during licensing of the Approved Project. The Modified Project will consist of a large number of solar PV panels, wires, and connections, which could be an additional source of electrical hazards.

4.4.2 Changes in Environmental Impacts

The potential impacts to worker safety during construction would be the same for the Modified Project as for the Approved Project.

The largest potential change to the analysis contained in the Final Decision is whether the on-going contribution to Riverside County Fire Department remains necessary since the level of service needed to respond to a HTF fire in the solar field, or a fire or explosion within the power block, has been eliminated. NextEra Blythe Solar will work with the Riverside County Fire Department and/or the City of Blythe Fire Department to negotiate an appropriate mitigation fee, if needed, to offset the impacts to the applicable fire department(s) from the reduced risk posed by the Modified Project. In the event of an on-site fire involving the PV panels, on-site workers and emergency responders may be subject to electrical shock hazards, since PV panels can remain energized after circuits are cut. NextEra Blythe Solar will identify safety measures, engineering controls, and BMPs that will be put in place as part of the Emergency Action Plan required by **WORKER SAFETY-2** in order to address potential electrical shock hazards. Training in required practices to address electrical shock hazards will also be included as part of exercises required in **WORKER SAFETY-9**.

4.4.3 Compliance With LORS

In the Commission Final Decision, the Commission concluded that, with the implementation of the Conditions of Certification, the Approved Project would comply with all applicable LORS. As with the Approved Project, the Modified Project would comply with all applicable LORS, and no new or additional LORS have been identified.

4.4.4 Conditions of Certification

No new or more severe impacts requiring additional mitigation would result from the Modified Project. Several changes to Conditions of Certification **WORKER SAFETY-1**, **WORKER SAFETY-2**, and **WORKER SAFETY-6** are proposed due to the elimination of the above-ground fuel depot, concrete batch plant, and the second site access road. In addition, proposed changes to Condition of Certification **WORKER SAFETY-2, WORKER SAFETY-7 and WORKER SAFETY-9** will need to be revised to reflect the reduction in impacts to the Riverside County Fire Department and/or City of Blythe Fire Department associated with the lower of level response necessary for the Modified Project.

Note, only excerpts from the Conditions of Certification which show the revisions are provided in this section, and a comprehensive set of both the revised and unchanged Conditions are provided under separate cover.

Proposed Revision to WORKER SAFETY-1

Rationale:

The Modified Project will not contain a concrete batch plant or an above-ground fuel depot. Accordingly, the Construction Fire Prevention Plan in **WORKER SAFETY-1** does not need to address a concrete batch plant or an above-ground fuel depot, as it did for the Approved Project.

WORKER SAFETY-1 The project owner shall submit to the Compliance Project Manager (CPM) a copy of the Project Construction Safety and Health Program containing the following:

- A Construction Fire Prevention Plan ~~that includes the concrete batch plant and the above-ground fuel depot.~~

Proposed Revision to WORKER SAFETY-2

Rationale:

The Modified Project will not contain an above-ground fuel depot. Accordingly, the Fire Prevention Plan in **WORKER SAFETY-2** does not need to address an above-ground fuel depot, as it did for the Approved Project. However, the Emergency Action Plan will include measures to address electrical shock hazards in the event of a fire.

WORKER SAFETY-2 The project owner shall submit to the CPM a copy of the Project Operations and Maintenance Safety and Health Program containing the following:

- An Emergency Action Plan that includes safety measures, engineering controls, and BMPs to address potential electrical shock hazards in the event of a fire;
- Fire Prevention Plan ~~that includes the fuel depot should the project owner elect to maintain and operate the fuel depot during operations (8 Cal Code Regs. § 3221); and~~

Proposed Revision to WORKER SAFETY-6

Rationale:

Condition of Certification **WORKER SAFETY-6** calls for a second access road to the site. This need was driven by the presence of HTF and natural gas on the site, leading to the potential for a fire event that could have potentially blocked the primary access road. As these hazards have been eliminated, there is no longer a need for a redundant access road, and bullet "b" should be eliminated and the reference to the second road in bullet "c" should be deleted. The references to the second road in the paragraphs following bullet "c" should also be deleted.

WORKER SAFETY-6 The project owner shall:

a. Provide a second access gate for emergency personnel to enter the site. This secondary access gate shall be at least one-quarter mile from the main gate.

~~b. Provide a second access road that comes to the site. This road shall be at a minimum an all-weather gravel road and at least 20 feet wide.~~

~~c~~ **b**. Maintain the main access road ~~and the second road~~ and provide a plan for implementation.

Plans for the secondary access gate, the method of gate operation, gravel road, and to maintain the road~~s~~ shall be submitted to the Riverside County Fire Department for review and comment and to the CPM for review and approval.

Verification: At least 60 days prior to the start of site mobilization, the project owner shall submit to the Riverside County Fire Department and the CPM preliminary plans showing the location of a second access gate to the site, a description of how the gate will be opened by the fire department, and a description and map showing the location, dimensions, and composition of the main road, and the gravel road to the second gate.

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4.5 HAZARDOUS MATERIALS MANAGEMENT

As described below impacts of the Modified Project to hazardous materials management are expected to be less than or equal to those of the Approved Project and will remain less than significant.

4.5.1 Project Changes Related to Hazardous Materials Management

The Modified Project proposes to utilize either fixed tilt or single-axis tracking PV modules for the Modified Project's electrical generation. The elimination of the solar thermal technology and power blocks will reduce the need for some hazardous materials storage, management, and disposal during operation. Hazardous materials used during construction will be the same for the Modified Project as for the Approved Project, although used in smaller amounts due less intensive grading and construction of a smaller area. A description of the types, quantities, and methods for management and disposal is discussed in Sections 2.10.1.3 and 2.10.1.4 of this Petition.

4.5.2 Changes in Environmental Impacts

4.5.2.1 Construction

The types of hazardous materials to be used during construction for the Modified Project are similar in type as the hazardous materials as contemplated for the Approved Project and lower in quantity due to the smaller project size. Therefore, the Modified Project's impacts to public health and safety associated with the use of hazardous materials during construction would be similar to or less than the impacts from the Approved Project and would remain less than significant.

4.5.2.2 Operations

The types of hazardous materials that would be used during operation under the Modified Project would be less than those assumed for the Approved Project because the power blocks and HTF would be completely eliminated.

As discussed in this Petition, NextEra Blythe Solar has not yet selected the specific panel for installation at the plant site. Some manufacturers employ the compound CdTe as the semiconductor material within the modules. Cadmium telluride is a stable compound of cadmium (Cd) and tellurium (Te). Cd, produced primarily as a byproduct of zinc refining, is a human carcinogen as an independent element, but when combined with Te, a byproduct of copper refining, forms the stable, non-hazardous compound CdTe. In module manufacturing Cd, a hazardous material, is safely sequestered in the form of CdTe in a module for the over 30-year lifetime of the module, after which it is recycled for use in new solar modules or other new products.

In addition, CdTe's physical properties, including its extremely low vapor pressure and high melting point, along with its insolubility in water, limit its mobility. Furthermore, the very thin layer of CdTe in PV modules is encapsulated between two protective sheets of glass. As a result, the risk of health or environmental exposure in fires, from accidental breakage, or from leaching is de minimus. The exposure routes to CdTe in modules are limited; furthermore, recent toxicological testing indicates that CdTe is significantly less toxic than elemental Cd.

First Solar, a manufacturer that uses CdTe, employs a collection and recycling program to ensure that PV materials stay in the production cycle and out of municipal landfills. The program is designed to recover approximately 95 percent of the semiconductor material and 90 percent of the glass. The remaining materials (e.g., glass fines, dust) are collected in high-efficiency particulate air filters and are disposed of properly. Commercial scale recycling facilities are currently in operation at each of First Solar's manufacturing facilities to recycle manufacturing materials. If NextEra Blythe Solar elects to use a PV panel that uses CdTe, it would participate in that manufacturer's recycling program.

In 2009, an in-depth assessment of the environmental, health, and safety aspects of First Solar's CdTe PV systems and manufacturing operations was carried out under the authority of the French Ministry of Ecology, Energy, Sustainable Development, and the Sea. It concluded that, "During standard operation of CdTe PV systems, there are no cadmium emissions – to air, to water, or to soil. In the exceptional case of accidental fires or broken panels, scientific studies show that cadmium emissions remain negligible. Accordingly, large-scale deployment of CdTe PV can be considered safe to human health and the environment."[4]

A 2005 peer review of three major published studies on the environmental profile of CdTe PV organized by the European Commission, Joint Research Center and sponsored by the German Environment Ministry concluded "…CdTe used in PV is in an environmentally stable form that does not leak into the environment during normal use or foreseeable accidents, and therefore can be considered the environmentally safest current use of cadmium." This review also concluded that "Large scale use of CdTe photovoltaic modules does not present any risks to public health and the environment."[5]

Independent analysis also indicates that CdTe modules do not pose a risk during fires. CdTe has an extremely low vapor pressure, high boiling and melting points, and is

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[4] Summary Report, "Environmental, Health, and Safety (EHS) Aspects of First Solar Cadmium Telluride (CdTe) Photovoltaic (PV) Systems," carried out under the authority of the French Ministry of Ecology, Energy, Sustainable Development, and the Sea, July 2009.

[5] Summary Report, "Peer Review of Major Published Studies on the Environmental Profile of Cadmium Telluride (CdTe) Photovoltaic (PV) Systems," European Commission, Joint Research Centre.

almost completely encapsulated by molten glass when exposed to fire. Exposure of pieces of CdTe PV modules to flame temperatures from 1,400°F to 2,000°F illustrated that CdTe diffuses into glass, rather than being released into the atmosphere. Higher temperatures produce further CdTe diffusion into the glass.[6]

4.5.3 Compliance With LORS

In the Commission Final Decision, the Commission concluded that, with the implementation of the Conditions of Certification, the Approved Project would comply with all applicable LORS. As with the Approved Project, the Modified Project would comply with all applicable LORS, and no new or additional LORS have been identified.

4.5.4 Conditions of Certification

Minor modifications are needed for Conditions of Certification **HAZ-1** and **HAZ-6** to provide a corrected table reference within this PTA and to update the description of on-site security. In addition, Condition of Certification **HAZ-4** should be deleted as it pertains solely to the use of HTF, which would not be used under the Modified Project.

Proposed Revision to HAZ-1, Appendix A

Rationale:

HAZ-1 refers to an Appendix A list of chemicals. Appendix A is no longer up to date. Therefore the following language changes are recommended to the COC:

> The project owner shall not use any hazardous materials not listed **in Table 2-6 and 2-7 of the Revised PTA (April, 2013)** ~~below~~, or in greater quantities or strengths than those identified by chemical name in **Tables 2-6 or 2-7**~~, Appendix A below~~, unless approved in advance by the Compliance Project Manager (CPM).

Proposed Revision to HAZ-2

Rationale:

Because the Modified Project no longer uses HTF, the requirements for a Process Safety Manual no longer apply. Therefore the following language change is recommended to the COC:

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[6] Fthenakis, V., Fuhrmann, M., Heiser, J., Lanzirotti, A., Fitts, J., and Wang, W.,""Emissions and Encapsulation of Cadmium in CdTe PV Modules During Fires," *Progress in Photovoltaics: Research and Applications*, 6, 99-103 (1998).

The project owner shall concurrently provide a Hazardous Materials Business Plan (HMBP), a Spill Prevention, Control, and Countermeasure Plan (SPCC) ~~and a Process Safety Management Plan (PSMP)~~ to the Riverside County Environmental Health Department (RCEHD), the Riverside County Fire Department (RCFD), and the CPM for review.

Proposed Elimination of HAZ-4

Rationale:

Condition of Certification **HAZ-4** should be deleted as it pertains solely to use of HTF which will be eliminated from the Modified Project.

Proposed Revisions to HAZ-6

Rationale:

Condition of Certification **HAZ-6** outlines steps related to operations security. As the Modified Project will contain much lower hazards, several of the outlined items are no longer necessary or will have no real meaning as written. Recommended changes to this Condition include elimination of the Power Block reference in item 1 and elimination of reference to a control room (replace with O&M building) in item 9. **HAZ-6** also proceeds on the assumption that the project will be manned 24 hours a day, as was the case for the Approved Project. As the Modified Project will not be manned 24 hours per day, item 10 should be deleted in its entirety.

HAZ-6 The project owner shall also prepare a site-specific security plan for the commissioning and operational phases that will be available to the CPM for review and approval. The project owner shall implement site security measures that address physical site security and hazardous materials storage. The level of security to be implemented shall not be less than that described below (as per NERC 2002).

The Operation Security Plan shall include the following:

1. Permanent full perimeter fence or wall, at least eight feet high around the ~~Power Block and~~ Solar Field;
2. Main entrance security gate, either hand operated or motorized;
3. Evacuation procedures;
4. Protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
5. Written standard procedures for employees, contractors, and vendors when encountering suspicious objects or packages on site or off site;

6.

A. a statement (refer to sample, ATTACHMENT A), signed by the project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to determine the accuracy of employee identity and employment history and shall be conducted in accordance with state and federal laws regarding security and privacy;

B. a statement(s) (refer to sample, ATTACHMENT B), signed by the contractor or authorized representative(s) for any permanent contractors or other technical contractors (as determined by the CPM after consultation with the project owner), that are present at any time on the site to repair, maintain, investigate, or conduct any other technical duties involving critical components (as determined by the CPM after consultation with the project owner) certifying that background investigations have been conducted on contractors who visit the project site;

7. Site access controls for employees, contractors, vendors, and visitors;
8. A statement(s) (refer to sample, ATTACHMENT C), signed by the owners or authorized representative of hazardous materials transport vendors, certifying that they have prepared and implemented security plans in compliance with 49 CFR 172.802, and that they have conducted employee background investigations in accordance with 49 CFR Part 1572, subparts A and B;
9. Closed circuit TV ~~(CCTV)~~ monitoring system, recordable, and viewable in the ~~power plant control room~~ **O&M building** ~~and security station (if separate from the control room)~~ with cameras able to pan, tilt, and zoom, have low-light capability, and are able to view the outside entrance to the ~~control room~~ **O&M building**, and the front gate**.**~~; and~~

~~10. Additional measures to ensure adequate perimeter security consisting of either:~~

~~A. security guard(s) present 24 hours per day, seven days per week; or~~

~~B. power plant personnel on site 24 hours per day, seven days per week, and~~

~~one of the following:~~

~~perimeter breach detectors~~

~~or~~

~~CCTV able to view both site entrance gates and 100 percent of the power block perimeter.~~

The project owner shall fully implement the security plans and obtain CPM approval of any substantive modifications to those security plans. The CPM may authorize modifications to these measures, or may require additional measures such as protective barriers for critical power plant components depending upon circumstances unique to the facility or in response to industry-related standards, security concerns, cyber security, or additional guidance provided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North American Electrical Reliability Corporation, after consultation with both appropriate law enforcement agencies and the Applicant.

Verification: At least 30 days prior to the initial receipt of **operations related** hazardous materials on site, the project owner shall notify the CPM that a site-specific operations site security plan is available for review and approval. In the annual compliance report, the project owner shall include a statement that all current project employee and appropriate contractor background investigations have been performed, and that updated certification statements have been appended to the operations security plan. In the annual compliance report, the project owner shall include a statement that the operations security plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.

~~SAMPLE CERTIFICATION (Attachment A) – SEE PAGE 200 of Document~~

~~SAMPLE CERTIFICATION (Attachment B) – SEE PAGE 201 of Document~~

~~SAMPLE CERTIFICATION (Attachment C) – SEE PAGE 202 of Document~~

~~Hazardous Materials Appendix A Hazardous Materials Proposed for Use at the BSPP – SEE PAGES 188-198~~

4.6 WASTE MANAGEMENT

As described below, the Modified Project's impacts to waste management are expected to be less than those of the Approved Project, and will remain less than significant.

4.6.1 Project Changes Related to Waste Management

The only changes proposed by the Modified Project relevant to waste management are the elimination of the wastes associated with operation of the power blocks and the elimination of the solar field's use of HTF. Since HTF will no longer be used, the Modified Project will no longer include two land treatment units for HTF spills, which will also eliminate the need for a waste management program tailored specifically to address such spills.

Construction wastes are expected to be similar to those identified in the Commission Final Decision for the Approved Project.

4.6.2 Changes in Environmental Impacts

4.6.2.1 Construction

The types and quantities of wastes generated and the management methods for such wastes during construction of the Modified Project would be consistent with the wastes and management methods contemplated for the Approved Project. For both the Approved Project and the Modified Project, solid waste, non-recyclable waste, and hazardous and non-hazardous waste generated during construction would be treated in a similar manner. Therefore, the Modified Project's waste management impacts would be less than or equal to impacts under the Approved Project and would remain less than significant.

4.6.2.2 Operations

The types of wastes generated and the management methods for such wastes during operation of the Modified Project would be consistent with the wastes and management methods contemplated for the Approved Project, with the exception of HTF related wastes. The quantities of wastes would be reduced under the Modified Project and there would be no need to manage the waste associated with releases of HTF. There would also be a reduction in sanitary wastewater amounts compared to the Approved Project due to the reduction in the Project workforce. Because the Modified Project would eliminate the use of a steam turbine and an electric generator, the wastes specific to that technology would be eliminated (e.g., waste associated with power control units, etc.). Therefore, the Modified Project's waste management impacts from operation are anticipated to be substantially less than the impacts under the Approved Project and would remain less than significant.

4.6.3 Compliance With LORS

In the Commission Final Decision, the Commission concluded that, with the implementation of the Conditions of Certification, the Approved Project would comply with all applicable LORS. As with the Approved Project, the Modified Project would comply with all applicable LORS, and no new or additional LORS have been identified. The LORS related to the delivery, storage, handling, and disposal of HTF-related wastes that were required for the Approved Project would not apply to the Modified Project as HTF would not be used.

4.6.4 Conditions of Certification

Condition of Certification **WASTE-8** should be deleted since HTF and the land treatment units have been eliminated from the Modified Project.

Section 5 ENVIRONMENTAL ANALYSIS

The following sections provide a description of the modifications proposed to the BSPP as they may affect the assumptions, rationale, and Conditions of Certification in the Final Decision. As discussed in Section 2 of this Petition, NextEra Blythe Solar has not yet selected the exact combination of fixed tilt and single access tracking PV modules for the site. Such selection will be made as part of the final design of the BSPP. However, where there are differences between the two systems, NextEra Blythe Solar has included a comparison of each for the Commission to consider a "worse-case" for each technical area. Ultimately the selection of either fixed-tilt or tracking PV systems or a combination of both systems will not affect the amount of land that is assumed to be considered impacted and upon which the biological, cultural, geological, and paleontological resources mitigation is based.

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5.1 BIOLOGICAL RESOURCES

This section describes the reduction in the potential impacts to biological resources that would be expected to occur in association with the Modified Project as a result of the change in technology and reduction in acreage, versus those of the Approved Project. As demonstrated below in all cases, the Modified Project's potential environmental impacts are less than those identified in the Commission Final Decision for the Approved Project.

5.1.1 Summary of Project Changes Related to Biology

5.1.1.1 Change in Technology

As described in Section 2 of this Petition, NextEra Blythe Solar is proposing to replace all of the solar thermal facilities with PV. The four power blocks including the cooling tower will be eliminated. The PV layout will be constructed in four phases with a total of approximately 485 MW (three 125-MW units and one 110-MW unit) instead of four solar thermal power plants generating 250 MW each. The change in technology to PV will result in a reduction of impacts to special-status wildlife, plants, and natural communities as compared to those for the Approved Project due to the reduction in the Modified Project footprint:

- Support facilities (transmission line, telecommunications, new access road, possible upgraded Black Rock Road access, on-site water treatment system [including fewer evaporation ponds], O&M building and parking area, internal access roads, groundwater wells), will occur for both projects and result in relatively the same or lower impacts.
- Construction of the PV solar site and linear features will result in permanent and semi-permanent losses of habitat less than those for the Approved Project.
- As with the Approved Project, the solar site will be fenced with exclusionary fencing to exclude, at a minimum, desert tortoises. Fencing will also remove the solar site from use by most species currently using the site and will potentially disrupt movement patterns of wildlife outside the site in the same manner as contemplated for the Approved Project.
- Effects on desert tortoises, which will be located during clearance surveys and translocated per the approved translocation plan, will be less than those anticipated for the Approved Project.
- No additional special-status species, including state or federally listed species, will be affected by the change in technology, as none are expected at the Modified Project.
- Impacts to other protected and/or special-status species or biological resources – including but not limited to plants, natural communities,

jurisdictional state waters, desert kit foxes, American badgers, Mojave fringe-toed lizards, Couch's spadefoot toads, burrowing owls, and nesting birds – will be the same as or less than the Approved Project and minimized identically for both projects by a combination of surveying, monitoring, avoidance, removal, and/or compensatory mitigation.

- In addition to loss of habitat and potential loss of individuals of low-mobility species, behaviors of animals in the Project vicinity may be disturbed by activities and noise associated with construction of either project. Operations on the Modified Project will result in activity, lights, and ongoing maintenance activities that will affect wildlife the same or less than that for solar thermal technology.
- The potential for indirect impacts, including but not limited to, weed expansion, predator increases, and dust deposition, will be less than the Approved Project.
- The potential for impacts to biological resources that may result from lowered groundwater levels (e.g., springs, seeps) will be less with the Modified Project because of lower water use for PV. The Approved Project projected an annual use of 600 AFY while the Modified Project expects to use between 30 to 40 AFY.
- Impacts to existing topography and hydrology will be less than that for solar trough technology because the PV structures allow for substantially less grading than solar trough structures.

5.1.1.2 Change in Grading Plan

The BSPP site no longer needs the type of extensive grading that was necessary to accommodate the solar trough technology. As described in Section 5.2 of this Petition, the grading necessary to accommodate either the fixed tilt or single access tracking PV systems is considerably less than that required for the original BSPP, which will allow much of the storm water from runoff events to flow through the site with minimal drainage structures. Additionally, because water will be allowed to flow through the site more naturally, the originally proposed drainage structures will not be installed.

5.1.1.3 Reduction in Acreage

As detailed in Section 2 of this Petition, the footprint for the Modified Project will be smaller than, and entirely within the footprint of, the Approved Project. For example, the Modified Project would impact approximately 2,950 fewer acres of desert tortoise habitat and 338 fewer acres of state waters than the Approved Project. All linear facilities will not change from the Final Decision, as modified by an Amendment approved by the Commission on August 30, 2011, as a result of the switch to PV technology.

In November 2011, BSPP completed the acquisition of 858.5 agency-approved acres of off-site mitigation land – 89.5 acres more than the 769 acres required for Phase 1A per Condition of Certification (COC) BIO-28.

5.1.2 Summary of Special-status Summer Annual Plant Surveys

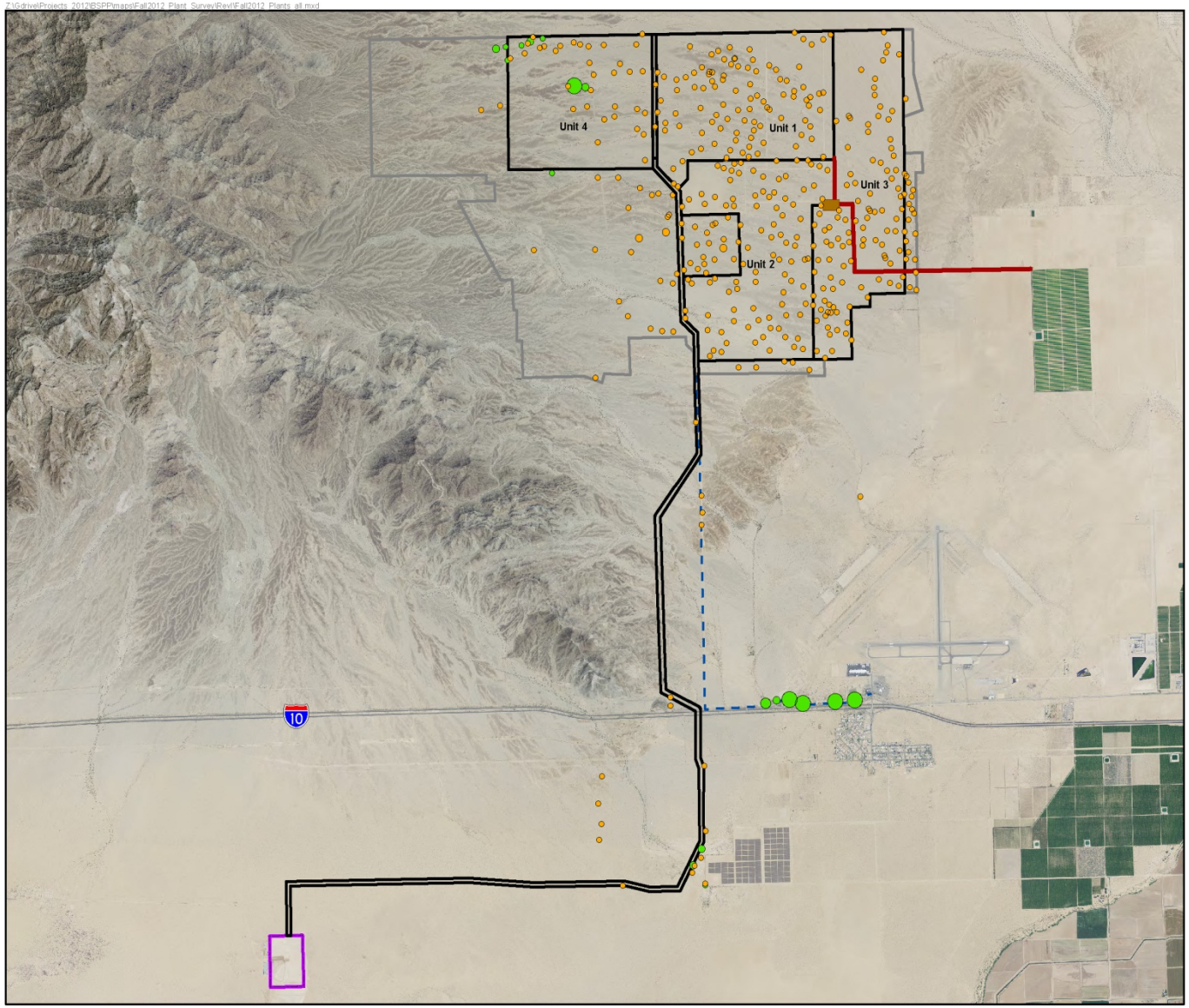
Biological surveys for the BSPP took place in 2009 and 2010; however, additional surveys for special-status summer annual (i.e., fall blooming) plants were conducted in August and September 2012. These surveys were conducted because there was insufficient rainfall to trigger germination at the time PVSI conducted plant surveys in Fall 2010 to comply with the CEC's COC BIO-19. Surveys were conducted according to methods outlined in BIO-19. Surveyors did not find any federally or state-threatened, endangered, or candidate plant species during surveys. However, surveyors did observe two special-status plants within the Modified Project Area:

- Abrams' spurge (*Euphorbia* [*Chamaesyce] ambramsiana)* California Natural Diversity Database [CNDDB] G4/S2S3; California Native Plant Society [CNPS] Rare Plant Rank 2.2.
- Desert unicorn plant (*Proboscidea althaeifolia):* CNDDB G5/S3.3; CNPS Rare Plant Rank 4.

More than 2,121 Abrams' spurge plants were observed within the Modified Project footprint during surveys, all of which were within Unit 4 (Figure 5.1-1; Table 5.1-1). These plants are part of a population that extends north for at least 2 miles beyond the Project. An extensive population of 85+ individuals was observed south of I-10 along the gen-tie route; however, all were outside of the footprint. Outside of the Project footprint, over 14,000 plants were observed along the north side of Black Rock Road, north of I-10. This species' rarity ranking is most likely a product of undersampling and survey observations indicate that this species is more widespread and common that originally thought.

TABLE 5.1-1
SPECIAL-STATUS SUMMER ANNUAL PLANTS OBSERVED WITHIN THE MODIFIED PROJECT DURING 2012

Species	Number of Plants Observed				
	Unit 1	Unit 2	Unit 3	Unit 4	Linear Facilities
Abrams' Spurge	0	0	0	>2,121	0
Desert Unicorn Plant	359	376	336	84	48



BLYTHE SOLAR
POWER PROJECT
RIVERSIDE COUNTY, CA

Legend

- Approved Project (Survey Area)
- Modified Project
- Access Road Shared with Other Solar Projects
- Distribution Line
- Well Pad
- SCE Colorado River Substation

Plant Species

- Abrams' Spurge
- Desert unicorn plant

Number of Plants Observed

- <25 Plants
- 25-100 Plants
- 101-500 Plants
- 501-1,000 Plants
- >1,000 Plants

0 2,500 5,000 10,000
Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, TTEC

FIGURE 5.1-1
SPECIAL-STATUS PLANTS OBSERVED
AUGUST/SEPTEMBER 2012

TETRA TECH

Surveyors observed 1,203 desert unicorn plants within the Modified Project footprint during surveys (Figure 5.1-1; Table 5.1-1), primarily in runnels and swales that held water for a short time. This species was common and evenly distributed throughout the Modified Project with the exception of the sand dunes and sand sheets south of I-10. Observations were considered part of the same population that extends north and east of the Modified Project where plants can be found in suitable habitat. As a CNPS Rare Plant Rank 4, it requires CEQA consideration only if the population has local or regional significance (California Department of Fish and Game[7] [CDFG] 2009). Based on the abundance and distribution within the BSPP and nearby areas, the BSPP population is not considered locally or regionally significant.

Detailed methods and results are located in the BSPP *2012 Special-status Summer Annual Plant Survey Report*, attached as Appendix F.

5.1.3 Changes in Environmental Impacts

The reduction of the Project footprint will result in a reduction of the number of acres disturbed that require habitat compensation. The revised impacts to vegetation and other land cover were recalculated to reflect the Modified Project footprint (Table 5.1-2). These acreages are derived from and consistent with the impact acres presented in Table 2-1. The impact reductions and associated mitigation acres are reflected in the proposed revisions to **BIO-28** (see Section 5.1.5, below).

5.1.4 Compliance With LORS

In the Commission Decision, the Commission concluded that, with the implementation of the Conditions, the Approved Project would comply with all applicable LORS. Finding 2 at page 247 of the Final Decision states:

> With implementation of mitigation measures as appropriate, construction and operation of the planned substation and associated gen-tie connection area project would be expected to comply with all applicable LORS, and would not be expected to result in any significant adverse direct, indirect, or cumulative impacts to biological resources.

There are no new LORS that would affect the Commission's finding. An amendment to the Commission's Final Decision would also amend the Incidental Take Permit and the Lake and Streambed Alteration Agreement from the CDFW.

Additionally, the BSPP obtained a Jurisdictional Determination from the United States Army Corps of Engineers that there are no waters of the United States on the BSPP site, included in Appendix G.

[7] CDFG officially changed their name to California Department of Fish and Wildlife (CDFW).

TABLE 5.1-2
VEGETATION AND LAND COVER IMPACT/MITIGATION ACRES FOR THE MODIFIED PROJECT

Vegetation Community/Land Cover	Impact Acres							Total	Mitigation Ratio	Mitigation Acres							
	Unit 1	Unit 2	Unit 3	Unit 4	Linear Facilities (north of switchyard)	Linear Facilities (south of switchyard)	Distribution Line and Well Pad			Unit 1	Unit 2	Unit 3	Unit 4	Linear Facilities (north of switchyard)	Linear Facilities (south of switchyard)	Distribution Line and Well Pad	Total
Ephemeral "Riparian" Drainages																	
Desert Dry Wash Woodland	0.0	4.7	0.0	14.8	0.0	0.7	0.9	21.0	3:1	0.0	14.0	0.0	44.3	0.0	2.1	2.7	63.1
Vegetated Ephemeral Swales (Creosote Bush - Big Galleta Grass Association)	90.8	55.6	5.0	75.2	1.5	0.7	0.0	228.8	1.5:1	136.1	83.4	7.5	112.8	2.3	1.1	0.0	343.2
Unvegetated Ephemeral Dry Wash	0.0	3.0	0.0	0.4	0.0	0.0	0.0	3.3	1:1	0.0	3.0	0.0	0.4	0.0	0.0	0.0	3.3
Subtotal Ephemeral "Riparian" Drainages	90.8	63.2	5.0	90.3	1.5	1.4	0.9	253.2	-	136.1	100.4	7.5	157.5	2.3	3.2	2.7	409.7
Upland Vegetation																	
Sonoran Creosote Bush Scrub	946.7	878.0	1045.1	795.8	20.9	24.3	11.9	3722.7	1:1	946.7	878.0	1045.1	795.8	20.9	24.3	11.9	3722.7
Stabilized and Partially Stabilized Desert Dunes	0.0	0.0	0.0	0.0	0.0	25.3	0.0	25.3	3:1	0.0	0.0	0.0	0.0	0.0	75.9	0.0	75.9
Subtotal Upland Vegetation	946.7	878.0	1,045.1	795.8	20.9	49.6	11.9	3,748.0	-	946.7	878.0	1,045.1	795.8	20.9	100.2	11.9	3,798.6
Other Cover Types																	
Agricultural Land	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Developed/Disturbed	27.8	109.5	0.4	0.0	0.0	19.9	8.3	165.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Other Cover Types	27.8	109.5	0.4	0.0	0.0	19.9	10.6	168.2	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1,065.2	1,050.8	1,050.5	886.1	22.4	70.9	23.4	4,169.3	-	1,082.8	978.4	1,052.6	953.3	23.2	103.4	14.6	4,208.3

5.1.5 Conditions of Certification

The conforming changes to the Conditions for the Modified Project related to biological resources are necessary to adjust the compensation acreages by the new project phases and to address other project design changes that would reduce effects on biological resources. In addition, the Commission will need to correct the security requirements associated with the new compensation acreages and any recent information supplied by the Renewable Energy Action Team (REAT) agencies. Specific rationale for changes to certain Conditions, if not readily apparent, is provided below. A complete set of all Conditions of Certification, including both revised and unchanged Conditions will be submitted under separate cover.

Proposed Revisions to BIO-8

Rationale:

BIO-8, #3 has been revised to reflect the same speed limits recently approved for the Genesis Solar Energy Project and the McCoy Solar Energy Project**. BIO-8, #8** has been revised to remove the reference to steam blowing, since that activity will not occur in the Modified Project.

BIO-8, #3

Minimize Traffic Impacts. Vehicular traffic during project construction and operation shall be confined to existing routes of travel to and from the project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit shall not exceed 25 miles per hour ~~within the project area,~~ on **dirt** maintenance roads for linear facilities, or on **dirt** access roads to the project site. **Paved roads shall not exceed 45 miles per hour; speed limits will be lowered during the tortoise's most active period (April through May and September through October [USFWS 2010]) to 35 miles per hour.** Speed limit signs shall be posted on new access roads to the site.

BIO-8, #8

Minimize Noise Impacts ~~A continuous low-pressure technique shall be used for steam blows, to the extent possible, in order to reduce noise levels in sensitive habitat proximate to the Blythe Project.~~ Loud construction activities ~~(e.g., unsilenced high pressure steam blowing and~~ pile driving, or other~~)~~ shall be avoided from February 15 to April 15 when it would result in noise levels over 65 dBA in nesting habitat (excluding noise from passing vehicles).

Proposed Revisions to BIO-9

Rationale:

BIO-9, #1 has been revised to clarify that biological monitors shall be allowed to conduct desert tortoise clearance surveys.

BIO-9, #1 **Desert Tortoise Exclusion Fence Installation.** To avoid impacts to desert tortoises, permanent exclusion fencing shall be installed along the permanent perimeter security fence (boundaries) as phases are constructed. Temporary fencing shall be installed along any subset of the plant site phasing that does not correspond to permanent perimeter fencing. Temporary fencing shall be installed along linear features unless a Biological Monitor is present in the immediate vicinity of construction activities for the linear facility. All fencing shall be flagged and surveyed within 24 hours prior to the initiation of fence construction. Clearance surveys of the desert tortoise exclusionary fence and utility rights-of-way alignments shall be conducted by the Designated Biologist~~(s)~~ **or biological monitors** using techniques outlined in the Desert Tortoise Field Manual (USFWS 2009) and may be conducted in any season with USFWS and ~~CDFG~~ **CDFW** approval. Biological Monitors may assist the Designated Biologist under his or her supervision. These fence clearance surveys shall provide 100-percent coverage of all areas to be disturbed and an additional transect along both sides of the fence line. Disturbance associated with desert tortoise exclusionary fence construction shall not exceed 30 feet on either side of the proposed fence alignment. Prior to the surveys the project owner shall provide to the CPM, ~~CDFG~~ **CDFW**, and USFWS a figure clearly depicting the limits of construction disturbance for the proposed fence installation. The fence line survey area shall be 90 feet wide centered on the fence alignment. Where construction disturbance for fence line installation can be limited to 15 feet on either side of the fence line, this fence line survey area may be reduced to an area approximately 60 feet wide centered on the fence alignment. Transects shall be no greater than 15 feet apart. Desert tortoise located within the utility ROW alignments shall be moved out of harm's way in accordance with the USFWS Desert Tortoise Field Manual (USFWS 2009). Any desert tortoise detected during clearance surveys for fencing within the project site and along the perimeter fence alignment shall be translocated and monitored in accordance with the Desert Tortoise Relocation/Translocation Plan (**BIO-10**). Tortoise shall be handled by the Designated Biologist(s) in accordance with the USFWS' Desert Tortoise Field Manual (USFWS 2009).

Proposed Revision to BIO-10

Rationale:

There are four phases to the Modified Project, instead of three.

BIO-10

The project owner shall develop and implement a final Desert Tortoise Relocation/Translocation Plan (Plan) that is consistent with current USFWS approved guidelines, and meets the approval of the CPM. The Plan shall include guidance specific to each of the ~~three~~ **four** phases of project construction, as described in BIO-28 (Phasing), and shall include measures to minimize the potential for repeated translocations of individual desert tortoises.

Proposed Revision to BIO-12

Rationale:

BIO-12 has been revised so that it refers to BIO-28 for impact and mitigation acres. In addition, the desert tortoise habitat that the BSPP would impact does not contribute to desert tortoise population/genetic connectivity or in any way serve as a linkage between desert tortoise designated critical habitat, known populations of desert tortoise, and/or other preserve lands. Accordingly, NextEra Blythe Solar should not be required to secure mitigation lands that contribute to such connectivity/linkages. Additionally, BIO-12 mitigation security wording has been changed to allow for the security amounts to be revised.

BIO-12 To fully mitigate for habitat loss and potential take of desert tortoise, the project owner shall provide compensatory mitigation at a 1:1 ratio for impacts to ~~6,957 7,277 acres of~~ **desert tortoise habitat, as outlined in BIO-28,** adjusted to reflect the final project footprint. For purposes of this Condition, the project footprint means all lands disturbed in the construction and operation of the Blythe **Solar Power** Project, including all linears, as well as undeveloped areas inside the project's boundaries that will no longer provide viable long-term habitat for the desert tortoise. …

and

1. Selection Criteria for Compensation Lands. The compensation lands selected for acquisition in fee title or in easement shall:
    a. be within the Colorado Desert Recovery Unit, ~~with potential to contribute to desert tortoise habitat connectivity and build linkages between desert tortoise designated critical habitat,~~

~~known populations of desert tortoise, and/or other preserve lands~~;

3. h. Mitigation Security. …..Prior to submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security. **Security shall be provided in amounts of (TO BE REVISED)** ~~Security shall be provided in the amounts of $2,374,672 for Phase 1A; $9,248,560 for Phase 1B, and $9,859,984 for Phase 2. These Security estimates are~~ based on the most current guidance from the REAT agencies (Desert Renewable Energy REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the REAT-NFWF Mitigation Account, July 23, 2010) and may be revised with updated information. This Security estimate reflects the amount that would be required for Security if the project owner acquired the ~~6,958 acres of~~ mitigation lands itself. The amount of security shall be adjusted for any change in the project footprints for each phase as described above.

   The project owner may elect to fund the acquisition and initial improvement of compensation lands through NFWF by depositing funds for that purpose into NFWF's REAT Account. Initial deposits for this purpose, which includes a NFWF administrative fee, must be made **in amounts of (TO BE REVISED) that are based on the most current guidance from the REAT agencies.** ~~the amounts of $2,465,611 for Phase 1a; $9,481,161 for Phase 1b; and $10,105,186 for Phase 2~~.

Proposed Revisions to BIO-13:

Rationale:

The changes to **BIO-13** are a result of NextEra Blythe Solar's request to delete **BIO-21** (see below) because potential impacts to bighorn are no longer expected and a water source in the McCoy Mountains is no longer necessary. Additionally, language has been added to allow for a per phase payment for raven mitigation.

BIO-13 The project owner shall implement a Raven Monitoring, Management, and Control Plan (Raven Plan) that is consistent with the most current USFWS-approved raven management guidelines, and which meets the approval of the CMP, in consultation with BLM, USFWS and ~~CDFG~~ **CDFW**. The draft Raven Plan submitted by the Applicant (AECOM **20**10a,

Attachment DR-BIO-49) shall provide the basis for the final Raven Plan, subject to review, revisions**,** and approval from BLM, the CPM, ~~CDFG~~ **CDFW**, and USFWS. The Raven Plan shall include but not be limited to a program to monitor raven presence in the project vicinity, determine if raven numbers are increasing, and to implement raven control measures as needed based on that monitoring. The purpose of the plan is to avoid any project-related increases in raven numbers during construction, operation, and decommissioning. ~~In addition to monitoring at the project site, the Plan shall address raven monitoring and control at the new water source proposed in the McCoy Mountains in staff's proposed Condition of Certification BIO-21~~. The project owner shall also provide funding for implementation of the USFWS Regional Raven Management Program, as described below.

and

USFWS Regional Raven Management Program. The project owner shall submit **a per phase** payment to the project sub-account of the REAT Account held by the National Fish and Wildlife Foundation (NFWF) to support the USFWS Regional Raven Management Program.

Verification: Current estimate of the fee for the USFWS Regional Raven Management Program is $105/acre. ~~Phase 1a disturbance is estimated to be 769 acres. Phase 1b disturbance is estimated to be 2,995 acres. Phase 2 disturbance is estimated to be 3,193 acres~~.

Proposed Revisions to BIO-15

Rationale:

Wording needs to be changed since there will not be mirror-like surfaces. Additionally, the language regarding carcass searches has been deleted for the following reasons; these tasks are not warranted for a PV project, and details on survey protocol should be identified in the Avian Protection Plan itself, as opposed to the COCs.

BIO-15

The project owner shall prepare and implement an Avian Protection Plan to monitor the death and injury of birds from collisions with facility features such as transmission lines and **PV panels** ~~reflective mirror-like surfaces and from heat, and bright light from concentrating sunlight.~~ The monitoring data shall be used to inform an adaptive management program that would avoid and minimize project-related avian impacts. The study design shall

be approved by the CPM in consultation with CDFG and USFWS, and shall be incorporated into the project's BRMIMP and implemented. ~~The Avian Protection Plan shall include detailed specifications on data and carcass collection protocol and a rationale justifying the proposed schedule of carcass searches. The plan shall also include seasonal trials to assess bias from carcass removal by scavengers as well as searcher bias.~~

Proposed Revisions to BIO-17

Rationale:

Due to the developments in kit fox and badger avoidance, minimization, and management practices since the original Condition was written, this condition has been revised to reflect the mitigation measure that the BLM recently adopted for the McCoy Solar Energy Project.

BIO-17

AMERICAN BADGER AND DESERT KIT FOX ~~IMPACT AVOIDANCE AND MINIMIZATION MEASURES~~ MITIGATION AND MONITORING PLAN

~~To avoid direct impacts to American badgers and desert kit fox, pre-construction surveys shall be conducted for these species concurrent with the desert tortoise surveys. Surveys shall be conducted as described below:~~

1. ~~Biological Monitors shall perform pre-construction surveys for badger and kit fox dens in the Project Disturbance Area, including a 20 foot swath beyond the disturbed area, utility corridors, and access roads. If dens are detected each den shall be classified as inactive, potentially active, or definitely active.~~
2. ~~Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox.~~
3. ~~Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance.~~
4. ~~If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand.~~
5. ~~If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After verification that the den is unoccupied it shall then be excavated and~~

~~backfilled by hand to ensure that no badgers or kit fox are trapped in the den. BLM approval may be required prior to release of badgers on public lands.~~

~~Verification: The project owner shall submit a report to the CPM and CDFG CDFW within 30 days of completion of badger and kit fox surveys. The report shall describe survey methods, results, impact avoidance and minimization measures implemented, and the results of those measures.~~

To avoid direct impacts to American badgers and desert kit fox, the Applicant shall implement the following measures:

1. ***Prepare Desert Kit Fox Management Plan*: At least 45 days prior to construction, the Applicant shall submit a Desert Kit Fox Management Plan that: 1) specifically identifies preconstruction survey methods for kit foxes and large carnivores (e.g., badgers) in the Project area; 2) describes pre-construction and construction-phase passive relocation methods from the site, and; 3) coordinates survey findings prior to and during construction to meet the information needs of wildlife health officials in monitoring the health of kit fox populations. The Plan shall include contingency measures that would be performed if canine distemper were documented in the Project area possible dispersal areas adjacent to the Project site, and measures to address potential kit fox reoccupancy of the site (as documented at the Genesis site). The contents and requirements of the Plan shall be subject to review and approval by the BLM and CDFW.**

2. ***Implement Desert Kit Fox Management Plan:* If canine distemper is not documented in the Project area, the mitigation strategy may utilize passive means or active means with appropriate CDFW authorization to relocate kit foxes from the site. The approach below assumes that canine distemper is not documented in the Project Area.**

   a. ***Pre-Construction Surveys:* Biological Monitors shall conduct pre-construction surveys for desert kit fox and American badger no more than 30 days prior to initiation of construction activities. Surveys shall also consider the potential presence of dens within 100 feet of the project boundary (including utility corridors and access roads) and shall be performed for each phase of construction. If dens are detected each den shall then be further classified as inactive, potentially active, or definitely active. Surveys may be conducted concurrently with desert tortoise clearance surveys.**

b. Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox.

c. Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance.

d. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand.

e. If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den. BLM approval may be required prior to release of badgers on public lands.

f. If an active natal den (a den with pups) is detected on the site, the BLM AO and CDFW shall be contacted within 24 hours to determine the appropriate course of action to minimize the potential for animal harm or mortality. The course of action would depend on the age of the pups, location of the den on the site (e.g., is the den in a central area or in a perimeter location), status of the perimeter site fence (completed or not), and the pending construction activities proposed near the den. A 500-foot no-disturbance buffer shall be maintained around all active dens.

g. The following measures are required to reduce the likelihood of distemper transmission:

i. No pets shall be allowed on the site prior to or during construction, with the possible exception of vaccinated kit fox scat detection dogs during preconstruction surveys, and then only with prior CDFW approval;

ii. Any sick or diseased kit fox, or documented kit fox mortality shall be reported to CDFW and the BLM AO within 8 hours of identification. If a dead kit fox is observed, it shall be collected and stored according to established protocols

distributed by CDFW WIL, and the WIL contacted to determine carcass suitability for necropsy.

Verification: No fewer than 30 days prior to the start of any construction-related ground disturbance activities associated with the new project related facilities, the project owner shall provide the CPM, BLM, and CDFW with a draft American Badger and Desert Kit Fox Mitigation and Monitoring Plan for review and comment.

No fewer than 10 days prior to start of any ground disturbance activities associated with the new project related facilities, the project owner shall provide an electronic copy of the CPM-approved final plan to the CPM and CDFW and implement the plan.

Proposed Revision to BIO-18

Rationale:

BIO-18 language for burrowing owl mitigation land has been modified to be consistent with mitigation for the Genesis Solar Energy Project and the McCoy Solar Energy Project.

BIO-18

4.a. Criteria for Burrowing Owl Mitigation Lands. The terms and Conditions of this acquisition or easement shall be as described in BIO-12 [Desert Tortoise Compensatory Mitigation], with the additional **criteria** that ~~to include: 1)~~ the 39 acres of mitigation land must provide suitable habitat for burrowing owls. ~~and 2) the acquisition lands must either currently support burrowing owls or be no farther than five miles from an active burrowing owl nesting territory.~~ The 39 acres of burrowing owl mitigation lands may be included with the desert tortoise mitigation lands ONLY if **this** ~~these two~~ burrowing owl criteria ~~are~~ is met. If the 39 acres of burrowing owl mitigation land is separate from the acreage required for desert tortoise compensation lands, the project owner shall fulfill the requirements described below in this Condition.

Proposed Revision to BIO-20

Rationale:

BIO-20 has been revised so that it refers to BIO-28 for impact and mitigation acres.

BIO-20

To mitigate for habitat loss and direct impacts to Mojave fringe-toed lizards the project owner shall provide compensatory mitigation at a 3:1 ratio, **as outlined in BIO-28**, which may include compensation lands purchased in fee or in easement in whole or in part, for impacts to stabilized or partially stabilized desert dune habitat ~~(58~~ **25** ~~acres or the acreage of sand dune/partially stabilized sand dune habitat impacted by the final project footprint~~). If compensation lands are acquired, the project owner shall provide funding for the acquisition in fee title or in easement, initial habitat improvements and long-term maintenance and management of the compensation lands. **The timing of this acquisition or easement shall be as described in BIO-28 (phasing).**

Proposed Elimination of BIO-21

Rationale:

NextEra Blythe Solar requests that Condition of Certification **BIO-21** be deleted because any potential impacts to Nelson's bighorn sheep or their spring foraging habitat have been eliminated by moving the Project boundary at least 1 mile from the base of the McCoy Mountains. The 1-mile boundary was established by the resource agencies during permitting of the BSPP as the distance from the base of the mountains to be considered for impacts to potential big horn sheep foraging habitat.

Proposed Revision to BIO-22

Rationale:

BIO-22 has been revised so that it refers to BIO-28 for impact and mitigation acres.

BIO-22 The project owner shall implement the following measures to avoid, minimize and mitigate for direct and indirect impacts to waters of the state and to satisfy requirements of California Fish and Game Code sections 1600 and 1607.

1. Acquire Off-Site State Waters: The project owner shall acquire, in fee or in easement, a parcel or parcels of land that includes ~~at least~~ **1,384** ~~1,386 acres of state jurisdictional waters, or~~ the area of state waters directly ~~or indirectly~~ impacted by the final project footprint**, as detailed in BIO-28**. The project footprint means all lands disturbed by construction and operation of the Blythe Project, including all linears. The parcel or parcels comprising the ~~**1,384**~~ ~~1,386~~ acres of ephemeral washes shall include ~~at least~~ ~~639 acres~~

~~of desert dry wash woodland or~~ the acreage of desert dry wash woodland impacted by the final project footprint at a 3:1 ratio**, as detailed in BIO-28 (phasing).** The terms and conditions of this acquisition or easement shall be as described in Condition of Certification **BIO-12** and the timing associated with **BIO-28** (phasing). Mitigation for impacts to state waters shall be within the Chuckwalla Valley or Colorado River Hydrological Units (HUs), as close to the project site as practicable.

Proposed Revisions to BIO-25

Rationale:

In the original amendment petition, PVSI requested the deletion of **BIO-25** because their PV-design did not include evaporation ponds. The Modified Project will include evaporation ponds; therefore, this Condition should remain and the following text from the original petition for amendment stricken:

> ~~PVSI requests that Condition of Certification BIO-25 be deleted because it applies solely to the use of evaporation ponds and the Modified Project has eliminated the use of evaporation ponds.~~

In addition, netting has posed an entanglement issue at the Desert Sunlight project and the nets have been removed at the request of CDFW. The proposed revision to **BIO-25** will allow for direction from the agencies based on relevant, current data if, in fact, nets are no longer recommended at the time of construction.

BIO-25 **As directed by USFWS, BLM, and CDFW based on data current at the time,** the project owner shall cover the evaporation ponds prior to any discharge with 1.5-inch mesh netting designed to exclude birds and other wildlife from drinking or landing on the water of the ponds…

Proposed Revisions to BIO-28

Rationale:

BIO-28 has been revised to reflect the updated number of phases for the Modified Project and associated impact and mitigation land acreages for each phase. Note that the revised table does not include impact/mitigation acres for indirect impacts to state waters. Such impacts are no longer expected because the installation of PV technology will allow post-construction offsite drainage patterns to mimic pre-construction offsite drainage patterns (see Appendix H).

BIO-28

The project Owner shall provide compensatory mitigation for the total Project Disturbance Area and may provide such mitigation in ~~three~~ **four** phases. ~~Phase 1a, Phase 1b, and Phase 2, as described in Palo Verde Solar 1, LLC's Proposed Phased Construction and Mitigation (Galati & Blek [tn:57593]. Palo Verde Solar 1, LLC's Proposed Phased Construction and Mitigation: Blythe Solar Power Project Docket No. (09-AFC-6), dated July 15, 2010.).~~ "Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the project.

Project construction will occur in ~~three~~ **four** phases that generally follow development of the solar units:

Phase 1:

- **Unit 1,**
- **The linear corridor from where the gen-tie leaves Unit 1 south to the CRS,**
- **The distribution line**

Phase 2:

- **Unit 2**

Phase 3:

- **Unit 3**

Phase 4:

- **Unit 4,**
- **The linear corridor from where the gen-tie leaves Unit 1 to the northern boundary of solar plant site. This portion of the linear corridor would not need to be constructed/disturbed until Unit 4 is constructed.**

~~, with the exception of the first phase of the project. Phase 1a, which will consist of two types of construction areas: (1) linear facilities, including the, access road, and communication lines and (2) non-linear facilities to include a staging/laydown area and a portion of the Unit 1 solar block area.~~

~~Phase 1b shall consist of the remainder of Unit 1 and Unit 2, and Phase 2 shall consist of the remainder of the project (Units 3 and 4).~~ These phases will generally include installation of fencing, clearing, grubbing and grading, and development of common facilities first, followed by the remaining ~~power block~~ units. All construction activities for the non-linear

features during these subsequent phases will occur within desert tortoise exclusionary fenced areas that have been cleared in accordance with USFWS protocols.

The estimated disturbance area for each project Phase and resource type is provided in the tables below. ~~This~~ **These** table**s** shall be refined prior to the start of each construction phase with the disturbance area adjusted to reflect the final project footprint for each phase. Prior to initiating each phase of construction the project owner shall submit the actual construction schedule, a figure depicting the locations of proposed construction and amount of acres to be disturbed. Mitigation acres are calculated based on the compensation requirements for each resource type as described in the above Conditions of Certification – BIO-12 (Desert Tortoise), BIO-20 (Mojave Fringe-toed Lizard), BIO-18 (Western Burrowing Owl), and BIO-22 (State Waters). Compensatory mitigation for each phase shall be implemented according to the timing required by each Condition.

~~Phase~~	~~Desert Tortoise~~		~~MFTL~~		~~WBO~~	
	~~Impact (acres)~~	~~Mitigation (acres)~~	~~Impact (Acres)~~	~~Mitigation (acres)~~	~~Impact (individuals/pairs)~~	~~Mitigation (acres)~~
~~Phase 1a~~	~~769~~	~~769~~	~~0~~	~~0~~	~~0~~	~~0~~
~~Phase 1b~~	~~2,995~~	~~2,995~~	~~58~~	~~174~~	~~1~~	~~19.5~~
~~Phase 2~~	~~3,193~~	~~3,193~~	~~0~~	~~0~~	~~1~~	~~19.5~~
~~Total~~	~~6,958~~	~~6,958~~	~~58~~	~~174~~	~~2~~	~~39~~

~~Phase~~	~~Desert Tortoise~~		~~MFTL~~	
	~~Impact (acres)~~	~~Mitigation (acres)~~	~~Impact (Acres)~~	~~Mitigation (acres)~~
~~Phase 1a~~	~~67~~	~~130~~	~~0~~	~~0~~
~~Phase 1b~~	~~231~~	~~409~~	~~36~~	~~51~~
~~Phase 2~~	~~294~~	~~665~~	~~146~~	~~189~~
~~Total~~	~~593~~	~~1205~~	~~133~~	~~179~~

~~Phase~~	~~State Waters - Direct~~		~~State Waters-Indirect~~		~~Bighorn Sheep~~	
	~~Impact (acres)~~	~~Mitigation (acres)~~	~~Impact (acres)~~	~~Mitigation (acres)~~	~~Impact (acres)~~	~~Mitigation (acres)~~
~~Phase 1a~~	~~67~~	~~130~~	~~0~~	~~0~~	~~27~~	~~27~~
~~Phase 1b~~	~~231~~	~~409~~	~~36~~	~~51~~	~~488~~	~~488~~
~~Phase 2~~	~~294~~	~~665~~	~~146~~	~~189~~	~~414~~	~~414~~
~~Total~~	~~592~~	~~1204~~	~~182~~	~~240~~	~~929~~	~~929~~

Phase	Desert Tortoise		MFTL		WBO	
	Impact (acres)	Mitigation (acres)	Impact (Acres)	Mitigation (acres)	Impact (individuals/ pairs)	Mitigation (acres)
Phase 1	1,074	1,074	25	76	2	39
Phase 2	942	942	0	0	0	0
Phase 3	1,051	1,051	0	0	0	0
Phase 4	908	908	0	0	0	0
Total	3,975	3,975	25	76	2	39

Phase	DDWW		Other State Waters	
	Impact (acres)	Mitigation (acres)	Impact (acres)	Mitigation (acres)
Phase 1	2	6	91	137
Phase 2	5	15	59	86
Phase 3	0	0	5	8
Phase 4	15	45	77	115
Total	22	66	232	346

Verification: The project owner shall not disturb any area outside of the area that has been approved for that phase of construction and for the previously approved phases of construction.

No less than 30 days prior to the start of desert tortoise clearance surveys for each phase, the project owner shall submit a description of the proposed construction activities for that phase to CDFW, USFWS, and BLM for review and to the CPM for review and approval. The description for each phase shall include the proposed construction schedule, a figure depicting the locations of proposed construction and amount of acres of each habitat type to be disturbed.

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AECOM. 2010b. Blythe Solar Power Project Botanical Survey Report. Prepared for Palo Verde Solar I, LLC. 309 pp.

AECOM. 2010c. Blythe Solar Power Project (09-AFC-6) Responses to CEC Staff Data Requests 45-97. 990 pp.

AECOM. 2010d. Blythe Solar Power Project Jurisdictional Delineation Report for Regulated Waters of the United States and State. Prepared for Palo Verde Solar I, LLC. 126 pp.

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USFWS. 2009. Desert Tortoise Field Manual. Available at: http://www.fws.gov/ventura/species_information/protocols_guidelines/

USFWS. 2010. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). 2010 Field Season. Available at: http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/. 18 pp.

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5.2 WATER RESOURCES

The following section discusses the Modified Project's impacts to water resources as compared to the Approved Project. As described below, potential impacts of the Modified Project to water resources are expected to be less than those of the Approved Project and will remain less than significant.

5.2.1 Project Changes Related to Water Resources

Characteristics of the Modified Project that have the potential to impact water resources differently than the Approved Project include the following:

- replacement of concentrating solar HelioTrough and associated HTF collections and circulation system with PV modules;
- elimination of all the power blocks and cooling towers;
- reduction in the number of water treatment facilities from four to one;
- reduction in the acreage of evaporation ponds from up to 32 acres to up to 12 acres;
- addition of inverter pads;
- less intensive grading of the site to accommodate PV;
- elimination of the large drainage control channels; and
- reduction of water use from up to 600 AFY to up to 40 AFY.

5.2.2 Changes in Environmental Impacts

The Commission Final Decision concluded that, with the implementation of the Conditions of Certification, the Approved Project would comply with all applicable LORS, and would not result in any unmitigated and significant direct, indirect, or cumulative adverse impacts related to water resources.

The Commission Final Decision addressed three areas within the context of water resources. Those areas are: (1) potential storm water impacts related to flooding/drainage, erosion and sedimentation; (2) water supply and use, including groundwater; and (3) groundwater quality. As described below, in all cases the Modified Project results in less potential impacts than the Approved Project.

5.2.2.1 Storm Water: Flooding, Erosion, and Sedimentation

Preliminary hydraulic analyses were prepared to reflect the effects of the movement of storm water under the Modified Project and are contained in Appendix C to this Petition. Since the grading of the site is minimal under the Modified Project, it is anticipated that

storm water can be controlled without the need for large drainage channels. A Preliminary Grading Plan is provided in Appendix B.

Hydrologic and hydraulic analyses of pre- and post-development drainage conditions were prepared to reflect the effects of the movement of storm water under the Modified Project and are presented in the Pre-/Post Development Hydrology Report included as Appendix C to this Petition. A HEC-HMS hydrologic model was developed to simulate precipitation-induced runoff from tributary drainage basins up-slope of the Modified Project vicinity. Results from the hydrologic model were used as inputs (inflow hydrographs) to a FLO-2D hydraulic model, developed to simulate pre/post-development drainage conditions at and down-slope of the Modified Project site. Pre- and post-development drainage conditions were modeled for the 10-, 25- and 100-year precipitation events.

The Pre-/Post-Development Hydrology Report contains figures showing spatially distributed maximum velocity, maximum flow depth, and the change in both of these parameters resulting from the Modified Project. The report also contains hydrographs showing flow rate vs. time at key locations in the model domain for each of the scenarios modeled.

Results of the updated hydrologic and hydraulic modeling demonstrate that:

1. The Modified Project's potential impacts to flooding, erosion, and sedimentation are substantially less than those of the Approved Project, and
2. The Modified Project will not materially impact the drainage conditions associated with the 10-, 25-, or 100-year precipitation events at or down-slope of the Modified Project site.

5.2.2.2 Water Supply and Use

The Modified Project would use the same groundwater wells as the Approved Project. The amount of groundwater to be used during construction is reduced from 4,100 AF to between 700 and 1,200 AF. Additionally the amount of groundwater used for operations will be reduced from 600 AFY for the Approved Project to a maximum of 40 AFY for the Modified Project.

This reduction in groundwater use for the Modified Project would therefore reduce the potential effects on nearby well owners or on the Palo Verde Groundwater Basin. With the Conditions of Certification contained in the Final Decision which fully mitigated the BSPP groundwater use, the Modified Project will not have a significant impact on groundwater.

5.2.2.3 Wastewater

The following paragraphs demonstrate that the impacts associated with the Modified Project on sanitary wastewater, construction wastewater, and process wastewater systems are reduced and less than significant with the implementation of the existing Conditions of Certification.

5.2.2.4 Sanitary Wastewater

The Modified Project would require fewer workers during construction and operation than would the Approved Project, so lower demands would be imposed on sanitary systems. The Modified Project, like the Approved Project, would utilize temporary portable toilets during construction prior to the installation of a septic tank and leach field.

5.2.2.5 Construction Wastewater

Wastewater generated during construction would consist of equipment wash water but would no longer include piping and vessel hydrostatic test water.

5.2.2.6 Process Wastewater

The Modified Project will no longer construct the 8-acres of evaporation ponds at each power block because the power blocks have been eliminated. However, water treatment facilities will be located in the central portion of the site to produce high quality water for panel washing activities. The wastewater from treatment of the groundwater will be discharged into evaporation ponds that may take up to 12 acres total. The evaporation ponds will be constructed in accordance with the Commission Final Decision which includes the Waste Discharge Requirements (WDRs) from the Colorado River Basin Regional Water Quality Control Board.

Because the Modified Project no longer requires HTF, the Land Treatment Unit has been removed from the design. The WDR Facts, Requirements and Monitoring/Reporting Program (Appendices B, C and D respectively in the Final Decision) have been revised to reflect changes in the Modified Project and are presented in Appendix H of this Petition. Note that while there are changes to the actual waste management units that the WDRs govern (changes that result in reduced environmental impacts), the actual WDRs and associated Monitoring and Reporting Program remain effectively unchanged.

5.2.3 Compliance With LORS

In the Commission Final Decision, the Commission concluded that, with the implementation of the Conditions of Certification, the Approved Project would comply with all applicable LORS. The same conclusion can be made for the Modified Project as

there are neither changed circumstances nor new LORS applicable to the Modified Project since the Final Decision.

There are also no "Waters of the United States" on the BSPP site and, therefore, federal wetland permitting is not required under Section 404, and a 401 Water Quality Certification is not required either for the Approved Project or the Modified Project. See Appendix G.

5.2.4 Conditions of Certification

Minor modifications are needed to Conditions of Certification **SOIL&WATER-4**, **11**, **12**, **16**, and **18** to remove all reference to HTF and to address characteristics of the Modified Project. Each of the proposed modifications is provided below. In addition, Conditions of Certification **SOIL&WATER-13**, **14**, **15**, and **18** would not apply to the Modified Project and should be deleted. The rationale for each of the proposed modifications and deletions of the Conditions of Certification is provided below. See Appendix H for recommended changes to the WDR Facts, Requirements and Monitoring and Reporting Program. No other modifications to the Conditions of Certification are required to accommodate the Modified Project.

Note, only excerpts from the Conditions of Certification which show the revisions are provided in this section, and a comprehensive set of both the revised and unchanged conditions are provided under separate cover.

Proposed Revisions to SOIL&WATER-4

Rationale:

The groundwater use, construction period, and annual average groundwater use during operation have been updated for the Modified Project.

SOIL&WATER-4

The proposed Project's use of groundwater during construction shall not exceed ~~4,100 AF~~ **1,200 AF** during the ~~69~~ **48** months of construction and an annual average of ~~600 afy~~ **40 AFY** during operation. Water quality used for project construction and operation will be reported in accordance with Condition of Certification **SOIL&WATER-18** as applicable to ensure compliance with this Condition.

Proposed Revisions to SOIL&WATER-11

Rationale:

Conditions of Certification **SOIL&WATER-11** should be revised to delete all references to collector channels, conveyance channels, channel confluences, swales, HTF, soil

cement, and drop structures as these features will be eliminated under the Modified Project. Additionally, language pertaining solely to a HEC-HMS model of the Project site should be deleted as detailed FLO-2D modeling of the Modified Project site has been conducted and is presented in Appendix C to this Petition.

SOIL&WATER-11:

The project owner shall provide a revised Drainage Report which includes the following additional information:

A. A detailed explanation of the ~~large~~ differences in pre- and post-project peak discharges and flood volumes along the downstream (east) project boundary ~~as currently indicated by the HEC-HMS results~~.

B. Pre- and post development drainage maps which include the following information:

1. All topographic data used to establish the overall watershed boundaries as well as the sub-basin boundaries.

~~2. A delineation of all onsite watersheds with basin areas, points of concentration, and peak discharge values where the smaller onsite channels discharge into the larger collector and conveyance channels.~~

~~3. Calculations and summarized results for all onsite swales and onsite channels showing adequate depth and non-erosive velocities.~~

2. A specific discussion of how the proposed on-site drainage design will protect the facility from erosion**.** ~~and the possible failure of the facilities resulting in a release of HTF.~~

3. Peak flow values at all downstream points of discharge from the project.

4. Any other information needed to allow a correlation between the ~~HEC-HMS~~ **FLO-2D** model and the proposed drainage design.

~~C. Detailed scour calculations to justify toe-down depths for all soil cement segments, drop structures and any other features where scour is an issue.~~

~~D. Hydraulic analysis of all onsite and offsite channel confluences and a justification of whether or not soil cement or other suitable protection is required.~~

Proposed Revisions to SOIL&WATER-12

Rationale:

Condition of Certification **SOIL&WATER-12** should be revised to delete all references to collector channels, end diffuser structures, and berms as these features will be eliminated under the Modified Project.

SOIL&WATER-12

The project owner shall provide a detailed hydraulic analysis utilizing FLO-2D which models pre- and post-development flood conditions for the 10-, 25- and 100-year storm events. ~~The post-development model must include all proposed collector channels, end diffuser structures and berms.~~ The methods and results of the analysis shall be fully documented in a Technical Memorandum or in the revised Project Drainage Report. Graphical output must include depth and velocity mapping as well as mapping which graphically shows the changes in both of these parameters between the pre- and post development conditions. Color shading schemes used for the mapping must be consistent between all maps as well as clear and easily differentiated between designated intervals for hydraulic parameters. Intervals to be used in the mapping are as follows:

- Flow Depth: at 0.20 ft intervals up to 1 ft, and 0.40 ft intervals thereafter.
- Velocity: 0.5 ft/s intervals

~~A set of figures shall be provided at a scale of no less than one in to 200 ft which show the extents and depths of flows entering the North, South and West channels for the 100-year event. A figure at the same scale shall also be provided for depth, velocity and the relative change in these parameters at and downstream of the four end diffuser structures for the 10-, 25- and 100-year events.~~ Digital input and output files associated with the FLO-2D analysis must be included with all submittals. The results of this analysis shall be used for design of the 30 percent project grading and drainage plans.

Proposed Elimination of SOIL&WATER-13, 14, and 15

Rationale:

Conditions of Certification **SOIL&WATER-13**, **14**, and **15** should be deleted completely because they pertain solely to constructed drainage channels which will not be needed under the Modified Project. Therefore, Drainage Channel Design, Channel Erosion Protection, and a Channel Maintenance Program are not applicable to the Modified Project.

Proposed Revisions to SOIL&WATER-16

Rationale:

The verification time for the results of the modeling effort was changed from 30 days to 90 days following certification of the proposed Modified Project. This change was made because a 90 day response time is a more reasonable time frame in which to determine impacts and develop mitigation responses, and 90 days is still well before pumping begins for the Modified Project.

SOIL&WATER-16

Verification:

Within ~~30~~**90** days following certification of the proposed project, the project owner shall submit to the CPM for their review and approval a report detailing the results of the modeling effort. The report shall include the estimated amount of subsurface water flowing from the surface water due to project pumping. This estimate shall be used for determining the appropriate volume of water for mitigation in accordance with **SOIL&WATER-2**.

Proposed Elimination of SOIL&WATER-18

Rationale:

This COC should be deleted completely because the Modified Project will not serve 25 people or more for more than 6 months. Therefore pursuant to Title 22, Article 3, Sections 64400.80 through 64445 a non-transient, non-community water system is not required for the Modified Project.

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5.3 CULTURAL RESOURCES

This section describes and compares the potential impacts to cultural resources between the Modified Project and the Approved Project. As demonstrated below in all cases, the Modified Project's potential environmental impacts are less than those identified in the Commission Final Decision for the Approved Project.

5.3.1 Summary of Project Changes Related to Cultural Resources

As described in Section 2 of this Petition, NextEra Blythe Solar is proposing to replace all of the solar thermal facilities with PV. The four power blocks including the cooling tower will be eliminated. The PV layout will be constructed in three 125 MW phases and one 110 MW phase (for a total of 485 MW), instead of four solar thermal power plants generating 250 MW each.

As detailed in Section 2 of this Petition, the footprint for the Modified Project will be entirely within the footprint of the Approved Project, and will be substantially reduced by 2,761 acres from 6,831 acres to 4,070 acres.

The linear facilities will not change from the Final Decision as a result of the switch to PV technology except that the natural gas pipeline will no longer be needed. Within the Modified Project footprint, the drainage structures proposed for the Approved Project will not be installed because the BSPP site no longer needs the intensive grading necessary to accommodate the solar trough technology. As described in Section 2 of this Petition, the grading necessary to accommodate either the fixed tilt or single access tracking PV systems is considerably less than that required for the original BSPP, which will allow much of the storm water from runoff events to flow through the site with minimal drainage structures.

5.3.2 Changes in Environmental Impacts

Based on the footprint of the Modified Project, several sites that would have been potentially impacted by the Approved Project will not be impacted by the Modified Project. The buried natural gas pipeline will no longer be necessary for this project, reducing subsurface/surface impacts for 10 miles. Table 5.3-1 lists the sites that would no longer be impacted by the Modified Project, as well as the subsection within the Condition of Certification where the change should be made. In addition, a map showing the location of these sites with respect to the Modified Project boundary is being submitted separately under confidential cover.

TABLE 5.3-1
SITES NO LONGER IMPACTED OR PREVIOUSLY REMOVED FROM SITE LIST WITH CEC CONCURRENCE

CUL-#	CUL Heading	Subheading/ Subsection	Comment
CUL-6	PREHISTORIC QUARRIES ARCHAEOLOGICAL DISTRICT (PQAD) DATA RECOVERY AND DISTRICT NOMINATION	Paragraph 1	Removal of sites CA-Riv-2846, SMB-P-436, SMB-P-437, SMB-P-438, SMB-P-440, SMB-P-441, SMB-H-164, and SMB-M-214. These sites are no longer impacted by the Modified BSPP.
CUL-6	PREHISTORIC QUARRIES ARCHAEOLOGICAL DISTRICT (PQAD) DATA RECOVERY AND DISTRICT NOMINATION	Evaluation and Data Recovery Methodology: a. Quarries	Removal of site CA-Riv-2846. This site is no longer impacted by the Modified BSPP.
CUL-6	PREHISTORIC QUARRIES ARCHAEOLOGICAL DISTRICT (PQAD) DATA RECOVERY AND DISTRICT NOMINATION	3. Data Recovery from Thermal Cobble Features	Revision of language to reflect only one thermal cobble feature is located within the Modified BSPP.
CUL-7	DATA RECOVERY FOR SMALL PREHISTORIC SITES (LITHIC SCATTERS, CAIRNS, AND POT DROPS)	Paragraph 1	Removal of sites SMB-P-228, SMB-P-238, SMB-P-241, SMB-P-244, SMB-P-249, SMB-P-160, SMB-P-530, SMB-P-531, SMB-P-532, CA-RIV-1136 and SMB-P-252. These sites are no longer impacted by the Modified BSPP.
CUL-7	DATA RECOVERY FOR SMALL PREHISTORIC SITES (LITHIC SCATTERS, CAIRNS, AND POT DROPS)	Paragraph 1	Removal of sites SMB-H-TC-101 and SMB-H-TC-103 per CEC Compliance Project Manager (CPM) concurrence received 6/13/11.
CUL-8	CUL-8 DATA RECOVERY ON HISTORIC-PERIOD SITES WITH FEATURES	Paragraph 1	Removal of sites SMB-H-203, SMB-H-205, SMB-H-207, SMB-H-222, SMB-H-223, SMB-H-245, SMB-H-247, SMB-H-250, SMB-H-251, SMB-H-163 and SMB-H-210. These sites are no longer impacted by the Modified BSPP.
CUL-8	CUL-8 DATA RECOVERY ON HISTORIC-PERIOD SITES WITH FEATURES	Paragraph 1	Removal of site SMB-H- 409 per CPM concurrence received 11/29/10.
CUL-9	DATA RECOVERY ON HISTORIC-PERIOD SITES WITH STRUCTURES	Paragraph 1	Removal of sites SMB-H-432 and SMB-H-514. These sites are no longer impacted by the Modified BSPP.
CUL-10	DATA RECOVERY ON HISTORIC-PERIOD DUMP SITES	Paragraph 1	Removal of site SMB-H-261/262 per CPM concurrence received 11/29/10.
CUL-11	DATA RECOVERY ON HISTORIC-PERIOD REFUSE SITES	Paragraph 1	Removal of site SMB-H-181. This site is no longer impacted by the Modified BSPP.

Within the Modified Project footprint, blading and construction activities will still occur, but blading will be significantly less for the Modified Project. The Approved Project required the removal of up to 7 feet of sediments in order to completely level the ground surface for the solar trough construction. The technology for PV for the Modified Project does not require a completely level project area, but will require some blading. Due to the reduced blading and depending on the Modified Project PV layout and design, there is the potential to avoid some smaller archaeological sites. This possibility will be evaluated during the design phase.

For visual effects, the Modified Project will not have the power blocks with the 120-foot-tall cooling tower. The height for the solar troughs was approximately 24 feet, whereas the PV units will only be approximately 9 feet. Facility lighting will still be shielded and oriented to reduce night time illumination.

5.3.3 Compliance With LORS

In the Commission Final Decision, the Commission concluded that, with the implementation of the Conditions of Certification, the Approved Project would comply with all applicable LORS. Finding 3 at page 395-196 of the Final Decision states:

> With implementation of the Conditions of Certification below, the BSPP will conform to all applicable laws, ordinances, regulations, and standards relating to cultural resources as set forth in the pertinent portion of Appendix A of this Decision.

There are no new LORS that would affect the Commission's finding. The BLM's ROD for the EIS did state that the conditions for approval for the right-of-way grant for the BSPP included compliance with the National Historic Preservation Act section 106 requirements and the Programmatic Agreement.

Because the entire footprint of the Modified Project is within the footprint of the Approved Project and there would be significantly less soil disturbance, the BLM is evaluating the extent to which the Programmatic Agreement may need to be amended to reflect the reduced impacts.

5.3.4 Conditions of Certification

According to the Final Decision, the adoption and implementation of the Conditions of Certification **CUL-1** through **CUL-18** would put the Approved Project in conformity with all applicable LORS. Since the Modified Project reduces impacts to cultural resources and a number of the Condition of Certification verifications have been altered with the concurrence of the CEC CPM, NextEra Blythe Solar recommends the following modifications to the Conditions of Certification **CUL-6** through **CUL-11**. Note, only excerpts from the Conditions of Certification which show the revisions are provided in

this section, and a comprehensive set of both the revised and unchanged Conditions are provided under separate cover.

Proposed Revision to CUL-6

Rationale:

Condition of Certification **CUL-6** outlines steps related to the identification, documentation, and analysis of a possible Prehistoric Quarries Archaeological District (PQAD). A number of sites identified as potential contributors to the PQAD are no longer impacted by the Modified Project and should be eliminated from the Condition (see Table 5.3-1). In addition, methodologies and quantities proposed for data recovery from thermal cobble features are no longer applicable based on the Modified Project. Lastly, verification language has been revised to reflect the nomenclature of the Modified Project layout and to remove reference to pedestrian survey of the northwestern edge of site CA-RIV-3419 as the Modified Project has been designed to avoid that portion of the site.

CUL-6 PREHISTORIC QUARRIES ARCHAEOLOGICAL DISTRICT (PQAD) DATA RECOVERY AND DISTRICT NOMINATION

Prior to the start of ground disturbance, the project owner shall ensure that the CRMMP includes a PQAD evaluation and data recovery plan, to identify buried additional potential contributors to the district by geophysical or mechanical survey, to investigate and establish the relationships among all potential contributors by formulating research questions answerable with data from the contributors, conduct data recovery from a sample of the contributors, and write a report of investigations and possibly CRHR and NRHP nominations as well. The potential contributors include quarry site~~s~~ ~~CA-Riv-2846 and~~ CA-Riv-3419 and thermal cobble feature~~s~~ SMB-P-434~~,~~ ~~SMB-P-436, SMB-P-437, SMB-P-438, SMB-P-440, SMB-P-441~~. This site list may be revised only with the agreement of the CRS and the CPM. The CRMMP shall also include a detailed data recovery plan for ~~three~~ **an** isolated potential thermal cobble feature~~s~~ (not included in the PQAD) at multi-component site~~s SMB-H-164, SMB-M-214,~~ SMB-M-418~~)~~.

…..

Evaluation and Data Recovery Methodology

a. Quarries:

The protocol for the quarry sites simultaneously recovers data from the parts of the ~~two~~ quarry site~~s, CA-RIV-2846 and~~ CA-RIV-3419~~,~~ that the project would impact and allows an assessment of the significance of the impacts of the project to the ~~two~~ quarry site~~s~~ and an assessment of the validity of the PQAD concept.

i. Conduct a 100 percent pedestrian survey of the parts of the quarry site~~s~~ that the project activities would disturb;

ii. Map and field-record finished tools, diagnostic artifacts, ceramics, artifact concentrations and features (and the material types of each) within the impacted portions of the quarry sites. ~~Indentify~~ **Identify** and quantify artifacts within a sample of no more than 1 percent of the impacted portions of the quarry sites using 2 by 2 meter surface units. Record any differential distribution of artifacts (with suggested explanations for the distribution), and assess the integrity of the site, providing evidence on which that opinion is based;

iii. …..

…..

3. Data Recovery from Thermal Cobble Features~~:~~

Data shall be recovered from ~~a sample of the individual~~ **impacted** thermal cobble features ~~to document these characteristic elements of the PQAD~~. The purpose of this documentation would be to describe the physical variability of the features, to identify and inventory the artifacts and ecofacts that are found in them, and to interpret the methods of construction and the potential uses of the features. The procedures below shall ~~also~~ be used for data recovery at **SMB-P-434** and the ~~three non-PQAD~~ potential thermal cobble feature~~s~~ at **multi-component** ~~(~~sites ~~SMB-H-164, SMB-M-214,~~ SMB-M-418~~)~~. Data recovery activities shall include:

~~i. Excavation of a sample of 20 percent of thermal cobble features (not to exceed 10 features), drawn from all of the thermal cobble features found as a result of the entire cumulative effort to inventory these PQAD contributors; preference should be given to data recovery from intact, buried examples, if any identified in geophysical or mechanical survey;~~

~~ii. Use of criteria to derive the sample that the CRS, the PPA, and the CPM shall agree upon and that reflect the spatial variability in the physical and material character and in the chronology of the PQAD, as such variability is presently known from the field investigations;~~

~~iii~~ **i.** Excavation would entail small (approximately 1–3 meters square) areal exposures by hand, where feasible, to remove the archaeological deposits in anthropogenic layers, if present;

~~iv~~ **ii**. Retention of samples ….
…..

4. Data Recovery from Former Land Surfaces Surrounding Thermal Cobble Features

…..

9. Outreach Initiatives If ~~PTNCL~~ **PQAD** is Not Eligible

a. Professional Outreach. The project owner shall ensure that the CRS and/or PPA prepare a research paper and present it at a professional conference, to inform the professional archaeological community about the PQAD and to interpret its implications for our understanding of the prehistory and early history of Native American life in the region.

b. Public Outreach. The project owner shall prepare and present materials that ~~I~~**i**nterpret the PQAD for the public. Project owner shall propose at least one outreach project~~,~~**;** examples may include one-time preparation of an instructional module or one-time preparation of a public interpretation brochure.

Verification: At least 15 days prior to the start of BSPP construction-related ground disturbance in the linear facilities corridor impacting site CA-Riv-3419, the project owner shall notify the CPM that the field recordation of the impacted southwestern portion of the site has ensued.

…..

1. At least 60 days prior to the onset of BSPP construction-related ground disturbance in Unit ~~1~~ **3** east of Historic Road SMB-H-601, the project owner shall ensure that the PPA completes the preliminary report on the formal inventory of the PQAD prepared by or under the direction of the CRS~~, and selection of~~

~~separate samples for the data recovery excavation of 10 PQAD thermal cobble features, and four block exposures to reveal intact buried land surfaces there.~~ The project owner shall ensure that the preliminary report is a concise document that provides descriptions of the schedule and methods of the inventory field effort, a preliminary tally of the numbers and, where feasible, the types of archaeological deposits that were found, a discussion of the potential range of error in that tally, and a map of the locations of the found archaeological deposits that has topographic contours and the project site landform designations as overlays. The results of the formal inventory, as set out in the preliminary report, shall be the basis for the refinement of the provisional district boundary.

2. At least 30 days prior to the start of BSPP construction-related ground disturbance in Unit ~~1~~**3** east of Historic Road SMB-H-601, the project owner shall notify the CPM that the CRS has initiated the data recovery phases of the data recovery program.

3. At least 30 days prior to the start of ground disturbance within 30 meters of the site boundaries of the three isolated thermal cobble features, the project owner shall notify the CPM that the CRS has initiated data recovery on the three isolated thermal cobble features.

~~4. At least 30 days prior to the start of ground disturbance within 30 meters of the northeastern portion of site CA-Riv-3419 that the project will impact, the project owner shall notify the CPM that the CRS has initiated the pedestrian surface survey of the northwestern edge of site CA-Riv-3419, with the permission of the BLM.~~

~~5~~ **4**. No longer than 90 days…..

Proposed Revision to CUL-7

Rationale:

Condition of Certification **CUL-7** outlines steps related to data recovery for small prehistoric sites. Proposed revisions to this Condition consist of removal of sites which are no longer impacted by the Modified Project or which were previously removed per concurrence between the Cultural Resources Specialist and CPM (see Table 5.3-1).

CUL-7 DATA RECOVERY FOR SMALL PREHISTORIC SITES (LITHIC SCATTERS, CAIRNS, AND POT DROPS)

The project owner shall ensure the CRMMP includes a data recovery plan for the resource type "small prehistoric sites," consisting of sites ~~CA-Riv-1136, SMB-P-160,~~ SMB-M-214, ~~SMB-P¬228,~~ SMB-H-234, ~~SMB-P-238, SMB-P-241, SMB-P-244, SMB-P-249, SMB-P-252, SMB-P-410, SMB-P-530, SMB-P-531, SMB-P¬532,~~ SMB-H-CT-001, ~~SMB-H-TC-101, SMB-H-TC-103,~~ and SMB-H-WG-102. This site list may be revised only with the agreement of the CRS and the CPM. The data recovery plan ….

Proposed Revision to CUL-8

Rationale:

Condition of Certification **CUL-8** outlines steps related to data recovery for historic-period archaeological sites with features. Proposed revisions to this Condition consist of removal of sites which are no longer impacted by the Modified Project or which were previously removed per concurrence between the CRS and CPM (see Table 5.3-1).

CUL-8 DATA RECOVERY ON HISTORIC-PERIOD SITES WITH FEATURES

The project owner shall ensure the CRMMP includes a data recovery plan for the resource type "historic-period archaeological sites with features," consisting of sites SMB-H-143, ~~SMB-H-163, SMB-H-203, SMB-H-205, SMB-H-207, SMB-H-210, SMB-H- 222, SMB-H-223, SMB-H-245, SMB-H-247, SMB-H-250, SMB-H-251, SMB-H- 409,~~ SMB-H-411, SMB-H-416, and SMB-H-419. This site list may be revised only with the agreement of the CRS and the CPM. The data recovery plan ….

Proposed Revision to CUL-9

Rationale:

Condition of Certification **CUL-9** outlines steps related to data recovery for historic-period archaeological sites with structures. Proposed revisions to this Condition consist of removal of two sites which are no longer impacted by the Modified Project (see Table 5.3-1).

CUL-9 DATA RECOVERY ON HISTORIC-PERIOD SITES WITH STRUCTURES

The project owner shall ensure the CRMMP includes a data recovery plan for the resource type "historic-period archaeological sites with structures," consisting of site~~s~~ SMB-H-404~~, SMB-H-432, and SMB-H-514~~. This site list

may be revised only with the agreement of the CRS and the CPM. The data recovery plan ….

….

7. The project owner shall ensure a systematic metal detector survey is completed at each site, and that each "~~"~~hit" is investigated. All artifacts and features thus found must be mapped, measured, photographed, and fully described in writing.

Proposed Revision to CUL-10

Rationale:

Condition of Certification **CUL-10** outlines steps related to data recovery for historic-period dump sites. Proposed revisions to this condition consist of removal of sites which are no longer impacted by the Modified Project or which were previously removed per concurrence between the CRS and CPM (see Table 5.3-1).

CUL-10 DATA RECOVERY ON HISTORIC-PERIOD DUMP SITES

The project owner shall ensure the CRMMP includes a data recovery plan for the resource type "historic-period dump sites," consisting of sites SMB-H-171, SMB-H-178, ~~SMB-H-224,~~ SMB-H-403, and SMB-H-427 on the proposed plant site ~~and sites SMB-H-261/262~~ and SMB-H-522/525 along the linear facilities corridor if impacts to the latter cannot be avoided by spanning. This site list may be revised only with the agreement of the CRS and the CPM. The data recovery plan ….

Proposed Revision to CUL-11

Rationale:

Condition of Certification **CUL-11** outlines steps related to data recovery for historic-period refuse sites. Proposed revisions to this condition consist of removal of one site which is no longer impacted by the Modified Project (see Table 5.3-1).

CUL-11 DATA RECOVERY ON HISTORIC-PERIOD REFUSE SITES

The project owner shall ensure the CRMMP includes a data recovery plan for the resource type "historic-period refuse sites," consisting of sites SMB-H-164, SMB-H-166, ~~SMB-H-181,~~ SMB-H-287, SMB-H-288, and SMB-H-423 (SMB-H-164 also has a probable prehistoric thermal cobble feature for which assessment and data recovery would be accomplished under CUL-6.). The focus of the recordation upgrade is to determine if these sites can be

attributed to the desert training center (DTC)/C-AMA use of the region and are therefore contributors to the DTCCL. This site list may be revised only with the agreement of the CRS and the CPM.

5.4 GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

This section describes the portions of the Modified Project that may affect the analysis, rationale, conclusions, and Conditions of Certification contained in the Commission Final Decision for the Approved Project as it relates to geological and paleontological resources. As described below, potential impacts of the Modified Project are expected to be less than those of the Approved Project and will remain less than significant.

5.4.1 Summary of Project Changes Related to Geological and Paleontological Resources

The Modified Project removes the deeper foundations that would have been required within the power blocks for each of the four units of the Approved Project. In addition, the footprint of the Modified Project would be smaller than that of the Approved Project. No other aspect of the Modified Project is relevant to the analysis of geological or paleontological resources.

5.4.2 Changes in Environmental Impacts

As concluded during the proceedings for the Approved Project, CEC staff believes that the potential is low for significant adverse impacts to the BSPP from geologic hazards during its design life and to potential geological, mineralogical, and paleontological resources from the construction and operation of the BSPP. The only change in environmental impacts to geological and paleontological resources is a reduction in the potential to discover and impact paleontological resources for the Modified Project due to elimination of the deeper foundation excavations associated with the Approved Project and the smaller footprint compared to the Approved Project.

5.4.3 Compliance With LORS

There are no differences in the LORS analysis between the Modified Project and the Approved Project. LORS relating to the design of the Modified Project as contained in the Final Decision would ensure the Modified Project is designed to minimize impacts to and from geologic hazards.

Similarly, there are no specific LORS designed to protect paleontological resources that would be applicable to the Modified Project in a manner different than would be applicable to the Approved Project.

5.4.4 Conditions of Certification

No changes to Conditions of Certification in the areas of Geological or Paleontological Resources, or to the relevant General and Civil Conditions (e.g., **GEN-1**, **GEN-5**, and **CIVIL-1**), are necessary for the Modified Project.

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5.5 SOIL RESOURCES

This section describes the portions of the Modified Project that may affect the analysis, rationale, conclusions, and Conditions of Certification contained in the Commission Final Decision for the Approved Project as it relates to soil resources. As described below, potential impacts of the Modified Project to soil resources are expected to be less than those of the Approved Project and will remain less than significant.

5.5.1 Summary of Project Changes Related to Soil Resources

As described in Section 2.8.3.2, the grading for the Modified Project is less intensive than the grading for the Approved Project. Furthermore, the footprint of the Modified Project at 4,070 acres is substantially smaller than the 6,831 acre footprint of the Approved Project.

5.5.2 Changes in Environmental Impacts

The only change in environmental impacts to soil resources is a reduction in the potential soil loss due to reduced grading activities and smaller footprint for the Modified Project.

5.5.3 Compliance With LORS

There are no specific LORS designed to protect soil resources that would be applicable to the Modified Project in a manner different than would be applicable to the Approved Project. Therefore the analysis contained in the Final Decision should remain unchanged for the Modified Project.

5.5.4 Conditions of Certification

No changes to Conditions of Certification in the area of Soil Resources are necessary for the Modified Project.

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Section 6 LOCAL IMPACT ASSESSMENT

The following sections provide a description of the modifications proposed to the BSPP as they may affect the assumptions, rationale, and Conditions of Certification in the Final Decision. As discussed in Section 2 of this Petition, NextEra Blythe Solar has not yet selected the exact combination of fixed tilt and single access tracking PV modules for the site. Such selection will be made as part of the final design of the BSPP. However, where there are differences between the two systems, NextEra Blythe Solar PVSI has included a comparison of each for the Commission to consider a "worse-case" for each technical area. Ultimately the selection of either fixed-tilt or tracking PV systems or a combination of both systems will not affect: the maximum or peak amount of construction and operation workers and associated traffic; the overall socioeconomic impacts; the amount of noise generated during construction or operation; or the overall visual impact of the site.

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6.1 LAND USE

As described below, impacts of the Modified Project to land use are expected to remain the same as or be less than those of the Approved Project.

6.1.1 Summary of Project Changes Related to Land Use

The only change proposed by the Modified Project that is relevant to land use is the reduction in the overall Project footprint. The Approved Project had an overall footprint of 6,831 acres, while the footprint of the Modified Project solar plant site would encompass 4,070 acres.

6.1.2 Changes in Environmental Impacts

The Modified Project would be approximately 2,761 acres smaller than the Approved Project. Therefore, impacts related to land use would be incrementally reduced under the Modified Project.

6.1.3 Compliance With LORS

In the Commission Final Decision, the Commission concluded in Finding 8 that "the proposed project would be consistent with applicable Land Use LORS including the Riverside County Airport Land Use Compatibility Plan for the Blythe Airport, with the exception of the prohibition on glint and glare effects." A revised glint and glare analysis has been conducted for the Modified Project (see Section 6.2, Traffic and Transportation). The results of this analysis show that potential impacts from glint and glare would be insignificant. Considering the results of the glint and glare analysis, the BSPP would be in compliance with applicable land use policies and LORS, including the Riverside County Airport Land Use Compatibility Plan for the Blythe Airport.

Finding 7 of the Approved Project Final Decision is conditional upon BLM approval of the ROW lease/grant and California Desert Conservation Area (CDCA) land use plan amendment. In the ROD for the project, the BLM did approve the ROW lease/grant as well as the CDCA land use plan amendment. The CDCA plan had not previously identified the BSPP site as a location for power generation, and therefore, an amendment to the plan was required to authorize the BSPP. The Modified Project is consistent with the terms of the original ROD approving the ROW lease/grant and CDCA plan amendment.

Since the time of the original Project review, the Departments of Interior and Energy have released the final *Programmatic Environmental Impact Statement to Develop and Implement Agency-Specific Programs for Solar Energy Development* (Solar Energy Development PEIS or PEIS). On October 12, 2012, the Secretary of the Interior signed the ROD for the PEIS. The PEIS establishes 17 Solar Energy Zones (SEZs) that will

serve as priority areas for commercial-scale solar development projects. The BSPP is located within the Riverside East SEZ and therefore would be consistent with the PEIS land use planning document.

The Modified Project would not interfere with or change the other Findings of the Commission as contained in the Approved Project Final Decision.

There are no other new land use policies or LORS that would be applicable to the Modified Project. By submitting this Petition to the Commission, NextEra Blythe Solar subjects the Modified Project to the exclusive siting jurisdiction of the California Energy Commission[8]. Section 25500 provides:

> The issuance of a certificate by the commission shall be in lieu of any permit, certificate, or similar document required by an state, local or regional agency, or a federal agency to the extent permitted by federal law, for such used of the site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law.

Therefore compliance with the Commission's Petition For Amendment process will satisfy all land use related LORS applicable to the Modified Project.

6.1.4 Conditions of Certification

No Conditions of Certification were adopted by the Commission related to Land Use. The Applicant is not proposing any changes to the Project that would be expected to alter the land use in such a way as to require new Conditions of Certification to be applied to the modified Project.

[8] Public Resources Code 2550.1 (c) applies the entire chapter of the Public Resources Code to a facility that makes a Petition for Amendment.

6.2 TRAFFIC AND TRANSPORTATION

The following section discusses the Modified Project's impacts to traffic and transportation as compared to the Approved Project. As described below, impacts of the Modified Project to traffic and transportation, including glint and glare, are expected to be less than or equal to those of the Approved Project, and will remain less than significant.

6.2.1 Project Changes Related to Traffic and Transportation

The following aspects of the Modified Project would affect the analysis and Conditions of Certification for Traffic and Transportation.

- The construction traffic is slightly less for the Modified Project;
- The construction period is reduced from 69 months to 48 months or less;
- The operation traffic is reduced substantially for the Modified Project;
- The BSPP will no longer have solar trough mirrors that the Commission determined might interfere with airport operations at the Blythe Airport as a result of potential glint and glare from the mirrors; and
- The BSPP will no longer have any air cooled condensers with the potential to create thermal plumes that the Commission determined might interfere with airport operations at the Blythe Airport.

6.2.2 Changes in Environmental Impacts

6.2.2.1 Construction Traffic

As described in the Project Description, the Modified Project is expected to be constructed over an up to 48-month time period with a peak workforce of approximately 619 workers. The Approved Project was estimated to have up to 1,004 workers during the peak month (month 18). Therefore, the Modified Project would have a slightly reduced peak construction workforce compared to the Approved Project. This reduction in the peak workforce is not enough to warrant reduction of any of the requirements contained in the Final Decision designed to reduce impacts during the construction period.

6.2.2.2 Operations Traffic

The operations workforce is proposed to be reduced from 221 workers for the Approved Project to between 15 and 20 for the Modified Project. Therefore, potential traffic impacts associated with employee vehicle trips for the Modified Project are substantially less than those identified in the Final Decision for the Approved Project.

6.2.3 Reduction in Environmental Impacts with Respect to Blythe Airport

The Final Decision for the Approved Project identified potential effects on the Blythe Airport due to upward thermal plumes from the cooling towers and due to glint and glare of the reflective surface of the mirrors during low sun angle hours. First, the Modified Project will no longer require cooling towers or air cooled condensers and therefore upward thermal plumes have been eliminated. Second, since the PV panels are not as reflective as mirrors and are distant from the Blythe Airport, glint and glare should no longer be a potential issue for pilots using the Blythe Airport. Many PV projects have been proposed and constructed near airports and U.S. Air Force Bases. Additionally, the Commission should note that Riverside County Planning Department recently (2010) permitted a solar PV project on the Blythe Airport property itself[9].

6.2.3.1 Differences in Glint and Glare Impacts from Those Analyzed in the Final Decision

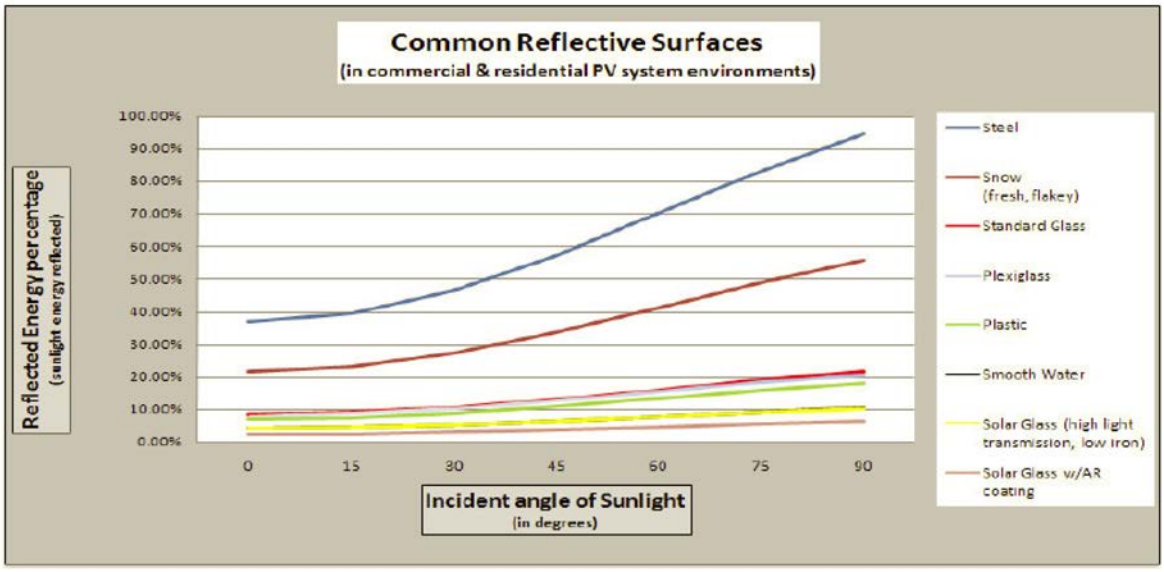
The electrical generation system in the Modified Project is substantially different from that analyzed in the Final Decision. The principal difference between the two solar technologies (parabolic mirrors versus PV) involves the means by which sunlight is converted to electrical power. The Modified BSPP is proposing to use high-transmission, low-reflectance PV panels with non-reflective coatings to transmit sunlight to solar cells that directly produce direct current electricity. The direct current is subsequently converted to alternating current. By contrast, the Approved Project proposed to use highly reflective parabolic trough mirrors to concentrate sunlight in a receiver tube filled with a circulating heat transfer fluid. The heat transfer fluid was to be heated by solar energy focused on the receiver tube by the parabolic mirrors and then conveyed in a closed loop to a heat exchanger for production of steam. The steam would then be used in a steam turbine generator to generate alternating current. The spent steam would subsequently be condensed in an air cooled condenser, a type of cooling tower.

The different approaches to generating electricity produce substantial differences in the resultant thermal plume produced by the steam condensation system and the potential for glint and glare from the solar collectors. Because the Modified Project uses direct conversion of sunlight to electricity, there is no need for a cooling tower since there is no steam generation and no need for spent steam condensation. Consequently, the potential hazard to aviation associated with the thermal plume emanating from the air cooled condenser in a solar thermal power plant is eliminated in the Modified Project.

The amount of glint and glare potentially produced is also substantially reduced in the Modified Project. As mentioned above, the PV panels are specifically designed to minimize reflection of incident sunlight while maximizing the transmission of sunlight

[9] On December 10, 2010 Riverside County Board of Supervisors agreed to lease 829 acres of Blythe Airport Property to NRG for construction and operation of a PV solar facility.

through the glass surface to the underlying solar cells. The efficiency of the PV panel is dependent on absorbing as much of the incident sunlight as possible in the solar cells. Manufacturer documentation of the reflection from PV high transmission low reflectance glass with non-reflective coatings indicated that PV panel surface glass is much less reflective than standard window glass and can be approximately 5 percent reflective for a normal incidence ray compared to approximately 20 percent for standard glass (see Figure 6.2-1, from SunPower 2009).



Source: SunPower 2009

Figure 6.2-1 Reflectance Curve of Common Reflective Surfaces

By contrast, a parabolic trough mirror is designed to reflect and focus as much of the incident sunlight as possible on the central receiver tube. However, no mirror is perfect as there are minor sources of reflection from the mirror arrays and central receiver tubes due to surface imperfections, mirror misalignment, local mirror warping, and edge effects at the ends of each mirror segment. When aggregated over an entire mirror array, edge effects can produce a minor source of glint and glare. In addition, the center glass receiver tube produces both reflection and refraction of sunlight. When these reflections are directed backward towards the mirror, the parabolic mirror then acts as a collimated source of light, leading to a slight glow from the mirror array when observed at a distance. A similar collimated light generation mechanism does not occur with PV panels.

Both PV and mirror solar collectors have reflections from their metallic supporting structures that are dependent on the surface characteristic, shape of the supports, and sun-PV panel-viewer geometry. However, all exposed PV support structures are

typically constructed with matt or burnished surfaces to reduce bright specular reflections.

6.2.3.2 Potential for Glint and Glare Impacts from the Modified Project

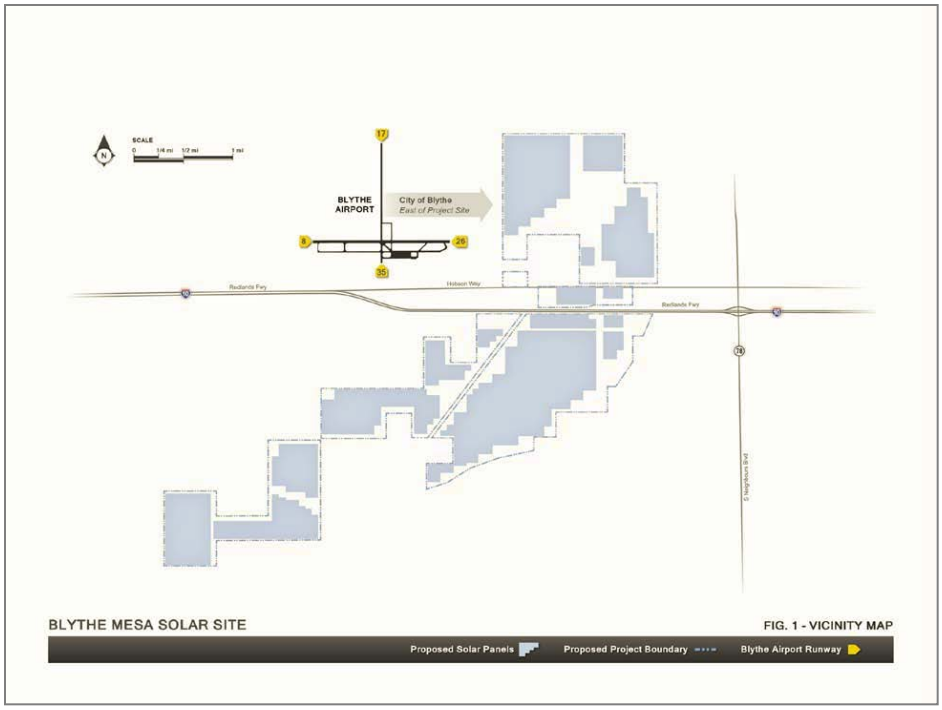
As summarized above, the source of glint and glare produced by PV panels in the Modified Project is substantially different than the glint and glare produced by parabolic trough mirrors as proposed for the Approved Project. The PV panels to be used at the Modified Project have inherently lower reflection characteristics than parabolic mirror arrays due to the fundamental difference in their physical process for collecting sunlight. For example, in its Technical Note *T09014, SunPower (2009) states:

> The glare and reflectance levels from a given PV system are decisively lower than the glare and reflectance generated by the standard glass and other common reflective surfaces in the environments surrounding the given PV system. Concerning random glare and reflectance observed from the air: SunPower has several large projects installed near airports or on air force bases. Each of these large projects has passed FAA or Air Force Standards and all projects have been determined as "No Hazard to Air Navigation."….

Glint and glare is critically dependent on the sun-reflection source-viewer geometry. Two different locations in the same project will not have the requisite geometry satisfied for a given observer, either ground based or aloft. The required geometry will exist only for a small portion of a given PV array; no other view direction will have the required sun-reflection source-viewer geometry that can exist simultaneous for PV arrays within the Modified Project (or for PV arrays in other nearby projects in the Blythe area).

As presented in the visual impacts section of this document, due to the surrounding topography, the Modified Project would be largely invisible from public roads. Observers potentially affected by glint and glare from the Modified Project would be travelers on Midland Road, users of off-highway vehicles, visitors to the McCoy or Big Maria Mountains or the Midland Long Term Visitor Area, and aircraft at the Blythe Airport. Again, the extent of glint and glare is dependent on the specific orientation of individual PV panels and the geometrical relationship of the sun, the PV panel, and the observer. Any such glare observed will not be significant given the low reflective nature of currently available PV solar panels.

A quantitative analysis was not performed for the Modified Project. However, a detailed quantitative analysis of glint and glare has been performed for the Blythe Mesa Solar Project (BMSP), a nominal 485 MW PV power project proposed for construction to the east and south of the Blythe Airport. The approach end of Runway 26 is less than a half mile from the nearest PV panel. Portions of the BMSP are directly beneath the established traffic pattern for the Blythe Airport, with a significant portion of the project within the Airport Compatibility Zone (see Figure 6.2-2).



Source: Renewable Resources Group 2011

Figure 6.2-2 Proposed Blythe Mesa Solar Project located near the Blythe Airport

A ray tracking analysis was performed by the BMSP applicant to analyze the potential magnitude of glint and glare from operation of the BMSP (Renewable Resources Group 2011). Even though the project is within a half mile of the approach end of Runway 26, the most used runway at the airport, and directly under the predominant flight pattern, the potential impacts on airport operations from glint and glare from the BMSP were determined by Renewable Resources Group (RRG) to be not significant. The Riverside County Planning Department did not indicate any disagreement with these findings, and in fact provided the presentation made by RRG to the Riverside County Airport Land Use Commission for BMSP as an example of an acceptable analysis of the impacts of glint and glare on aviation activities at the Blythe Airport.

The decrease in intensity of glint and glare with distance is subject to an inverse square law, with the intensity decreasing as the square of the distance from the source of glint and glare. As the Modified Project is at a greater distance from the airport than BMSP, the glint and glare produced by the Modified Project PV panels would be less and certainly no worse than the negligible impacts of glint and glare from the BMSP on aviation at the Blythe Airport.

As another example, the Riverside County Board of Supervisors has acknowledged this lack of significance of the potential reflections from a PV solar array by approving on December 14, 2010 the lease of approximately 829 acres of Blythe Airport land to NRG for construction of the Solar Blythe II project. The Solar Blythe II project is a nominal 21

MW PV facility on 200 acres within the Blythe Airport Compatibility Zone (Riverside Board of Supervisors 2010).

Additionally, glint and glare from the PV panels were analyzed by the BLM in the McCoy Solar Energy Project (MSEP)[10] EIS, and this impact was considered to be insignificant if non-reflective coating is used (BLM 2013). Glint and glare from other support structures and the gen-tie line (which crosses the Blythe Airport Compatibility Zone) was also analyzed by the BLM in the MSEP EIS, and this impact was not considered to be sufficient to cause an adverse change in the contrast rating.

It is becoming common to install PV solar panels at airports and military installations. For example, FedEx has installed a 0.9 MW PV system at its hub at the Oakland International Airport (Power Engineers 2010). Denver International Airport has installed a 1.6 MW solar system to provide power for airport operations (Power Engineers 2010). A simple internet search[11] identified active or proposed PV solar installations at Hickam Air Force Base (AFB), Davis-Monthan AFB, Nellis AFB, Edwards AFB, Los Angeles AFB, Peterson AFB, and Schriever AFB. The number of PV power generation systems at numerous airports around the country is strong evidence of the general consensus by the aviation community that PV electrical generation technology is not a hazard to aviation.

Based on the findings of the other PV projects in the immediate area of BSPP, with BSMP and Blythe Solar II Project within the Blythe Airport land use compatibility zone, as well as the now-common location of PV projects near air fields, a finding by the relevant agencies that the Modified Project would have insignificant glint and glare impacts would be appropriate.

6.2.3.3 Differences in Glint and Glare Impacts between Fixed-Tilt and Single-Axis Tracking PV Modules

At this time, NextEra Blythe Solar has not selected whether it would install a fixed-tilt or single-axis tracking modular system or a combination of both systems. A fixed-tilt system would always be at the same angle with respect to the sun while a tracking system will vary throughout the day. Both systems would be oriented on a north-south axis. Because of the varying orientation throughout the day, a tracking system would have slightly more potential for configuration that could be seen by pilots at different times of the day. However, as discussed above, all types of PV are designed to minimize reflection, and hence the potential for glint and glare from either type of technology would be negligible. Furthermore, potential glint and glare from the metal

[10] MSEP is 750 MW PV project that is proposed to be located adjacent to BSPP to the north.
[11] A single internet search with the key words “solar PV air force bases”; first page of results only.

footing and supports for the two technologies would also be negligible as discussed above, and the impact from both types of PV would be basically the same.

6.2.3.4 Cumulative Impact

There are multiple solar PV projects proposed for construction or in operation near the Blythe Airport in addition to the Modified Project. Four of the projects are located within the Blythe Airport Compatibility Zone, including two on the airport grounds itself. A list of projects within 6 miles of the airport is provided in Table 6.2-1.

The weight of evidence demonstrates that glint and glare from a PV solar array such as that proposed for the Modified Project, while it exists, is not significant and does not pose a hazard to air navigation. As the intensity of glint and glare drops off as the inverse square of the distance from the source to the observer, the glint and glare produced by Modified Project PV panels would be no worse and potentially significantly less than the impacts of glint and glare from the nearby BMSP and the two PV projects proposed for location Blythe Airport property. By the same reasoning, the potential impact of the other PV facilities further away will likewise be less than that of the Modified Project.

TABLE 6.2-1
SOLAR PV POWER PLANTS LOCATED NEAR THE BLYTHE AIRPORT

Project	Developer	Description
Blythe Solar Power Generating Station I	Amonix	Nominal 2 MW PV facility proposed for location on the Blythe Airport and within the Airport Compatibility Zone.
Blythe Airport Solar II	NRG	Nominal 21 MW PV facility proposed for location on the Blythe Airport and within the Airport Compatibility Zone.
Blythe Mesa Solar Project (BMSP)	Renewable Resources Group	Nominal 485 MW PV facility located to the east through south of the Blythe Airport with the nearest PV panels approximately one-half mile east of the approach end of Runway 08 and much of the project boundary within the Airport Compatibility Zone.
Desert Quartzite	First Solar	Nominal 600 MW PV facility with the nearest PV panels located approximately 2 miles southwest of the ends of the nearest runways. The northern portion of the facility is within the Airport Compatibility Zone.
McCoy Solar Energy Project (MSEP)	McCoy Solar, LLC (NextEra Energy Resources)	Nominal 750 MW PV solar power generation project located to the northwest of the Blythe Airport on land managed by the BLM and adjacent to BSPP. The closest project boundary is approximately 4 miles from the approach end of Runway 17.
McCoy Solar	EDF	Nominal 300 MW PV facility located approximately 6 miles northwest of the Blythe Airport adjacent to the MSEP.
Mule Mountain	Bullfrog Green Energy, LLC	Nominal 500 MW PV facility located approximately 5 miles southwest of the Blythe Airport.

Source: California Energy Commission, Renewable Energy Action Team (REAT) Generation Tracking Projects Report, Revised 10/03/12.

Although there are a substantial number of PV projects proposed in the vicinity of the Blythe Airport, glint and glare is highly localized for a given observer for a specific time of day and observing geometry. Highly specific conditions determined by geometry must exist for glint and glare to be observed, and such conditions will only occur for a single observer at a given instant in time and from a specific portion of an individual PV array. Multiple simultaneous observations of glint and glare by a single observer looking in a given direction are not possible unless two facilities are aligned along the same view axis. However, the glint and glare will fall off as the inverse square of the distance from the source so the more distance PV array will have a significantly reduced intensity when compared to the foreground PV array.

The potential glint and glare from the other PV facilities proposed for the Blythe area would likewise have a smaller impact that the BMSP would have. It should be recognized that the glint and glare from the BMSP was found to be insignificant by RRG and it is assumed the Riverside County Planning Department is in agreement with this finding. Consequently, the potential for cumulative glint and glare impacts between the Modified Project and other proposed solar power plants in the Blythe area should also be considered to be insignificant.

6.2.4 Compliance With LORS

In its Final Decision, the Commission concluded that, with the implementation of the Conditions, the Approved Project would comply with all applicable LORS related to traffic and transportation with the exception of glint and glare as it affects local aviation at the Blythe Airport. A revised glint and glare analysis has been conducted for the Modified Project. The results of this analysis show that potential impacts from glint and glare would be negligible and not present a hazard to air navigation. Considering the results of the glint and glare analysis, the BSPP would be in compliance with applicable traffic and transportation related policies and LORS, including the Riverside County Airport Land Use Compatibility Plan for the Blythe Airport. The Modified Project would therefore comply with all applicable policies and LORS related to traffic and transportation, and no new or additional LORS have been identified.

6.2.1 Conditions of Certification

The glint and glare analysis for the Modified Project demonstrates that potential impacts from glint and glare would be negligible and would not present a hazard to aviation at the Blythe Airport. As a result of this analysis, the Applicant recommends that Conditions of Certification **TRANS-7**, **TRANS-9**, and **TRANS-10** be deleted as they are unnecessary for the Modified Project.

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Riverside County Board of Supervisors. 2010. Option Agreement and Lease Agreement – Solar Facilities, Blythe Airport. Approval for Agenda Number 3.29. December 10.

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6.3 SOCIOECONOMICS

As described below, impacts of the Modified Project to socioeconomics are expected to be less than or equal to those of the Approved Project and will remain less than significant. As with the Approved Project, the Modified Project would not result in cumulative impacts related to socioeconomics.

6.3.1 Summary of Project Changes Related to Socioeconomics

The changes proposed for the Modified Project that could affect socioeconomics include the following:

- A reduction in the construction period from 69 months to up to 48 months.
- A reduction in the construction workforce from an average of approximately 604 daily construction workers, with a peak daily workforce of 1,004, to an average of 250 to 430 daily construction workers, with a peak daily workforce of 619.
- A reduction in the hiring of about 221 permanent, full-time employees to hiring 15 to 20 permanent, full-time employees from the local area for project operations. Temporary personnel would be employed, as needed, during seasonal periods when panel washing is required.

6.3.2 Changes in Socioeconomic Impacts

The Modified Project involves fewer construction and operations personnel. Thus, any effect on local population, housing, or public services identified in the Commission Final Decision would be less under the Modified Project. Since the Commission Final Decision found these impacts to be insignificant, that finding would remain true for the Modified Project.

While the Modified Project reduces the estimated number of construction and operations personnel, the Project still will produce a beneficial economic impact to the community of Blythe and surrounding communities by creating new jobs for skilled and unskilled workers. Summaries of the Modified Project's total economic impacts/benefits from construction and operation are presented in Tables 6.3-1 and 6.3-2, respectively. The economic benefits associated with anticipated construction and operation payroll, local purchases of materials and supplies, and sales tax revenues generated by the Modified Project will be less than the Approved Project, but will still have a beneficial effect on the local and regional economy.

The Commission also found that simultaneous construction of multiple (four other) large solar projects in the vicinity of BSPP would not have a significant cumulative impact on population, housing, or public services. Construction of two of these four projects (Desert Sunlight and Genesis Solar) is complete or nearly complete, Rice Solar (RSEP)

is on-hold, and Palen Solar (PSPP) is being amended to allow different solar thermal technology to be used (with about a doubling of the peak construction workforce needed). Another project adjacent to BSPP, the MSEP, is in the process of obtaining permits and approvals. The cumulative analysis for the Approved Project determined if the peak construction month for all five solar projects occurred at the same time, that a total construction workforce would be on the order of 4,200 construction workers. In the unlikely event that BSPP (peak of 619 workers), PSPP (2,311), RSEP (438), and MSEP (750) are constructed simultaneously with coincident peak construction periods, the total construction workforce would still be on the order of 4,200. The BSPP Final Decision indicated that this number of construction workers would fall well within the construction labor pool available in Riverside, San Bernardino, and Ontario areas that were assumed to service these projects. Therefore, cumulative socioeconomic impacts would remain less than significant.

TABLE 6.3-1
SUMMARY OF TOTAL ECONOMIC IMPACTS FROM CONSTRUCTION

Capital Cost (in millions)	$1,131
Local Materials and Supply Purchases (in millions)	$17
Total Construction Payroll (in millions)	$173
Total Sales Taxes During Construction (in millions)	$16

All values are approximate.

TABLE 6.3-2
SUMMARY OF TOTAL ECONOMIC IMPACTS FROM OPERATIONS AND MAINTENANCE

Annual Local O&M Purchases	$150,000
Total Annual O&M Payroll (in millions)	$1.4
Annual O&M Employment	15-20

All values are approximate.

6.3.3 Compliance with LORS

There are no changes in LORS that would be applicable to the Modified Project. Therefore, the analysis contained in the Final Decision should remain unchanged for the Modified Project.

6.3.4 Conditions of Certification

There were no Conditions of Certification imposed on the Approved Project in the area of socioeconomics. Consequently, no changes or additions are necessary for the Modified Project.

6.4 NOISE AND VIBRATION

This section describes the portions of the Modified Project that may affect the analysis, rationale, conclusions, and Conditions of Certification contained in the Commission Final Decision for the Approved Project as it relates noise and vibration. As described below, potential impacts of the Modified Project from noise and vibration are expected to be less than those of the Approved Project and will remain less than significant.

6.4.1 Summary of Project Changes Related to Noise and Vibration

The Modified Project will generate electricity through PV technology, and does not contain four power blocks with air cooled condensers (ACCs) and associated equipment. The power blocks with ACCs were the main sources of operational noise and vibration for the Approved Project. The Modified Project will have substantially reduced operational noise. Construction-related noise will also be reduced at the Modified Project, as there will be substantially less grading and other construction activity, and the previously proposed concrete batch plant is no longer planned.

6.4.2 Changes in Environmental Impacts

Construction noise from the Modified Project will be reduced from what was analyzed in the Approved Project as there will be substantially less grading and other construction activity, and a concrete batch plant is no longer planned for the site. There are no new pieces of equipment or methods of construction that were not analyzed previously for the Approved Project.

The Modified Project operational noise will be substantially less than the Approved Project, since there will no longer be power blocks, ACCs, or other associated thermal power equipment.

6.4.3 Compliance With LORS

The only noise-related LORS applicable to the Modified Project are the same as those that would be applicable to the Approved Project. The Modified Project will comply with all applicable noise-related LORS as enforced by the Conditions of Certification.

6.4.4 Conditions of Certification

The power blocks, ACCs, and associated thermal-power equipment were the main sources of noise and vibration concern for the Approved Project. By eliminating these components and using PV technology, the Modified Project will not generate substantial noise during project operations. Adherence to the applicable Conditions of Certification will ensure that the Modified Project will not generate substantial noise during construction. As the power blocks, ACCs, and associated thermal-power equipment

have been eliminated, Conditions of Certification **NOISE-4**, **NOISE-5**, and **NOISE-7** are no longer relevant and should be deleted.

Specifically, **NOISE-4** requires a community noise survey to ensure that the power block equipment does not certain levels or types of noise (pure tone components). **NOISE-5** requires an occupational noise survey. **NOISE-**7 requires mitigation if high pressure steam blows are to be performed prior to operation of the steam turbine and piping. Since steam turbines, piping, and other power block noise sources will not be installed, these surveys should no longer be required.

6.5 VISUAL RESOURCES

As described below impacts of the Modified Project to visual resources are expected to be less than or equal to those of the Approved Project.

6.5.1 Summary of Project Changes Related to Visual Resources

Changes proposed in the Modified Project that are relevant to visual resources include:

- Elimination of the power blocks for all four units including the 120-foot cooling towers;
- Elimination of the solar trough mirrors which are 24 feet tall; and
- Installation of PV modules on either a fixed mounting system or a single axis tracking system that would enable the module to track the sun.

6.5.2 Changes in Environmental Impacts

The Commission Final Decision ultimately found that the Approved Project, even with mitigation, would still result in significant direct, indirect, and cumulative impacts. The Modified Project will lessen those impacts because it will result in a substantially smaller footprint, less glint and glare, will eliminate taller structures, and the PV modules will be significantly less visible since they will be about a third of the height of the original solar trough mirrors.

The visual simulations for the Modified Project are included in Appendix I. The visual impact from all key observation points is less or equal to than the Approved Project.

6.5.3 Compliance With LORS

There are no specific visual related LORS applicable to the Modified Project.

6.5.4 Conditions of Certification

No modifications to the Conditions of Certification are necessary for the Modified Project.

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Section 7 POTENTIAL EFFECTS ON PROPERTY OWNERS

The Commission's Power Plant Siting Regulations require a Petition For Amendment to include: (1) a discussion of how the modification affects the public, (2) a list of property owners potentially affected by the modification, and (3) a discussion of the potential effect on nearby property owners, the public, and the parties in the application proceedings.

The Modified Project would not affect the public differently than the Approved Project. As described in every technical area evaluated in Sections 3, 4, 5, and 6 of this Petition, impacts of the Modified Project are either the same or less than the Approved Project. In addition to reducing impacts, the Modified Project would still result in the overall public benefits described in the Commission Final Decision.

A list of the adjacent property owners potentially affected by the Modified Project is provided in Appendix J.

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Section 8 CONCLUSIONS AND RECOMMENDED FINDINGS

NextEra Blythe Solar recommends that the Commission approve this Petition For Amendment with the Conditions of Certification changes proposed. The use of PV technology, in every technical area, either reduces impacts or results in impacts that are the same as the original BSPP.

The Commission originally made override findings for the BSPP accepting some impacts in exchange for the benefits of the project. The underlying rationale for those findings remains unchanged. Therefore, the Petition should be approved.

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APPENDIX A LEGAL DESCRIPTION

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NextEra Blythe Solar Energy Center, LLC

March 7, 2013

VIA Certified Mail and E-Mail/PDF

James G. Kenna
Director, California State Office
Bureau of Land Management
U.S. Department of the Interior
2800 Cottage Way, Suite W-1623
Sacramento, CA 95825

Re: Partial Relinquishment of Right-of-Way, Blythe Solar Project, CACA-48811

Dear Mr. Kenna:

On behalf of NextEra Blythe Solar Energy Center, LLC ("NextEra Blythe"), I am writing to notify the Bureau of Land Management ("BLM) that NextEra Blythe is hereby relinquishing an approximate 2,408.65 acre portion of its right-of-way ("ROW") Grant for the Blythe Solar Project, which was approved for assignment to NextEra Blythe on August 22, 2012. The relinquished area is located in the western portion of the ROW Grant and constitutes a portion of the area approved for the location of the solar generating facility.

The retained area of the ROW Grant is identified on the attached map (Exhibit A) and legal description (Exhibits B1-B5). The retained area constitutes approximately 4,616.35 acres in total and includes the eastern portion of the area for the solar generating facility and all of the ancillary and linear facilities covered by the ROW Grant. We request that BLM issue a revised legal description and map for the ROW Grant and a revised rent determination (effective April 1, 2013). We are not requesting a revised performance and reclamation bond at this time, but will update this information in the future in conjunction with a revised Plan of Development for the project.

Neither NextEra Blythe, nor its predecessor Palo Verde Solar I, LLC, were issued any notice to proceed or have undertaken any construction activity within the relinquished area. Those lands therefore remain undisturbed under the terms of the ROW Grant and do not trigger any of the decommissioning or reclamation obligations set forth in the ROW Grant.

We appreciate your assistance with regard to this matter. Please contact Stuart McCurdy at (561) 304-5609 or stuart.mccurdy@nexteraenergy.com if you have any questions.

Sincerely,

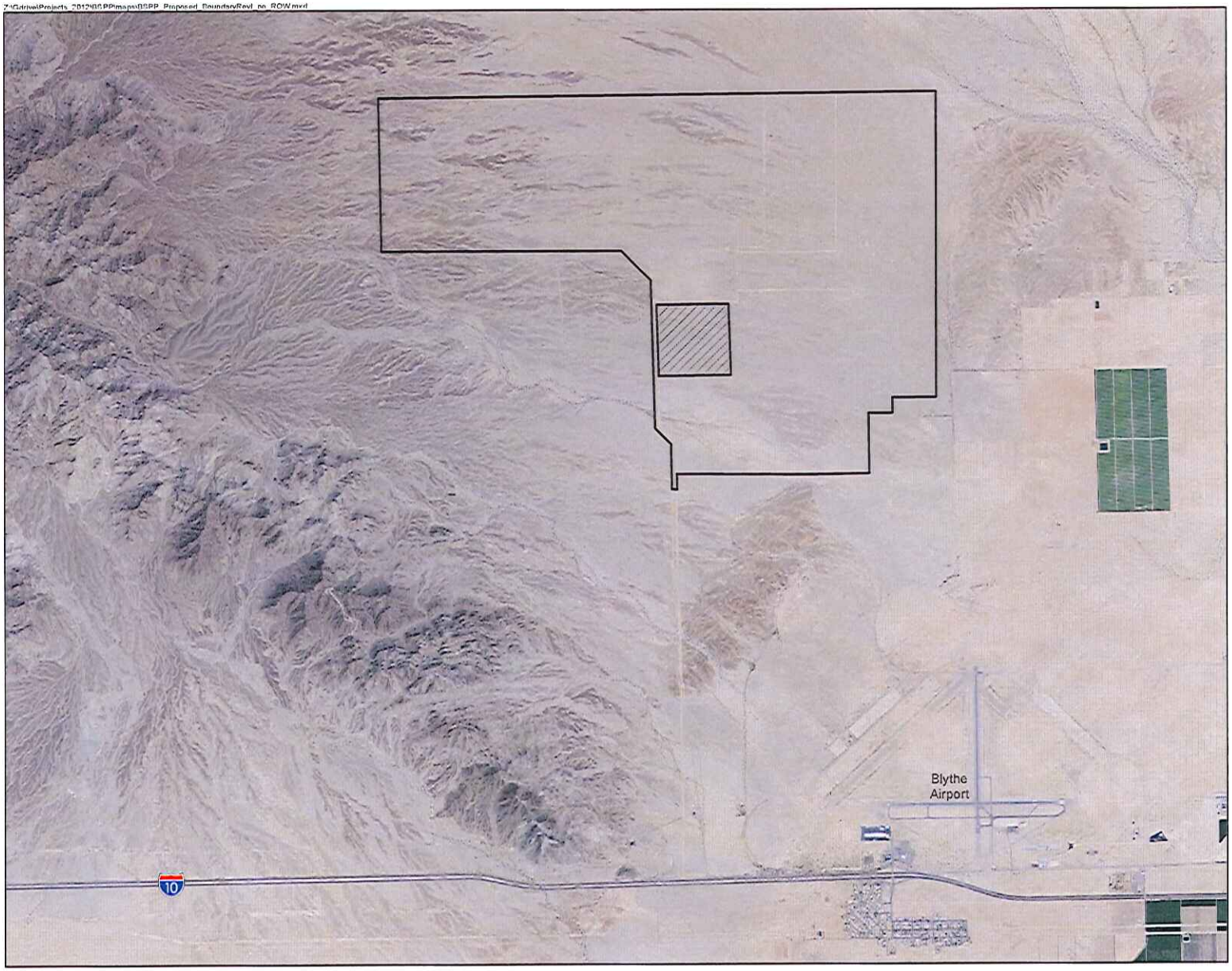
Gregory Schneck
Vice President

Attachments: (A) Map; and (B1-B5) Legal Descriptions

cc: Jeff Childers, BLM Project Manager, CDD (via email)
Brandon Anderson, Realty Specialist, State Office (via email)

EXHIBIT A

Z:\GdriveProjects_2012\60\PPmaps\05PP_Proposed_BoundaryRevI_no_ROW.mxd



BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA

Legend

- BSPP Boundary
- Private Land

N

0 2,000 4,000 8,000

Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, Tt, Worley Parsons

BSPP BOUNDARY

TETRA TECH

EXHIBIT B1

AMENDED BSPP RIGHT OF WAY
LEGAL DESCRIPTION

BEING PORTIONS OF SECTION 4, SECTION 9, TRACT 37 THROUGH TRACT 43, INCLUSIVE, TRACT 45, TRACT 46, TRACT 47 AND TRACT 49 THROUGH TRACT 56, INCLUSIVE, TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM; SECTION 6, SECTION 7 AND SECTION 18, TOWNSHIP 6 SOUTH, RANGE 22 EAST, SBM, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID TRACT 38, SAID CORNER BEING 1" IRON PIPE WITH 2 1/2" GENERAL LAND OFFICE BRASS TAG PER GOVERNMENT SURVEY FIELD NOTES AS FILED IN BOOK 452-6, PAGE 3, RECORDS OF BUREAU LAND MANAGEMENT;

THENCE SOUTH 01°47'10" EAST 88.86 FEET ALONG THE EAST LINE OF SAID TRACT 38 TO THE **TRUE POINT OF BEGINNING,** SAID POINT BEING NORTH 01°47'10" WEST 5183.37 FEET, MEASURED ALONG THE EAST LINE OF SAID TRACT 38 FROM THE SOUTHEAST CORNER THEREOF, SAID CORNER BEING 1" IRON PIPE WITH 2 1/2" GENERAL LAND OFFICE BRASS TAG AS FILED IN BOOK 452-6, PAGE 3, RECORDS OF BUREAU LAND MANAGEMENT;

THENCE NORTH 89°24'07" EAST 5287.30 FEET;

THENCE SOUTH 00°05'01" WEST 3779.86 FEET;

THENCE SOUTH 00°39'28" EAST 1554.72 FEET;

THENCE SOUTH 00°07'00" WEST 6055.34 FEET;

THENCE SOUTH 89°20'32" WEST 1614.80 FEET

THENCE SOUTH 00°00'00" WEST 568.85 FEET;

THENCE SOUTH 90°00'00" WEST 890.51 FEET;

THENCE SOUTH 00°39'28" EAST 2241.31 FEET;

THENCE SOUTH 89°20'32" WEST 1277.15 FEET;

THENCE SOUTH 89°54'35" EAST 5840.60 FEET;

THENCE SOUTH 00°47'04" EAST 572.06 FEET;

THENCE NORTH 90°00'00" WEST 200.02 FEET;

THENCE NORTH 00°47'04" WEST 1698.80 FEET;

AMENDED BSPP RIGHT OF WAY
LEGAL DESCRIPTION

THENCE NORTH 45°39'28" WEST 821.79 FEET;

THENCE NORTH 01°47'45" WEST 1950.49 FEET;

THENCE NORTH 01°46'54" WEST 3591.56 FEET;

THENCE NORTH 45°00'00" WEST 1526.68 FEET;

THENCE SOUTH 89°59'27" WEST 8861.48 FEET TO THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 9;

THENCE NORTH 00°49'12" WEST 485.80 FEET ALONG THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 9 TO THE NORTH QUARTER CORNER THEREOF;

THENCE NORTH 00°57'01" WEST 5223.58 FEET ALONG THE EAST LINE OF THE WEST HALF OF SAID SECTION 4;

THENCE NORTH 89°24'07" EAST 15321.49 FEET TO THE **TRUE POINT OF BEGINNING.**

EXCEPTING THEREFROM TRACT 48, TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM.

DESCRIBED PARCEL CONTAINS 4431.35 ACRES, MORE OR LESS.

FOR GRAPHICAL PURPOSES SEE EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

Prepared under the supervision of:

Robert K. Holt Date: 02/28/13

Robert K Holt, RCE 27943
Expires 3/31/2014
The Holt Group, Inc
201 E Hobsonway
Blythe, CA 92225
(760) 922-4658

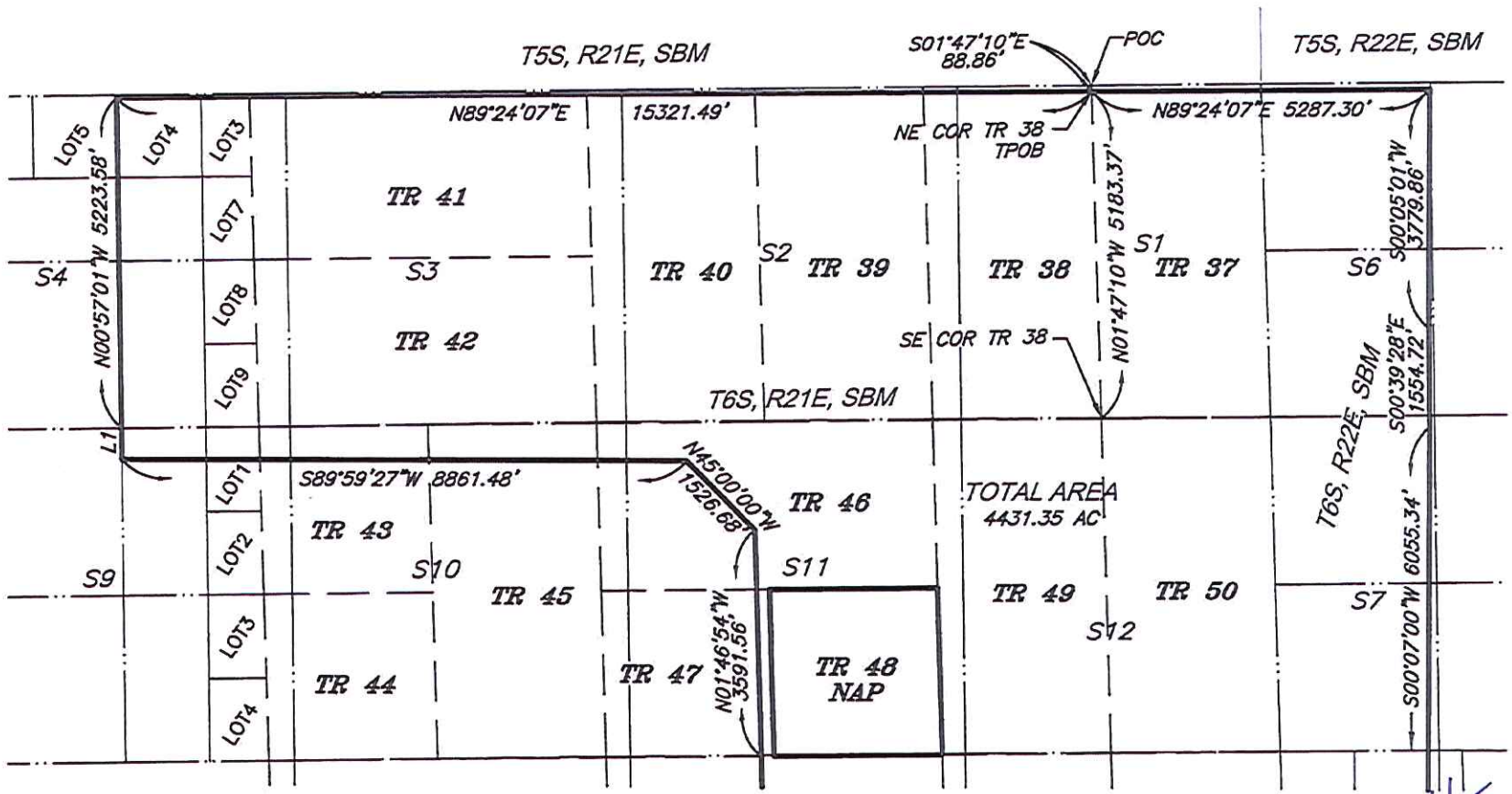
REGISTERED PROFESSIONAL ENGINEER
ROBERT K. HOLT
No. 27943
Exp. 3-31-14
CIVIL
STATE OF CALIFORNIA

02/28/13

THG NO. 632.073

DATE: 02/28/2013 BY: TJH

AMENDED BSPP RIGHT OF WAY



SEE SHEET 2

SCALE: 1" = 2500'

LINE DATA

NO.	BEARING	DISTANCE
L1	N00°49'12"W	485.80'

REGISTERED PROFESSIONAL ENGINEER
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02/28/13

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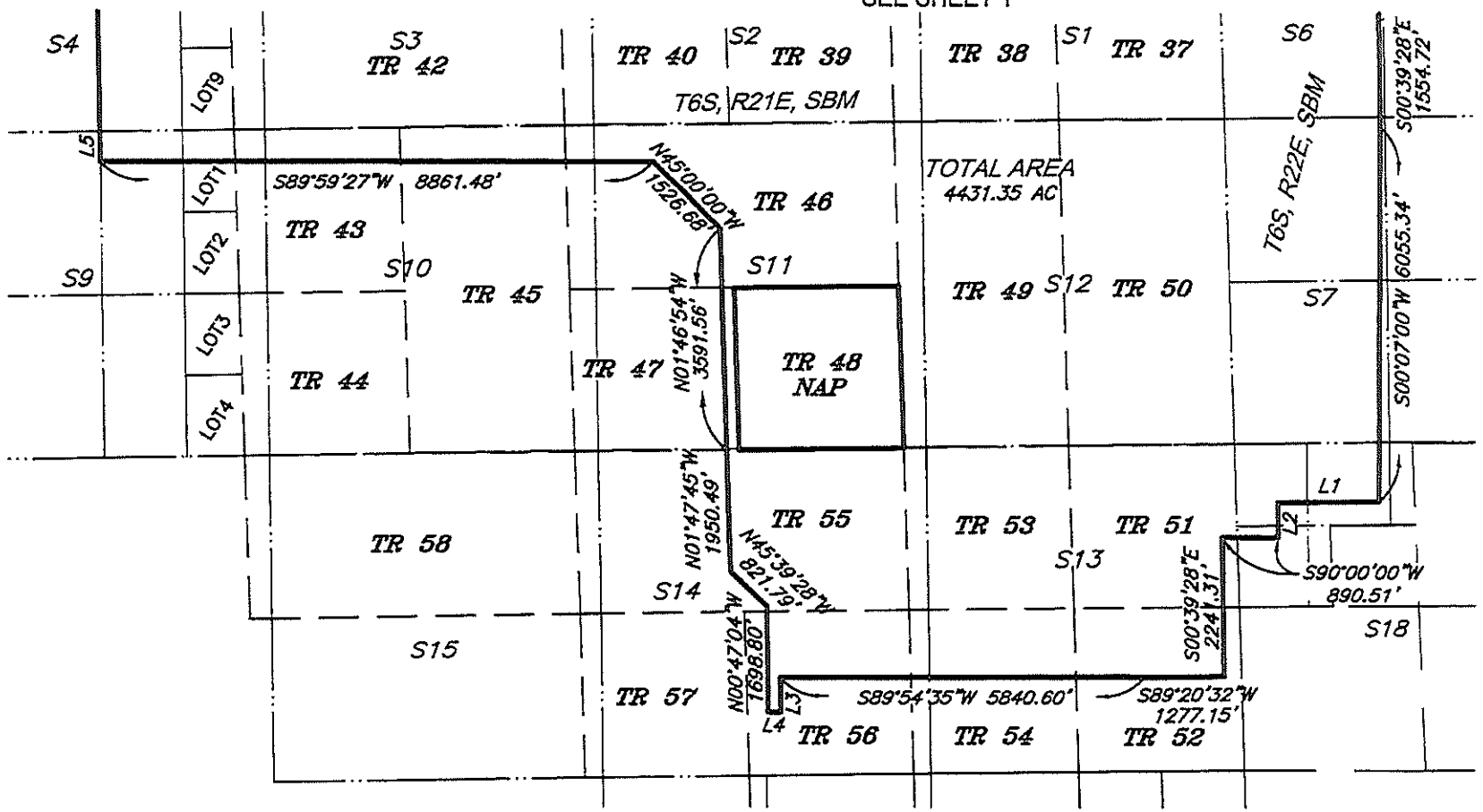
1601 N. Imperial Ave., El Centro, CA. 92243
Phone: (760) 337-3883 Fax: (760) 337-5997

THG NO. 632.073

SHEET 2 OF 2

AMENDED BSPP RIGHT OF WAY

SEE SHEET 1



LINE DATA

NO.	BEARING	DISTANCE
L1	S89°20'32"W	1614.80'
L2	S00°00'00"W	568.85'
L3	S00°47'04"E	572.06'
L4	N90°00'00"W	200.02'
L5	N00°49'12"W	485.80'

SCALE: 1" = 2500'

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DATE: 02/28/2013 BY: TJH

EXHIBIT B2

GEN-TIE AND OVERHEAD FIBER OPTIC
LEGAL DESCRIPTION

PARCEL "A"

LOT 5, LOT 6 AND SW¼ SW¼ SECTION 23; TRACT 56; TRACT 59; TRACT 71; TRACT 78A; TRACT 78B; TRACT 79, ALL LYING WITHIN TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

DESCRIBED PARCEL "A" CONTAINS 57.14 ACRES, MORE OR LESS.

PARCEL "B"

TRACTS 78B AND 80, TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

LOT 4, LOT 5, SW¼ NE¼, NW¼ SE¼ AND E½ SW¼ SECTION 2; S½ S½ SECTION 3; S½ S½ SECTION 4; S½ S½ SECTION 5; SE¼ SE¼ SECTION 6; E½ NE¼ SECTION 7; NE¼ NE¼ SECTIONS 10; N½ NW¼ SECTION 11, ALL LYING WITHIN TOWNSHIP 7 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

DESCRIBED PARCEL "B" CONTAINS 70.27 ACRES, MORE OR LESS.

FOR GRAPHICAL PURPOSES SEE EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

Prepared under the supervision of:

Date: 02/19/13

Robert K Holt, RCE 27943
Expires 3/31/2014
The Holt Group, Inc
201 E Hobsonway
Blythe, CA 92225
(760) 922-4658

REGISTERED PROFESSIONAL ENGINEER
ROBERT K. HOLT
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CIVIL
STATE OF CALIFORNIA

02/19/13

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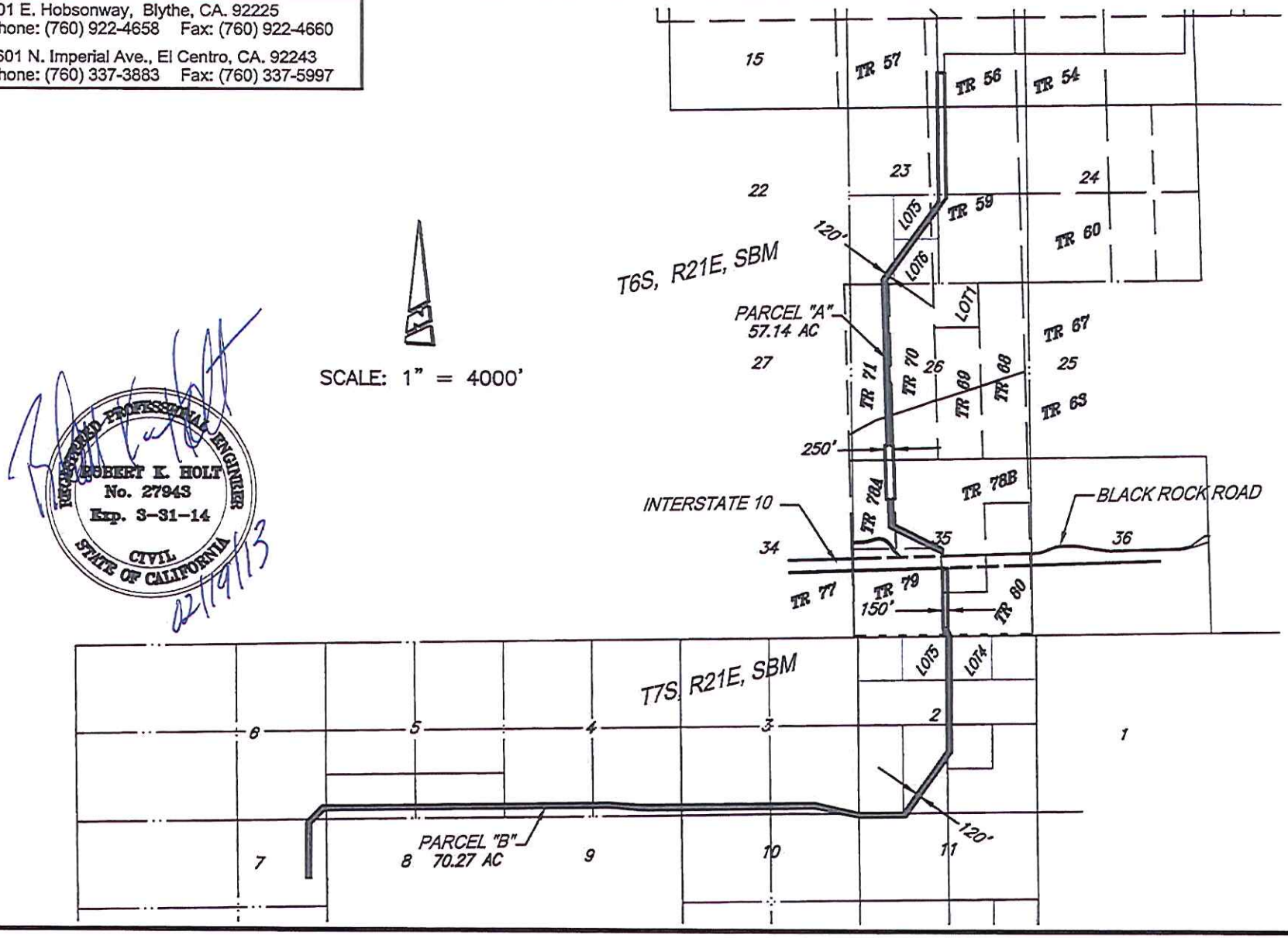
Phone: (760) 337-3883 Fax: (760) 337-5997

THG NO. 632.073

DATE: 02/14/2013 BY: TJH

BSPP GEN-TIE AND OVERHEAD FIBER OPTIC



REGISTERED PROFESSIONAL ENGINEER
ROBERT K. HOLT
No. 27943
Exp. 3-31-14
CIVIL
STATE OF CALIFORNIA

2/19/13

EXHIBIT B3

NATURAL GAS LINE
LEGAL DESCRIPTION

PARCEL "A"

LOT 1 SECTION 26; TRACT 56; TRACT 59; TRACT 69; TRACT 78B, ALL LYING WITHIN TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, SATE OF CALIFORNIA.

DESCRIBED PARCEL "A" CONTAINS 46.11 ACRES, MORE OR LESS.

PARCEL "B"

TRACTS 78B AND 80, TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, SATE OF CALIFORNIA.

DESCRIBED PARCEL "B" CONTAINS 5.98 ACRES, MORE OR LESS.

FOR GRAPHICAL PURPOSES SEE EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

Prepared under the supervision of:

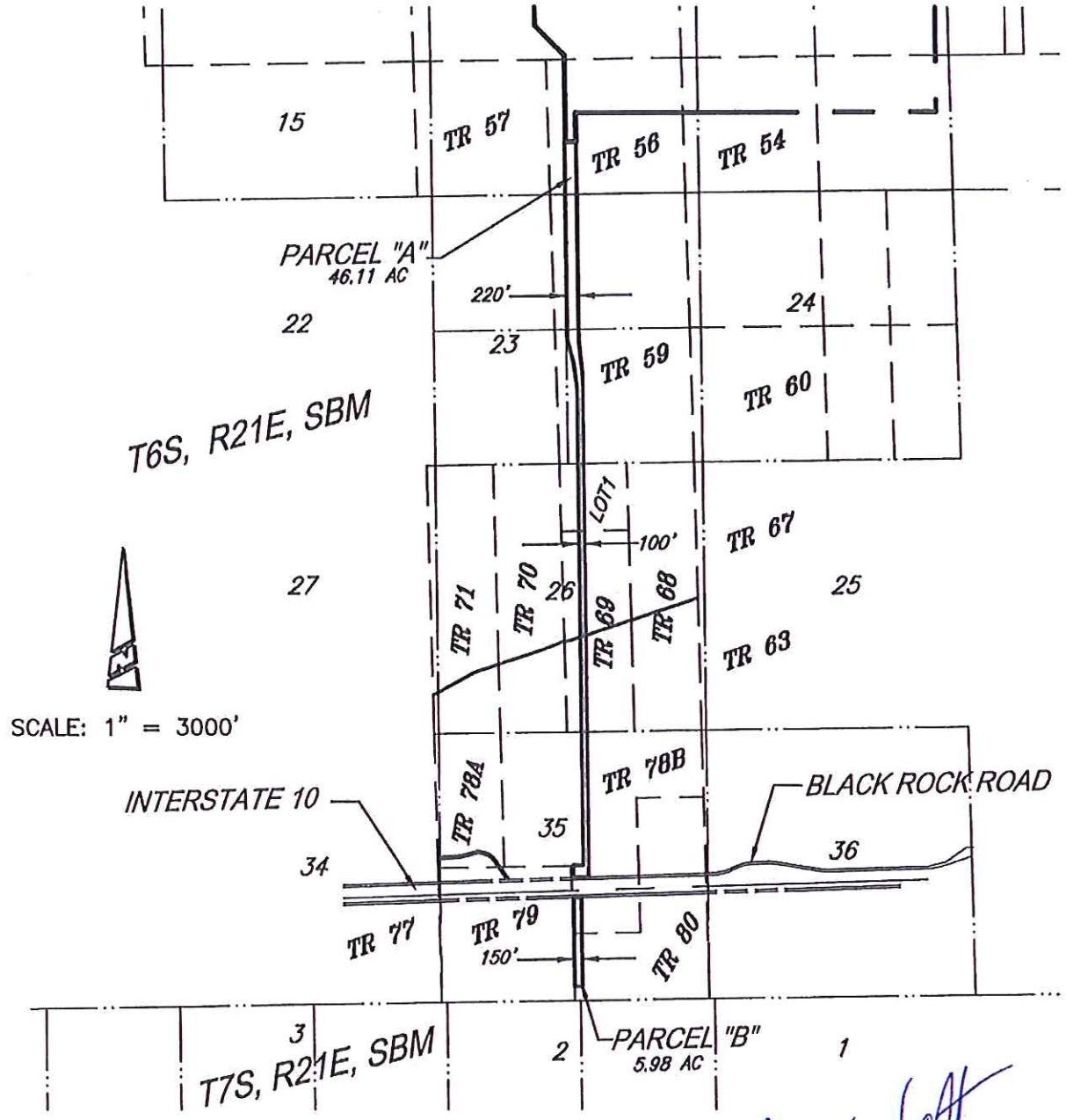
Date: 02/19/13

Robert K Holt, RCE 27943
Expires 3/31/2014
The Holt Group, Inc
201 E Hobsonway
Blythe, CA 92225
(760) 922-4658

THG NO. 632.073

SHEET 1 OF 1

BSPP NATURAL GAS LINE



02/14/13

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1601 N. Imperial Ave., El Centro, CA. 92243
Phone: (760) 337-3883 Fax: (760) 337-5997

DATE: 02/14/2013 BY: TJH

EXHIBIT B4

REDUNDANT FIBER OPTIC
LEGAL DESCRIPTION

PARCEL "A"

LOT 1 SECTION 26; TRACT 56; TRACT 59; TRACT 69; TRACT 78B, ALL LYING WITHIN TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

DESCRIBED PARCEL "A" CONTAINS 46.11 ACRES, MORE OR LESS.

PARCEL "B"

TRACTS 78B AND 80, TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

LOT 4, LOT 5, SW¼ NE¼, NW¼ SE¼ AND E½ SW¼ SECTION 2; S½ S½ SECTION 3; S½ S½ SECTION 4; S½ S½ SECTION 5; SE¼ SE¼ SECTION 6; E½ NE¼ SECTION 7; NE¼ NE¼ SECTIONS 10; N½ NW¼ SECTION 11, ALL LYING WITHIN TOWNSHIP 7 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

DESCRIBED PARCEL "B" CONTAINS 70.27 ACRES, MORE OR LESS.

FOR GRAPHICAL PURPOSES SEE EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

Prepared under the supervision of:

Date: 02/19/13

Robert K Holt, RCE 27943
Expires 3/31/2014
The Holt Group, Inc
201 E Hobsonway
Blythe, CA 92225
(760) 922-4658

THG NO. 632.073

DATE: 02/14/2013 BY: TJH

The Holt Group, Inc.
ENGINEERING PLANNING SURVEYING

201 E. Hobsonway, Blythe, CA. 92225
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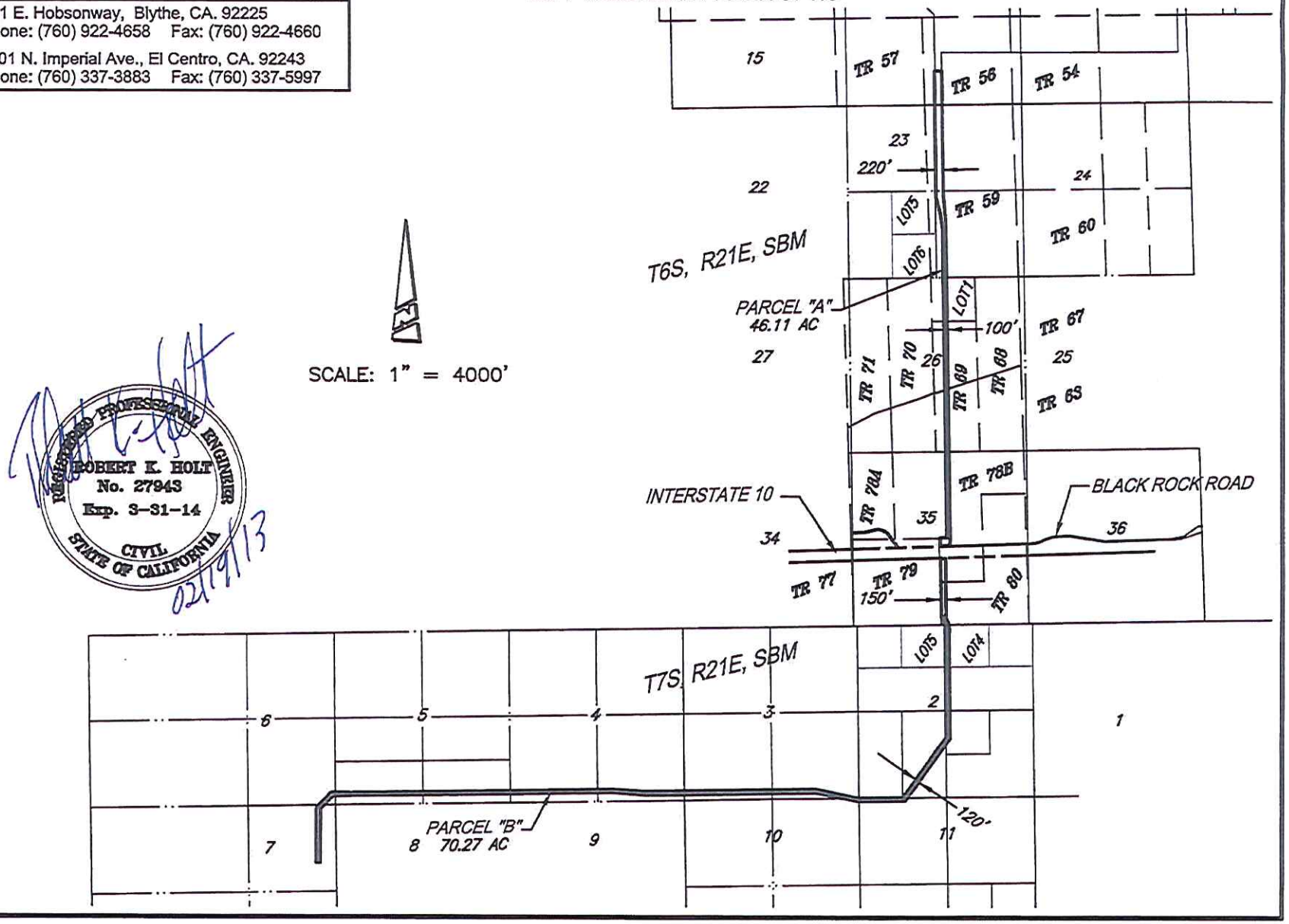
1601 N. Imperial Ave., El Centro, CA. 92243
Phone: (760) 337-3883 Fax: (760) 337-5997

BSPP REDUNDANT FIBER OPTIC



SCALE: 1" = 4000'

REGISTERED PROFESSIONAL ENGINEER
ROBERT K. HOLT
No. 27943
Exp. 3-31-14
CIVIL
STATE OF CALIFORNIA

02/19/13

EXHIBIT B5

BSPP ACCESS ROAD
LEGAL DESCRIPTION

PARCEL "A"

LOT 1 SECTION 26; TRACT 56; TRACT 59; TRACT 69; TRACT 78B, ALL LYING WITHIN TOWNSHIP 6 SOUTH, RANGE 21 EAST, SBM, COUNTY OF RIVERSIDE, SATE OF CALIFORNIA.

DESCRIBED PARCEL "A" CONTAINS 46.11 ACRES, MORE OR LESS.

FOR GRAPHICAL PURPOSES SEE EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

Prepared under the supervision of:

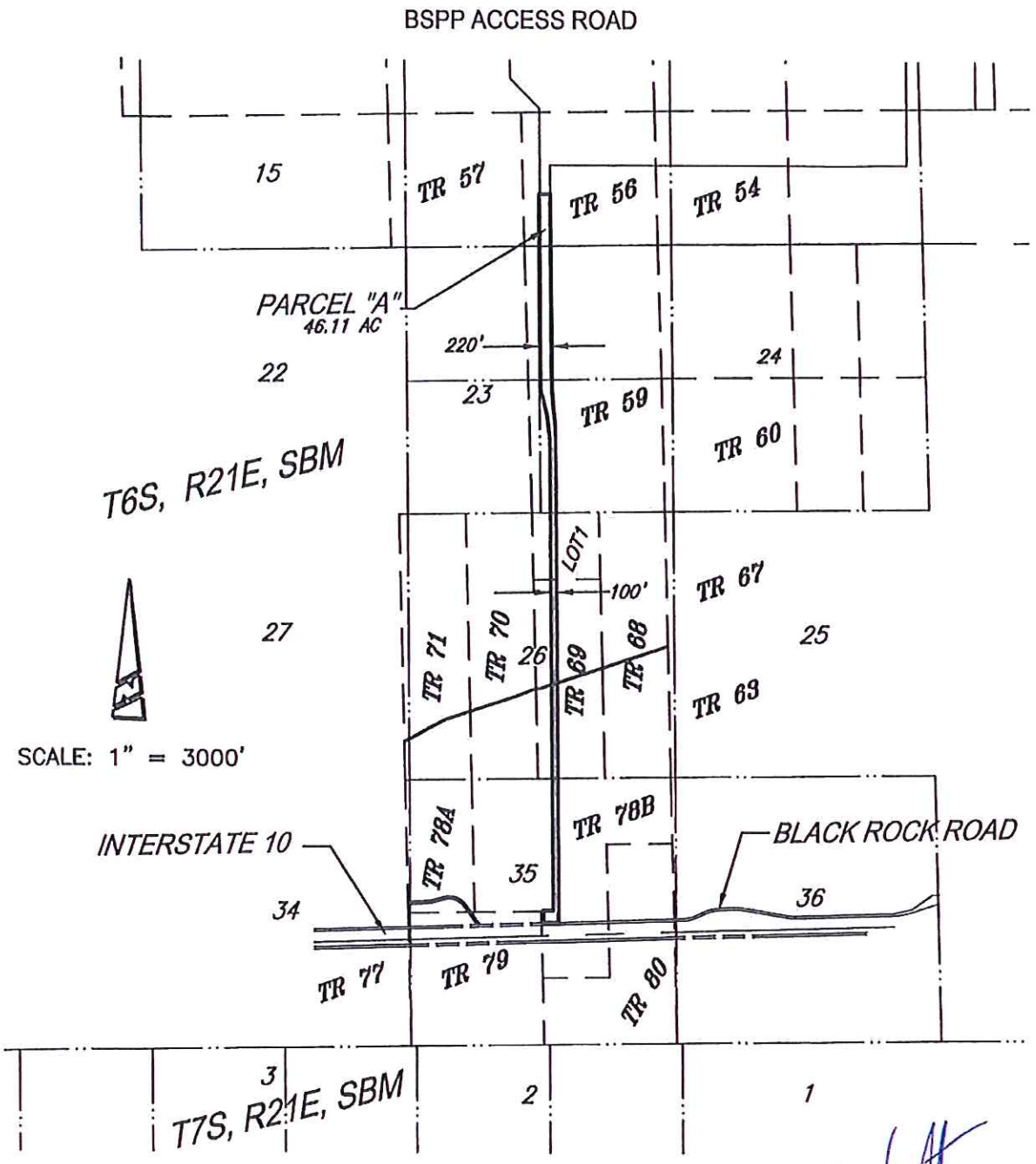
Date: 02/19/13

Robert K. Holt, RCE 27943
Expires 3/31/2014
The Holt Group, Inc
201 E Hobsonway
Blythe, CA 92225
(760) 922-4658

REGISTERED PROFESSIONAL ENGINEER
ROBERT K. HOLT
No. 27943
Exp. 3-31-14
CIVIL
STATE OF CALIFORNIA
02/19/13

THG NO. 632.073

SHEET 1 OF 1



REGISTERED PROFESSIONAL ENGINEER
ROBERT K. HOLT
No. 27943
Exp. 3-31-14
CIVIL
STATE OF CALIFORNIA

02/14/13

DATE: 02/14/2013 BY: TJH

The Holt Group, Inc.
ENGINEERING PLANNING SURVEYING

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1601 N. Imperial Ave., El Centro, CA. 92243
Phone: (760) 337-3883 Fax: (760) 337-5997

APPENDIX B GRADING AND DRAINAGE PLAN

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PRELIMINARY CIVIL CONSTRUCTION PLANS

FOR BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

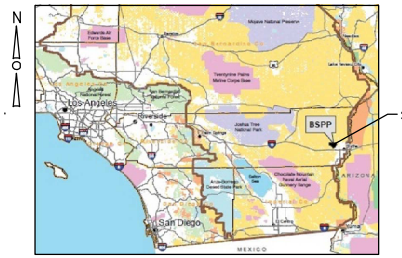
FOR

AMENDMENT TO BUREAU OF LAND MANAGEMENT
BLM LAND USE APPLICATION FILE #CACA-048811

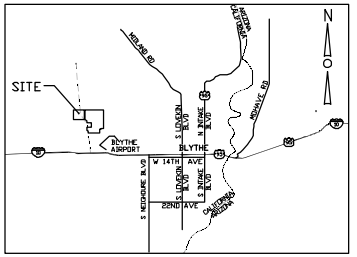
ACCESS ROADS, DRAINAGE AND EROSION CONTROL

SHEET INDEX		
SHEET No.	DRAWING No.	TITLE
1	BSPP-1-DW-112-000-001	COVER SHEET
2	BSPP-1-DW-112-101-001	SITE BOUNDARY
3	BSPP-1-DW-112-101-002	KEY MAP
4	BSPP-1-DW-112-735-000	CONSTRUCTION AND GENERAL NOTES
5	BSPP-1-DW-112-735-001	PRELIMINARY GRADING PLAN I
6	BSPP-1-DW-112-735-002	PRELIMINARY GRADING PLAN II
7	BSPP-1-DW-112-735-003	PRELIMINARY GRADING PLAN III
8	BSPP-1-DW-112-735-004	TYPICAL GRADING SECTIONS AND DETAILS
9	BSPP-1-DW-112-735-005	FENCE AND LIGHT DETAILS
10	BSPP-1-DW-112-735-006	TORTOISE GUARD DETAIL
11	BSPP-1-DW-112-735-007	WASH CROSSING DETAIL
12	BSPP-1-DW-112-717-001	EROSION CONTROL PLAN
13	BSPP-1-DW-112-717-002	EROSION CONTROL NOTES

REGIONAL MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE



VICINTY MAP
NOT TO SCALE

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	PROJECT ENGINEER	PROJECT MANAGER
B	12-21-12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
A	12-14-12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY: A. PRATT	
CHECKED BY: J. BRAVO	
LEAD DESIGNER: A. PRATT	
ENGINEER/TECH SPECIALIST: J. BRAVO	
PROJECT ENGINEERING MANAGER: R. HILL	
PROJECT MANAGER: A. ZIMMERMAN	

Zero Harm Leadership No Incidents Safe Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE: _____ STATE: _____
LIC. NO: _____ DATE: _____

CONCEPTUAL
ENGINEERING PLANS

NOT FOR CONSTRUCTION
FOR PERMITTING ONLY

APPLICANT:
NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
700 UNIVERSE BOULEVARD
JUNO BEACH, FL 33408

LANDOWNER:
BUREAU OF LAND MANAGEMENT
PALM SPRINGS/SOUTH COAST FIELD OFFICE
1201 BIRD CENTER DRIVE
PALM SPRINGS, CA 92262

PROJECT OWNER:
NEXTERA ENERGY RESOURCES, LLC
700 UNIVERSE BOULEVARD
JUNO BEACH, FL 33408

ENGINEER:
WORLEYPARSONS
2330 E. BIDWELL ST. SUITE 150
FOLSOM, CA 95630
916-817-3920

WorleyParsons resources & energy

CLIENT/PROJECT TITLE
NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

COVER SHEET

SCALE	DRAWING SIZE
NOT TO SCALE	ARCH D (36" x 24")

WORLEYPARSONS DWG. NO.	SHEET NO.	REV
BSPP-1-DW-112-000-001	1	B

01_BSPP-1-DW-112-000-001_Cover Sheet.dwg
12-14-2012 - 10:46

LEGEND:

- EASEMENT
- 230 KV DOUBLE CIRCUIT (BLYTHE GEN-TIE)
- PROPOSED FENCE
- PROJECT BOUNDARY
- 500 EXISTING CONTOUR
- 230 KV DOUBLE CIRCUIT (McCOY GEN-TIE)
- INVERTER AND TRANSFORMER PADS
- PROPOSED SINGLE AXIS TRACKER WITH PANELS
- PROPOSED GRAVEL ROAD
- PROPOSED PAVED ROAD
- UNIT BOUNDARY

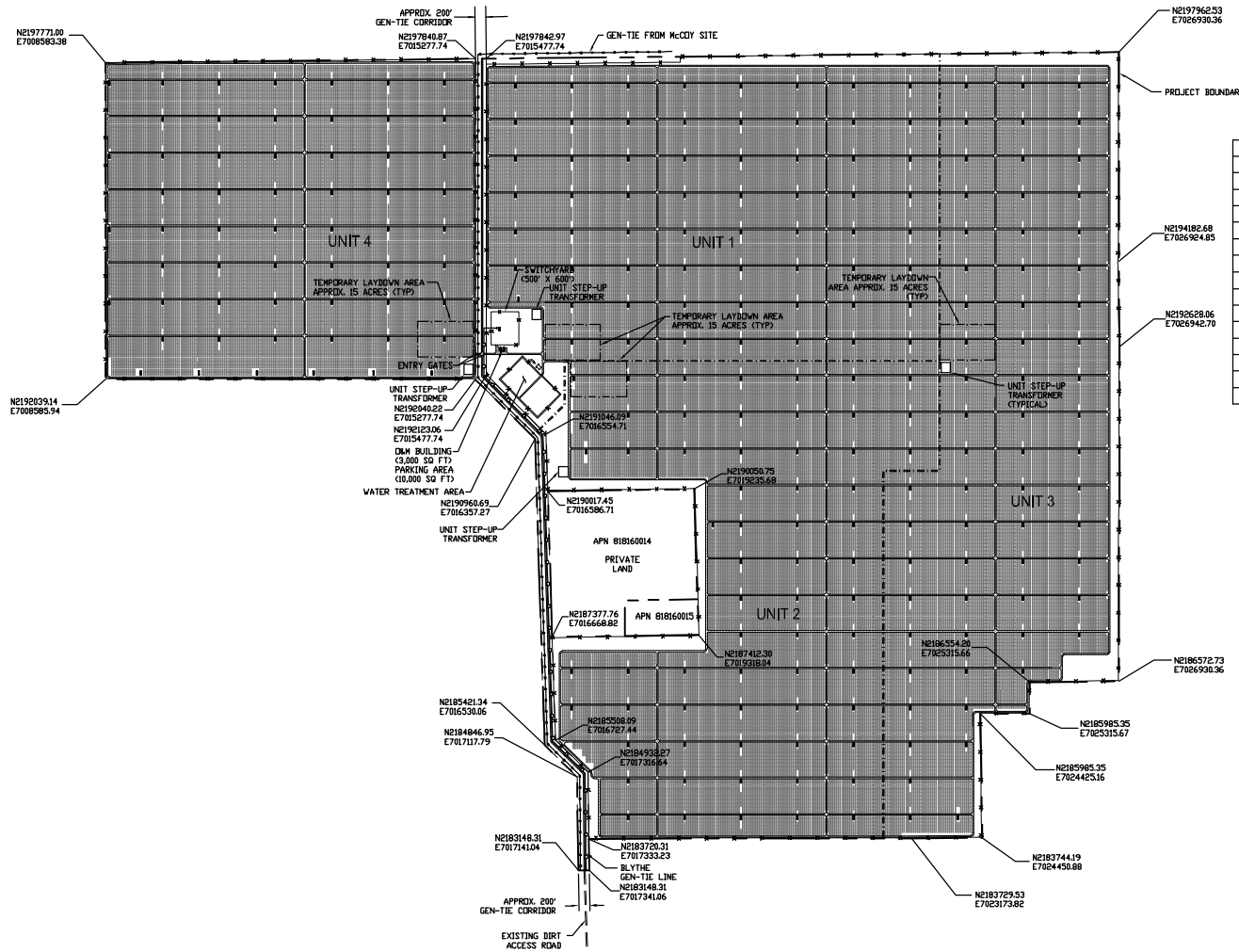
NOTE:

BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THE SURVEY IS THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE 6, BASED ON LOCAL CONTROL STATIONS BETWEEN NATIONAL GEODETIC SURVEY (NGS) GPS OBSERVATION MONUMENTS "HPGN CA 11 15", "E 1363" AND "FLY" NAD 1983 (NSRS 2007.00) AS PER THE NATIONAL GEODETIC SURVEY (NGS) PUBLISHED DATA SHEET BEING "N89°08'26"E" AND "N87°24'10"E".

CONVERGENCE ANGLE & FACTOR
CONVERGENCE ANGLE AT NE COR SECTION 15: +00°49'03.46"
COMBINED FACTOR AT NE COR SECTION 15: 0.99995058

DATUM STATEMENT
UNLESS OTHERWISE NOTED, ALL MEASUREMENTS SHOWN ON THIS MAP ARE GROUND DISTANCES, GRID DISTANCES MAY BE OBTAINED BY MULTIPLYING THE COMBINED SCALE FACTOR 0.99995058
THE COMBINED FACTOR IS COMPUTED AT THE NE COR SECTION 15, T6S, R21E, SBM, ELEVATION 414'

N



PLAN

1,000 0 1,000 2,000 3,000

SCALE: 1" = 1,000'

ACREAGE USAGE

UNIT 1	990.5 AC
UNIT 2	994.5 AC
UNIT 3	992.8 AC
UNIT 4	883.9 AC
GEN-TIE CORRIDOR/EASEMENT (INCLUDES MAIN ACCESS ROAD)	100.8 AC
MAIN ACCESS ROAD (24' WIDE)	8.6 AC
OFFICE/MAINTENANCE BLDG	3000 SQ FT
PAVED ROAD (24' WIDE)	0.9 AC
UNPAVED ROAD (16' AND 24' WIDE)	197.9 AC
SWITCHYARD	6.9 AC
UNIT STEP-UP TRANSFORMERS	2.8 AC
PCS AREAS	13.9 AC
WATER TREATMENT AREA	0.1 AC
EVAPORATION PONDS	13.7 AC
AREA IN AND AROUND SOLAR FIELDS REMAINING UNGRADED	93.7 AC
	4301.07 ACRES TOTAL

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	ENGINEER MANAGER	PROJECT MANAGER
B	02/27/12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
A	12/28/11	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL
DRAWN BY: A. PRATT
CHECKED BY: J. BRAVO
LEAD DESIGNER: A. PRATT
ENGINEER/TECH SPECIALIST: J. BRAVO
PROJECT ENGINEERING MANAGER: R. HILL
PROJECT MANAGER: A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE: — — — STATE: — — —
LIC. NO: — — — DATE: — — —

Zero Harm — Leadership No Incidents Date Behalf

WorleyParsons resources & energy

CLIENT/PROJECT TITLE
NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

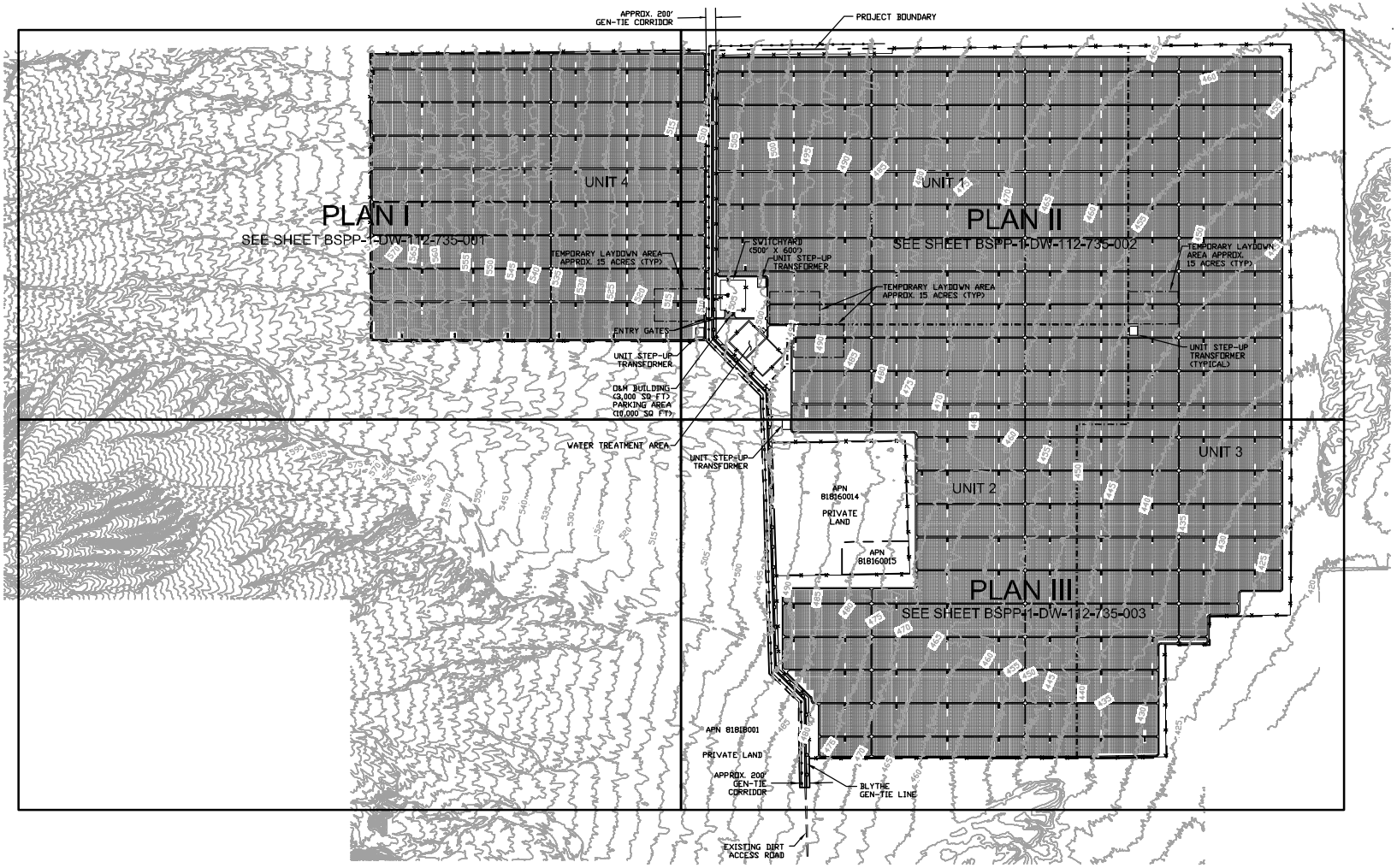
SITE BOUNDARY

SCALE: 1" = 1000' | DRAWING SIZE: ARCH D (36" x 24")
WORLEYPARSONS DWG. NO.: BSPP-1-DW-112-101-001 | SHEET NO.: 2 | REV: B

BSPP-1-DW-112-101-001_Site Boundary Plotting
25-Feb-2012 - 09:40

LEGEND:

- EASEMENT
- 230 KV DOUBLE CIRCUIT (BLYTHE GEN-TIE)
- PROPOSED FENCE
- PROJECT BOUNDARY
- 500 EXISTING CONTOUR
- 230 KV DOUBLE CIRCUIT (McCOY GEN-TIE)
- INVERTER AND TRANSFORMER PADS
- PROPOSED SINGLE AXIS TRACKER WITH PANELS
- PROPOSED GRAVEL ROAD
- PROPOSED PAVED ROAD
- UNIT BOUNDARY



KEY PLAN

1,000 0 1,000 2,000 3,000

SCALE: 1" = 1,000'

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	ENGINEER/TECH SPECIALIST	PROJECT ENGINEERING MANAGER	PROJECT MANAGER
B	02/27/13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
A	12/28/12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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ORIGINATING PERSONNEL

DRAWN BY: A. PRATT
CHECKED BY: J. BRAVO
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ENGINEER/TECH SPECIALIST: J. BRAVO
PROJECT ENGINEERING MANAGER: R. HILL
PROJECT MANAGER: A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

Zero Harm Leadership No Incidents Safe Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF PE ____ STATE ____ LIC. NO. ____ DATE ____

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

KEY MAP

SCALE	DRAWING SIZE	WORLEYPARSONS DWG. NO.	SHEET NO.	REV
1" = 1000'	ARCH D (36" x 24")	BSPP-1-DW-112-101-002	3	B

03_BSPP-1-DW-112-101-002_Key Plan.dwg
27-Feb-2013 - 2:42

DEPARTMENT OF BUILDING AND SAFETY COUNTY OF RIVERSIDE
GRADING NOTES (2010 CBC)

GENERAL

1. ALL GRADING SHALL CONFORM TO THE 2010 CALIFORNIA BUILDING CODE CHAPTERS 17, 18 & APPENDIX CHAPTER- J AS AMENDED BY ORD. 457.
2. ALL PROPERTY CORNERS SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
3. ALL WORK UNDER THIS GRADING PERMIT SHALL BE LIMITED TO WORK WITHIN THE PROPERTY LINES. ALL WORK WITHIN THE ROAD RIGHT-OF- WAY WILL REQUIRE SEPARATE PLANS AND A SEPARATE REVIEW/APPROVAL (PERMIT) FROM THE TRANSPORTATION DEPARTMENT.
4. GRADING SHALL BE DONE UNDER THE SUPERVISION OF A SOILS ENGINEER IN CONFORMANCE WITH RECOMMENDATIONS OF THE PRELIMINARY SOILS INVESTIGATION BY KLEINFELDER DATED SEPTEMBER 23, 2009.
5. COMPACTED FILL TO SUPPORT ANY STRUCTURES SHALL COMPLY WITH SECTION 1803.5. PROJECTS WITHOUT PRELIMINARY SOILS REPORT SHALL HAVE DETAILED SPECIFICATIONS SATISFYING THE REQUIREMENTS IN SECTION 1803.5 PREPARED BY THE EOR.
6. THE CONTRACTOR SHALL NOTIFY THE BUILDING AND SAFETY DEPARTMENT AT LEAST 24 HOURS IN ADVANCE TO REQUEST FINISH LOT GRADE AND DRAINAGE INSPECTION. THIS INSPECTION MUST BE APPROVED PRIOR TO BUILDING PERMIT FINAL INSPECTION FOR EACH LOT.
7. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE DIGGING AT 1-800-422-4133.

CUT / FILL

8. MAXIMUM CUT AND FILL SLOPE = 2:1.
9. NO FILL SHALL BE PLACED ON EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL AND OTHER DELETERIOUS MATERIAL. FILLS SHOULD BE PLACED IN THIN LIFTS (8-INCH MAX OR AS RECOMMENDED IN SOILS REPORT), COMPACTED AND TESTED AS GRADING PROCESS UNTIL FINAL GRADES ARE ATTAINED. ALL FILLS ON SLOPES STEEPER THAN 5 TO 1 (H/V) AND A HEIGHT GREATER THAN 5 FEET SHALL BE KEYED AND BENCHED INTO FIRM NATURAL SOIL FOR FULL SUPPORT. THE BENCH UNDER THE TOE MUST BE 10 FEET WIDE MIN.
10. THE SLOPE STABILITY FOR CUT AND FILL SLOPES OVER 30' IN VERTICAL HEIGHT, OR SLOPES STEEPER THAN 2:1 MUST BE VERIFIED WITH A FACTOR OF SAFETY OF AT LEAST 1.5.
11. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES SHALL BE BURIED OR PLACED IN FILLS CLOSER THAN 10 FEET TO THE FINISHED GRADE.

DRAINAGE AND EROSION/ DUST CONTROL

12. DRAINAGE ACROSS THE PROPERTY LINE SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY.
13. PROVIDE A SLOPE INTERCEPTOR DRAIN ALONG THE TOP OF CUT SLOPES WHERE THE DRAINAGE PATH IS GREATER THAN 40 FEET TOWARDS THE CUT SLOPE.
14. PROVIDE 5 ' WIDE BY 1' HIGH BERM ALONG THE TOP OF ALL FILL SLOPES STEEPER THAN 3:1.
15. THE GROUND IMMEDIATELY ADJACENT TO THE BUILDING FOUNDATION SHALL BE SLOPED AWAY WITH 5% MIN FOR A MIN DISTANCE OF 10 HORIZONTAL FEET. SWALES WITHIN 10 FEET FROM BUILDING SHALL HAVE 2% MINIMUM SLOPE.
16. NO OBSTRUCTION OF NATURAL WATER COURSES SHALL BE PERMITTED.
17. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL (BEST MANAGEMENT PRACTICES, BMPS) SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES.
18. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
19. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING OPERATIONS.
20. FOR SLOPES 3 TO 1 (H/V) OR STEEPER:
ALL SLOPES EQUAL TO OR GREATER THAN 3 ' IN VERTICAL HEIGHT, ARE REQUIRED TO BE PLANTED WITH GRASS OR ROSEA ICE PLANT (OR EQUAL) GROUND COVER AT A MAXIMUM SPACING OF 12' ON CENTER. SLOPES EXCEEDING 15 ' IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED SHRUBS NOT TO EXCEED 10' ON CENTER, OR TREES SPACED NOT TO EXCEED 20 ' ON CENTER OR SHRUBS NOT TO EXCEED 10 ', OR A COMBINATION OF SHRUBS AND TREES NOT TO EXCEED 15 ' IN ADDITION TO THE GRASS OR GROUND COVER. SLOPES THAT REQUIRE PLANTING SHALL BE PROVIDED WITH AN IN-GROUND IRRIGATION SYSTEM EQUIPPED WITH AN APPROPRIATE BACKFLOW DEVICE PER U.P.C., CHAPTER 10. THE SLOPE PLANTING AND IRRIGATION SYSTEM SHALL BE INSTALLED PRIOR TO PRECISE GRADING FINAL.

COMPLETION OF WORK

21. A REGISTERED CIVIL ENGINEER SHALL PREPARE FINAL COMPACTION REPORT/ GRADING REPORT AND IT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL. THE REPORT SHALL ALSO PROVIDE BUILDING FOUNDATION DESIGN PARAMETERS INCLUDING ALLOWABLE SOIL PRESSURES, EXPANSION INDEX AND REMEDIAL MEASURES IF EI > 20, WATER SOLUBLE SULFATE CONTENT, CORROSIVITY AND REMEDIAL MEASURES IF NECESSARY.
22. EXCEPT FOR NON-TRACT SINGLE RESIDENTIAL LOT GRADING, THE COMPACTION REPORT SHALL INCLUDE THE SPECIAL INSPECTION VERIFICATIONS LISTED IN TABLE 1704.7 OF 2010 CBC.
23. A REGISTERED CIVIL ENGINEER SHALL SUBMIT TO THE BUILDING AND SAFETY DEPARTMENT WRITTEN CERTIFICATION OF COMPLETION OF GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN PRIOR TO REQUESTING INSPECTION AND ISSUANCE OF THE BUILDING PERMIT. CERTIFICATION SHALL INCLUDE LINE GRADE, SURFACE DRAINAGE, ELEVATION, AND LOCATION OF PERMITTED GRADING ON THE LOT.

NPDES: WHEN ONE ACRE OR MORE IS BEING DISTURBED:

1. CONSTRUCTION SITE BEST MANAGEMENT PRACTICES (BMPS) FOR THE MANAGEMENT OF STORM WATER AND NON-STORM WATER DISCHARGES SHALL BE DOCUMENTED ON THE GRADING PLAN WHICH THEREBY BECOMES THE SITE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). ARRANGEMENTS SHALL BE MADE BY THE DEVELOPER TO RETAIN THE SWPPP ON THE JOBSITE THROUGHOUT THE TIME OF CONSTRUCTION. THE IMPLEMENTATION AND MAINTENANCE OF SITE BMPS IS REQUIRED TO MINIMIZE JOBSITE EROSION AND SEDIMENTATION. CERTAIN BMPS MAY BE REQUIRED TO REMAIN IN PLACE THROUGHOUT THE YEAR TO MINIMIZE EROSION AND SEDIMENTATION. ARRANGEMENTS SHALL BE MADE BY THE DEVELOPER TO MAINTAIN THOSE BMPS THROUGHOUT THE TIME OF CONSTRUCTION.
2. EROSION CONTROL BMPS SHALL BE IMPLEMENTED AND MAINTAINED TO MINIMIZE THE ENTRAINMENT OF SOIL IN RUNOFF FROM DISTURBED SOIL AREAS ON CONSTRUCTION SITES.
3. SEDIMENT CONTROL BMPS SHALL BE IMPLEMENTED AND MAINTAINED TO MINIMIZE THE TRANSPORT OF SOIL FROM THE CONSTRUCTION SITE.
4. GRADING SHALL BE PHASED TO LIMIT THE AMOUNT OF DISTURBED AREAS EXPOSED TO THE EXTENT FEASIBLE.
5. AREAS THAT ARE CLEARED AND GRADED SHALL BE LIMITED TO ONLY THE PORTION OF THE SITE THAT IS NECESSARY FOR CONSTRUCTION. THE CONSTRUCTION SITE SHALL BE MANAGED TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF GRADING AND THE USE OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
6. ONCE DISTURBED, SLOPES (TEMPORARY OR PERMANENT) SHALL BE STABILIZED IF THEY WILL NOT BE WORKED WITHIN 21 DAYS. DURING THE STORM SEASON, ALL SLOPES SHALL BE STABILIZED PRIOR TO A PREDICTED STORM EVENT. CONSTRUCTION SITES SHALL BE RE-VEGETATED AS EARLY AS FEASIBLE AFTER SOIL DISTURBANCE.
7. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
8. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT A STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE.
DISCHARGES OTHER THAN STORM WATER (NON-STORM WATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT, THE STATEWIDE GENERAL PERMIT-CONSTRUCTION ACTIVITY. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; WASTES FROM STREET CLEANING; AND SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
9. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITE AND MUST NOT BE DISCHARGED TO RECEIVING WATERS OR THE LOCAL STORM DRAIN SYSTEM.
10. APPROPRIATE BMPS FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED TO ELIMINATE OR REDUCE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF.
11. ALL CONSTRUCTION CONTRACTORS AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BMPS AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
12. DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON- CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES MAY REQUIRE A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE REGIONAL WATER QUALITY CONTROL BOARD.
13. BMPS SHALL BE MAINTAINED AT ALL TIMES. IN ADDITION, BMPS SHALL BE INSPECTED PRIOR TO PREDICTED STORM EVENTS AND FOLLOWING STORM EVENTS.
14. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY, ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED OF IN TRASH OR RECYCLE BINS.

CONCEPTUAL
ENGINEERING PLANS

NOT FOR CONSTRUCTION
FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	PROJECT ENGR	PROJECT MGR	MANAGER
B	02-27-13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	JB	RH	AZ
A	12-28-12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL
DRAWN BY: A. PRATT
CHECKED BY: J. BRAVO
LEAD DESIGNER: A. PRATT
ENGINEER/TECH SPECIALIST: J. BRAVO
PROJECT ENGINEERING MANAGER: R. HILL
PROJECT MANAGER: A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

Zero Harm Leadership No models Safe Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE: _____ STATE: _____
LIC. NO: _____ DATE: _____

WorleyParsons
resources & energy

CLIENT/PROJECT TITLE
NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

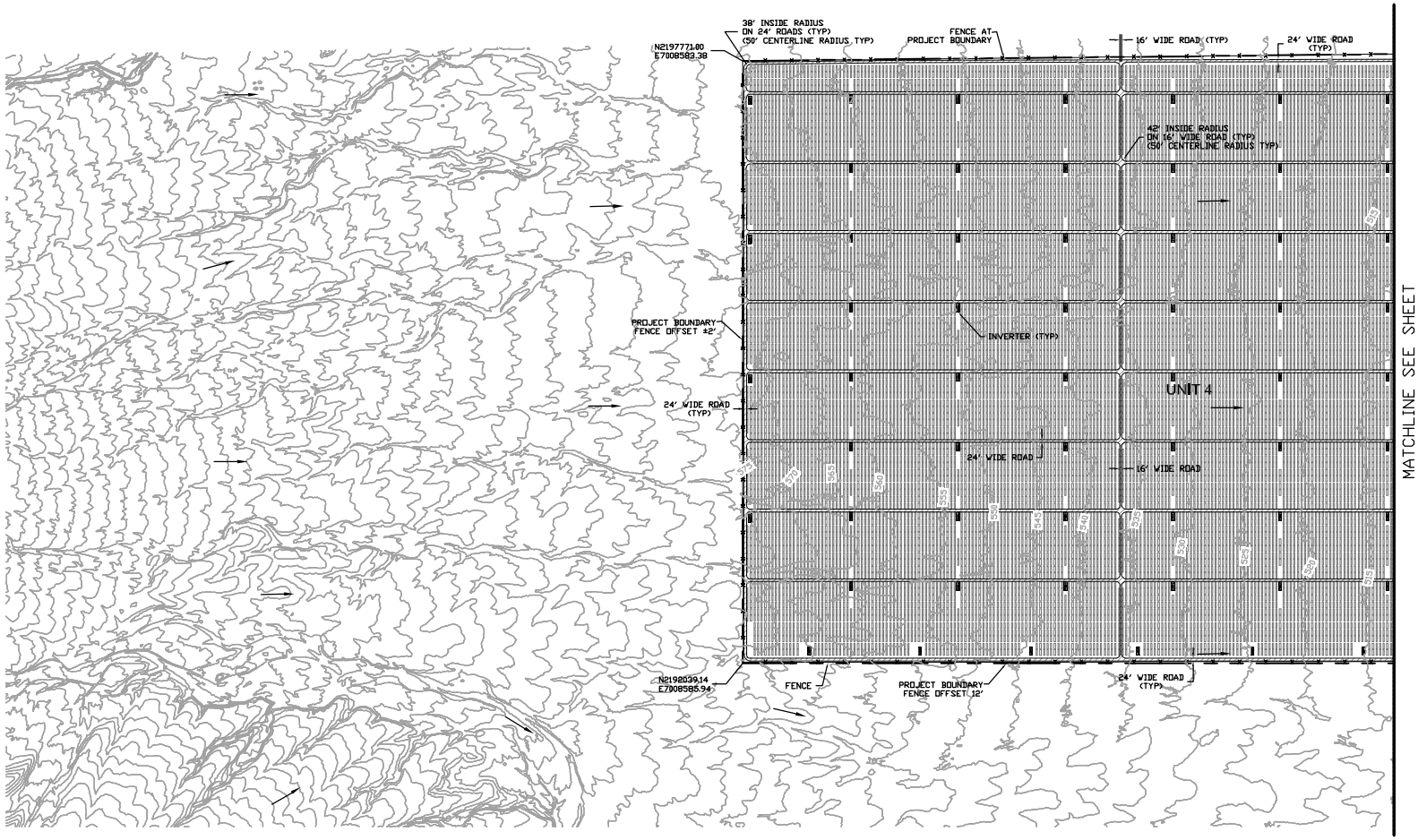
CONSTRUCTION AND
GENERAL NOTES

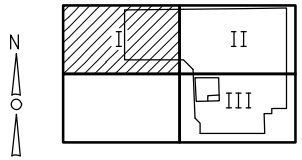
SCALE: NOT TO SCALE
DRAWING SIZE: ARCH D (36" x 24")
WORLEYPARSONS DWG. NO.: BSPP-1-DW-112-735-000
SHEET NO.: 4
REV: B

01_BSPP-1-DW-112-735-000_Const and Gen Notes.dwg
27-Feb-2013 12:00

LEGEND:

- EASEMENT
- EXISTING CONTOUR MAJOR (500)
- PROJECT BOUNDARY
- DRAINAGE FLOW DIRECTION
- PROPOSED FENCE
- UNIT BOUNDARY
- 230 KV DOUBLE CIRCUIT (BLYTHE GEN-TIE)
- 230 KV DOUBLE CIRCUIT (McCOY GEN-TIE)
- INVERTER AND TRANSFORMER PADS
- PROPOSED SINGLE AXIS TRACKER WITH PANELS
- PROPOSED GRAVEL ROAD
- PROPOSED PAVED ROAD





KEY MAP

NOTES:

1. THIS DRAWING IS CONCEPTUAL AND NOT INTENDED FOR DETAILED DESIGN.
2. PERIMETER ROADS, INVERTER ACCESS ROADS, AND NORTH-SOUTH MAINTENANCE ROADS ARE 24 FT WIDE (TYPICAL). ALL OTHER MAINTENANCE ROADS ARE 16 FT WIDE (TYPICAL). SEE SHEET BSPP-1-DW-112-735-004 FOR ROAD DETAILS.
3. AN 8 FT CHAIN LINK FENCE WITH THREE STRAND BARB WIRE IS PROPOSED WITHIN PROJECT BOUNDARY WITH SUFFICIENT ROOM FOR FENCE MAINTENANCE.
4. LOCATIONS OF ALL EXISTING AND PROPOSED ITEMS ARE APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.
5. FOR BASIS OF BEARINGS, CONVERGENCE & FACTOR, AND DATUM STATEMENT, SEE NOTE ON SHEET BSPP-1-DW-112-101-001.

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	PROJECT ENGINEER	PROJECT MANAGER
B	02/27/13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
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ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY: A. PRATT	
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PROJECT ENGINEERING MANAGER: R. HILL	
PROJECT MANAGER: A. ZIMMERMAN	

Zero Harm — Leadership No Incidents Date Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF PE: ____ STATE: ____ LIC. NO: ____ DATE: ____

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

PRELIMINARY GRADING PLAN I

SCALE	DRAWING SIZE
1" = 500'	ARCH D (36" x 24")

WORLEYPARSONS DWG NO.	SHEET NO.	REV
BSPP-1-DW-112-735-001	5	B

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

500 0 500 1,000 1,500
SCALE: 1" = 500'

05_BSPP-1-DW-112-735-001.GRD Layo
27-Feb-2013 - 10:0

LEGEND:

- EASEMENT
- EXISTING CONTOUR MAJOR
- PROJECT BOUNDARY
- DRAINAGE FLOW DIRECTION
- PROPOSED FENCE
- UNIT BOUNDARY
- 230 KV DOUBLE CIRCUIT (BLYTHE GEN-TIE)
- 230 KV DOUBLE CIRCUIT (McCOY GEN-TIE)
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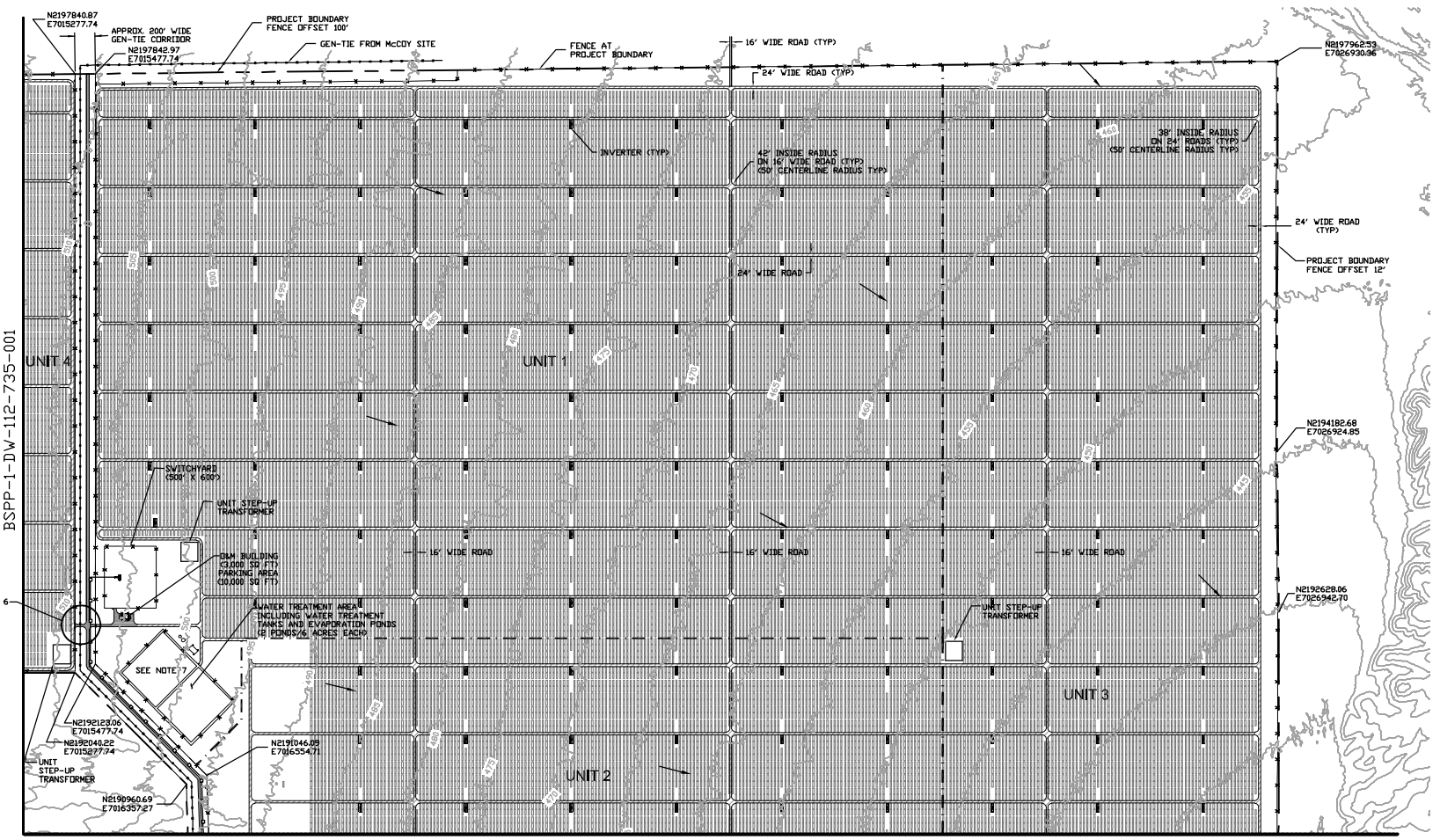

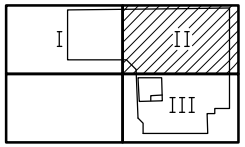

KEY MAP

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2. PERIMETER ROADS, INVERTER ACCESS ROADS, AND NORTH-SOUTH MAINTENANCE ROADS ARE 24 FT WIDE (TYPICAL). ALL OTHER MAINTENANCE ROADS ARE 16 FT WIDE (TYPICAL). SEE SHEET BSPP-1-DW-112-735-004 FOR ROAD DETAILS.
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5. FOR BASIS OF BEARINGS, CONVERGENCE & FACTOR, AND DATUM STATEMENT, SEE NOTE ON SHEET BSPP-1-DW-112-101-001.
6. SEE SITE MAIN ACCESS DETAIL ON SHEET BSPP-1-DW-112-735-004.
7. SEE EVAPORATION POND GRADING DETAIL ON SHEET BSPP-1-DW-112-735-004.

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	ENGINEER/TECH SPECIALIST	PROJECT ENGINEER	PROJECT MANAGER
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ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
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LEAD DESIGNER: A. PRATT	
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PROJECT MANAGER: A. ZIMMERMAN	

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF PE: ____ STATE: ____ LIC. NO: ____ DATE: ____

Zero Harm — Leadership No Incidents Date Beha.vr

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

PRELIMINARY GRADING PLAN II

SCALE	DRAWING SIZE	SHEET NO.	REV
1" = 500'	ARCH D (36" x 24")	6	B

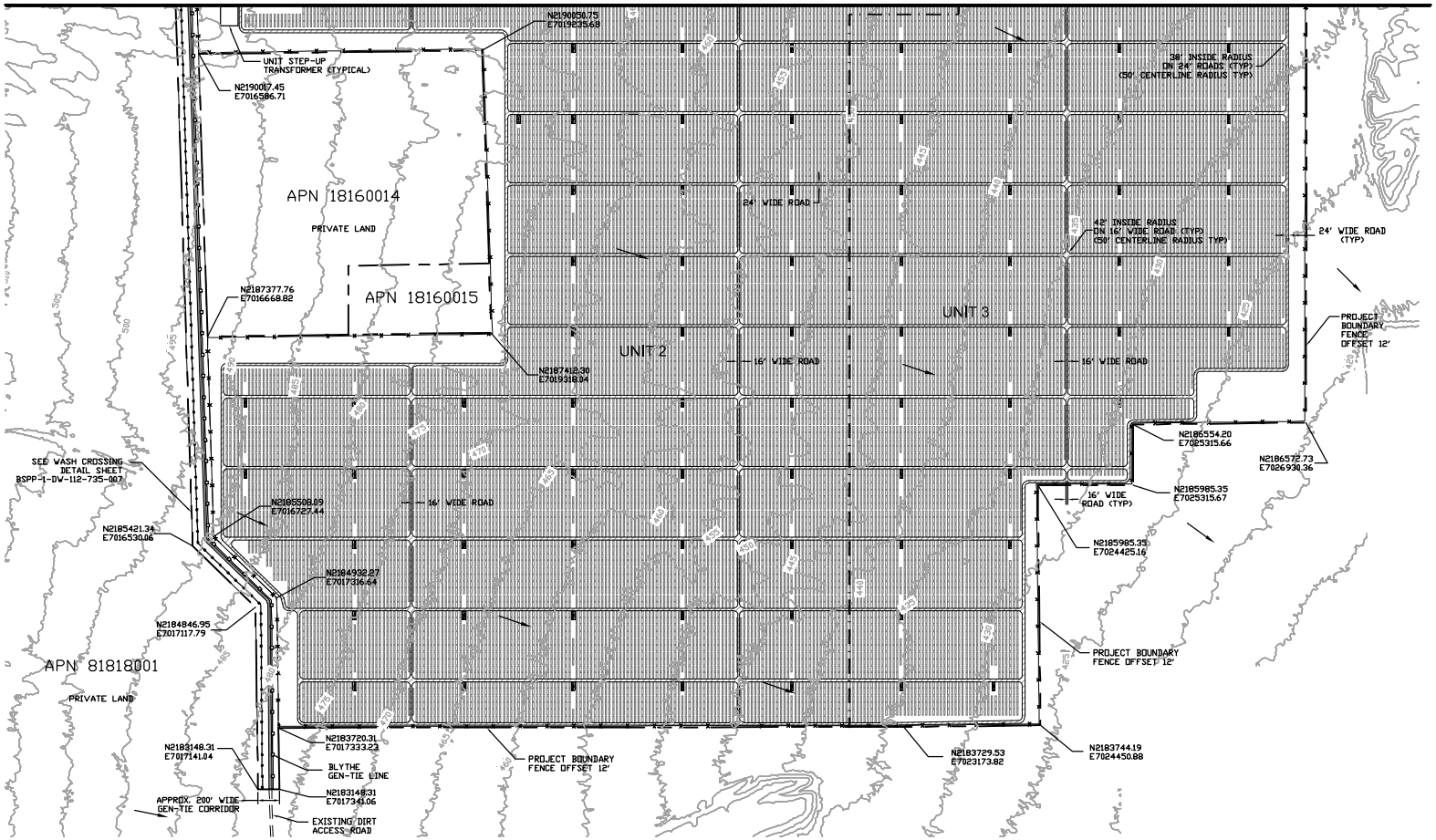
WORLEYPARSONS DWG NO.: BSPP-1-DW-112-735-002

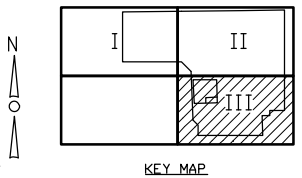
500 0 500 1,000 1,500
SCALE: 1" = 500'

06_BSPP-1-DW-112-735-002.DGN 2-May-13 14:03

LEGEND:

- EASEMENT
- EXISTING CONTOUR MAJOR
- PROJECT BOUNDARY
- DRAINAGE FLOW DIRECTION
- PROPOSED FENCE
- UNIT BOUNDARY
- 230 KV DOUBLE CIRCUIT (BLYTHE GEN-TIE)
- 230 KV DOUBLE CIRCUIT (McCOY GEN-TIE)
- INVERTER AND TRANSFORMER PADS
- PROPOSED SINGLE AXIS TRACKER WITH PANELS
- PROPOSED GRAVEL ROAD
- PROPOSED PAVED ROAD





KEY MAP

NOTES:

1. THIS DRAWING IS CONCEPTUAL AND NOT INTENDED FOR DETAILED DESIGN.
2. PERIMETER ROADS, INVERTER ACCESS ROADS, AND NORTH-SOUTH MAINTENANCE ROADS ARE 24 FT WIDE (TYPICAL). ALL OTHER MAINTENANCE ROADS ARE 16 FT WIDE (TYPICAL). SEE SHEET BSPP-1-DW-112-735-004 FOR ROAD DETAILS.
3. AN 8 FT CHAIN LINK FENCE WITH THREE STRAND BARB WIRE IS PROPOSED WITHIN PROJECT BOUNDARY WITH SUFFICIENT ROOM FOR FENCE MAINTENANCE.
4. LOCATIONS OF ALL EXISTING AND PROPOSED ITEMS ARE APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.
5. FOR BASIS OF BEARINGS, CONVERGENCE & FACTOR, AND DATUM STATEMENT, SEE NOTE ON SHEET BSPP-1-DW-112-101-001.

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	PROJ ENGR	PROJ MGR
B	08/27/12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
A	12/28/11	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY: A. PRATT	
CHECKED BY: J. BRAVO	
LEAD DESIGNER: A. PRATT	
ENGINEER/TECH SPECIALIST: J. BRAVO	
PROJECT ENGINEER: R. HILL	
PROJECT MANAGER: A. ZIMMERMAN	

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF PE: ____ STATE: ____ LIC. NO.: ____ DATE: ____

Zero Harm — Leadership No Incidents Date Beha.vr

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

CONCEPTUAL ENGINEERING PLANS

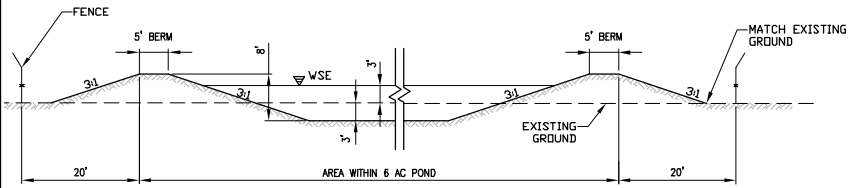
NOT FOR CONSTRUCTION FOR PERMITTING ONLY

PRELIMINARY GRADING PLAN III

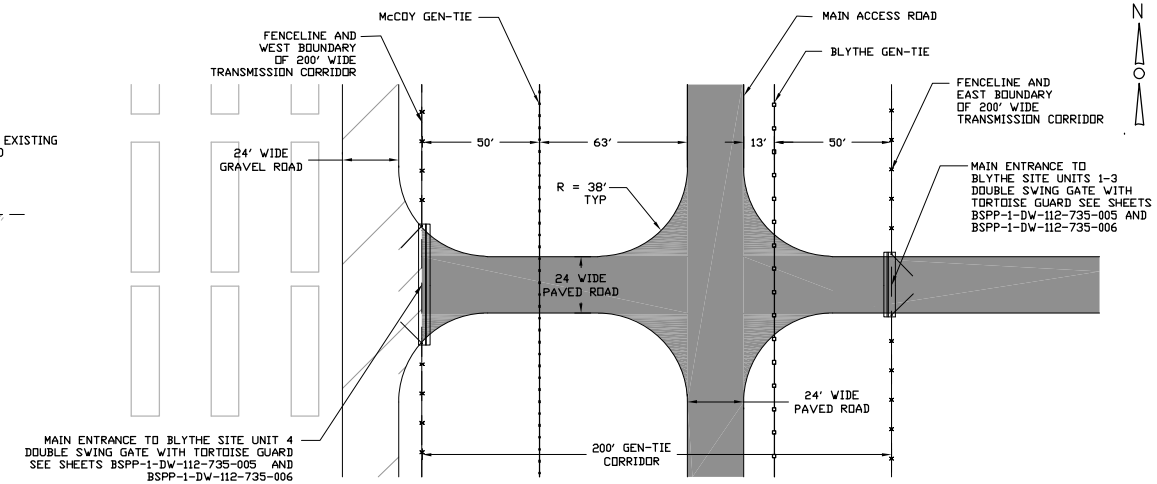
SCALE	DRAWING SIZE	SHEET NO.	REV
1" = 500'	ARCH D (36" x 24")	7	B

WORLEYPARSONS DWG NO.: BSPP-1-DW-112-735-003

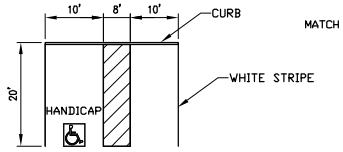
07_BSPP-1-DW-112-735-003.DGN 3.44p
27-Aug-2013 14:47



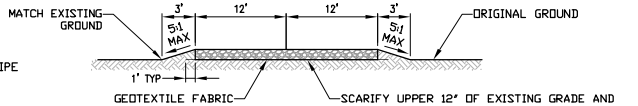
EVAPORATION POND GRADING DETAIL
NOT TO SCALE



SITE MAIN ACCESS DETAIL



PARKING SPACE DETAIL
NOT TO SCALE

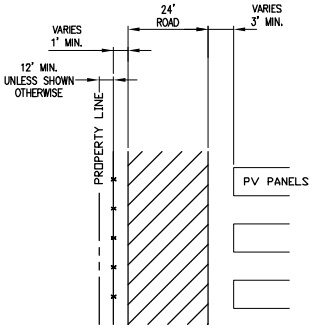


1. USED ON ALL PERIMETER ROADS AND CONSTRUCTION ACCESS ROADS.

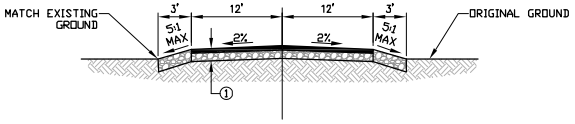
24' WIDE GRAVEL ROAD SECTION (TYPICAL)
NOT TO SCALE

NOTES:

1. SEE BSPP-1-DW-112-735-005 FOR FENCE DETAILS.
2. SEE BSPP-1-DW-112-735-006 FOR TORTOISE GUARD.
3. THIS DRAWING IS CONCEPTUAL AND IS NOT INTENDED FOR DETAILED DESIGN.



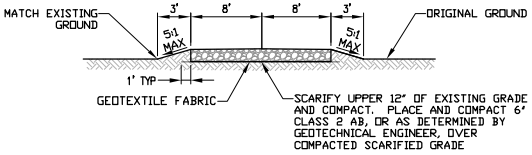
TYPICAL PROPERTY BOUNDARY DETAIL
NOT TO SCALE



① PAVEMENT SECTION 3" AC OVER 4" AB OR AS DETERMINED BY GEOTECHNICAL/PAVEMENT ENGINEER.

2. USED ON ROADS STARTING FROM THE ENTRANCE OF ENERGY PROJECT TO O&M BUILDING AND BOTH SUBSTATIONS.

PAVED ENTRANCE ACCESS ROAD SECTION TO BLYTHE SOLAR POWER PROJECT
NOT TO SCALE



1. USED ON ALL SERVICE ROADS WITHIN THE SOLAR PANEL FIELD.

16' WIDE GRAVEL ROAD SECTION (TYPICAL)
NOT TO SCALE

CONCEPTUAL
ENGINEERING PLANS

NOT FOR CONSTRUCTION
FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	ENGINEER/TECH SPECIALIST	PROJECT ENGINEER	PROJECT MANAGER
B	02/27/13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
A	02/08/13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL

DRAWN BY: A. PRATT
CHECKED BY: J. BRAVO
LEAD DESIGNER: A. PRATT
ENGINEER/TECH SPECIALIST: J. BRAVO
PROJECT ENGINEER: R. HILL
PROJECT MANAGER: A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

Zero Harm — Leadership No models Safe behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE ____ STATE ____
LIC. NO. ____ DATE ____

WorleyParsons resources & energy

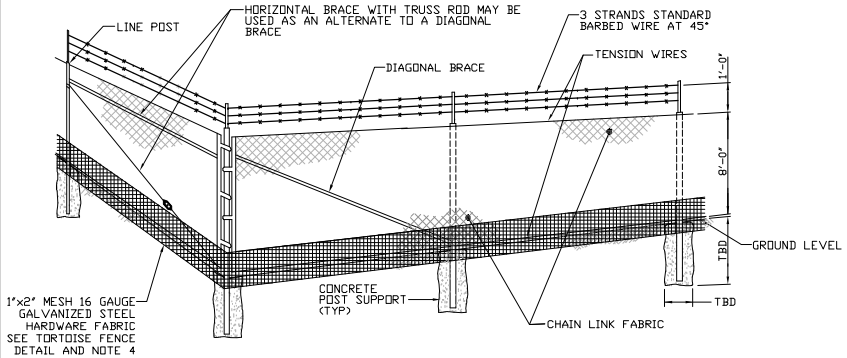
CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

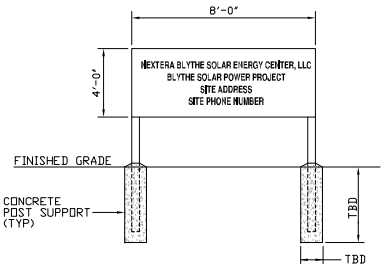
TYPICAL GRADING SECTIONS AND DETAILS

SCALE: 1" = 1000'
DRAWING SIZE: ARCH D (36" x 24")
WORLEYPARSONS DWG. NO.: BSPP-1-DW-112-735-004
SHEET NO.: 8
REV: B

DG_BSPP-1-DW-112-735-004.dwg
27-Feb-2013 14:22



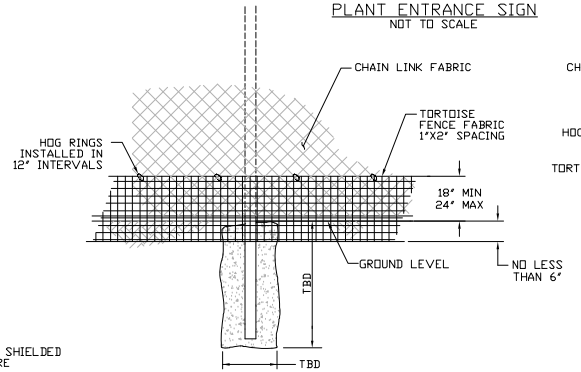
TYPICAL FENCE ELEVATION
NOT TO SCALE



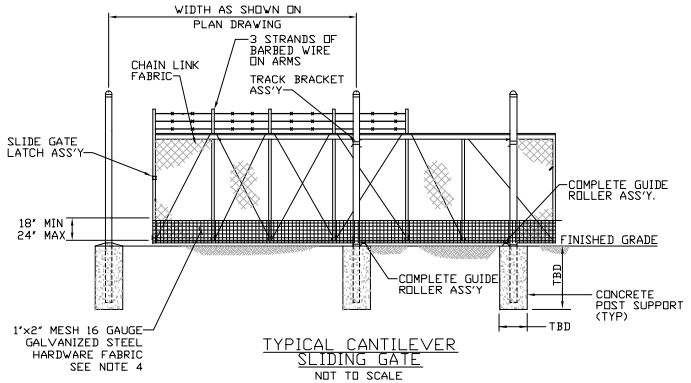
PLANT ENTRANCE SIGN
NOT TO SCALE

NOTES:

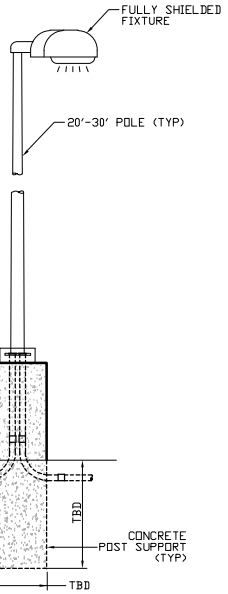
1. LIGHTING FIXTURES WILL BE DESIGNED AND INSTALLED PER THE RIVERSIDE COUNTY ZONING ORDINANCE.
2. LIGHTING FIXTURES WILL BE LOCATED IN AND NEAR EQUIPMENT MAINTENANCE AREAS, ABOVE DOORWAYS, AND WITHIN THE COMMON SERVICES AREA.
3. PLANT ENTRANCE SIGN LOCATED AT PLANT MAIN ACCESS GATE.
4. TORTOISE FENCE CLOTH TO BE ATTACHED TO CHAIN LINK FENCE FABRIC WITH HOG RINGS AT 12" MAXIMUM SPACING.
5. BACKFILL TRENCH WITH EXCAVATED MATERIAL AND COMPACT.
6. FENCING SETBACKS WILL BE DETERMINED DURING DETAILED DESIGN SO THAT ANY PONDING WILL BE WITHIN PROJECT BOUNDARY.
7. THIS DRAWING IS CONCEPTUAL AND NOT INTENDED FOR DETAILED DESIGN.



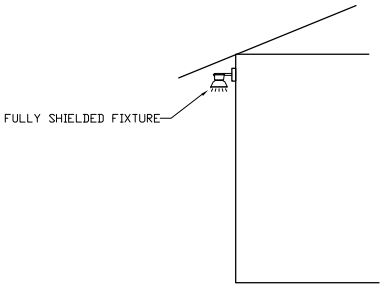
TORTOISE FENCE DETAIL
NOT TO SCALE



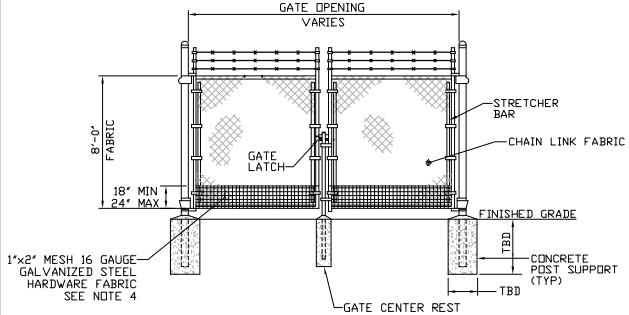
TYPICAL CANTILEVER SLIDING GATE
NOT TO SCALE



TYPICAL LIGHT POLE DETAIL
NOT TO SCALE



TYPICAL WALL MOUNT LIGHT DETAIL
NOT TO SCALE



TYPICAL DOUBLE SWING GATE
NOT TO SCALE

LEGEND:

TBD = TO BE DETERMINED
(TYP) = TYPICAL

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	ENGINEER	PROJECT ENGINEER	PROJECT MANAGER
B	02/27/13	ISSUED FOR PERMITTING	AP	AB	AP	JB	JB	RH	AZ
A	12/28/12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL

DRAWN BY: A. PRATT
CHECKED BY: J. BRAVO
LEAD DESIGNER: A. PRATT
ENGINEER/TECH SPECIALIST: J. BRAVO
PROJECT ENGINEERING MANAGER: R. HILL
PROJECT MANAGER: A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

Zero Harm — Leadership No models Safe Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF: PE ____ STATE ____ LIC. NO. ____ DATE ____

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

FENCE AND LIGHT DETAILS

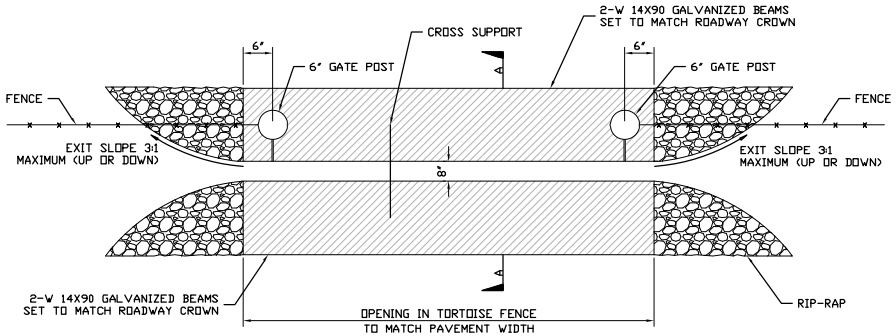
SCALE: 1" = 400' | DRAWING SIZE: ARCH D (36" x 24")

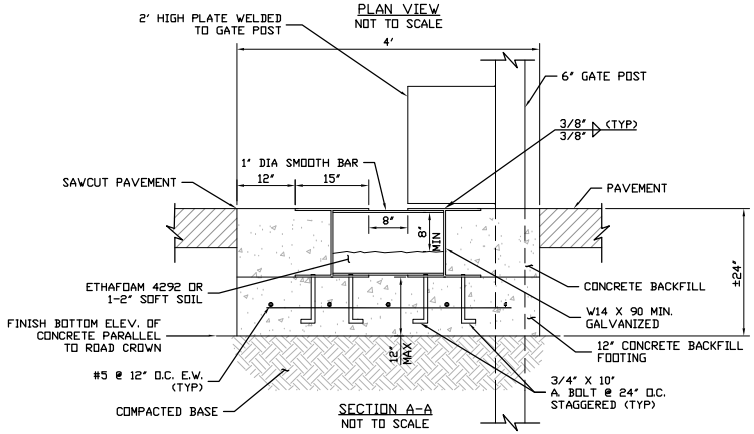
WORLEYPARSONS DWG. NO.: BSPP-1-DW-112-735-005 | SHEET NO.: 9 | REV: B

D9_BSPP-1-DW-112-735-005.dwg
27-Feb-2013 14:49

NOTES:

1. THIS DRAWING IS CONCEPTUAL AND NOT INTENDED FOR DETAILED DESIGN.





TORTOISE GUARD

CONCEPTUAL
ENGINEERING PLANS

NOT FOR CONSTRUCTION
FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	ENGINEER	PROJECT ENGINEER	PROJECT MANAGER
B	02/27/13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	JB	RH	AZ
A	12/18/12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL

DRAWN BY: A. PRATT
CHECKED BY: J. BRAVO
LEAD DESIGNER: A. PRATT
ENGINEER/TECH SPECIALIST: J. BRAVO
PROJECT ENGINEERING MANAGER: R. HILL
PROJECT MANAGER: A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

Zero Harm Leadership No models Be a Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE: _____ STATE: _____
LIC. NO: _____ DATE: _____

WorleyParsons resources & energy

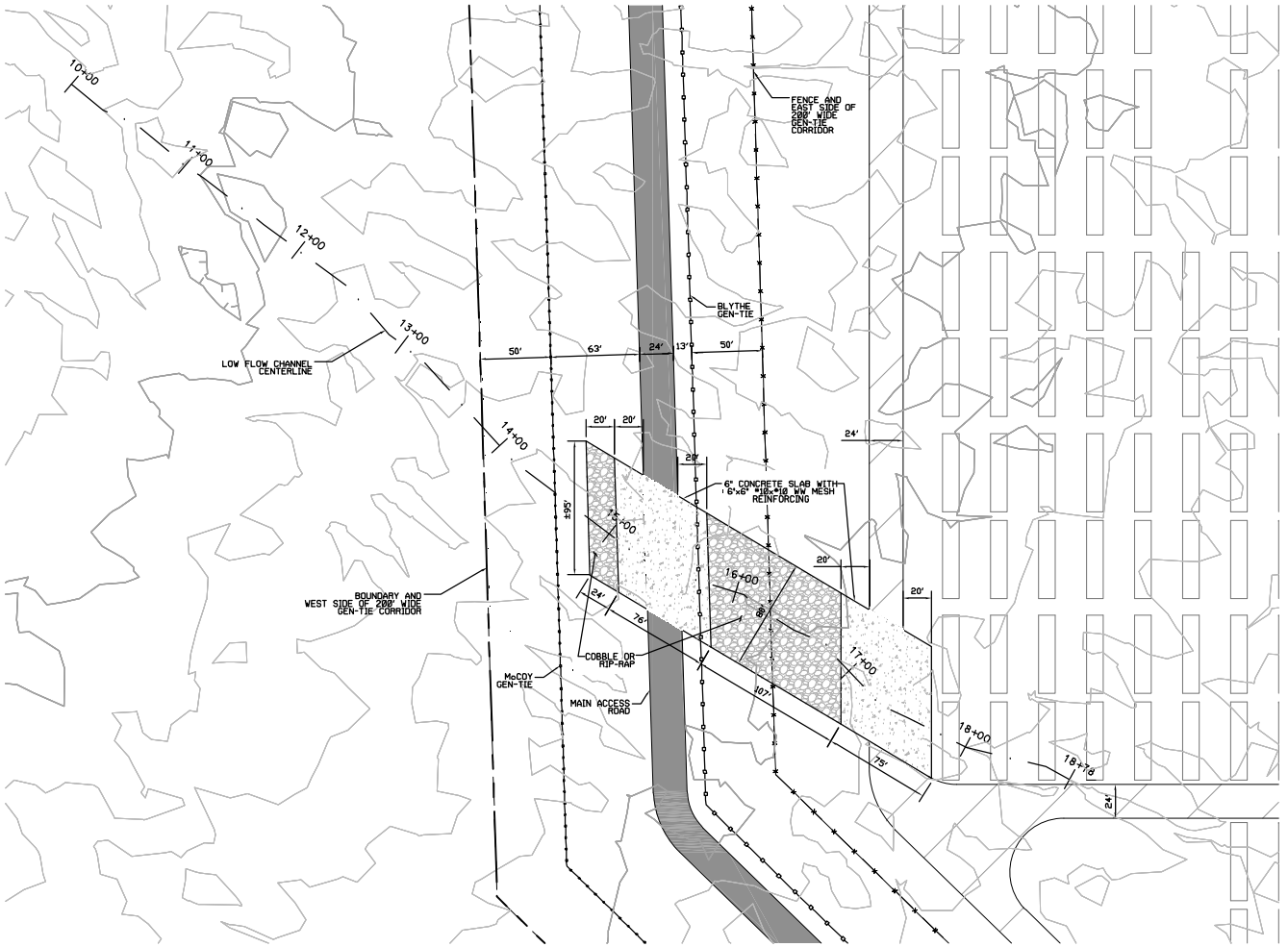
CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

TORTOISE GUARD DETAILS

SCALE: NONE
DRAWING SIZE: ARCH D (36" x 24")
WORLEYPARSONS DWG. NO.: BSPP-1-DW-112-735-006
SHEET NO.: 10
REV: B

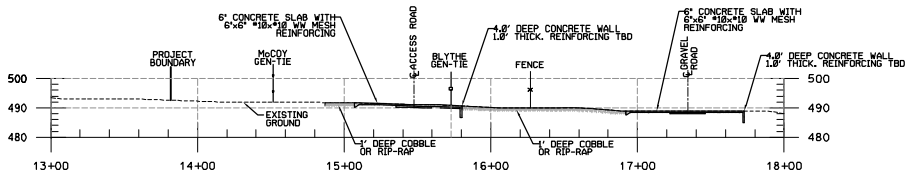
BSPP-1-DW-112-735-006.dwg
27-Feb-2013 - JOE



CHANNEL PLAN VIEW #1

40 0 40 80 120

SCALE: 1"=40'

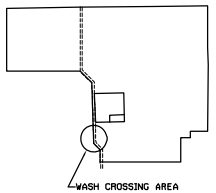


CHANNEL PROFILE #1

SCALE:
HORIZ: 1"=40'
VERT: 1"=20'

LEGEND:

- EXISTING GROUND
- BOUNDARY
- EXISTING CONTOUR MINOR
- EXISTING CONTOUR MAJOR (500)
- TRANSMISSION CORRIDOR
- PROPOSED FENCE
- CENTERLINE OF LOW FLOW CHANNEL
- McCOY GEN-TIE
- BLYTHE GEN-TIE
- PROPOSED PAVED ROAD
- PROPOSED GRAVEL ROAD
- CONCRETE SLAB
- COBBLE OR RIP-RAP
- PROPOSED SINGLE AXIS TRACKER WITH PANELS



KEY MAP

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	PROJECT ENGINEER	PROJECT MANAGER
B	08/27/21	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
A	12/29/20	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY: A. PRATT	
CHECKED BY: J. BRAVO	
LEAD DESIGNER: A. PRATT	
ENGINEER/TECH SPECIALIST: J. BRAVO	
PROJECT ENGINEERING MANAGER: R. HILL	
PROJECT MANAGER: A. ZIMMERMAN	

Zero Harm Leadership No models Ba's Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF PE: ____ STATE: ____ LIC. NO: ____ DATE: ____

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

WASH CROSSING DETAILS

SCALE	DRAWING SIZE	SHEET NO.	REV
AS NOTED	ARCH D (36" x 24")	11	B

WORLEYPARSONS DWG. NO.: BSPP-1-DW-112-735-007

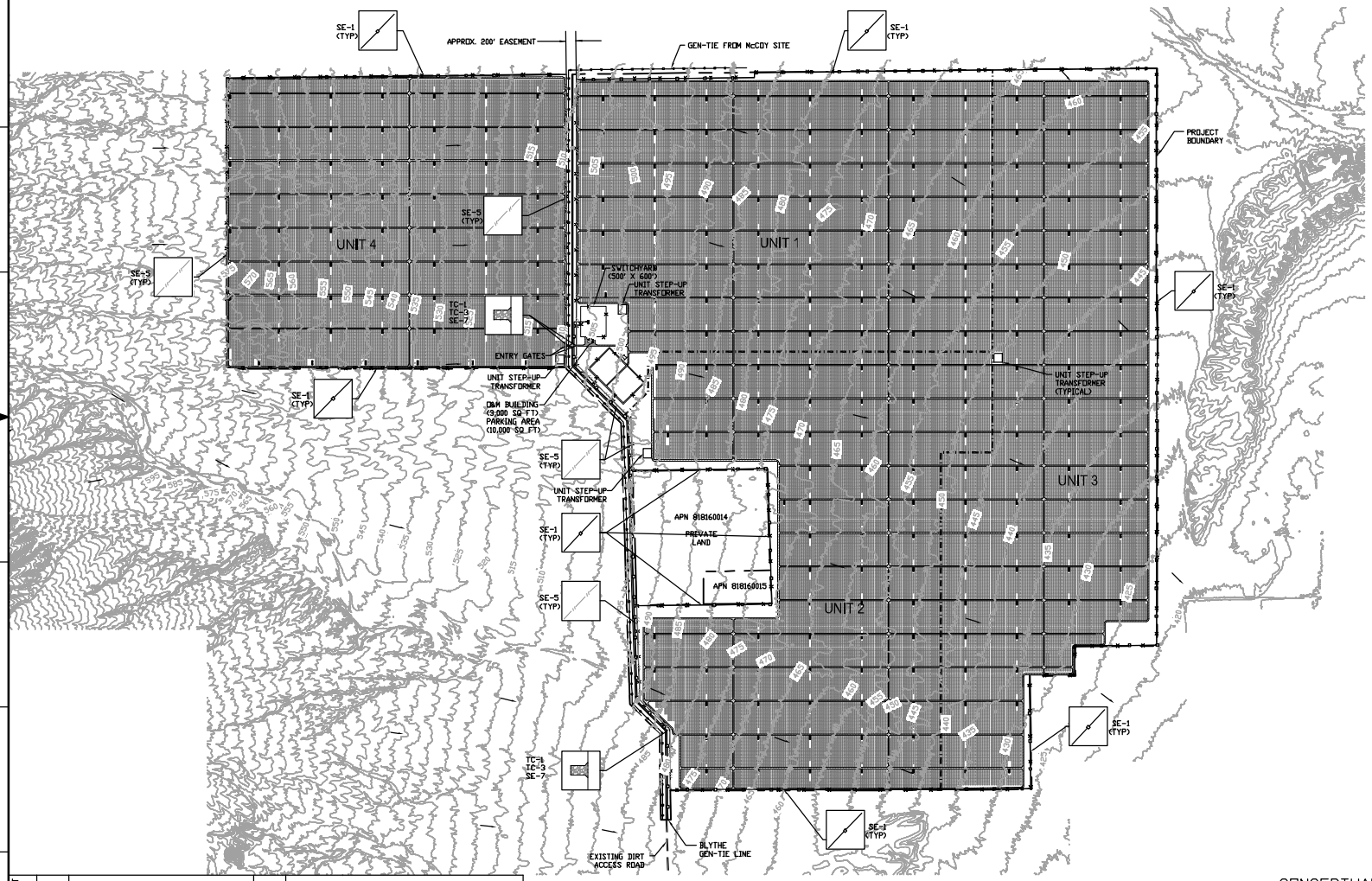
11_BSPP-1-DW-112-735-007.dwg
27-Aug-2021 10:03

LEGEND:

- EASEMENT
- 230 KV DOUBLE CIRCUIT (BLYTHE GEN-TIE)
- PROPOSED FENCE
- PROJECT BOUNDARY
- 500 EXISTING CONTOUR
- DRAINAGE FLOW DIRECTION
- 230 KV DOUBLE CIRCUIT (McCOY GEN-TIE)
- INVERTER AND TRANSFORMER PADS
- PROPOSED SINGLE AXIS TRACKER WITH PANELS
- PROPOSED GRAVEL ROAD
- PROPOSED PAVED ROAD
- UNIT BOUNDARY

NOTES:

1. THIS DRAWING IS CONCEPTUAL AND NOT INTENDED FOR DETAILED DESIGN.
2. SEE SHEET BSPP-1-DW-112-717-002 FOR NOTES.



CASQA BEST MANAGEMENT PRACTICE MANUAL (BMP) LEGEND

TITLE	STD SYMB	DESCRIPTION
SE-1		SILT FENCE
SE-5		FIBER ROLL
TC-1 TC-3 SE-7		STABILIZED CONSTRUCTION ENTRANCE/EXIT ENTRANCE/OUTLET TIRE WASH STREET SWEEPING AND VACUUMING
TC-2		STABILIZED CONSTRUCTION ROADWAY

1,000 0 1,000 2,000 3,000
SCALE: 1" = 1,000'

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	TECH SPEC	ENGR MGR	PROJ MGR
B	02/27/12	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ
A	12/28/11	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY: A. PRATT	
CHECKED BY: J. BRAVO	
LEAD DESIGNER: A. PRATT	
ENGINEER/TECH SPECIALIST: J. BRAVO	
PROJECT ENGINEERING MANAGER: R. HILL	
PROJECT MANAGER: A. ZIMMERMAN	

Zero Harm — Leadership No Incidents Date Behalf

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF PE: ____ STATE: ____ LIC. NO: ____ DATE: ____

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

EROSION CONTROL PLAN

SCALE	DRAWING SIZE
1" = 1000'	ARCH D (36" x 24")

WORLEYPARSONS DWG NO.	SHEET NO.	REV
BSPP-1-DW-112-717-001	12	B

12_BSPP-1-DW-112-717-001.DGN 12-Feb-2012 - 10:10

BEST MANAGEMENT PRACTICES AND STORMWATER POLLUTION NOTES:

1. ALL WORK SHALL APPLY THE "BEST MANAGEMENT PRACTICES" (BMPS) FOR THE CONSTRUCTION INDUSTRY. IN ADDITION, THE CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH, AND IMPLEMENT ALL STORMWATER QUALITY AND POLLUTION CONTROL MEASURES IN ACCORDANCE WITH THE LATEST CODE.

2. THE CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR MUNICIPAL CONSTRUCTION AND INDUSTRIAL ACTIVITIES AS PROMULGATED BY THE CALIFORNIA STATE WATER RESOURCE CONTROL BOARD OR ANY OF ITS REGIONAL WATER QUALITY CONTROL BOARDS.

3. THE CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOKS LATEST EDITION AND THE STORMWATER POLLUTION PREVENTION PLAN PREPARED FOR THIS PROJECT TITLED "STORMWATER POLLUTION PREVENTION PLAN".

4. THE CONTRACTOR AND SUBCONTRACTORS OF EVERY TIER ARE REQUIRED TO CAREFULLY REVIEW AND UNDERSTAND THE SWPPP AND BMP REQUIREMENTS FOR THIS PROJECT.

5. ALL CONTRACTORS AND SUBCONTRACTORS SHALL ATTEND AN ENVIRONMENTAL TRAINING PROGRAM OFFERED BY THE PROJECT PROPONENT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND BMPS SHALL BE IMPLEMENTED UNDER THE DIRECTION OF A QUALIFIED SWPPP DEVELOPER (QSD).

6. AFTER COMPLETION OF THE PROJECT, ALL SURPLUS OR WASTE EARTHEN MATERIAL SHALL BE REMOVED FROM THE SITE AND DEPOSITED IN A LEGAL POINT OF DISPOSAL.

7. EROSION CONTROL SHOWN ON THESE PLANS IS INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES, OR BMPS, MAY BE REQUIRED, AS DETERMINED IN THE FIELD BY THE QSD.

8. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION OF THE PROJECT AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.

9. IN THE EVENT THAT ONE OR MORE ADDITIONAL BMPS ARE REQUIRED, SUCH BMPS SHALL BE INSTALLED UNDER THE DIRECTION OF THE QSD.

10. GATHER ALL CONSTRUCTION DEBRIS ON A REGULAR BASIS. STORE ALL CONSTRUCTION MATERIALS AND WASTE IN A COVERED AREA, OR UNDER A TARP. SWEEP WHERE POSSIBLE, DO NOT USE WATER TO WASH DOWN AREAS DRAINING TO STORM DRAINS. USE PROPER EQUIPMENT CLEANING, FUELING, AND MAINTENANCE PRACTICES.

11. MINIMIZE CONSTRUCTION ACCESS POINTS TO THE SITE. PROVIDE A CONSTRUCTION ENTRANCE AT EACH ACCESS POINT. REMOVE ALL SILT, GRAVEL, RUBBISH, AND GREEN WASTE FROM THE STREET ADJOINING THE SITE PRIOR TO OCTOBER 1ST. PROVIDE REGULAR MAINTENANCE, WEEKLY OR AFTER STORM EVENTS, TO KEEP ACCESS POINTS CLEAN AND FREE OF DEBRIS, DURING WET WEATHER AVOID DRIVING OFF PAVED AREAS AND TRACKING MUD AND SILT ONTO PAVED AREAS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING SITE EROSION CONTROL AT ALL TIMES.

13. PROTECT ADJACENT PROPERTIES FROM ALL STORM WATER OR SILT RUNOFF GENERATED BY ON-SITE CONSTRUCTION ACTIVITIES. INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF ONTO PUBLIC ROADWAYS.

14. TEMPORARY SILT FENCE AND DRAINAGE CONTROL FACILITIES SHALL BE INSTALLED TO CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND TO PROVIDE FOR THE SAFE DISCHARGE OF STORM WATERS INTO EXISTING STORM WATER FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE COUNTY ENGINEER AND IN PLACE PRIOR TO THE START OF GRADING.

15. MINIMIZE REMOVAL OF ANY VEGETATION. STABILIZE ALL CLEARED AND DE-VEGETATED AREAS PRIOR TO OCTOBER 1ST. STABILIZATION SHOULD INCLUDE TEMPORARY OR PERMANENT RE-SEEDING, MULCHING, PROTECTIVE BERMS, SILT FENCES, PLASTIC COVERINGS OR ROCKING OF ROADS, AND SHOULD BE BASED ON A BAG EROSION CONTROL OR CALIFORNIA STORM WATER BMP HANDBOOK STANDARDS.

16. STABILIZE SWALES, GULLIES, CHANNELS, CULVERTS, FIELD INLETS, AND OUTFACES ON THE CONSTRUCTION SITE TO PREVENT EROSION.

17. USE SEDIMENT CONTROLS TO REDUCE SEDIMENTATION FROM DEWATERING EFFLUENT. CONTROL THE USE AND PREVENT DISCHARGE TO STORM DRAINS OF ALL POTENTIAL POLLUTANTS. FOR EXAMPLE, PESTICIDES, PETROLEUM PRODUCTS, NUTRIENTS (PLANT WASTES), SOLID WASTES, AND CONSTRUCTION DISCHARGES FROM DEWATERING ACTIVITIES, STREET WASHING, AND PAVEMENT SAW CUTTING.

18. BETWEEN OCTOBER 15TH AND APRIL 15TH, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. HAY BALES, FILTER BERMS, SILT FENCES OR OTHER MEANS SHALL BE EMPLOYED TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING ANY WATER COURSE.

19. THE CONTRACTOR SHALL DESIGNATE ONE AREA (OR AREAS) OF THE CONSTRUCTION SITE WELL AWAY FROM ANY STREAMS, WETLAND RESTORATION AREA OR STORM BASIN INLETS FOR EQUIPMENT PARKING AND ROUTINE EQUIPMENT AND VEHICLE MAINTENANCE,

20. ALL VEHICLES AND HEAVY EQUIPMENT SHALL BE INSPECTED FREQUENTLY FOR LEAKS, CLEAN UP SPILLED MATERIALS IMMEDIATELY, NOT WASHING THEM OR BURYING THEM.

21. CLEAN UP LIQUID SPILLS ON PAVED AND IMPERVIOUS SURFACES USING "DRY" CLEAN UP METHODS. (I. E. ABSORBENT MATERIALS, RAGS)

22. CLEAN UP SPILLS ON DIRT AREAS BY REMOVING AND PROPERLY DISPOSING OF CONTAMINATED SOIL.

23. REPORT SIGNIFICANT SPILLS TO THE APPROPRIATE SPILL RESPONSE AGENCY AND OWNER. SEE THE STORM WATER POLLUTION PLAN PREPARED FOR THE PROJECT.

24. THE CONTRACTOR SHALL KEEP CONTAMINANTS FROM FRESH CONCRETE AND ASPHALT OUT OF STORM DRAINS AND STREAMS AND WETLAND AREAS BY SCHEDULING PAVING JOBS AFTER PERIODS OF DRY WEATHER, ALLOWING NEW PAVEMENT TO CURE BEFORE STORM WATER FLOWS ACROSS IT.

25. IF PAVING AND STORM DRAIN IMPROVEMENT ARE NOT COMPLETED BY OCTOBER 1ST TEMPORARY SILT AND DRAINAGE CONTROL FACILITIES SHALL BE INSTALLED TO CONTROL AND CONTAIN EROSION CAUSED SILT DEPOSITS AND TO PROVIDE FOR THE SAFE DISCHARGE OF STORM WATERS INTO EXISTING STORM WATER FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE COUNTY.

26. ALL BMP DOCUMENTS APPROVED FOR THIS PROJECT SHALL BE KEPT ON FILE AT THE JOB SITE.

FOR BEST MANAGEMENT PRACTICES (BMP) FACT SHEETS REFER TO THE CALIFORNIA STORMWATER BMP HANDBOOK CONSTRUCTION, NOVEMBER 2009

CONCEPTUAL ENGINEERING PLANS

NOT FOR CONSTRUCTION FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD ENGINEER	TECH SPEC	ENGINEER	PROJECT MANAGER	PROJECT MANAGER
B	08-27-13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	JB	RH	AZ
A	08-09-13	ISSUED FOR PERMITTING	AP	JB	AP	JB	JB	JB	RH	AZ

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

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

ORIGINATING PERSONNEL

DRAWN BY: A. PRATT
CHECKED BY: J. BRAVO
LEAD DESIGNER: A. PRATT
ENGINEER/TECH SPECIALIST: J. BRAVO
PROJECT ENGINEER: R. HILL
PROJECT MANAGER: A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

Zero Harm — Leadership No Incidents Safe Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE ___ STATE ___
LIC. NO. ___ DATE ___

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NEXTERA BLYTHE SOLAR ENERGY CENTER, LLC
BLYTHE SOLAR POWER PROJECT BSPP
RIVERSIDE COUNTY, CA

EROSION CONTROL NOTES

SCALE	DRAWING SIZE	SHEET NO.	REV
N/A	ARCH D (36" x 24")		
WORLEYPARSONS DWG. NO.			
BSPP-1-DW-112-717-002		13	B

13_BSPP-1-DW-112-717-002_ERO_Notes.dwg
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APPENDIX C HYDROLOGIC EVALUATION

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Pre/Post-Development Hydrology Report

Blythe Solar Power Project
Riverside County, California

Prepared for
NextEra Blythe Solar Energy Center, LLC

Prepared by
AECOM

April 2, 2013

This report was prepared by:

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AECOM

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ABBREVIATIONS AND ACRONYMS

AF	acre-feet
AF/yr	acre-feet per year
BLM	Bureau of Land Management
cfs	cubic feet per second
CN	curve number
DEM	digital elevation model
FEMA	Federal Emergency Management Agency
fps	feet per second
ft	feet
I-10	Interstate 10
LiDAR	light detection and ranging
BSPP	Blythe Solar Power Project
MW	megawatt
NOAA	National Ocean and Atmospheric Administration
NRCS	Natural Resources Conservation Service
PV	photovoltaic
SCS	Soils Conservation Survey (now NRCS)
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey

1. PROJECT DESCRIPTION

1.1 Introduction

In mid-2012, NextEra Blythe Solar Energy Center, LLC ("NextEra Blythe") purchased the Blythe Solar Power Project (BSPP), which is a fully permitted 1000 MW solar thermal power project (referred to as the "Approved Project"). NextEra Blythe is proposing to modify the power generating technology to photovoltaic (PV) solar technology, and reduce the footprint and power generation capacity of the project (referred to as the "Modified Project"). The Modified Project would have a nominal power generation capacity of 485 MW and would occupy approximately 4,138 acres located fully within the Approved Project boundaries.

The purpose of this study was to characterize the effects of development of the Modified Project on surface water drainage patterns at, and down-slope of the Modified Project site. To achieve this objective, pre-development site conditions were modeled for the 10-, 25-, and 100-year (24-hour duration) hydrologic events, and used as a benchmark for comparison with post-development modeling results.

Aspects of the Modified Project that have potential to impact surface water drainage conditions differently than those of the Approved Project are as follows:

- Replacement of concentrating solar helio-trough and associated HTF collections and circulation system with PV modules
- Reduction of Project footprint from approximately 6,831 acres to approximately 4,138 acres
- Less intensive grading of the site will be required to accommodate PV technology
- Elimination of large drainage control channels and structures

HEC-HMS was used to develop flood hydrographs for mountainous watersheds tributary to the Modified Project vicinity, and FLO-2D was used to route the flood hydrographs and local rainfall-runoff through the Modified Project site and vicinity. Development effects were quantified based on modeled changes in the following hydraulic parameters: maximum flow velocity, maximum flow depth, peak flow rate, and total outflow volume.

1.2 Site Description

The Modified Project site comprises approximately 4,138 acres located approximately 8 miles northwest of Blythe, California, and approximately 3 miles north of I-10. The area is located in the Sonoran Desert on the Palo Verde Mesa, approximately 2 miles east of the McCoy Mountains, and is within the jurisdictional boundaries of the BLM, and un-incorporated Riverside County. Figure 1 is a vicinity map showing the location of the Modified Project site and relevant geographic features in the surrounding area.

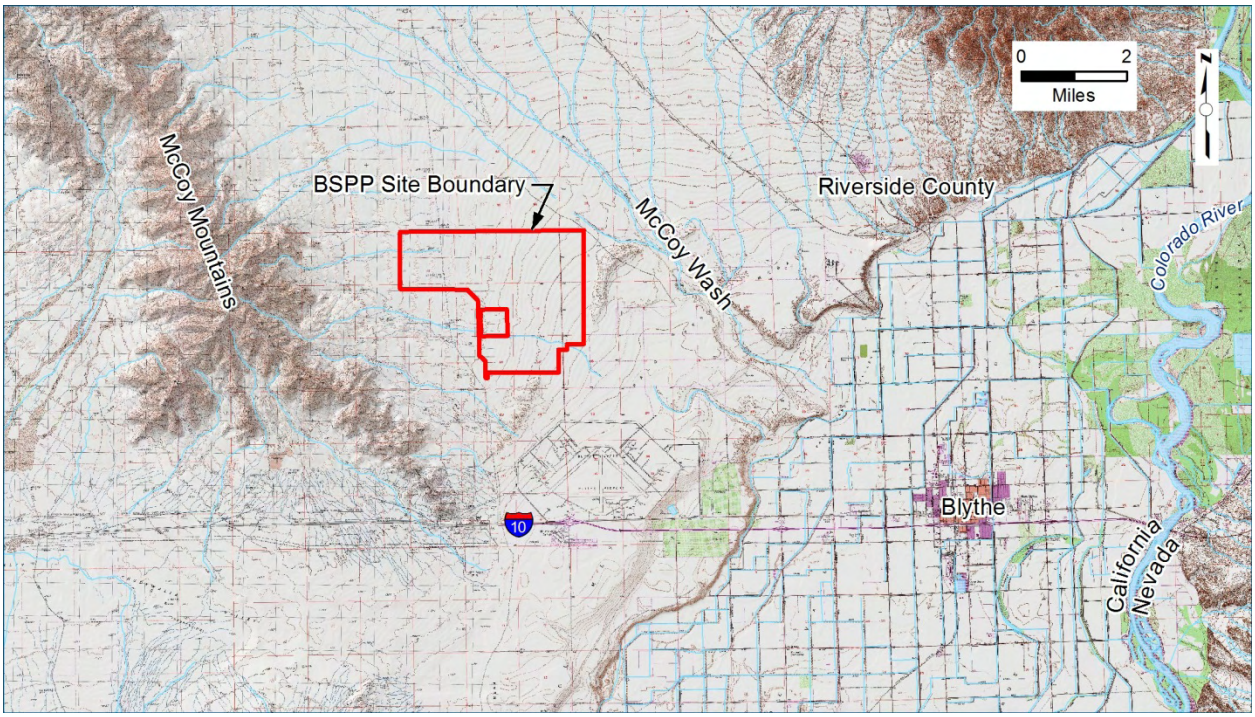


Figure 1: BSPP Solar Plant Site and Surrounding Areas

The general surface water flow pattern trends from higher elevations in the McCoy Mountains into shallow moderately defined channels at the base of the mountains. The major watercourse in the project area is McCoy Wash (northeast of the Modified Project site) which drains approximately 210 square miles of the Palo Verde Mesa, McCoy Mountains, Little Maria Mountains and Big Maria Mountains, and exits the mesa to the east of the Modified Project site. Alluvial fans radiate from the base of the McCoy Mountains and mesa discharging to a broad flat expanse of desert terrain sloping in a southeasterly direction across the BSPP site. Based on field observations, low flows from the ephemeral washes that traverse the Modified Project site in a west-to-east orientation transition into alluvial fans and abate into the landscape prior to connecting with the McCoy Wash.

Vegetation in the Sonoran Desert consists primarily of succulent cacti and drought resistant

shrub adapted to sparse rainfall and well-draining soil. Soils generally consist of large, angular, cobbles in the up-slope mountainous terrain, and transition to finer, more closely packed, cobbles and pebbles in the project vicinity and at the Modified Project site.

Proposed construction of the Modified Project is anticipated to occur in four operational Units (phases); Unit 1, will be constructed in the first phase, and Units 2 through 4 will be constructed in subsequent phases. To ensure that the post-development modeling addressed the full range of potential hydrologic impacts related to the phased development approach, the following two development scenarios were simulated: 1) development of Unit 1 only, and 2) development of all Units. Figure 2 shows the preliminary site layout including areal coverage of PV panels, Unit boundaries, and other site development features.

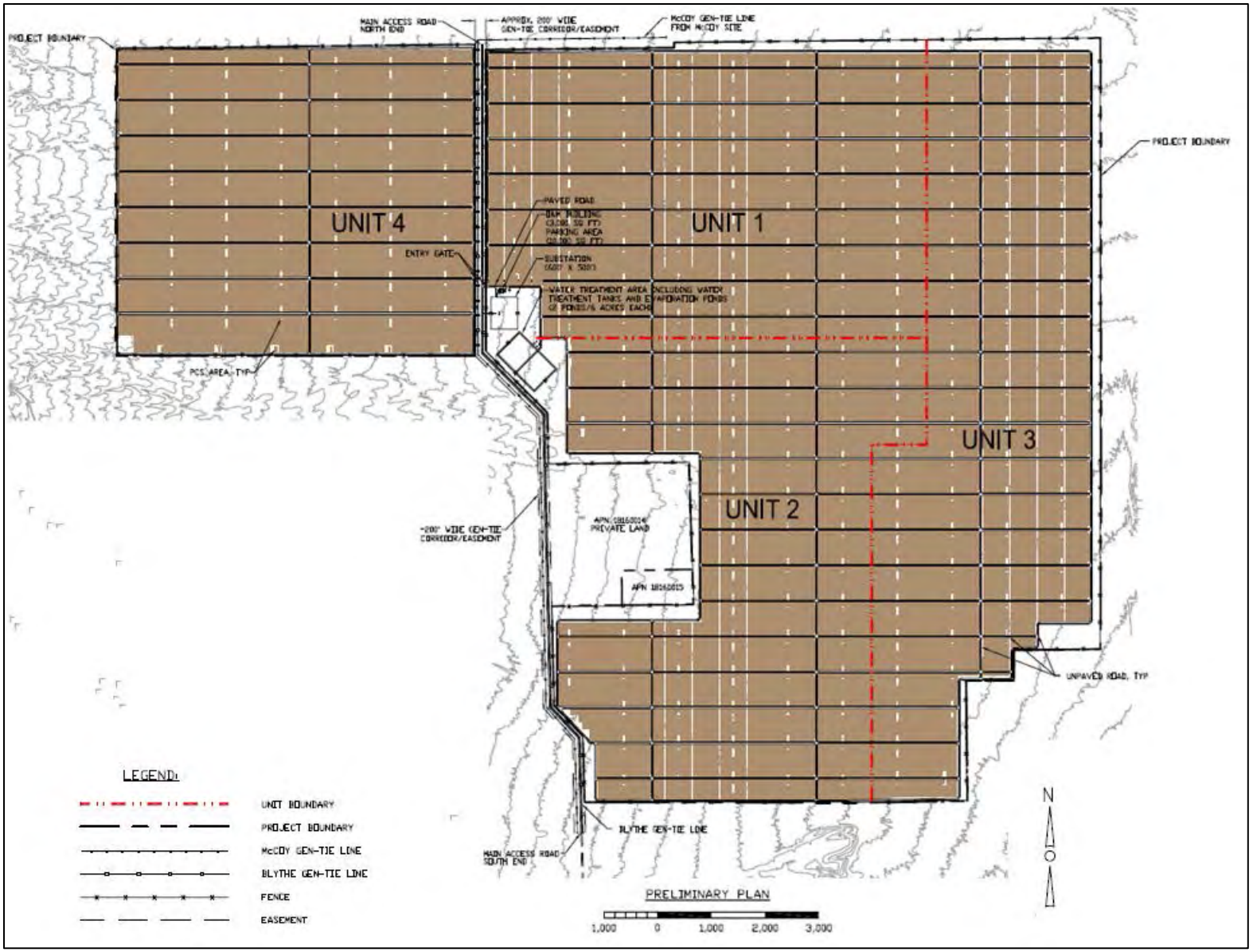


Figure 2: Draft Site Plan Showing Areal Coverage of PV Panels and Other Site Development Features (Source: WorleyParsons)

2. METHODOLOGY

HEC-HMS was used to develop flood hydrographs for mountainous watersheds tributary to the project vicinity. Pre- and post-development drainage conditions in the vicinity of the BSPP site were characterized using FLO-2D to route flood hydrographs and local rainfall-runoff through the BSPP site and Modified Project vicinity. This section provides a summary of the modeling approach and input parameters used in the models.

2.1 Spatial Configuration

Hydrologic and hydraulic model extents were established based on drainage basins which were delineated using topographic data to determine surface water flow directions. Figure 3 shows the boundaries of the HEC-HMS model sub-basins (purple) and the FLO-2D model boundary (black) in relation to the BSPP site.

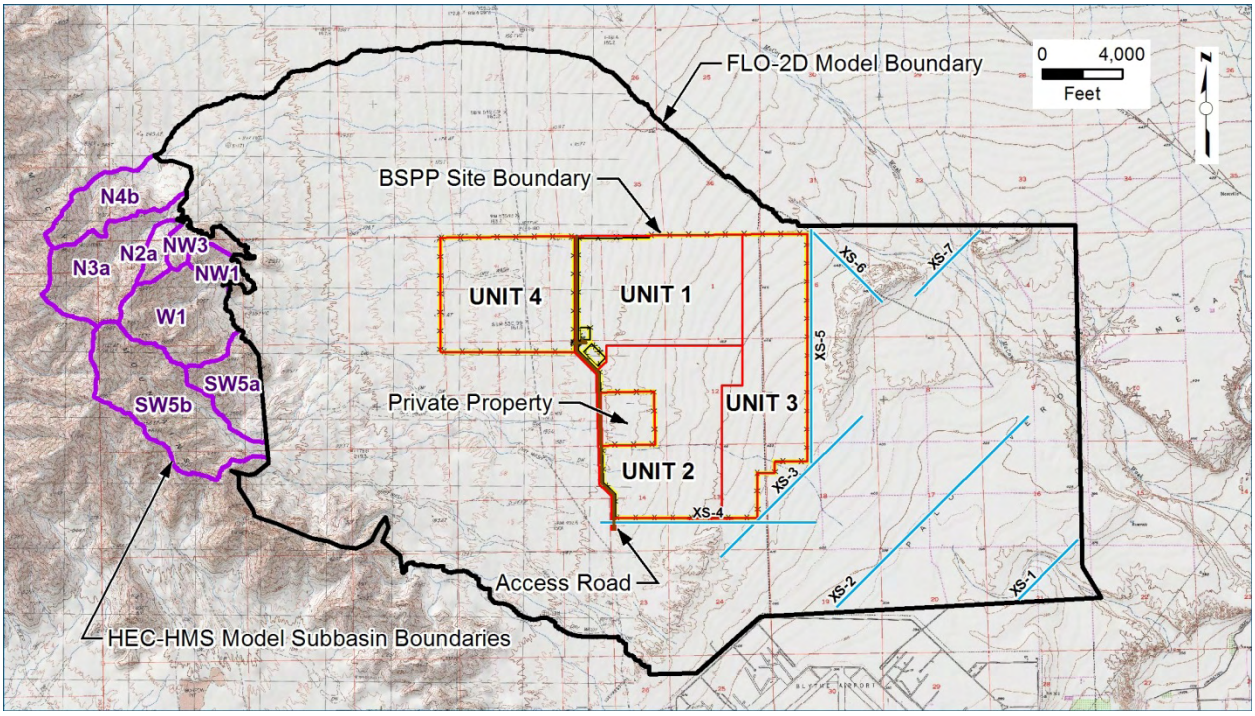


Figure 3: HEC-HMS and FLO-2D Model Boundaries

The HEC-HMS model domain includes all watersheds that contribute flows to the Modified Project boundary. The FLO-2D model boundaries were established to capture all flows tributary to the Modified Project site and all areas potentially receiving flows resulting from runoff from the Modified Project site.

Seven flow analysis cross-sections (XS-1 through XS-7) were established within the FLO-2D

model. The flow analysis cross-sections are used to quantify changes in peak flow rate and total outflow volume leaving the BSPP site resulting from development-related changes to site conditions. Locations of the flow analysis cross-sections are shown as light in Figure 3 (light blue lines).

2.2 Hydrologic Modeling (HEC-HMS)

The BSPP site receives surface water flow from 8 tributary basins originating in the McCoy Mountains located approximately 2 miles west of the site. These watersheds were delineated with the ArcHydro suite within ArcGIS using 30-foot contour USGS DEM topographic data.

The 8 basins tributary to the Modified Project vicinity were individually modeled for the 10-, 25, and 100-year (24-hour duration) hydrologic events using HEC-HMS. The parameters used in the HMS model are described below and the values are listed in Table 1.

1. Runoff Methodology. The surface runoff calculations were performed by transforming the rainfall using the Standard SCS synthetic unit hydrograph (UH). The dimensionless UH is scaled by the lag time to produce the unit hydrograph that is applied for surface runoff calculation. The lag time for the Standard SCS UH is defined as the length of time between the centroid of precipitation and the peak flow of the hydrograph. Basin properties used to calculate lag time include; 1) length of the longest flowpath in the basin (L), 2) centroidal length from the centroid of the basin perpendicular to the longest flow path (Lca), 3) average basin slope, and 4) curve number (defined below).

2. Loss Method. The SCS method was selected to calculate infiltration within each sub basin. With this method, infiltration and initial abstraction are calculated based on the user-defined curve number (CN) which is based on the soil type and vegetation and defined in SCS TR-55[1]. Impervious areas are not included in infiltration loss calculations.

3. Precipitation Values and Distribution. The rainfall depths resulting from 10-, 25-, and 100-year (24-hour duration) precipitation events were obtained from the NOAA Atlas 14 document as reported in the Approved Project's *Revised Drainage Report for Pre-Development Hydrology and Post-Development Hydrology and Hydraulics*[2]

[1] United States Department of Agriculture - Natural Resources Conservation Service, Urban Hydrology for Small Watersheds, Technical Release TR 55, Table 2-2d. Major plants include saltbrush, greasewood, creosotebush, blackbrush, bursage, palo verde, mesquite, and cactus

[2] Kiewit Power Engineers Co. *Revised Drainage Report for Pre-Development Hydrology and Post-Development*

dated August 30, 2010. Rainfall depths used for the 10-, 25-, and 100-year return periods were 2.0 inches, 2.54 inches, and 3.44 inches, respectively. The SCS Type II storm distribution was used to distribute the precipitation over the 24-hour period.

Outflow hydrographs resulting from the three storm events were generated for each of the 8 tributary basins, and then used to define the inflow contributions along the western FLO-2D model boundary. The flow generated up-slope of the BSPP site would not be expected to change as a result of the site development; therefore, the same inflow hydrographs were used in all model scenarios. Table 1 shows the input parameters used to model each of the up-slope basins in HEC-HMS.

Table 1: HEC-HMS Offsite Basin Model Inputs

Basin	Basin Area (mi^2)	L (mi)	L_{CA} (mi)	Soil Type	CN (area-weighted)	Slope (%)	Lag Time (min)	Initial Abstraction (in)
N4b	0.57	1.60	0.77	B (33%), D (70%)	84	1.90%	12.2	0.381
N3a	0.75	1.81	1.13	B (7%), D (93%)	87	1.49%	15.2	0.299
N2a	0.12	0.88	0.50	B (13%), D (87%)	87	1.49%	8.0	0.299
NW3	0.17	0.51	0.33	B (18%), D (82%)	86	1.63%	5.5	0.326
NW1	0.13	0.57	0.25	B (9%), D (91%)	87	1.49%	5.3	0.299
W1	0.75	1.29	0.78	B (4%), D (96%)	88	1.36%	11.1	0.273
SW5a	0.43	0.88	0.37	B (19%), D (81%)	86	1.63%	7.3	0.326
SW5b	1.09	2.34	1.27	B (1%), D (99%)	88	1.36%	18.8	0.273

Notes:

1. All basins were assigned an imperviousness of 0%.

2.3 Hydraulic Modeling (FLO-2D)

Inputs to the FLO-2D model include topographic data, ground surface and soil attributes (surface roughness, abstraction, and infiltration), and precipitation. Under the pre-development scenario, no adjustments to input parameters were made to differentiate the BSPP site from the surrounding areas. Post-development hydraulic modeling was conducted to address two site development scenarios: development of only Unit 1, and development all Units. Under the Unit 1 development scenario, parameter adjustments were made within the Unit 1 disturbance area to capture the effects of development of that area. Under the development of all Units scenario, parameter adjustments were made to the entire BSPP site to reflect the effects of full development of the site. This section provides a discussion of the FLO-2D model parameters and how they were varied to represent the various development scenarios.

2.3.1 Topography

The topographic dataset used in this study was generated by developing a mosaic of high-resolution LiDAR data (2-foot contour) with lower-resolution radar data (10-foot contour) and USGS DEM data (30-foot contour). Figure 4 shows the spatial distribution of the sources of topographic data used within the HEC-HMS and FLO-2D model domains. The datasets were combined into a final elevation dataset mosaic using the highest resolution data available for a given location, and filling in with lower resolution data where necessary. The ground surface was represented in the FLO-2D model as a grid consisting of 100-ft by 100-ft grid elements. The grid element elevations were assigned using the FLO-2D *Grid Developer System* to sample elevations from the elevation dataset mosaic.

Post-development changes in elevation are expected to be minimal and will generally not change from pre-development conditions. However, grid elements in contact with the proposed paved access road that runs north-south through the length of the Modified Project site were raised 0.5 feet to represent the post-development effects of the paved road section on surface water flow patterns[3]. Grid topography was not modified for the proposed gravel roads within the BSPP site boundary, as the finished surface of these roads is expected to be within 1 to 2 inches of the existing grade[3].

[3] WorleyParsons, *Email communication between Casey Dick (AECOM) and Juan Bravo, PE (WorleyParsons).* March 20 and 29, 2012.

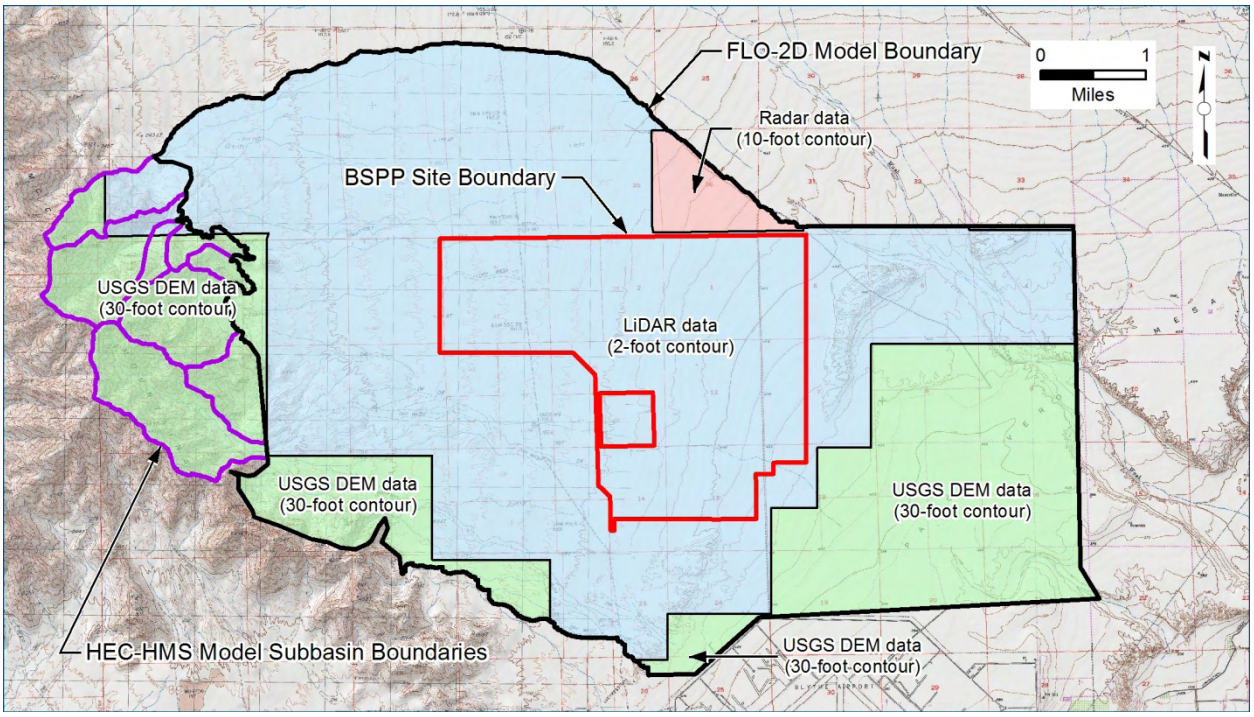


Figure 4: Spatial Distribution of Topographic Data Sources within the HEC-HMS and Flo-2D Model Domains

2.3.2 Surface Roughness

FLO-2D uses the Manning's n coefficient to account for the effects of surface roughness. The Manning's n roughness value utilized in FLO-2D is specific to overland flow computations[4], which is significantly higher than the Manning's n value specific to open channel flow computations[5].

Pre-development Manning's n values were estimated based on correlation of field photographs[6], site visits, aerial imagery, and sensitivity analyses. Manning's n was distributed spatially using ArcGIS shapefiles, and a composite overland flow Manning's n value was assigned to each grid cell to account for the local variations in vegetation and surface irregularity. The pre-development Manning's n values represent the sparse vegetation, sandy soils, and open ground with debris noted at the site[4].

Post-development changes to Manning's n values were estimated by applying adjustment factors to the base values to account for slight compaction due to construction activities,

[4] FLO-2D Software Inc., FLO-2D Reference Manual (Version 2009), 2009.

[5] Army Corps of Engineers, HEC-1 Manual (1990) and Technical Engineering Design Guide, No. 19 (1997).

[6] United States Geological Survey, *Guide for Selecting Manning's Roughness Coefficients for Natural Channels and Flood Plains*, Arcement and Schneider, USGS Water-Supply Paper 2339, 1989.

installation of the PV panels and the mounting structures, and a surrounding access road with fencing. While some adjustment factors caused an increase in surface roughness (e.g., PV mounting structures), the composite adjustment resulted in a net decrease in surface roughness.

The chain-link fence enclosing the Modified Project site was represented in the FLO-2D model by an increased Manning's n value of 0.4 to simulate the additional drag that would be caused by the fence. This value was derived based on the assumption that the tortoise fencing in the lower 2 feet of the security fence would induce drag similar to that of *dense vegetation*[4].

Figures 5, 6, and 7 depict the spatial distribution of Manning's n for the three model scenarios.

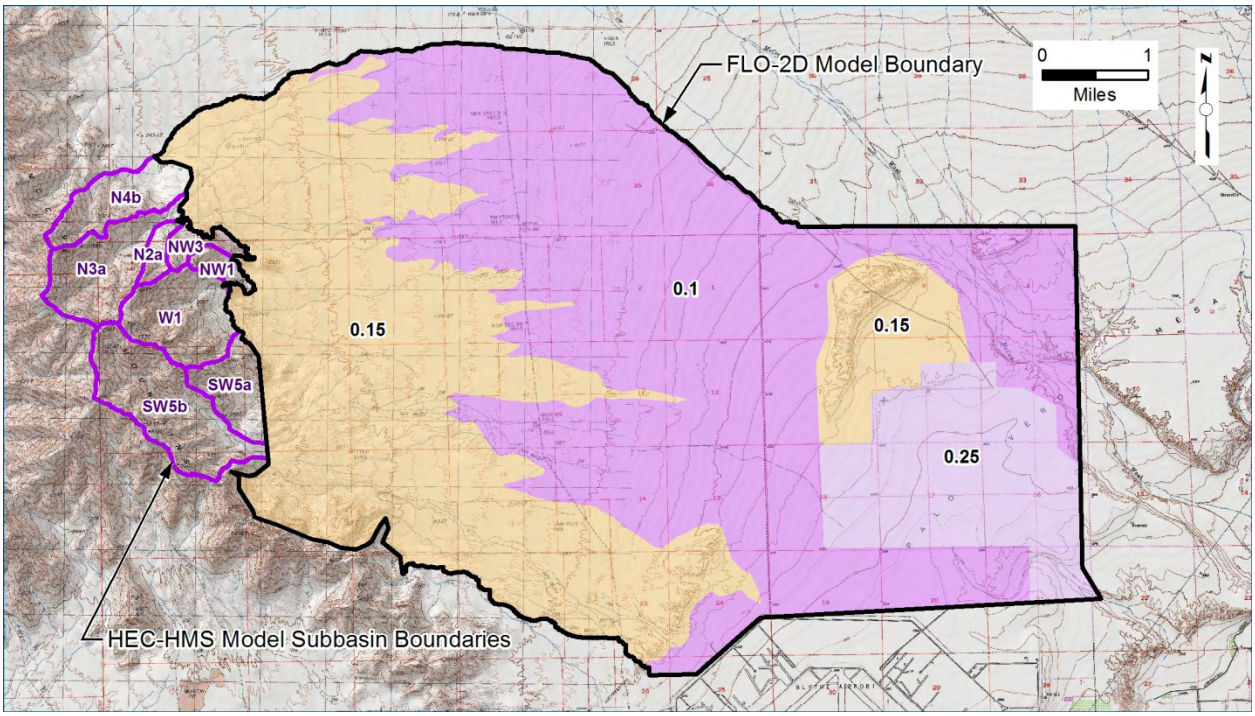


Figure 5: Pre-Development Manning's n Values

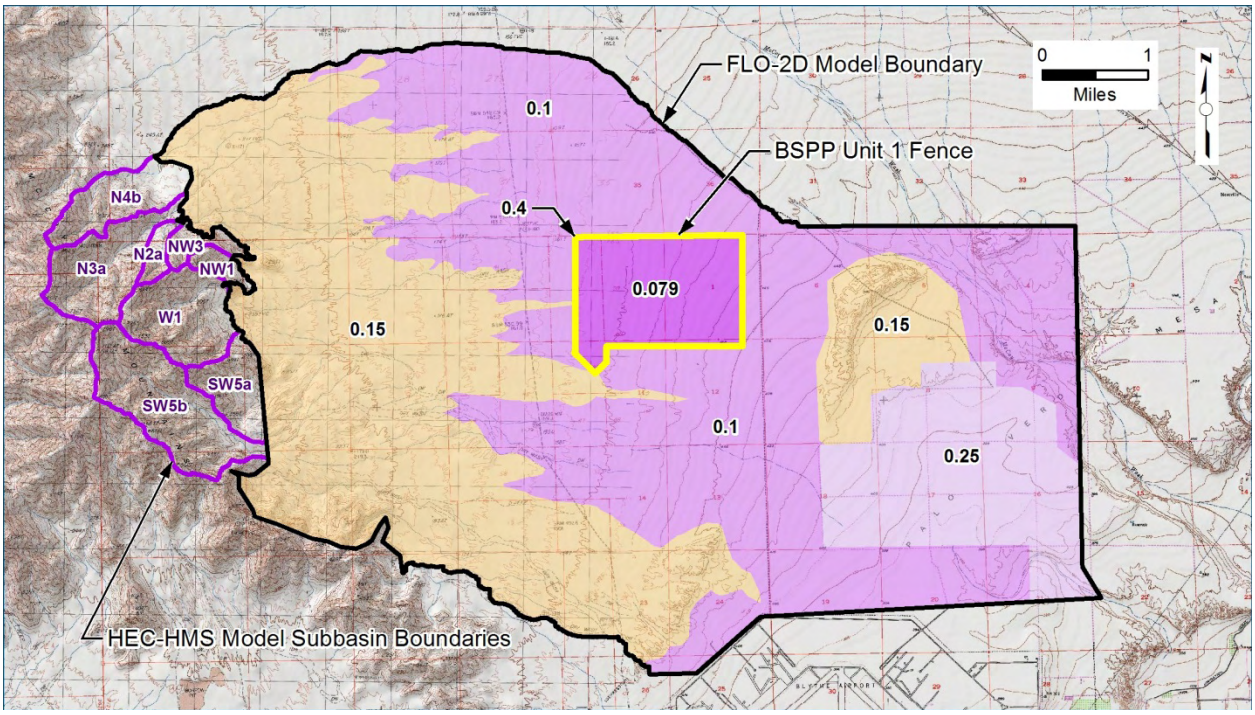


Figure 6: Post-Development (Unit 1) Manning's n Values

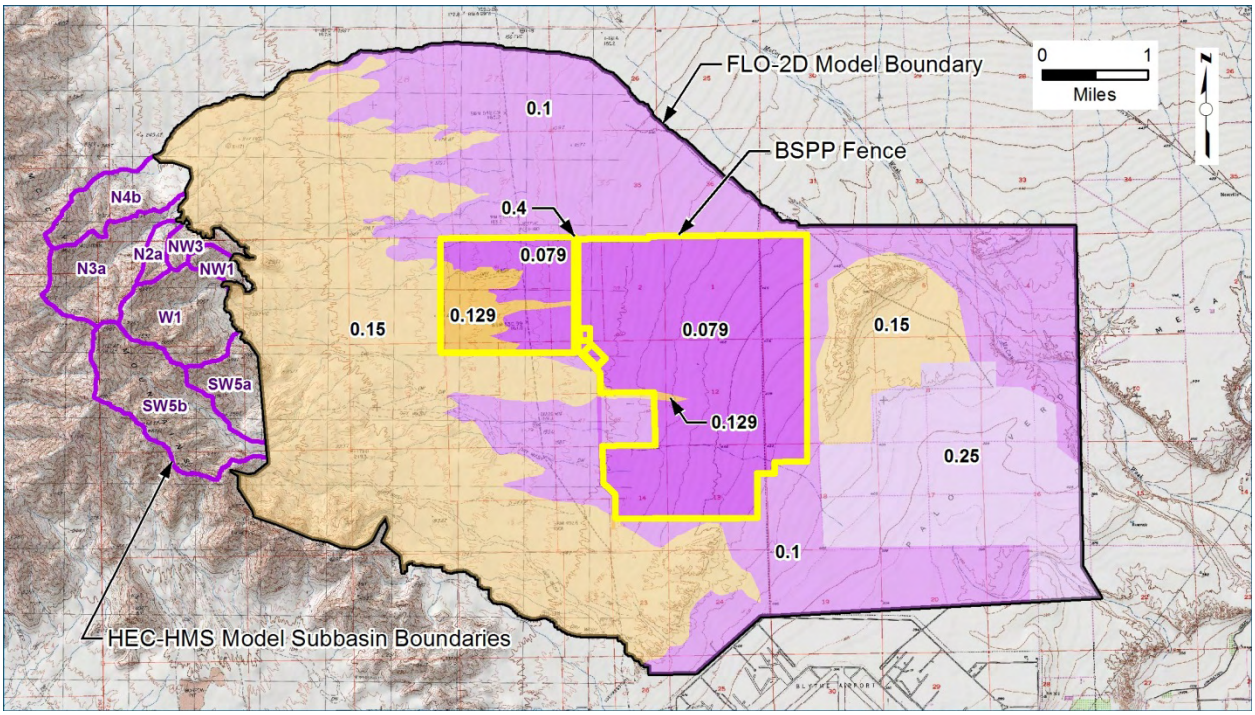


Figure 7: Post-Development (All Units) Manning's n Values

2.3.3 Infiltration

The SCS Curve Number approach was utilized in the FLO-2D model to account for infiltration of water into the subsurface. Curve number (CN) values representing Desert Shrub[7] Soil Groups B and D were used as base values. Pre-development CN values are 77 for Soil Group B and 88 for Soil Group B. CN values were spatially distributed using ArcGIS in a manner similar to that for distribution of Manning's n values.

Post-development CN values were increased to 82 for Soil Group B, and 89 for Soil Group D within the BSPPP site boundary to account for changes in the quality of cover related to site development. Primary factors contributing to post-development changes to CN values are the PV panels, facility buildings, slight compaction of soil due to construction activity, and construction of the access roads. CN values were increased only within the construction limits specific to each development scenario.

Figures 8, 9, and 10 depict the spatial distribution of CN values for the three model scenarios.

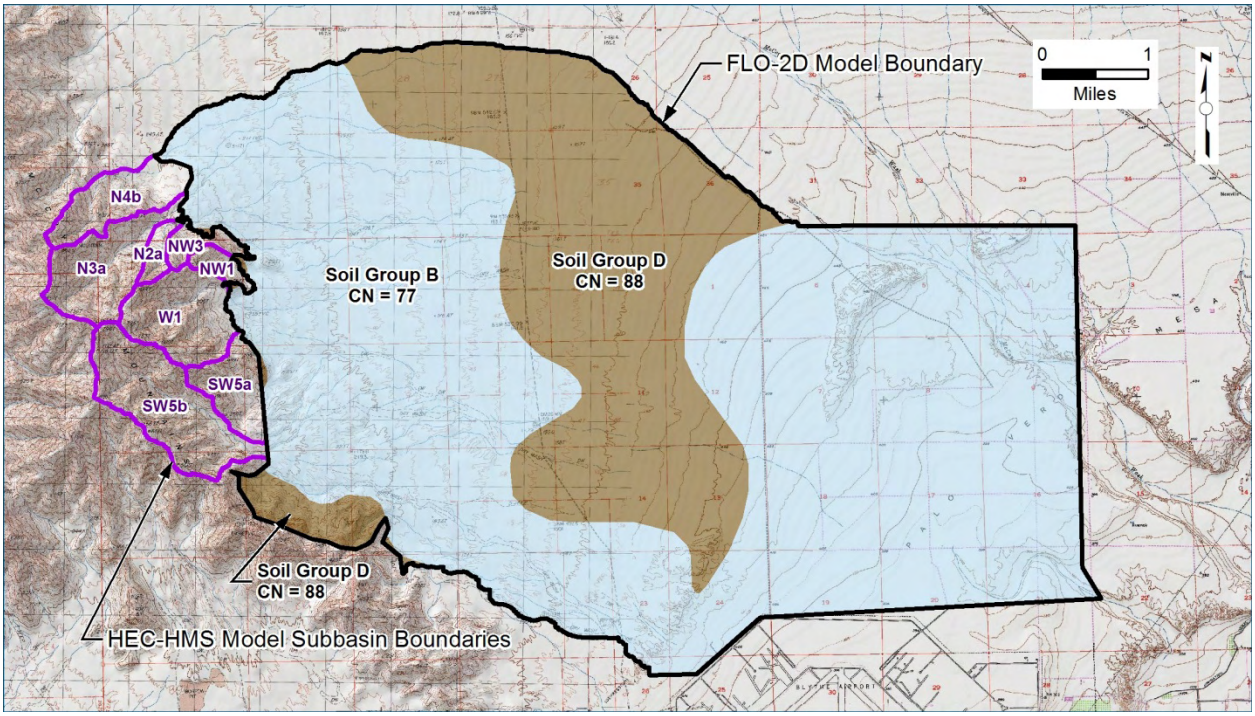


Figure 8: Pre-Development SCS Curve Number Values

[7] United States Department of Agriculture - Natural Resources Conservation Service, *Urban Hydrology for Small Watersheds*, Technical Release TR 55, Table 2-2d. Major plants include saltbrush, greasewood, creosotebush, blackbrush, bursage, palo verde, mesquite, and cactus.

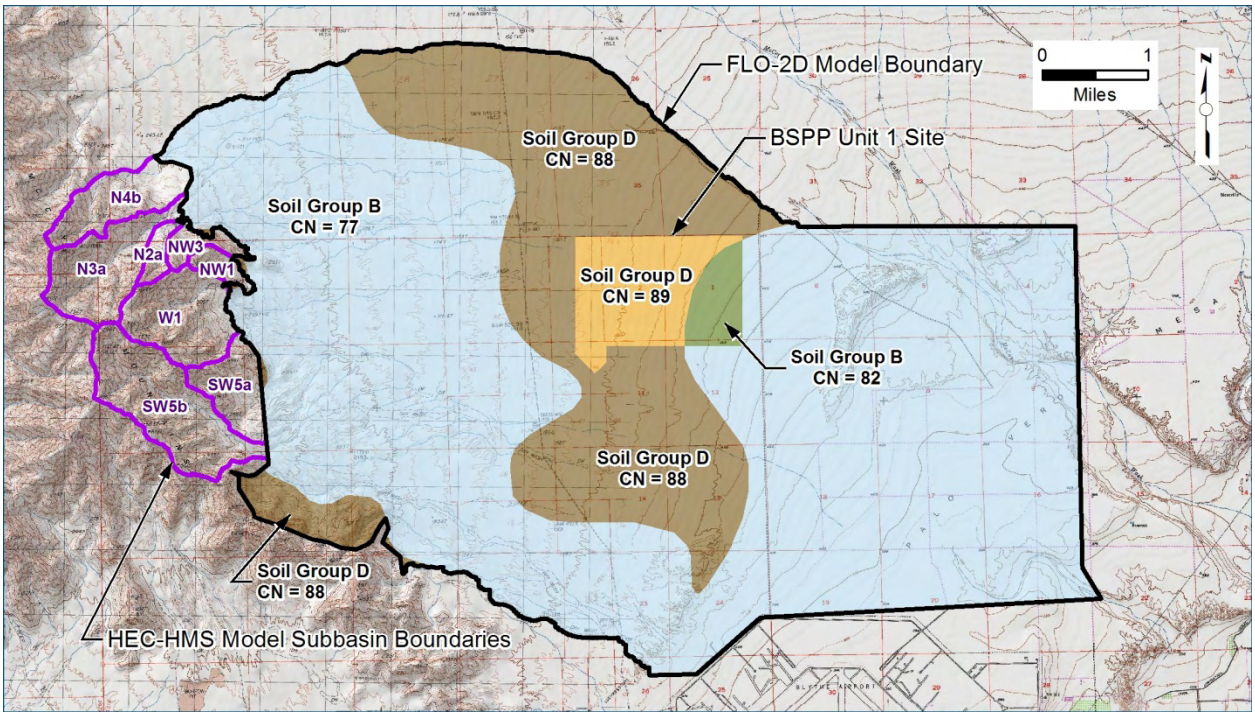


Figure 9: Post-Development (Unit 1) SCS Curve Number Values

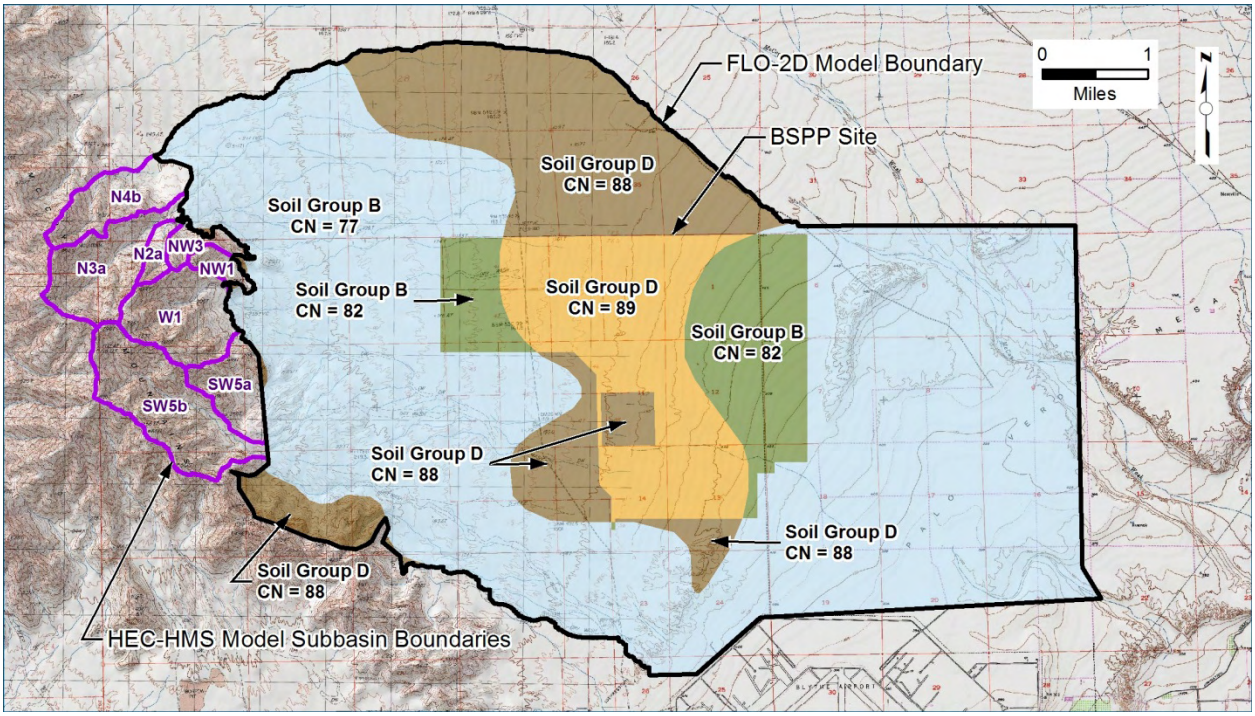


Figure 10: Post-Development (All Units) SCS Curve Number Values

2.3.4 Surface Abstraction

Surface abstraction refers to the amount of water lost to depression storage, evaporation, and interception during a hydrologic event. FLO-2D accounts for surface abstraction with the user defined variable TOLER. A TOLER value of 0.025 ft, representing *Natural Desert and Rangeland Surface Cover*[8], was specified for all model scenarios.

No changes in surface abstraction are assumed occur between the pre- and post-development conditions.

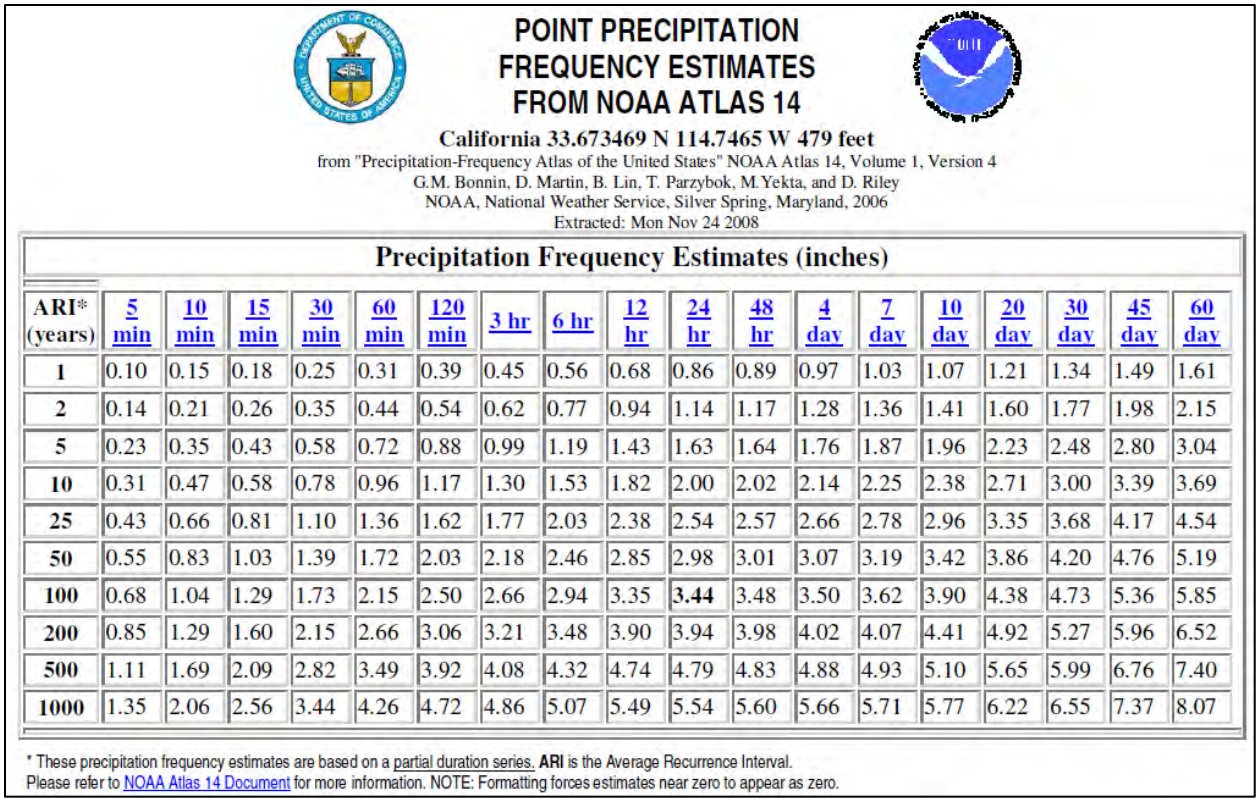
2.3.5 Precipitation

The rainfall depths resulting from 10-, 25-, and 100-year (24-hour duration) precipitation events were obtained from the NOAA Atlas 14 document as reported in the Approved Project's *Revised Drainage Report for Pre-Development Hydrology and Post-Development Hydrology and Hydraulics*[9] dated August 30, 2010. Figure 11 shows precipitation frequency data for the Modified Project vicinity. It is assumed that the 24-hour duration rainfall event is spatially distributed evenly over the hydrologic (HEC-HMS) and hydraulic (FLO-2D) model extents. Precipitation was distributed temporally as a Type II storm, in accordance with the U.S. Soil Conservation Service (now NRCS) Technical Release 55 recommendation for southeastern California. Rainfall depths used for the 10-, 25-, and 100-year return periods were 2.0 inches, 2.54 inches, and 3.44 inches, respectively.

No changes in precipitation are assumed occur between the pre- and post-development conditions.

[8] Maricopa County Drainage Design Manual, 1992.

[9] Kiewit Power Engineers Co. *Revised Drainage Report for Pre-Development Hydrology and Post-Development Hydrology and Hydraulics, Blythe Solar Power Project, Riverside County, California*. Submitted to the California Energy Commission August 30, 2010.



POINT PRECIPITATION FREQUENCY ESTIMATES FROM NOAA ATLAS 14

California 33.673469 N 114.7465 W 479 feet

from "Precipitation-Frequency Atlas of the United States" NOAA Atlas 14, Volume 1, Version 4
G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley
NOAA, National Weather Service, Silver Spring, Maryland, 2006
Extracted: Mon Nov 24 2008

Precipitation Frequency Estimates (inches)

ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.10	0.15	0.18	0.25	0.31	0.39	0.45	0.56	0.68	0.86	0.89	0.97	1.03	1.07	1.21	1.34	1.49	1.61
2	0.14	0.21	0.26	0.35	0.44	0.54	0.62	0.77	0.94	1.14	1.17	1.28	1.36	1.41	1.60	1.77	1.98	2.15
5	0.23	0.35	0.43	0.58	0.72	0.88	0.99	1.19	1.43	1.63	1.64	1.76	1.87	1.96	2.23	2.48	2.80	3.04
10	0.31	0.47	0.58	0.78	0.96	1.17	1.30	1.53	1.82	2.00	2.02	2.14	2.25	2.38	2.71	3.00	3.39	3.69
25	0.43	0.66	0.81	1.10	1.36	1.62	1.77	2.03	2.38	2.54	2.57	2.66	2.78	2.96	3.35	3.68	4.17	4.54
50	0.55	0.83	1.03	1.39	1.72	2.03	2.18	2.46	2.85	2.98	3.01	3.07	3.19	3.42	3.86	4.20	4.76	5.19
100	0.68	1.04	1.29	1.73	2.15	2.50	2.66	2.94	3.35	**3.44**	3.48	3.50	3.62	3.90	4.38	4.73	5.36	5.85
200	0.85	1.29	1.60	2.15	2.66	3.06	3.21	3.48	3.90	3.94	3.98	4.02	4.07	4.41	4.92	5.27	5.96	6.52
500	1.11	1.69	2.09	2.82	3.49	3.92	4.08	4.32	4.74	4.79	4.83	4.88	4.93	5.10	5.65	5.99	6.76	7.40
1000	1.35	2.06	2.56	3.44	4.26	4.72	4.86	5.07	5.49	5.54	5.60	5.66	5.71	5.77	6.22	6.55	7.37	8.07

* These precipitation frequency estimates are based on a partial duration series. **ARI** is the Average Recurrence Interval.
Please refer to NOAA Atlas 14 Document for more information. NOTE: Formatting forces estimates near zero to appear as zero.

Figure 11: Precipitation Frequency Estimates for the BSPP Vicinity (from Kiewit, 2010[9]).

3. RESULTS

3.1 HEC-HMS Results

Hydrographs resulting from HEC-HMS modeling of the up-slope tributary basins for the 10-, 25-, and 100-year hydrologic events are presented in Figures 12, 13, and 14, respectively. These hydrographs were used as inputs along the western (upstream) boundary of the FLO-2D model. Inflow hydrograph labels correspond to the HEC-HMS sub-basins shown in Figure 3.

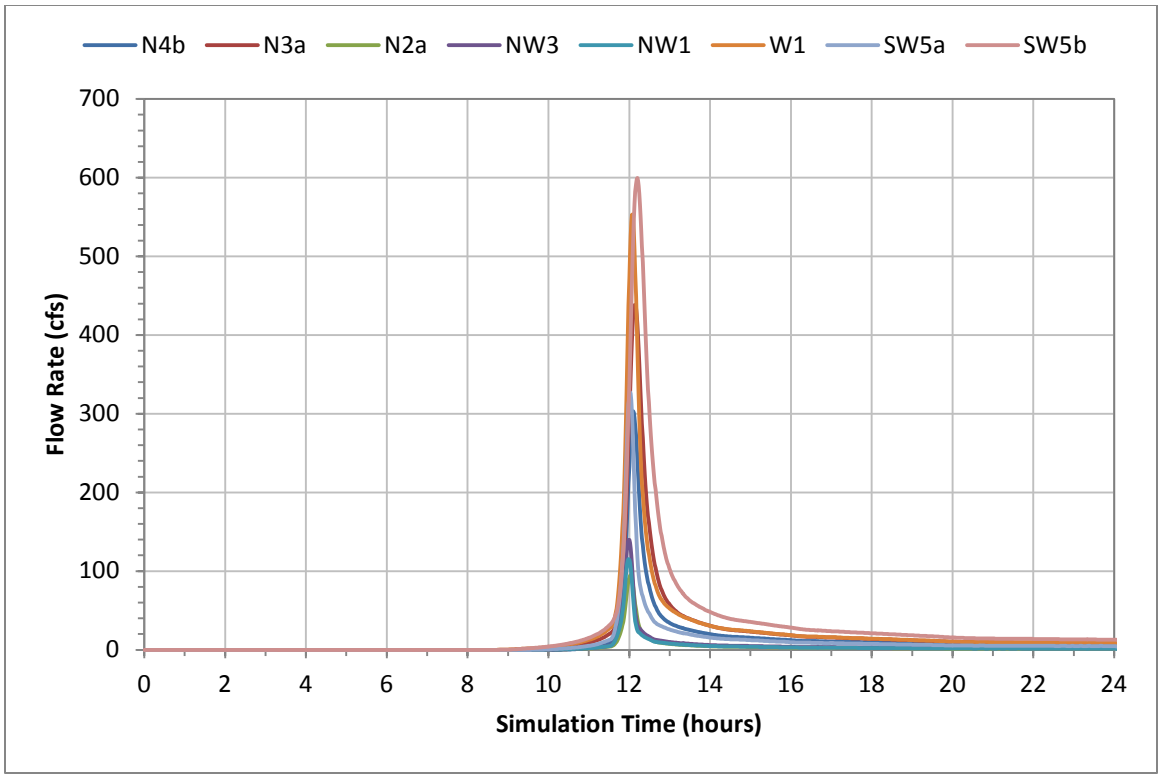


Figure 12: Offsite Hydrographs Resulting from 10-Year Hydrologic Event

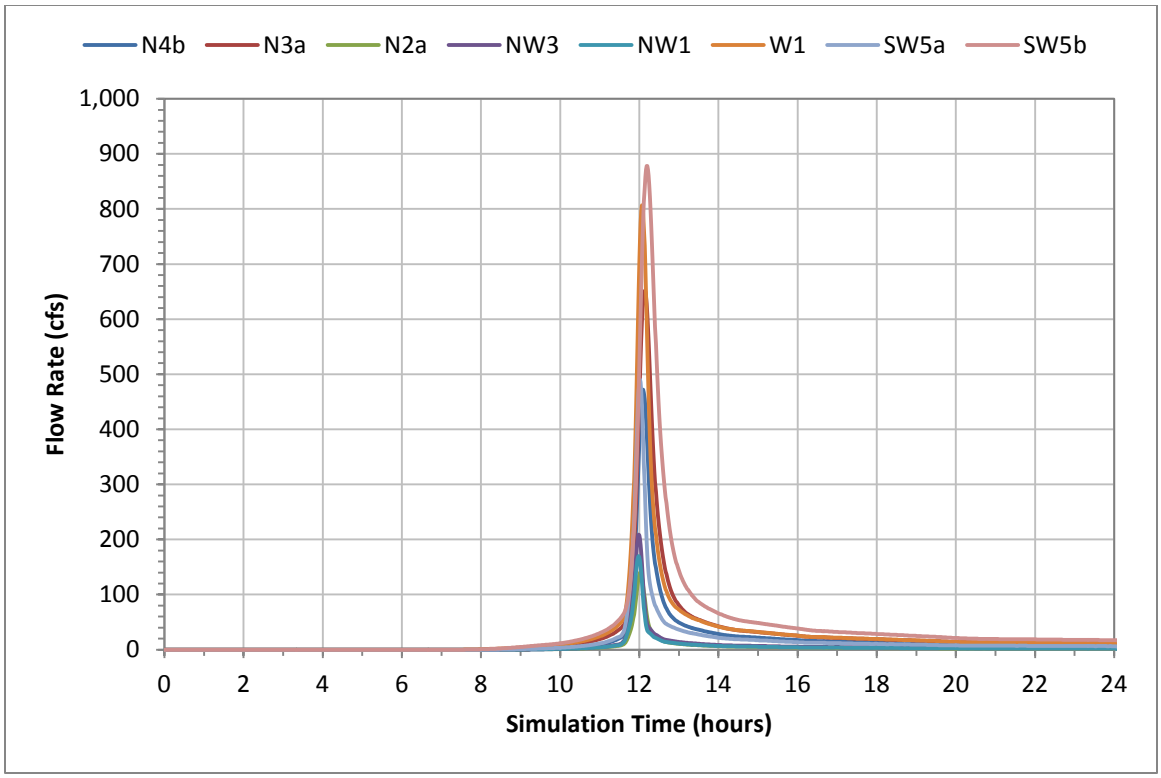


Figure 13: Offsite Hydrographs Resulting from 25-Year Hydrologic Event

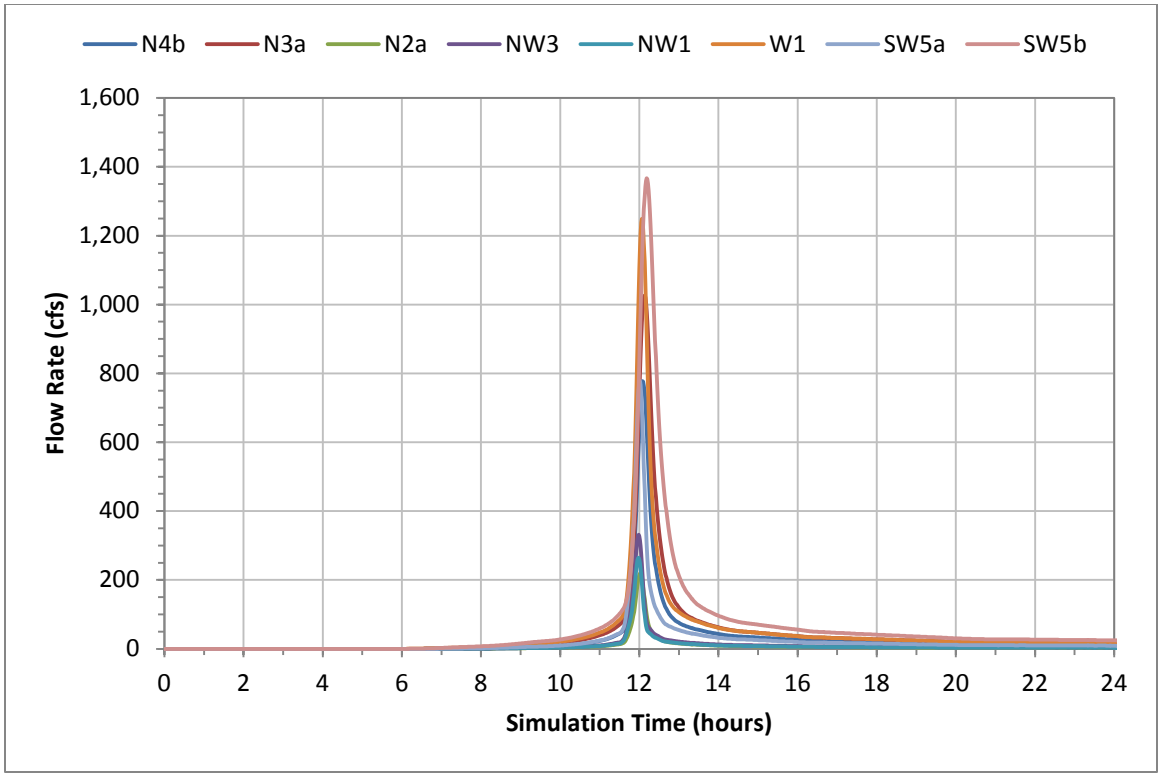


Figure 14: Offsite Hydrographs Resulting from 100-Year Hydrologic Event

Table 2 provides a summary of the HEC-HMS model results for each of the up-slope basins, including peak flow rate, time to peak, and total inflow volume for the 10-, 25-, and 100-year events.

Table 2: HEC-HMS Offsite Basin Model Results Summary

	10-Year Event			25-Year Event			100-Year Event		
Basin	Peak Flow Rate (cfs)	Time to Peak (hrs)	Total Volume (Ac-Ft)	Peak Flow Rate (cfs)	Time to Peak (hrs)	Total Volume (ac-ft)	Peak Flow Rate (cfs)	Time to Peak (hrs)	Total Volume (ac-ft)
N4b	303	12:06	22.8	472	12:06	34.9	777	12:05	57
N3a	438	12:08	36.5	651	12:08	53.8	1,027	12:08	84.8
N2a	95	12:02	5.8	140	12:02	8.6	219	12:01	13.6
NW3	140	11:59	7.8	209	11:59	11.6	331	11:59	18.5
NW1	115	11:59	6.3	170	11:59	9.3	265	11:59	14.7
W1	553	12:05	38.9	807	12:04	56.6	1,249	12:04	88.2
SW5a	328	12:01	19.6	491	12:01	29.3	778	12:01	46.7
SW5b	599	12:12	56.6	878	12:12	82.3	1,367	12:11	128.2

3.2 FLO-2D Results

Pre-development flow patterns on the site generally trend from west to east with a slight crescent pattern across the site. The crescent pattern is described by a minor change in flow direction from east at the western BSPP site boundary to southeast at the eastern BSPP site boundary.

Simulated post-development flow patterns on the BSPP site are very similar to those shown for the pre-development conditions. Slight changes are noted along the north-south fence-lines and along the paved access road alignment where the proposed fencing and access road create a minor backwatering effect on flows.

Simulated post-development flow patterns downstream of the BSPP site are also very similar to those shown for the pre-development conditions. For the development of all units scenario under the 100-year storm event, slight increases in maximum flow depth of approximately 0.1 to 0.2 feet are noted near the southeast corner of the FLO-2D model domain where flows tend to be concentrated prior to descending from the Mesa. No other material changes to maximum flow depth or maximum flow velocity were noted downstream of the BSPP site.

Tables 3, 4, and 5 provide a summary of peak flow rate at each of the seven flow analysis cross-sections (shown in Figure 5) under the three model scenarios, for the 10- and 100-year storm events, respectively. Tables 6, 7, and 8 provide a summary of total flow volume at each of the

flow analysis cross-sections under the three model scenarios, for the 10- and 100-year storm events, respectively.

Table 3: Peak Flow Rate (CFS) at Flow Analysis Cross-Sections for 10-Year Event

	Pre-Development	Post-Development (Unit 1)	Change (Unit 1 – Pre)	Post Development (All Units)	Change (All Units – Pre)
XS-1	119.3	119.3	0.0	129.2	9.9
XS-2	175.8	177.8	2.0	190.9	15.1
XS-3	205.2	212.2	7.0	223.8	18.6
XS-4	108.3	112.2	3.9	113.0	4.7
XS-5	135.4	136.3	0.9	147.0	11.6
XS-6	1.8	1.8	0.0	1.6	-0.2
XS-7	4.3	4.4	0.1	4.2	-0.1

Table 4: Peak Flow Rate (CFS) at Flow Analysis Cross-Sections for 25-Year Event

	Pre-Development	Post-Development (Unit 1)	Change (Unit 1 – Pre)	Post Development (All Units)	Change (All Units – Pre)
XS-1	295.9	299.1	3.2	311.9	16.0
XS-2	412.1	414.9	2.8	432.1	20.0
XS-3	471.6	470.8	-0.8	499.1	27.5
XS-4	264.0	269.1	5.1	272.6	8.6
XS-5	306.7	308.6	1.9	317.1	10.4
XS-6	4.1	4.1	0.0	4.1	0.0
XS-7	18.0	17.8	-0.2	18.1	0.1

Table 5: Peak Flow Rate (CFS) at Flow Analysis Cross-Sections for 100-Year Event

	Pre-Development	Post-Development (Unit 1)	Change (Unit 1 – Pre)	Post Development (All Units)	Change (All Units – Pre)
XS-1	613.8	623.3	9.5	638.6	24.8
XS-2	844.1	859.4	15.3	898.7	54.6
XS-3	1149.4	1174.3	24.9	1212.1	62.7
XS-4	617.2	624.6	7.4	559.9	-57.3
XS-5	909.7	913.6	3.9	911.3	1.6
XS-6	10.7	10.7	0.0	10.6	-0.1
XS-7	48.6	48.6	0.0	48.9	0.3

Table 6: Total Outflow Volume (AF) at Flow Analysis Cross-Sections for 10-Year Event

	Pre-Development	Post-Development (Unit 1)	Change (Unit 1 – Pre)	Post Development (All Units)	Change (All Units – Pre)
XS-1	407.3	415.7	8.4	445.0	37.7
XS-2	511.9	519.8	7.9	522.3	10.4
XS-3	573.9	582.3	8.6	615.7	41.8
XS-4	152.6	153.7	1.1	156.7	4.1
XS-5	400.9	409.5	8.6	438.1	37.2
XS-6	0.8	0.8	0.0	0.8	0.0
XS-7	4.9	4.9	0.0	5.0	0.1

Table 7: Total Outflow Volume (AF) at Flow Analysis Cross-Sections for 25-Year Event

	Pre-Development	Post-Development (Unit 1)	Change (Unit 1 – Pre)	Post Development (All Units)	Change (All Units – Pre)
XS-1	853.3	863.7	10.4	900.9	47.6
XS-2	1016.9	1026.2	9.3	1067.5	50.6
XS-3	1077.8	1088.3	10.5	1130.6	52.8
XS-4	282.4	284.7	2.3	288.0	5.6
XS-5	754.0	764.6	10.6	801.0	47.0
XS-6	2.3	2.3	0.0	2.3	0.0
XS-7	16.0	16.0	0.0	16.0	0.0

Table 8: Total Outflow Volume (AF) at Flow Analysis Cross-Sections for 100-Year Event

	Pre-Development	Post-Development (Unit 1)	Change (Unit 1 – Pre)	Post Development (All Units)	Change (All Units – Pre)
XS-1	1598.4	1609.8	11.4	1652.4	54.0
XS-2	1966.8	1978.6	11.8	2033.7	66.9
XS-3	2014.3	2027.3	13.0	2083.3	69.0
XS-4	521.9	525.9	4.0	510.3	-11.4
XS-5	1416.6	1430.3	13.7	1467.2	50.6
XS-6	5.1	5.1	0.0	5.1	0.0
XS-7	38.1	38.1	0.0	38.1	0.0

Plots showing hydrographs for each of the flow analysis cross-sections under the three model scenarios, for the 10-, 25-, and 100-year storm events are presented in Appendices D, E, and F, respectively.

FLO-2D provides, as an output, volumetric mass balance of water inflows, losses, retention, and outflows represented by the following five components:

A. Off-Site Surface Water Inflow (input from HEC-HMS model).

B. On-Site Precipitation Inflow.

C. On-Site Initial Abstraction and Infiltration Losses.

D. On-Site Watershed Storage.

E. Surface Water Outflow.

Perfect mass balance for a given simulation results in A + B - C - D = E. Mass balance results for each of the model scenarios are presented in Tables 9, 10, and 11.

Table 9: FLO-2D Mass Balance Results (AF) for 10-Year Hydrologic Event

Parameter	Row	Pre-Development	Unit 1		All Units	
		Volume	Volume	Change	Volume	Change
Off-Site SW Inflow	A	194.6	194.6	0.0	194.6	0.0
On-Site Precip. Inflow	B	3687.8	3687.8	0.0	3687.8	0.0
On-Site Initial Ab. and Infil. Loss	C	2594.9	2586.1	-8.8	2552.6	-42.3
On-Site Watershed Storage	D	642.7	643.3	0.6	643.3	0.6
Surface Water Outflow	E	644.8	653.1	8.3	686.6	41.8
Residual		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 10: FLO-2D Mass Balance Results (AF) for 25-Year Hydrologic Event

Parameter	Row	Pre-Development	Unit 1		All Units	
		Volume	Volume	Change	Volume	Change
Off-Site SW Inflow	A	286.6	286.6	0.0	286.6	0.0
On-Site Precip. Inflow	B	4683.6	4683.5	-0.1	4683.6	0.1
On-Site Initial Ab. and Infil. Loss	C	2936.8	2925.7	-11.1	2883.1	-53.7
On-Site Watershed Storage	D	656.5	657.0	0.5	657.0	0.5
Surface Water Outflow	E	1376.9	1387.4	10.5	1430.2	53.3
Residual		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 11: FLO-2D Mass Balance Results (AF) for 100-Year Hydrologic Event

Parameter	Row	Pre-Development	Unit 1		All Units	
		Volume	Volume	Change	Volume	Change
Off-Site SW Inflow	A	452.0	452.0	0.0	452.0	0.0
On-Site Precip. Inflow	B	6343.1	6343.1	0.0	6343.0	-0.1
On-Site Initial Ab. and Infil. Loss	C	3360.2	3346.3	-13.9	3291.0	-69.2
On-Site Watershed Storage	D	660.4	660.8	0.4	660.9	0.5
Surface Water Outflow	E	2774.5	2788.0	13.5	2843.1	68.6
Residual		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Maps showing the spatial distribution of maximum flow velocity, maximum flow depth, and the changes in these parameters resulting from development of the Modified Project for the 10-, 25-, and 100-year storm events are presented in Appendices A, B, and C, respectively. Table 12 provides a guide to the organization of these appendices.

Table 12: Appendix Map Matrix

Map Type	10-Year Event		25-Year Event		100-Year Event	
	Velocity	Depth	Velocity	Depth	Velocity	Depth
Pre-Development	A1	A6	B1	B6	C1	C6
Post-Development (Unit 1)	A2	A7	B2	B7	C2	C7
Change (Unit 1 – Pre)	A3	A8	B3	B8	C3	C8
Post-Development (All Units)	A4	A9	B4	B9	C4	C9
Absolute Change (All Units – Pre)	A5	A10	B5	B10	C5	C10

Noteworthy findings from the maps showing change between pre- and post-development conditions are summarized as follows:

- Figures A3, B3, and C3: 10-, 25-, and 100-Year Storm Events – Max. Velocity – Unit 1: Changes in maximum velocity are limited to small areas, particularly for the 10- and 25-year storms. Small changes in maximum velocity (0.1 - 0.2 fps), both increases and decreases, exist for the 10-year storm in the southwest corner of the Modified Project site (Figure A3). The 25-year storm indicates slight decreases in the southwest corner of the Modified Project site and small increases on the interior of the Modified Project site. Additionally, the 25-year storm shows very slight decreases (0.05 - 0.1 fps) in the southeast corner of the model boundary (Figure B3). The 100-year storm shows more widespread (but small) changes in maximum velocity, particularly on the interior of the Modified Project site and in the southeast area of the model boundary, with changes ranging from 0.05 - 0.2 fps.
- Figures A5, B5, and C5: 10-, 25-, and 100-Year Storm Events – Max Velocity – All Units: Small increases in maximum velocity (0.1 - 0.2 fps) are noted for all three storm events at limited locations within the Modified Project site and toward the southwest model boundary. Slight decreases in maximum velocity are also noted near the southwest corner of the model boundary for the 100-year storm (Figure C5). Increases in maximum velocity ranging from 0.1 - 0.2 fps are also observed for the 100-year storm along the southern and eastern boundaries of the Modified Project site.

- Figures A8, B8, and C8: 10-, 25-, and 100-Year Storm Events – Max Depth – Unit 1: Aside from 0.05 - 0.2 ft decreases in maximum flow depth in the southwest corner of the Modified Project site (Figures A8 and B8), very few changes in maximum flow depth are observed in the 10- and 25-year storm events for the Unit 1 development scenario. Under the 100-year storm event, very small areas in the southwest corner of the Modified Project site, the northeast corner of Unit 1, and to the southeast of the Modified Project site showed slight to moderate decreases in maximum flow depth (0.1 - 0.4 ft) (Figure C8).
- Figures A10, B10, and C10: 10, 25, and 100-Year Storm Events – Max Depth – All Units: Under the 10-year storm event, a few areas showed a small decrease in maximum depth (0.05 - 0.2 ft) just to the southeast of the Modified Project site. Additionally, a small area of slight maximum flow depth increases (0.1 - 0.2 ft) occurred near the southeast corner of the model boundary (Figure A10). The primary maximum flow depth changes in the 25-year storm were small increases (0.1 – 0.2 ft) in the southeastern corner of the model boundary. There were also isolated slight increases and decreases inside the Modified Project site (Figure B10). The 100-year storm event showed moderate (0.3 - 0.4 ft) maximum flow depth decreases along the southern and eastern boundaries of the Modified Project site with adjacent small increases in maximum flow depth (0.1 - 0.2 ft) in the same areas (Figure C10). There were also slight maximum flow depth increases in the southeast section of the model boundary.

Findings noted in the list above are consistent with the changes in flow characteristics observed in the flow analysis cross-sections.

4. CONCLUSIONS

Post-development flow conditions at and downstream of the Modified Project site are generally similar to the pre-development conditions, with some areas showing small increases in flow, and some areas showing small decreases in flow. Changes to flow patterns resulting from development of the BSPP site primarily consist of minor rerouting of flow within the Modified Project site resulting from development-related changes in interior surface roughness and construction of the access road and fencing. As illustrated in Tables 3 through 8 and on the maps showing changes between pre- and post-development conditions in Appendices A, B, and C; the changes to flow patterns downstream of the Modified Project site are limited to minor changes in peak flow rate, total outflow volume, maximum flow depth, and maximum velocity. The following list summarizes the simulated changes to the key hydraulic metrics related to surface water runoff resulting from development of the Modified Project:

1) The maximum simulated **increase in peak flow rate** at the flow analysis cross-sections was **+18.6 cfs**, **+27.5 cfs**, and **+62.7 cfs** for the 10-, 25-, and 100-year storm events, respectively (XS-3).

2) The maximum simulated **increase in outflow volume** at the flow analysis cross-sections was **+41.8 AF**, **+52.8 AF**, and **+69.0 AF** for the 10-, 25-, and 100-year storm events, respectively (XS-3).

3) The maximum simulated **change in maximum velocity** downstream of the Modified Project site was **+/-0.3 fps**, which occurred under the development of all Units scenario. Changes to maximum velocities within the Modified Project site were similar in magnitude to those downstream of the site.

4) The maximum simulated **change in maximum flow depth** within the model domain was **+/-0.4 feet**, which occurred under the development of all Units scenario under the 100-year storm event. The majority of simulated changes in maximum flow depth (where changes are shown to occur) generally do not exceed ±0.2 feet (±2 inches) within and downstream of the site. Changes to maximum flow depths within the Modified Project site were similar in magnitude to those downstream of the site.

The anticipated changes to flow characteristics described above are considered to be very minor, and demonstrate that the Modified Project will not materially impact the drainage conditions associated with the 10-, 25-, or 100-year precipitation events within, or down-slope of the Modified Project site boundary.

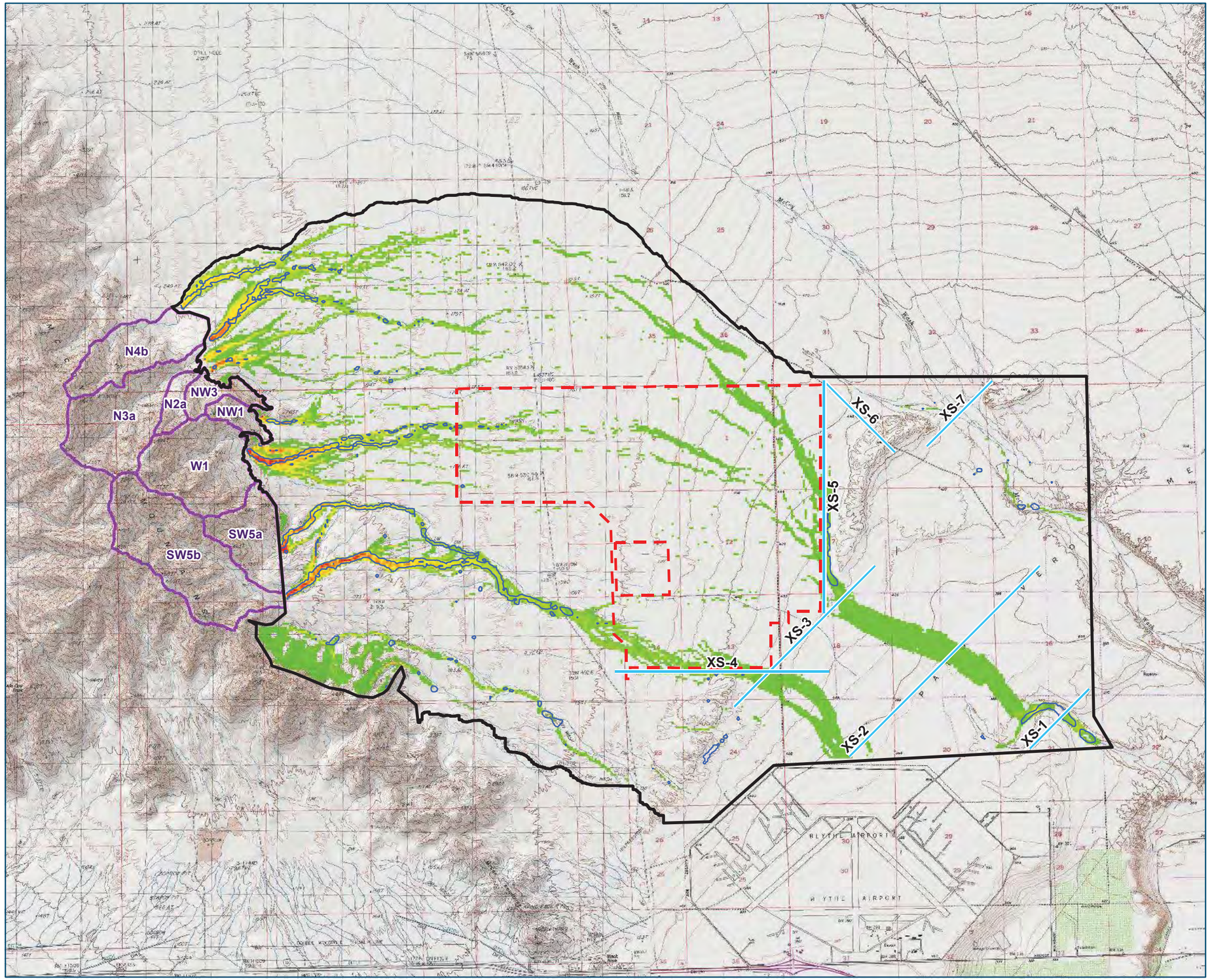
APPENDIX A

10-year Storm Event Pre/Post-Development Hydrology
Maximum Velocity, Maximum Flow Depth, and Change Maps

Blythe Solar Power Project

Riverside County, CA **03/29/2013**

FIGURE A1
10-YEAR STORM EVENT
MAX VELOCITY
PRE-DEVELOPMENT



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_A1_Velocity_Pre_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE A2
10-YEAR STORM EVENT
MAX VELOCITY
POST-DEVELOPMENT (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

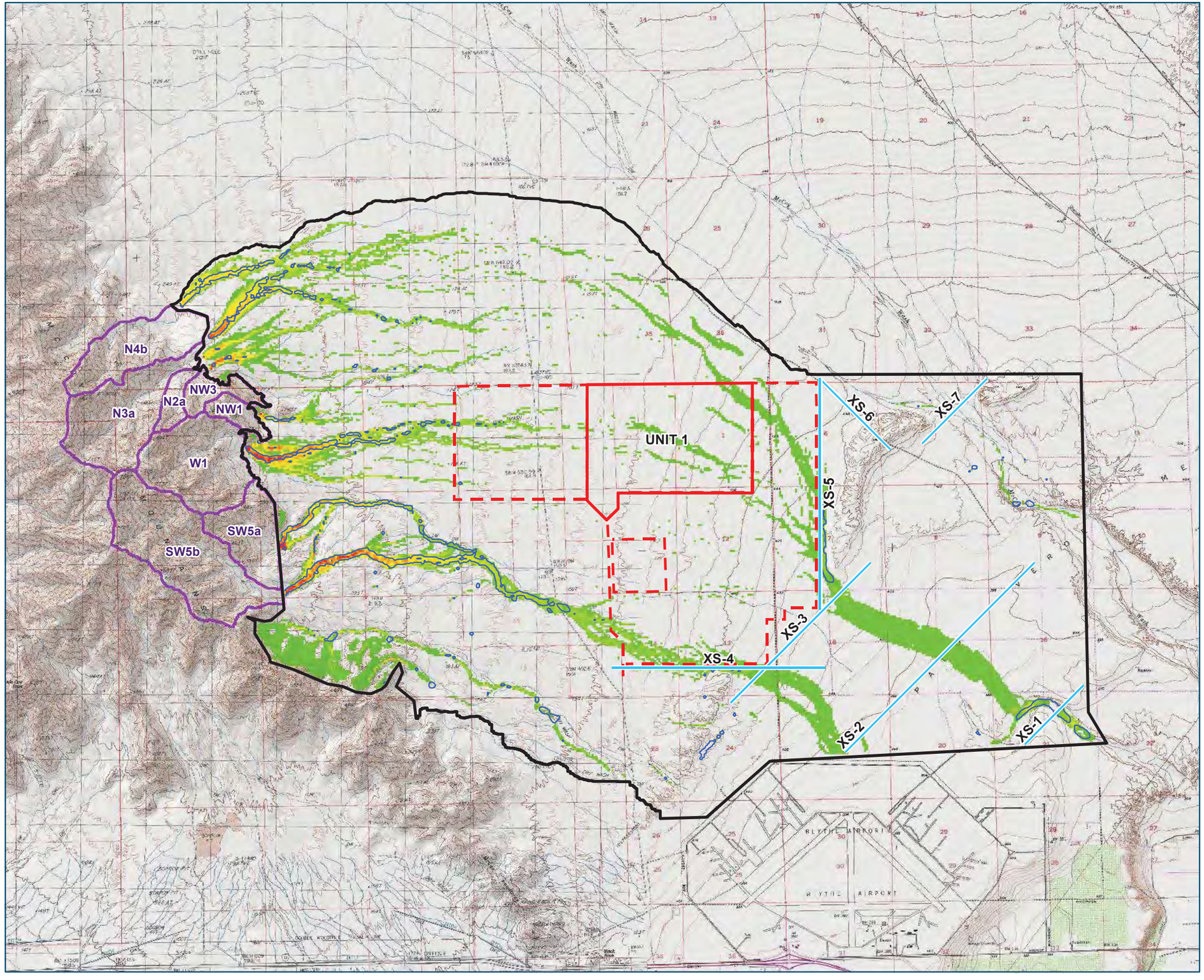
Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N



PROJECT LOCATOR MAP

File Name: Fig_A2_Velocity_U1Post_10yr
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PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE A3
10-YEAR STORM EVENT
CHANGE IN MAX VELOCITY
POST - PRE (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Velocity (feet/second)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1
N4b
N3a
N2a
NW3
NW1
W1
SW5a
SW5b
XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7
PALO VERDE
BLYTHE AIRPORT

PROJECT LOCATOR MAP

File Name: Fig_A3_Velocity_U1Delta_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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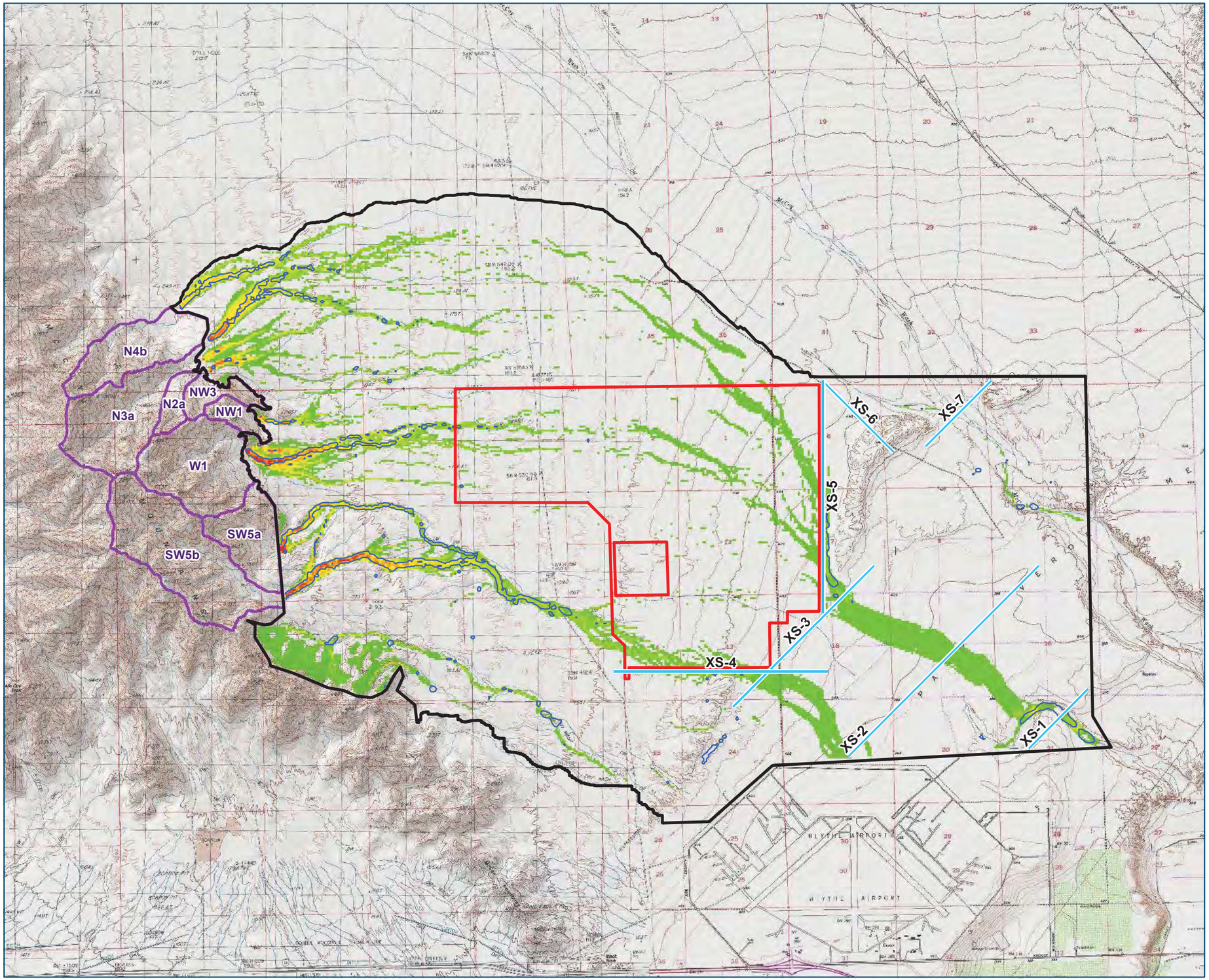
Riverside County, CA **03/29/2013**

FIGURE A4
10-YEAR STORM EVENT
MAX VELOCITY
POST-DEVELOPMENT (ALL UNITS)



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_A4_Velocity_Post_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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FIGURE A5
10-YEAR STORM EVENT
CHANGE IN MAX VELOCITY
POST - PRE (ALL UNITS)

Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Velocity (feet/second)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_A5_Velocity_Delta_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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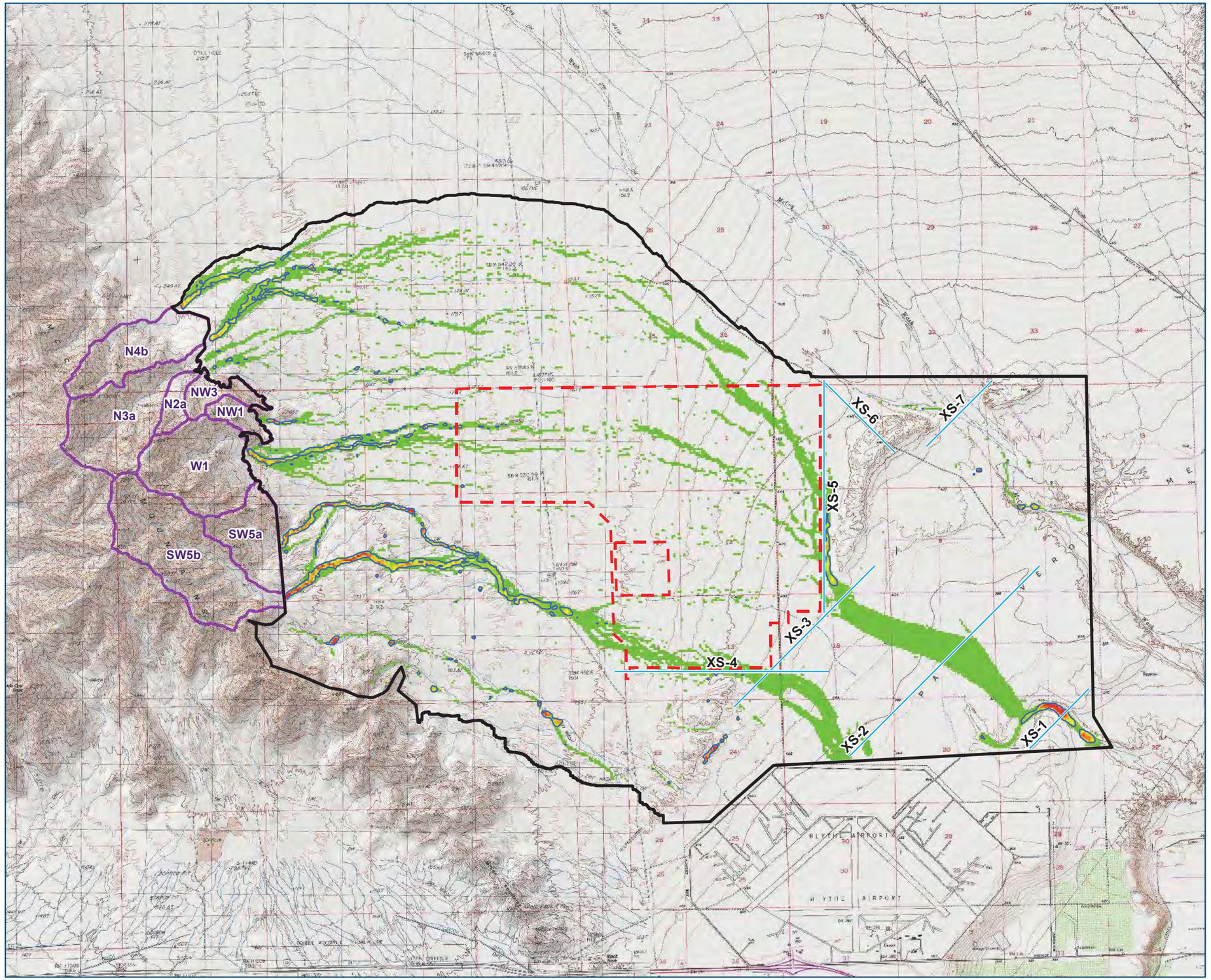
Riverside County, CA **03/29/2013**

FIGURE A6
10-YEAR STORM EVENT
MAX FLOW DEPTH
PRE-DEVELOPMENT



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_A6_Velocity_Pre_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE A7
10-YEAR STORM EVENT
MAX FLOW DEPTH
POST-DEVELOPMENT (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1

N4b
NW3
N2a
NW1
N3a
W1
SW5a
SW5b

XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7

BLYTHE AIRPORT

PROJECT LOCATOR MAP

File Name: Fig_A7_Depth_U1Post_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE A8

10-YEAR STORM EVENT
CHANGE IN MAX FLOW DEPTH
POST - PRE (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Flow Depth (feet)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1

N4b
NW3
N2a
N3a
NW1
W1
SW5a
SW5b

XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7

BLYTHE AIRPORT

PROJECT LOCATOR MAP

File Name: Fig_A8_Depth_U1Delta_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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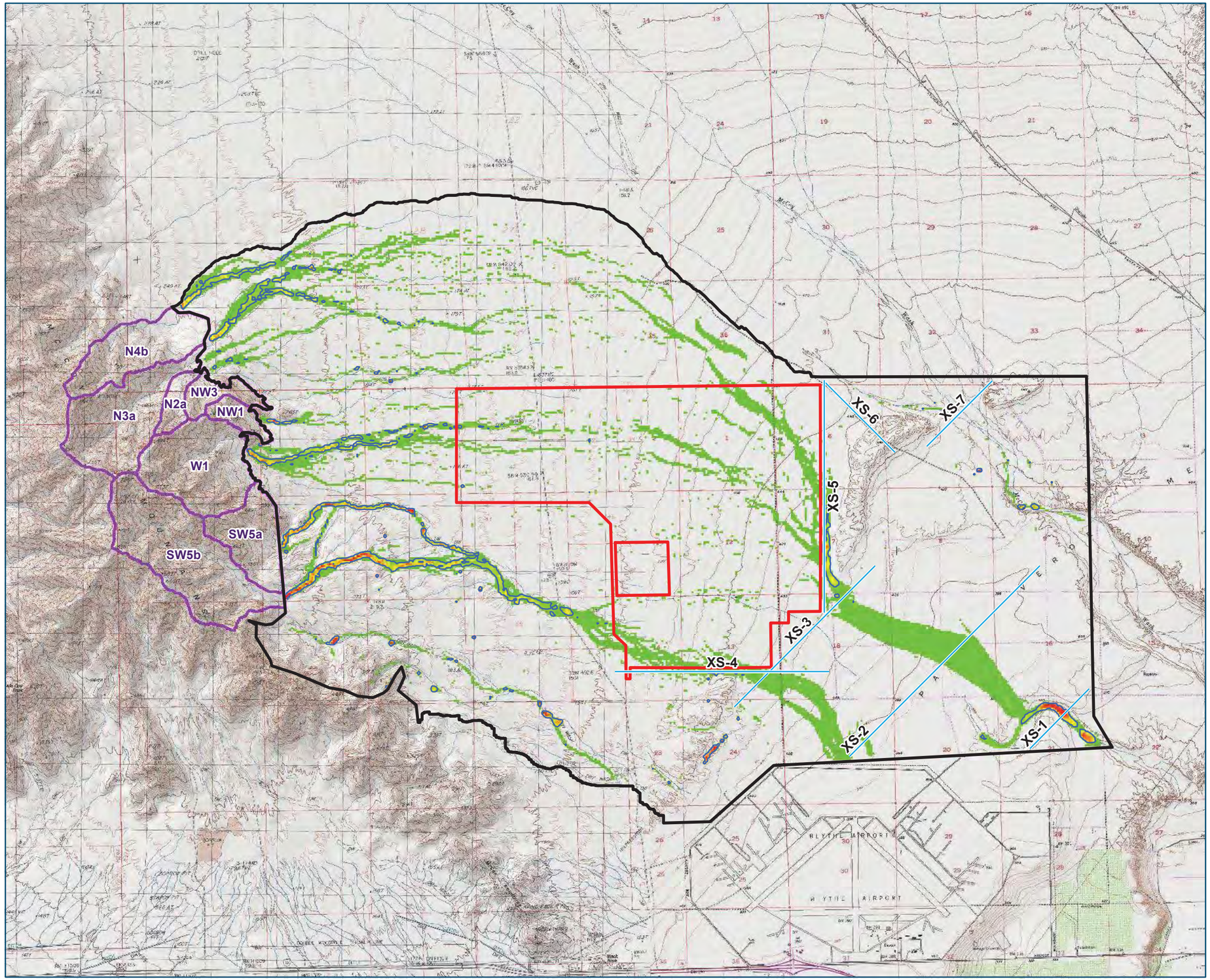
Riverside County, CA **03/29/2013**

FIGURE A9
10-YEAR STORM EVENT
MAX FLOW DEPTH
POST-DEVELOPMENT (ALL UNITS)



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_A9_Depth_Post_10yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE A10
10-YEAR STORM EVENT
CHANGE IN MAX FLOW DEPTH
POST - PRE (ALL UNITS)

Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Flow Depth (feet)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_A10_Depth_Delta_10yr
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PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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APPENDIX B

25-year Storm Event Pre/Post-Development Hydrology
Maximum Velocity, Maximum Flow Depth, and Change Maps

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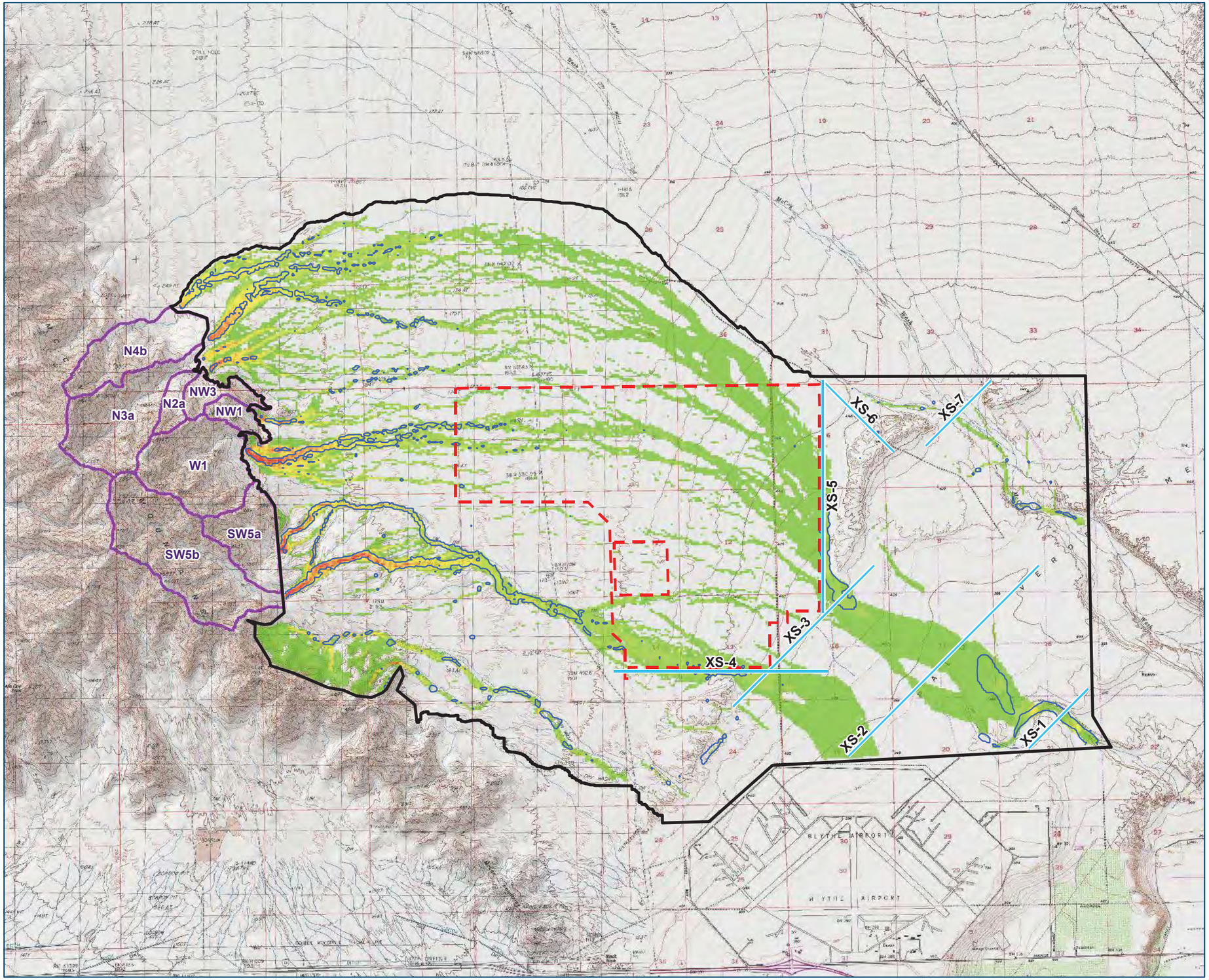
Riverside County, CA **03/29/2013**

FIGURE B1
25-YEAR STORM EVENT
MAX VELOCITY
PRE-DEVELOPMENT



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B1_Velocity_Pre_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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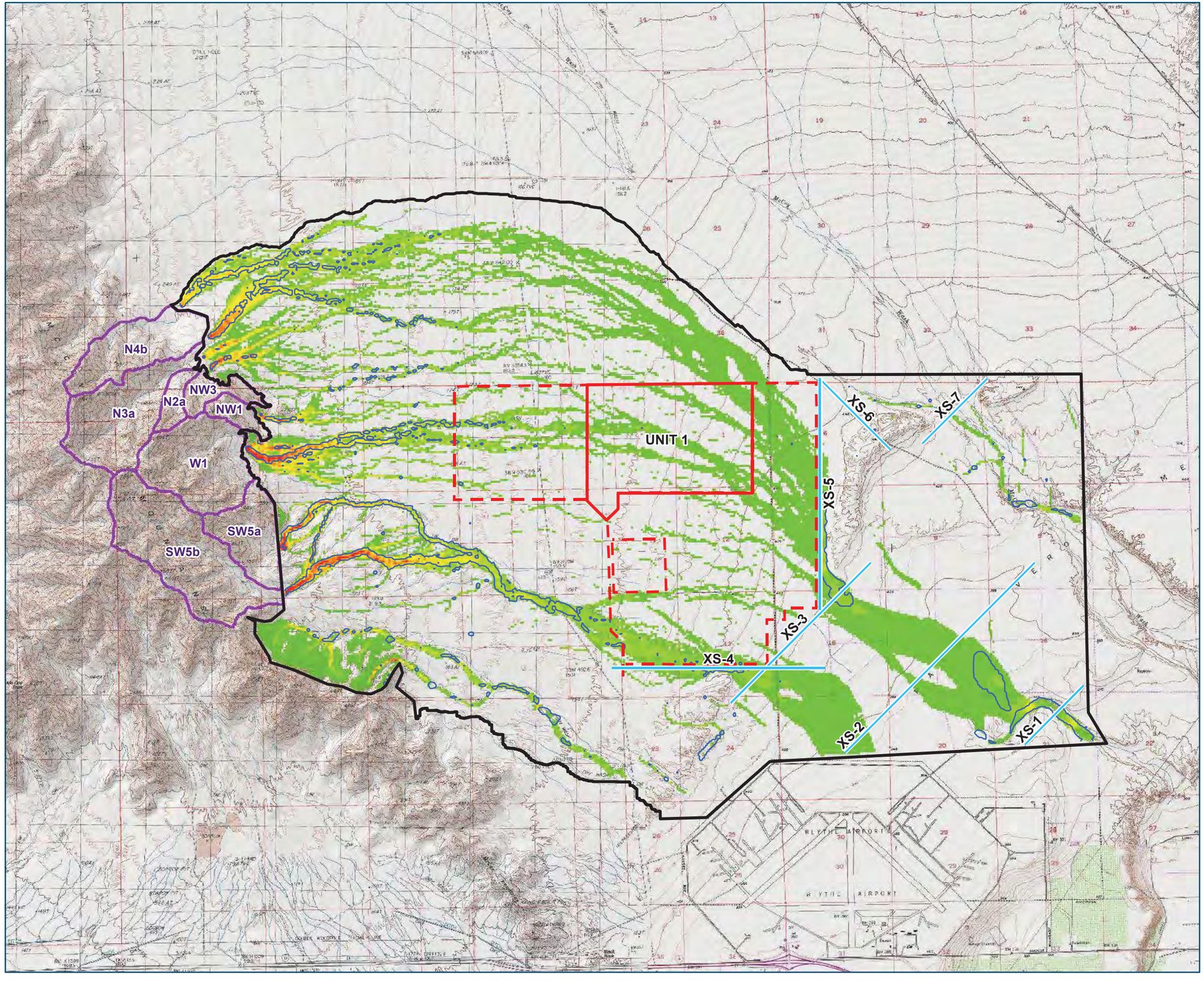
FIGURE B2
25-YEAR STORM EVENT
MAX VELOCITY
POST-DEVELOPMENT (UNIT 1)



Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B2_Velocity_U1Post_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE B3
25-YEAR STORM EVENT
CHANGE IN MAX VELOCITY
POST - PRE (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Velocity (feet/second)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1

N4b
NW3
N2a
N3a
NW1
W1
SW5a
SW5b

XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7

BLYTHE AIRPORT

PROJECT LOCATOR MAP

File Name: Fig_B3_Velocity_U1Delta_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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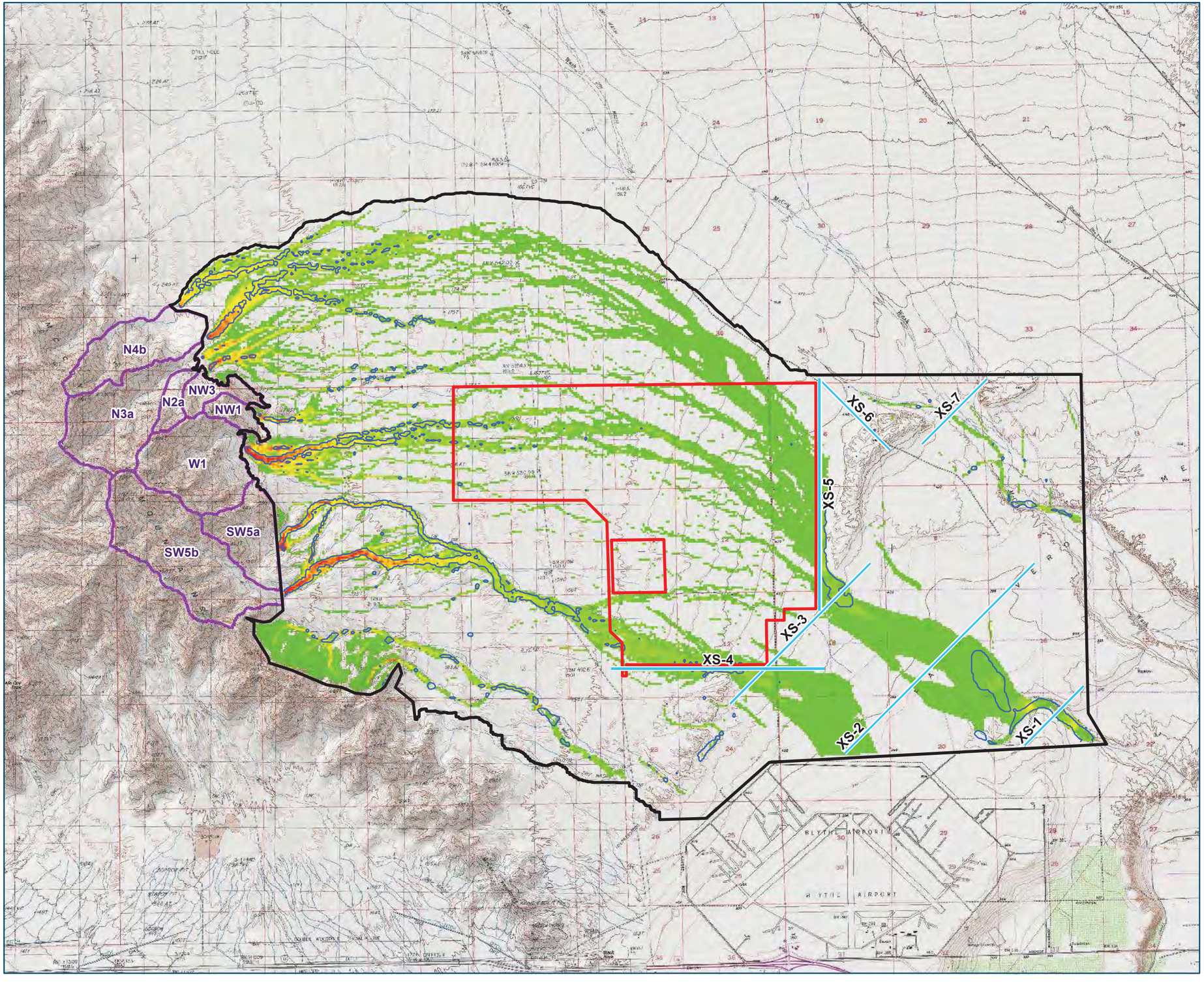
FIGURE B4
25-YEAR STORM EVENT
MAX VELOCITY
POST-DEVELOPMENT (ALL UNITS)



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B4_Velocity_Post_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE B5
25-YEAR STORM EVENT
CHANGE IN MAX VELOCITY
POST - PRE (ALL UNITS)

Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Velocity (feet/second)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B5_Velocity_Delta_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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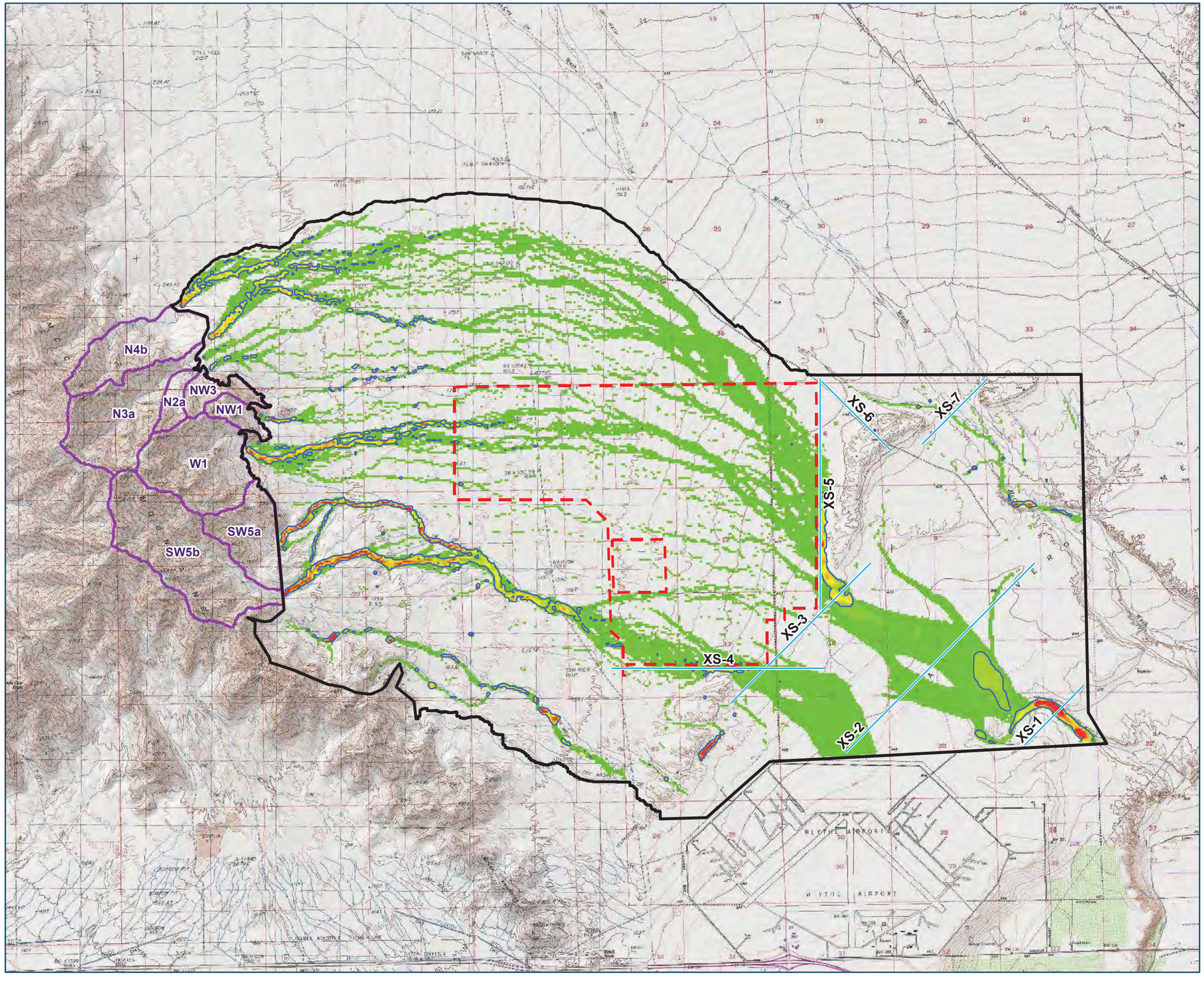
Riverside County, CA **03/29/2013**

FIGURE B6
25-YEAR STORM EVENT
MAX FLOW DEPTH
PRE-DEVELOPMENT



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B6_Velocity_Pre_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE B7
25-YEAR STORM EVENT
MAX FLOW DEPTH
POST-DEVELOPMENT (UNIT1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

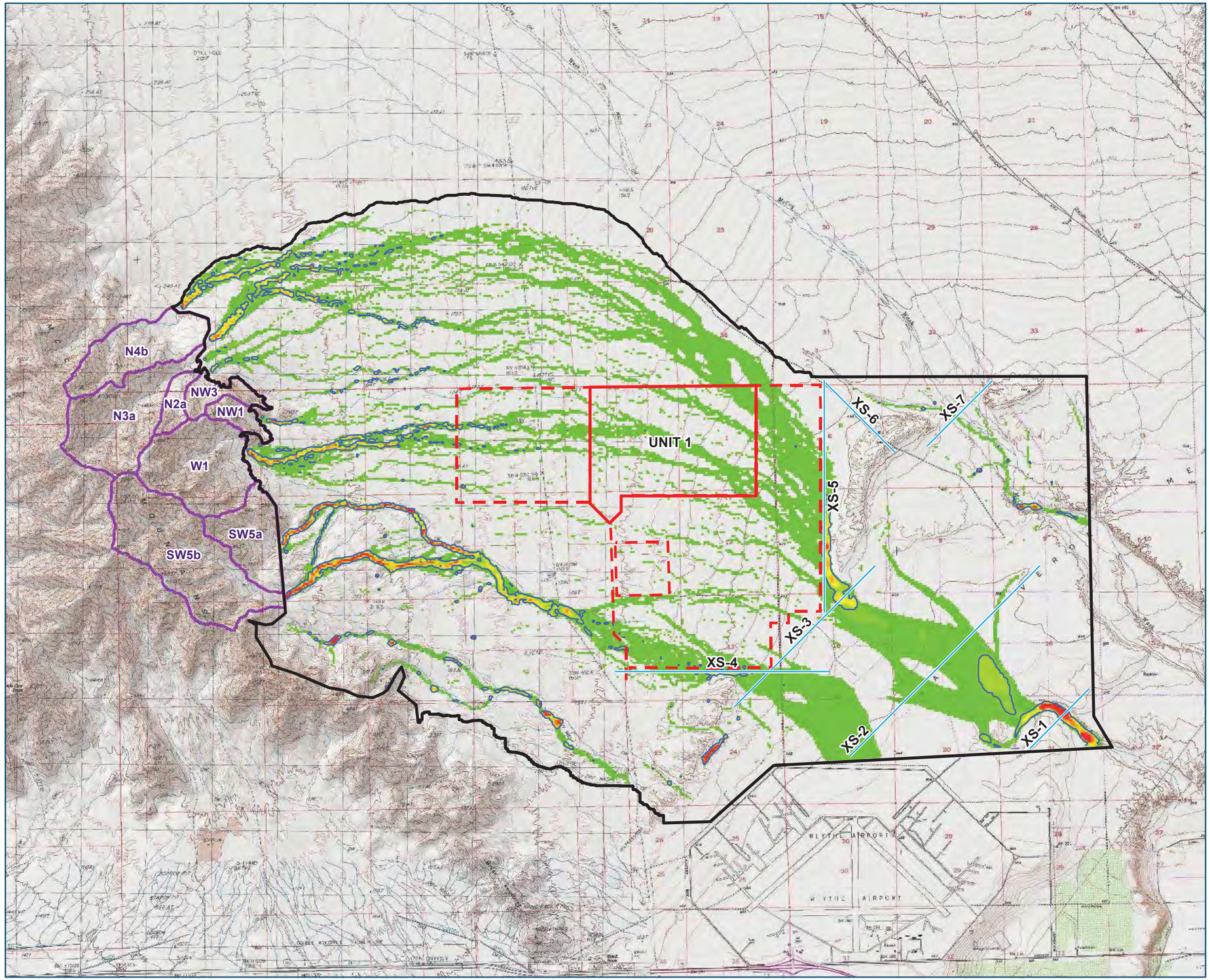
Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N



PROJECT LOCATOR MAP

File Name: Fig_B7_Depth_U1Post_25yr
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PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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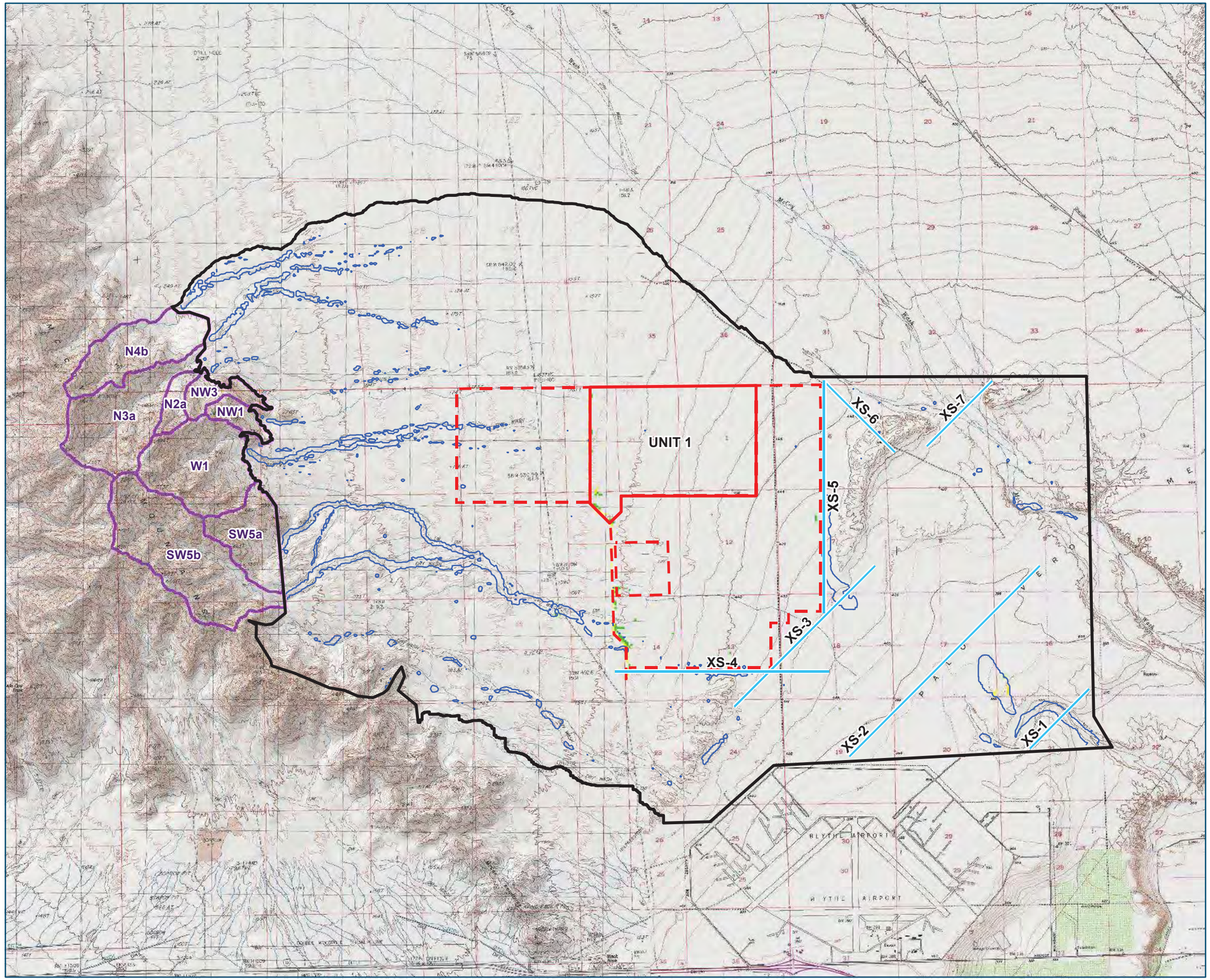
Riverside County, CA **03/29/2013**

FIGURE B8
25-YEAR STORM EVENT
CHANGE IN MAX FLOW DEPTH
POST - PRE (UNIT 1)



Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Flow Depth (feet)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B8_Depth_Delta_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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FIGURE B9
25-YEAR STORM EVENT
MAX FLOW DEPTH
POST-DEVELOPMENT (ALL UNITS)

Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B9_Depth_Post_25yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE B10
25-YEAR STORM EVENT
CHANGE IN MAX FLOW DEPTH
POST - PRE (ALL UNITS)

Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Flow Depth (feet)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_B10_Depth_Delta_25yr
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PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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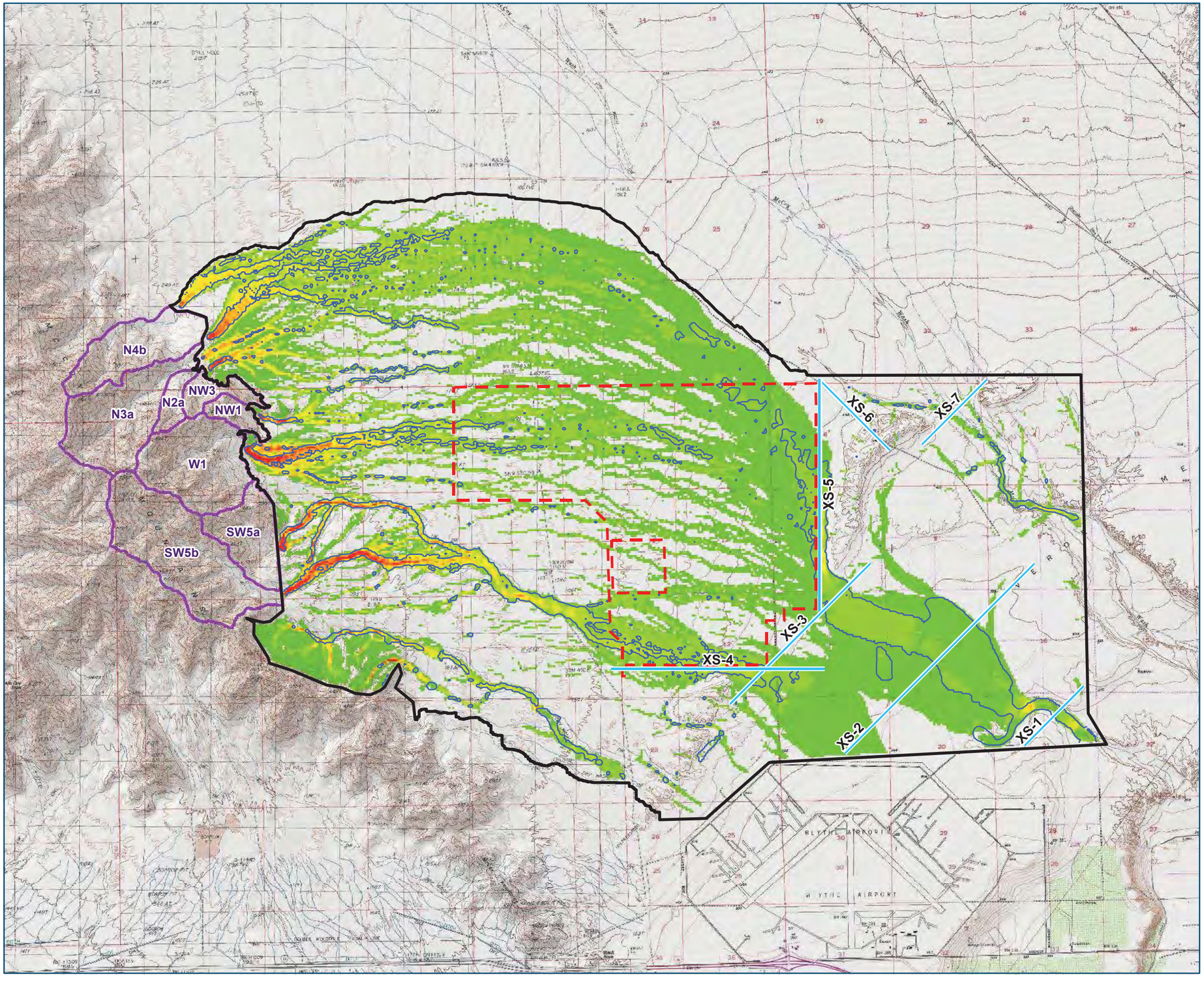
APPENDIX C

100-year Storm Event Pre/Post-Development Hydrology
Maximum Velocity, Maximum Flow Depth, and Change Maps

Blythe Solar Power Project

Riverside County, CA **03/29/2013**

FIGURE C1
100-YEAR STORM EVENT
MAX VELOCITY
PRE-DEVELOPMENT



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_C1_Velocity_Pre_100yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE C2

100-YEAR STORM EVENT
MAX VELOCITY
POST-DEVELOPMENT (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1

N4b
NW3
N2a
N3a
NW1
W1
SW5a
SW5b

XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7

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PROJECT LOCATOR MAP

File Name: Fig_C2_Velocity_U1Post_100yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE C3

100-YEAR STORM EVENT
CHANGE IN MAX VELOCITY
POST - PRE (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Velocity (feet/second)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1

N4b
N3a
N2a
NW3
NW1
W1
SW5a
SW5b

XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7

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PROJECT LOCATOR MAP

File Name: Fig_C3_Velocity_U1Delta_100yr
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Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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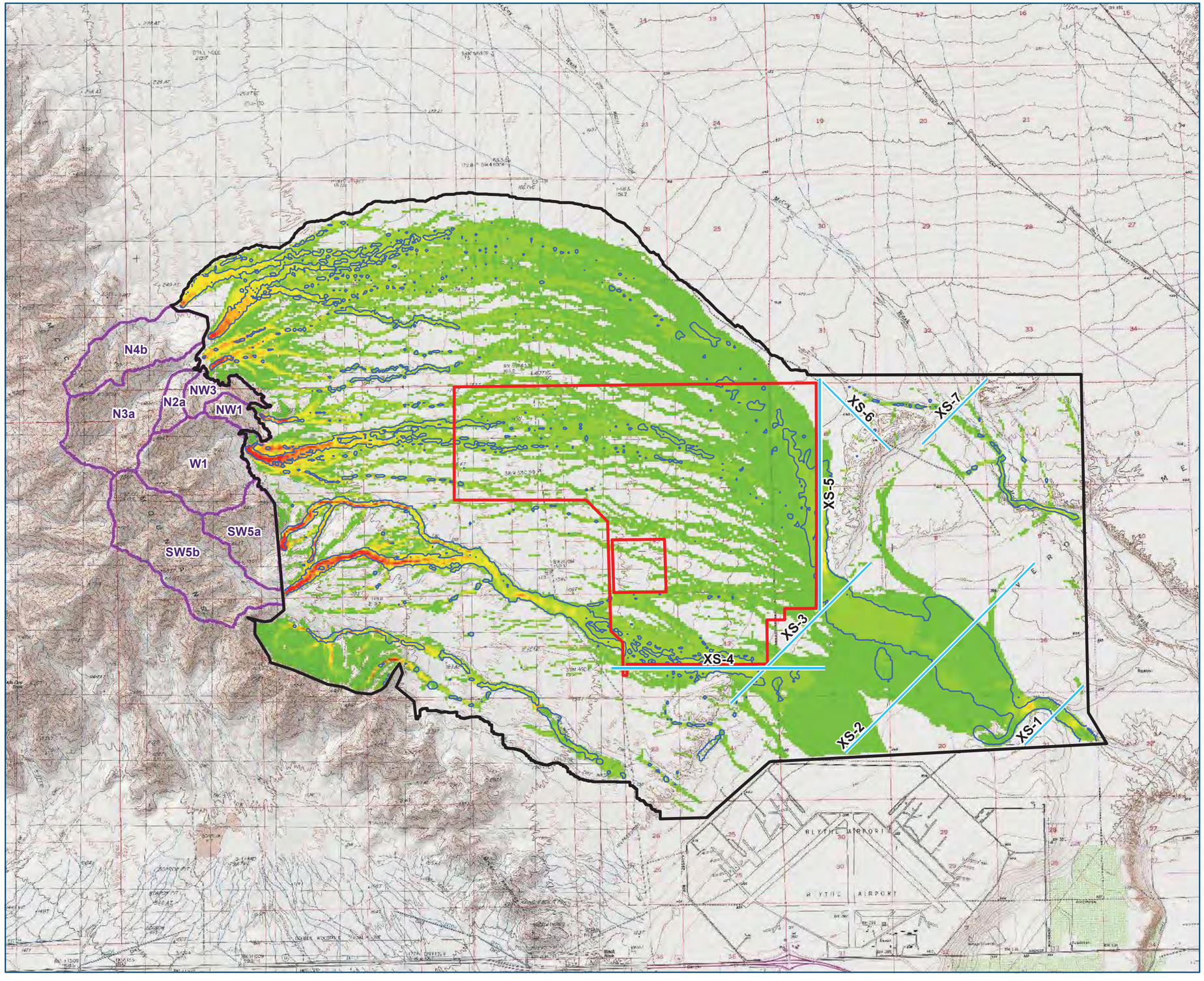
Riverside County, CA **03/29/2013**

FIGURE C4
100-YEAR STORM EVENT
MAX VELOCITY
POST-DEVELOPMENT (ALL UNITS)



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Velocity (feet/second)

- 0.00 - 0.25
- 0.26 - 0.50
- 0.51 - 0.75
- 0.76 - 1.00
- 1.01 - 1.25
- 1.26 - 1.50
- 1.51 - 1.75
- 1.76 - 2.00
- 2.01 - 2.25
- > 2.25

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_C4_Velocity_Post_100yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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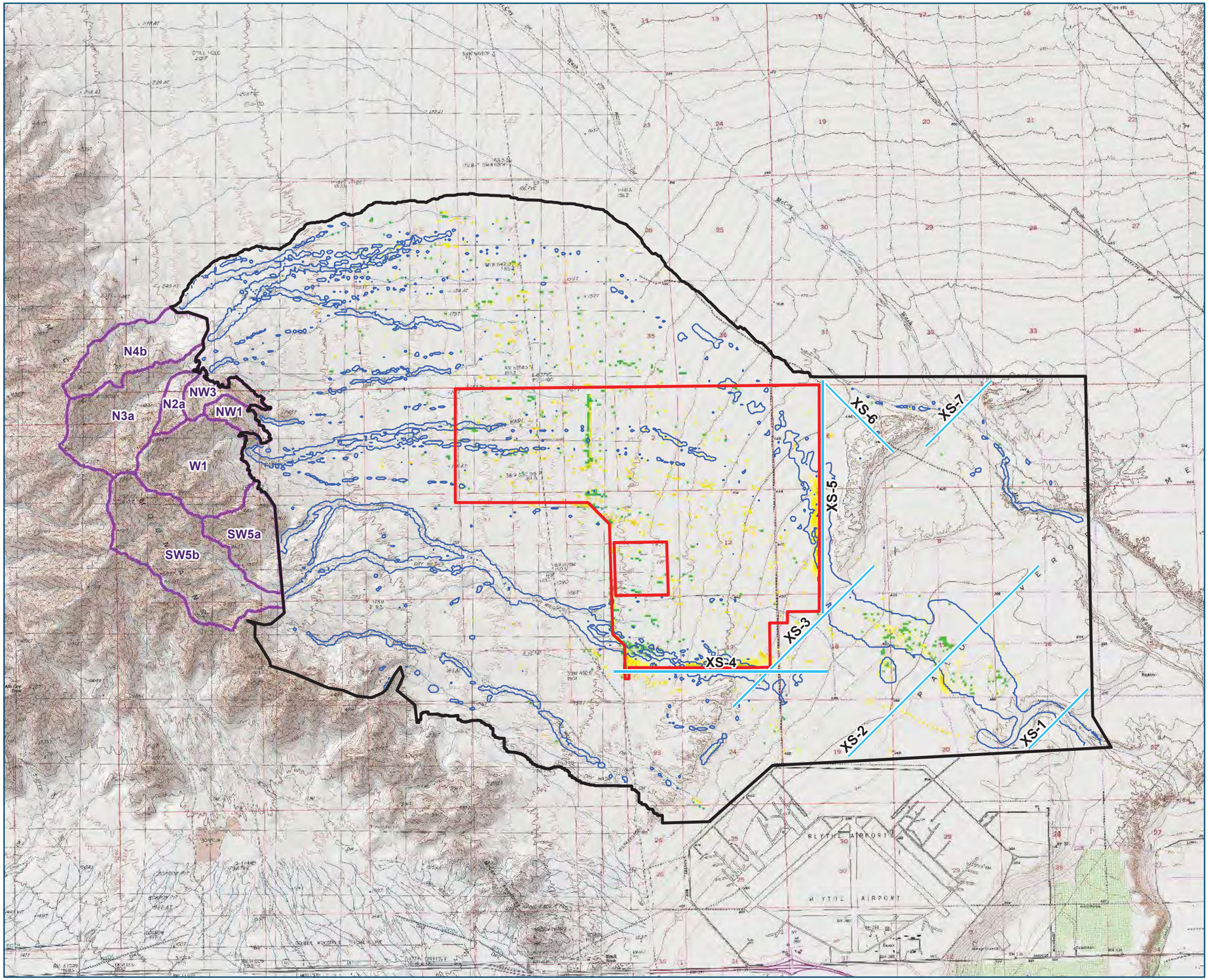
Riverside County, CA **03/29/2013**

FIGURE C5
100-YEAR STORM EVENT
CHANGE IN MAX VELOCITY
POST - PRE (ALL UNITS)



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Velocity (feet/second)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_C5_Velocity_Delta_100yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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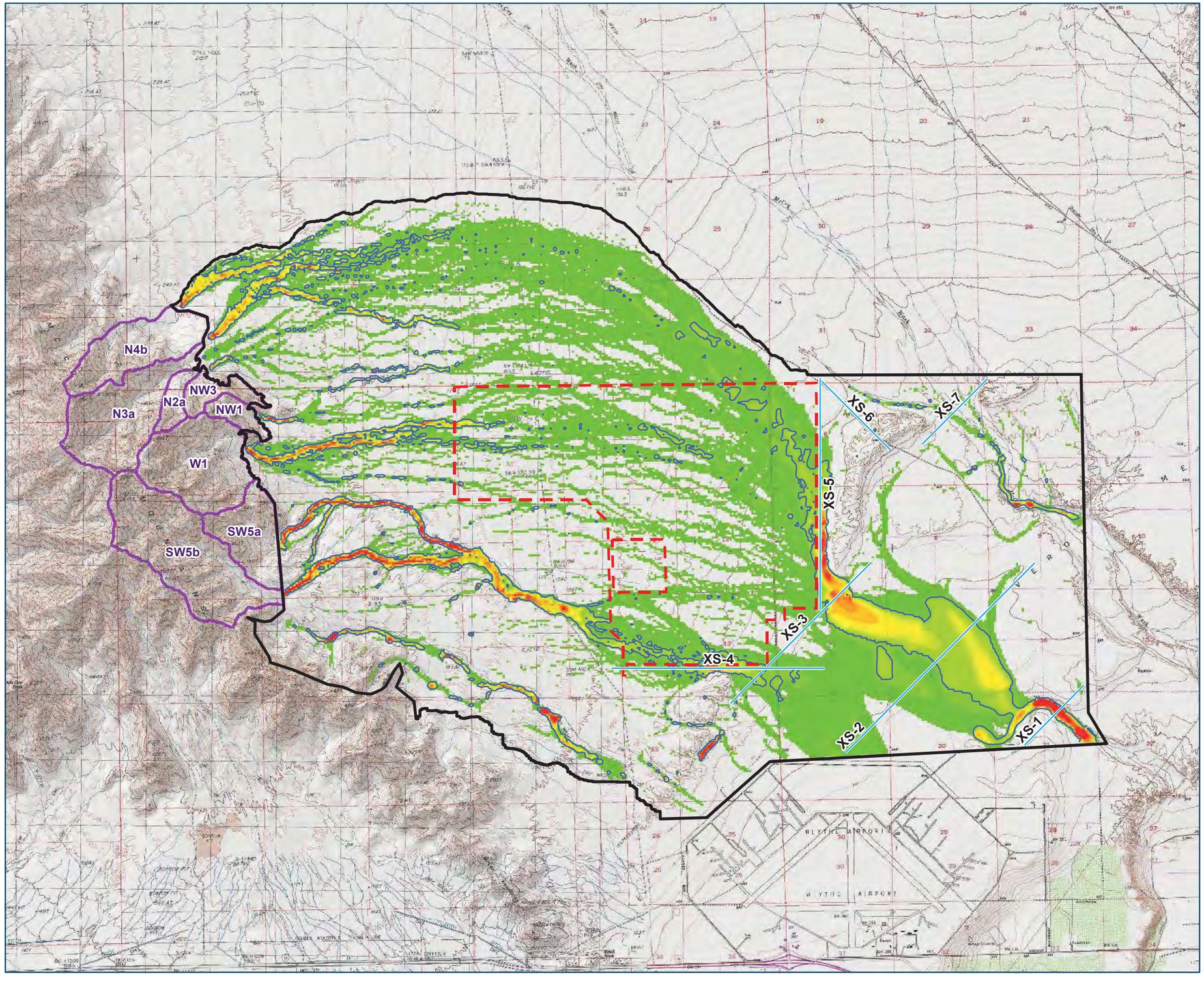
FIGURE C6
100-YEAR STORM EVENT
MAX FLOW DEPTH
PRE-DEVELOPMENT



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_C6_Velocity_Pre_100yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
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Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE C7
100-YEAR STORM EVENT
MAX FLOW DEPTH
POST-DEVELOPMENT (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1
N4b
N3a
N2a
NW3
NW1
W1
SW5a
SW5b
XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7
BLYTHE AIRPORT

PROJECT LOCATOR MAP

File Name: Fig_C7_Depth_U1Post_100yr
MXD File Path: NextEra\60280294_Blythe\GIS\Layouts\BSPP
PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE C8

100-YEAR STORM EVENT
CHANGE IN MAX FLOW DEPTH
POST - PRE (UNIT 1)

Legend

- BSPP Unit 1 Boundary
- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

Change in Max Flow Depth (feet)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

UNIT 1
N4b
NW3
N2a
NW1
N3a
W1
SW5a
SW5b
XS-1
XS-2
XS-3
XS-4
XS-5
XS-6
XS-7
BLYTHE AIRPORT

PROJECT LOCATOR MAP

File Name: Fig_C8_Depth_U1Delta_100yr
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PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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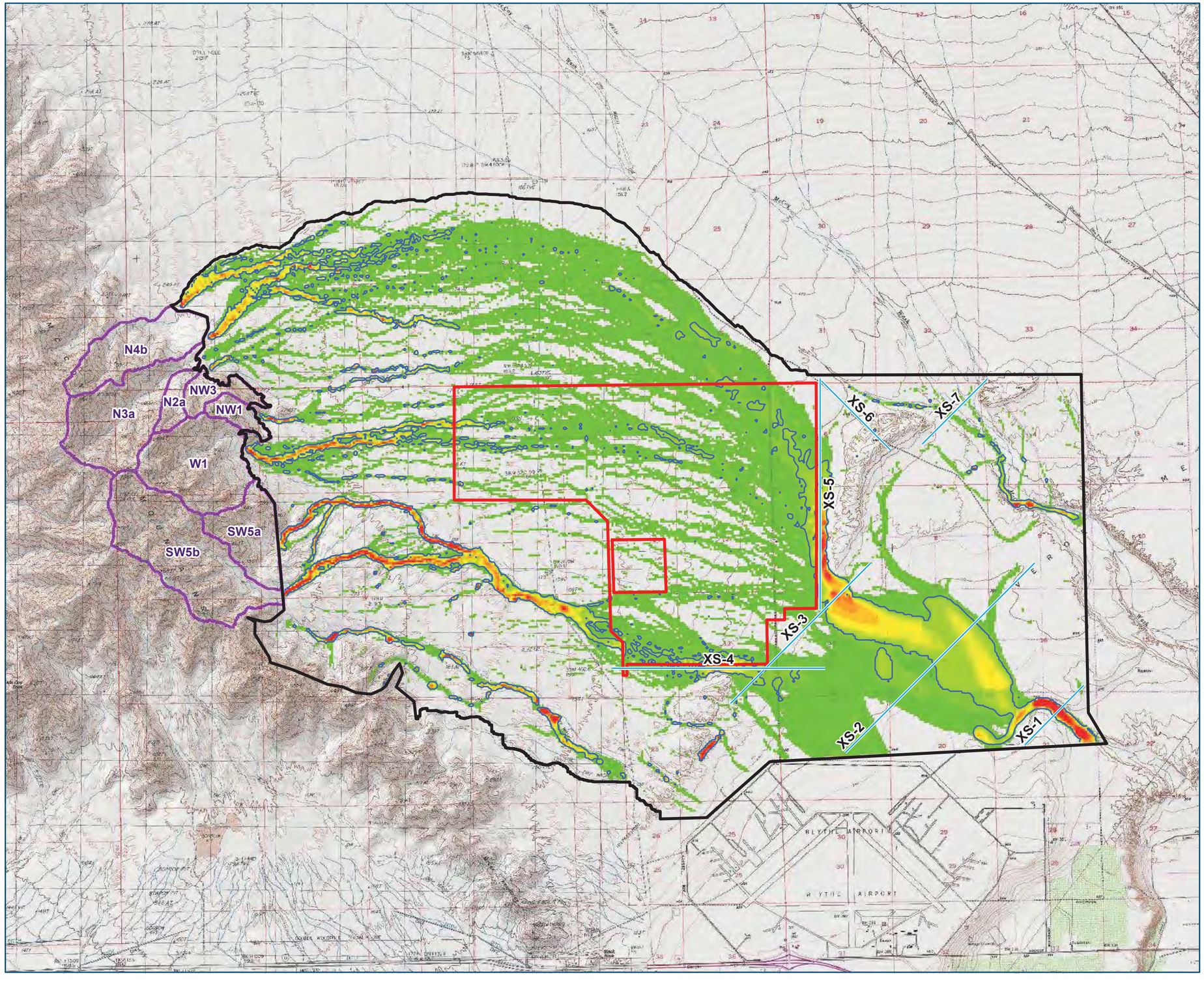
Riverside County, CA **03/29/2013**

FIGURE C9
100-YEAR STORM EVENT
MAX FLOW DEPTH
POST-DEVELOPMENT (ALL UNITS)



Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow*
- Flow Analysis Cross Sections

Flow Depth (feet)

0.0 - 0.2	1.1 - 1.2
0.3 - 0.4	1.3 - 1.4
0.5 - 0.6	1.5 - 1.6
0.7 - 0.8	1.7 - 1.8
0.8 - 0.9	1.9 - 2.0
0.9 - 1.0	> 2.0

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N

PROJECT LOCATOR MAP

File Name: Fig_C9_Depth_Post_100yr
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PDF File Path: NextEra\60280294_Blythe\GIS\Maps\BSPP
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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Riverside County, CA **03/29/2013**

FIGURE C10
100-YEAR STORM EVENT
CHANGE IN MAX FLOW DEPTH
POST - PRE (ALL UNITS)

Legend

- BSPP Site Boundary
- FLO-2D Model Boundary
- HEC-HMS Model Subbasin Boundaries
- Area of Concentrated Flow (Post-Development)*
- Flow Analysis Cross Sections

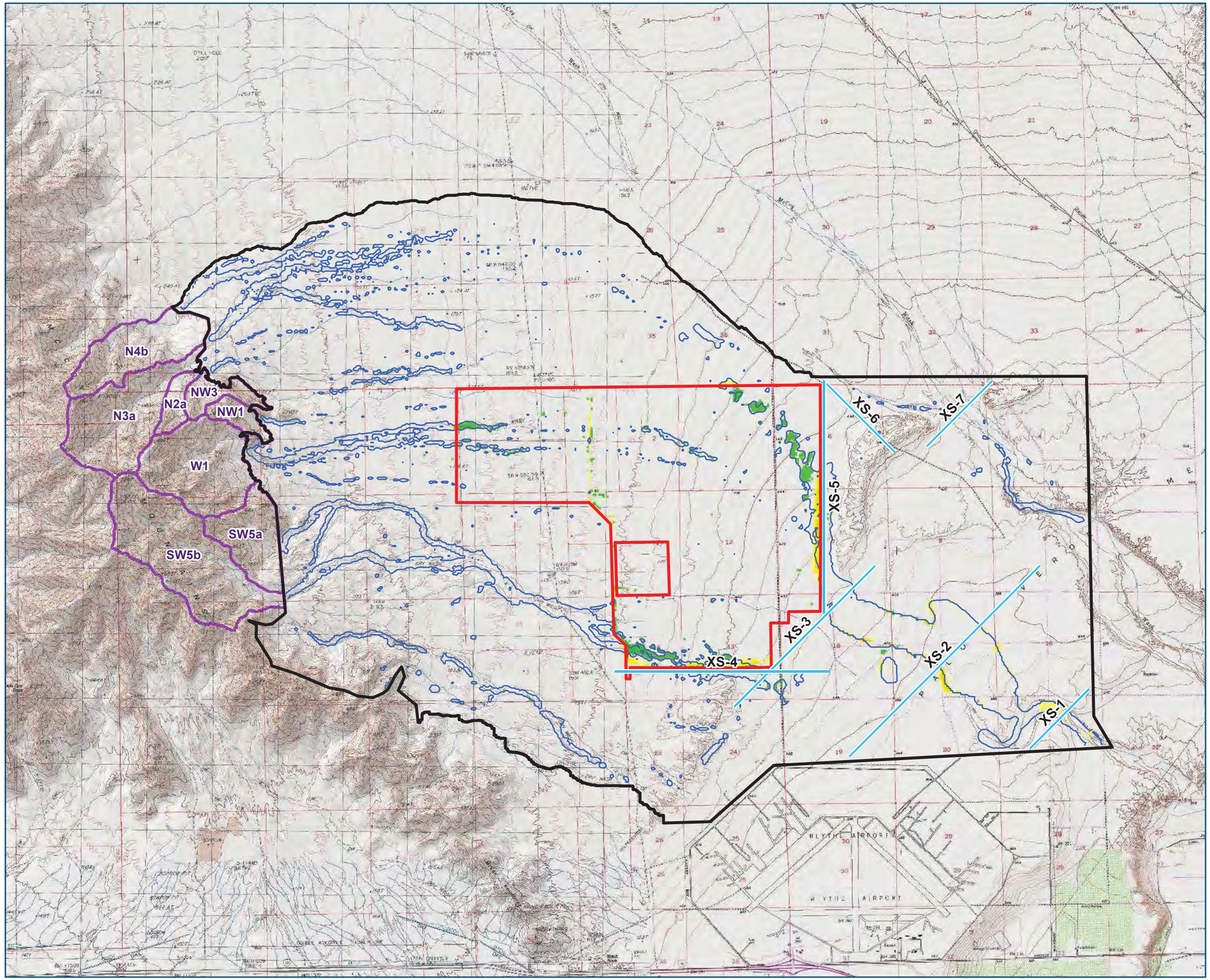
Change in Max Flow Depth (feet)

> 0.7	-0.1 - -0.05
0.6 - 0.7	-0.2 - -0.1
0.5 - 0.6	-0.3 - -0.2
0.4 - 0.5	-0.4 - -0.3
0.3 - 0.4	-0.5 - -0.4
0.2 - 0.3	-0.6 - -0.5
0.1 - 0.2	-0.7 - -0.6
0.05 - 0.1	< -0.7
-0.05 - 0.05	

*Area of maximum concentrated flow with water depth exceeding 0.5 feet

0 5,000 10,000 Feet

N



PROJECT LOCATOR MAP

File Name: Fig_C10_Depth_Delta_100yr
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PDF File Path: NextEra\60280294_Blythe\GIS\Maps\DELTA_100YR
Date Modified: March 29, 2013
Projection: NAD 1983 State Plane, California VI, Feet
Data Sources: ESRI, USGS, US Census, TetraTech, NextEra

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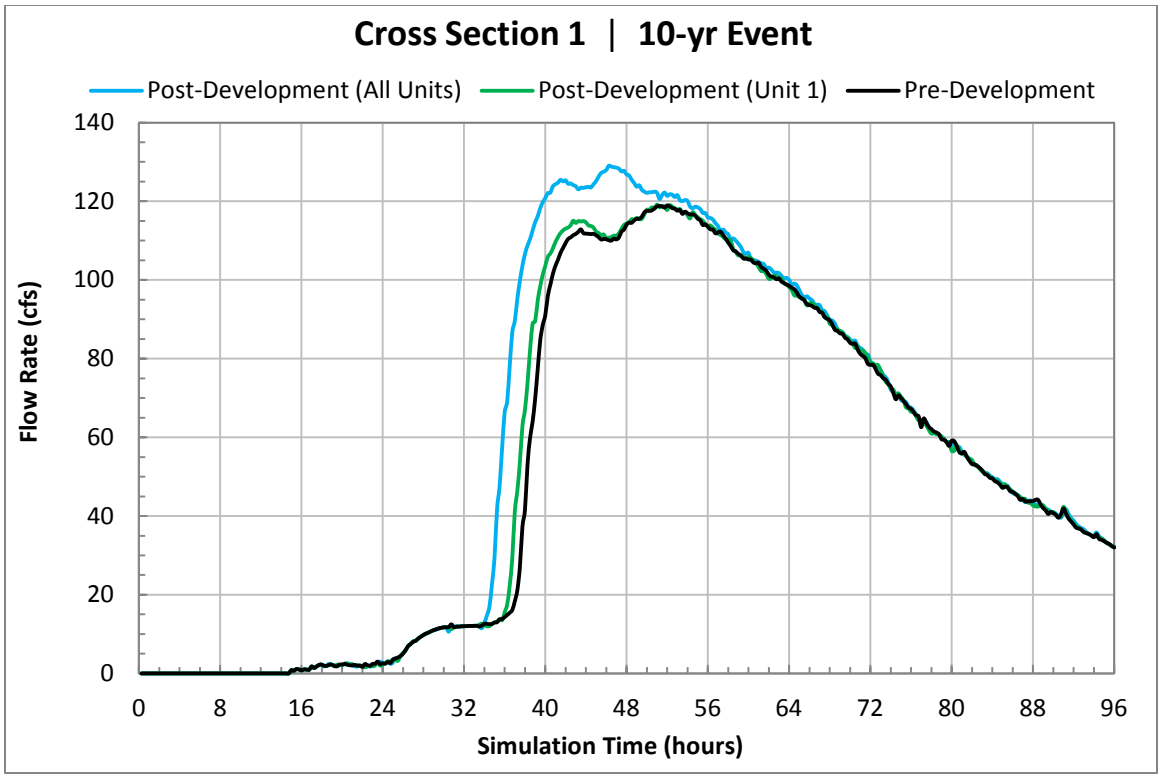
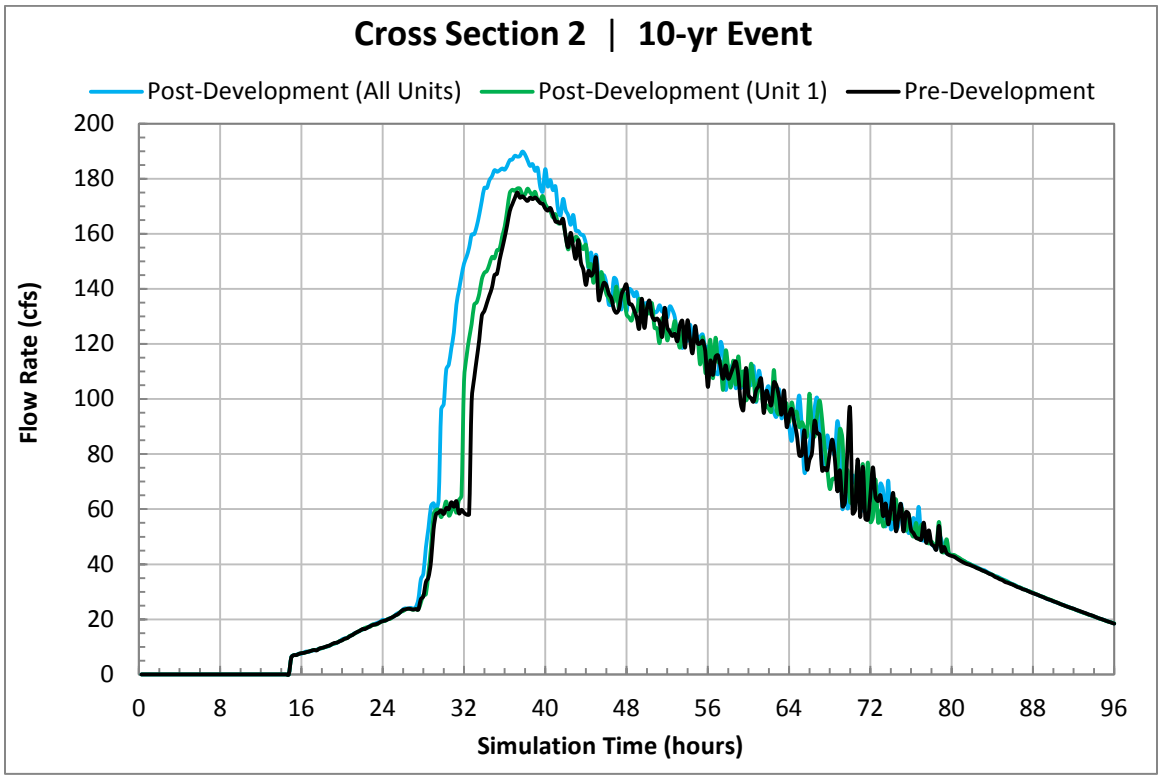
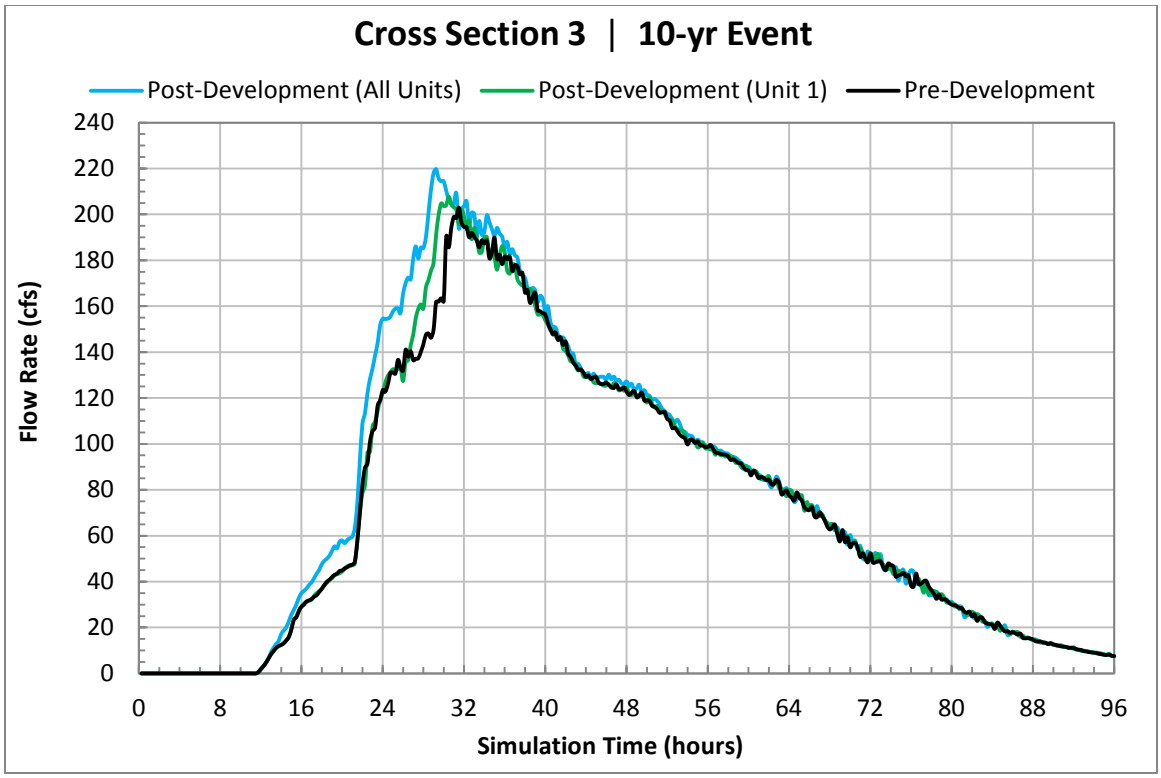
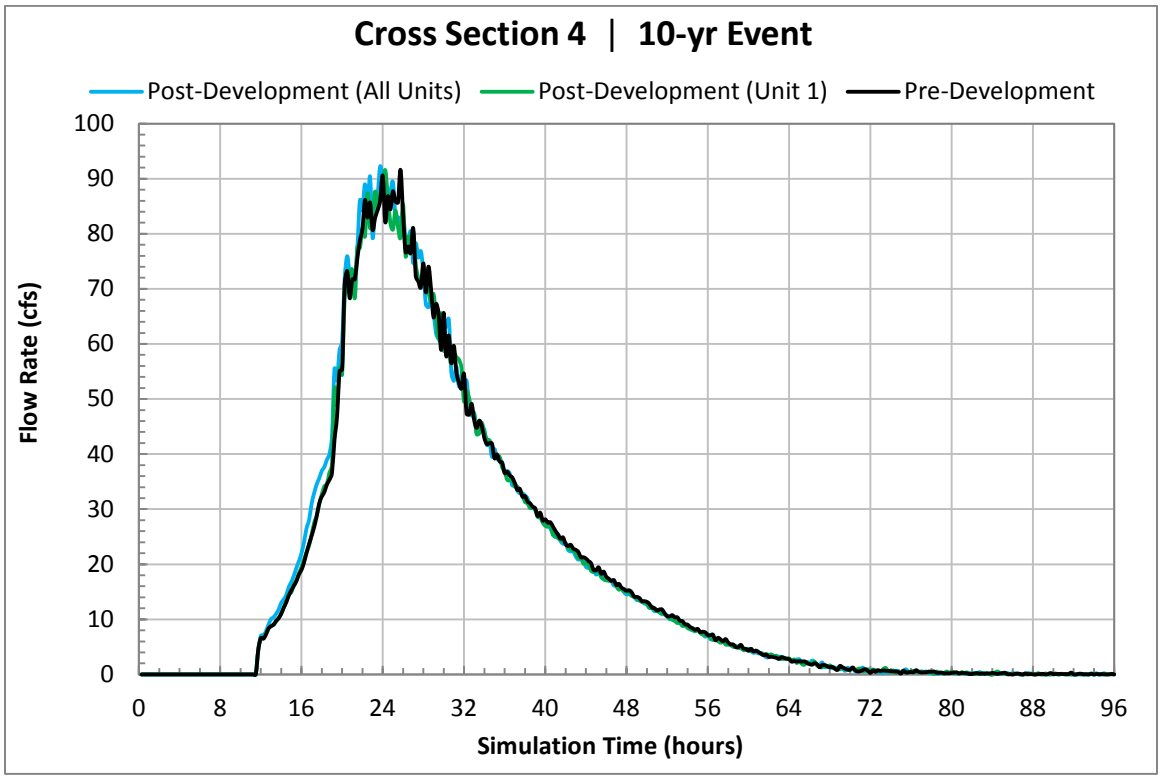
APPENDIX D

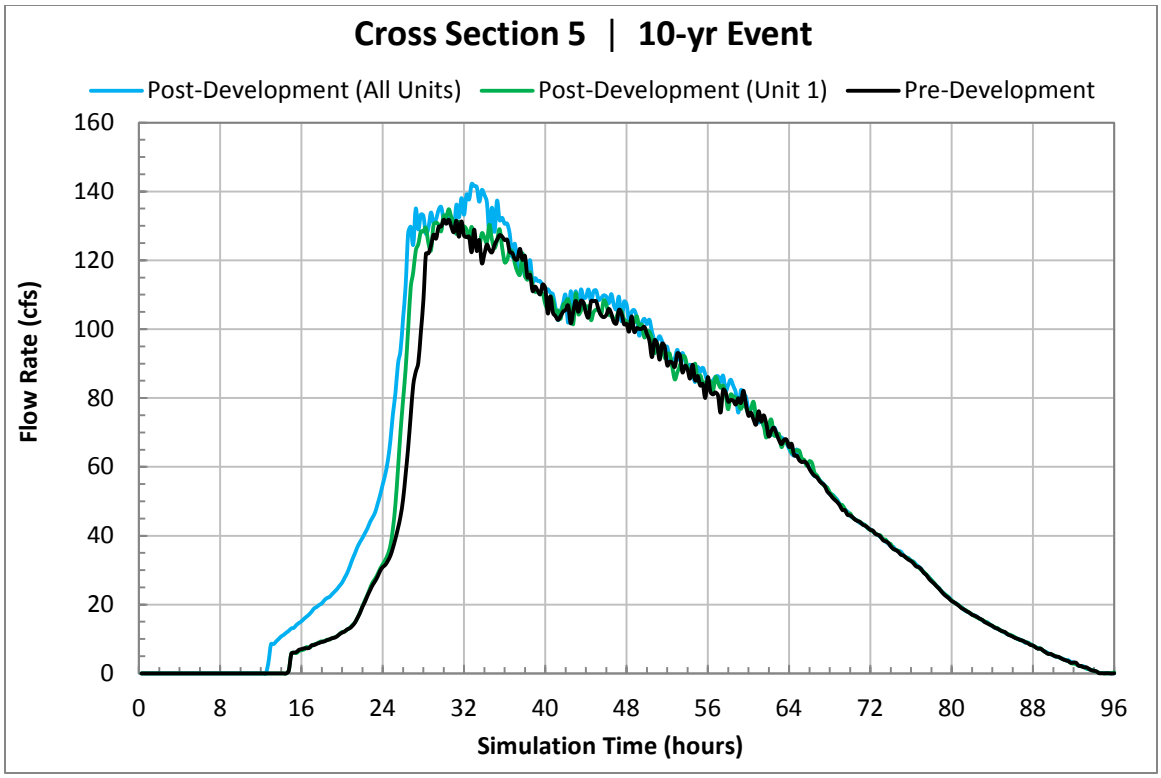
10-Year Event Hydrographs for Flow Measurement Cross-Sections

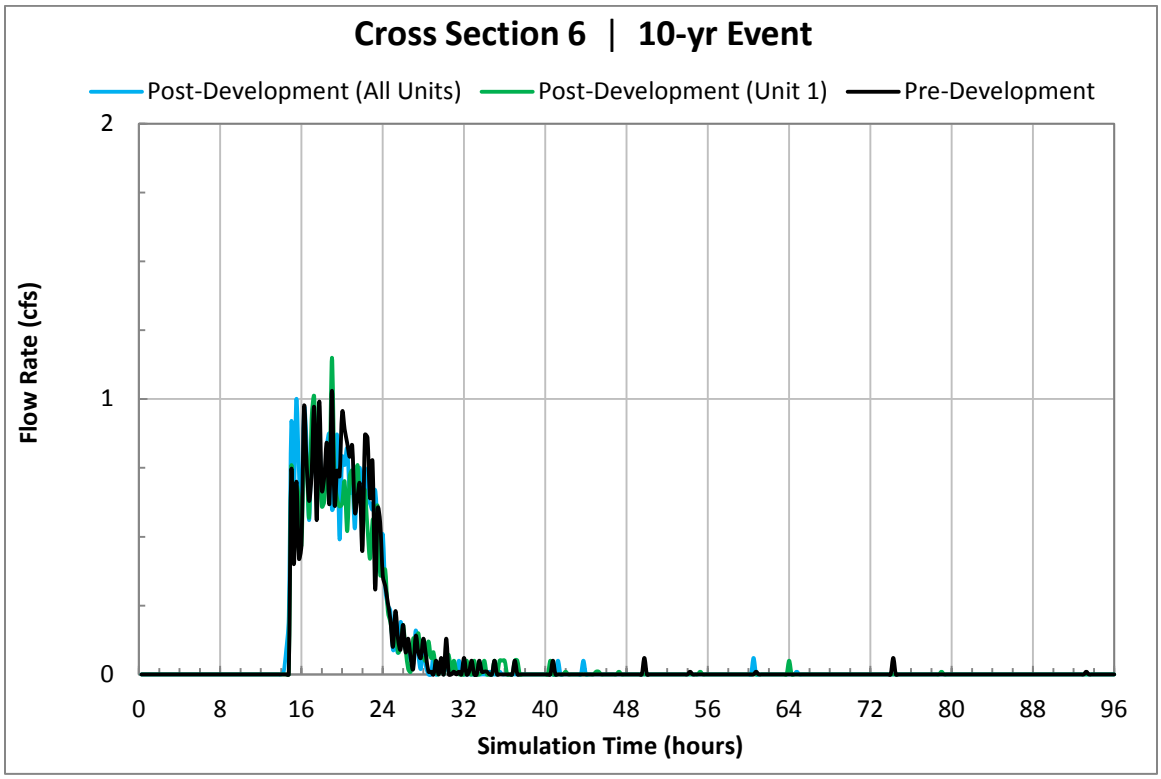

Cross Section 1 | 10-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
0
20
40
60
80
100
120
140
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

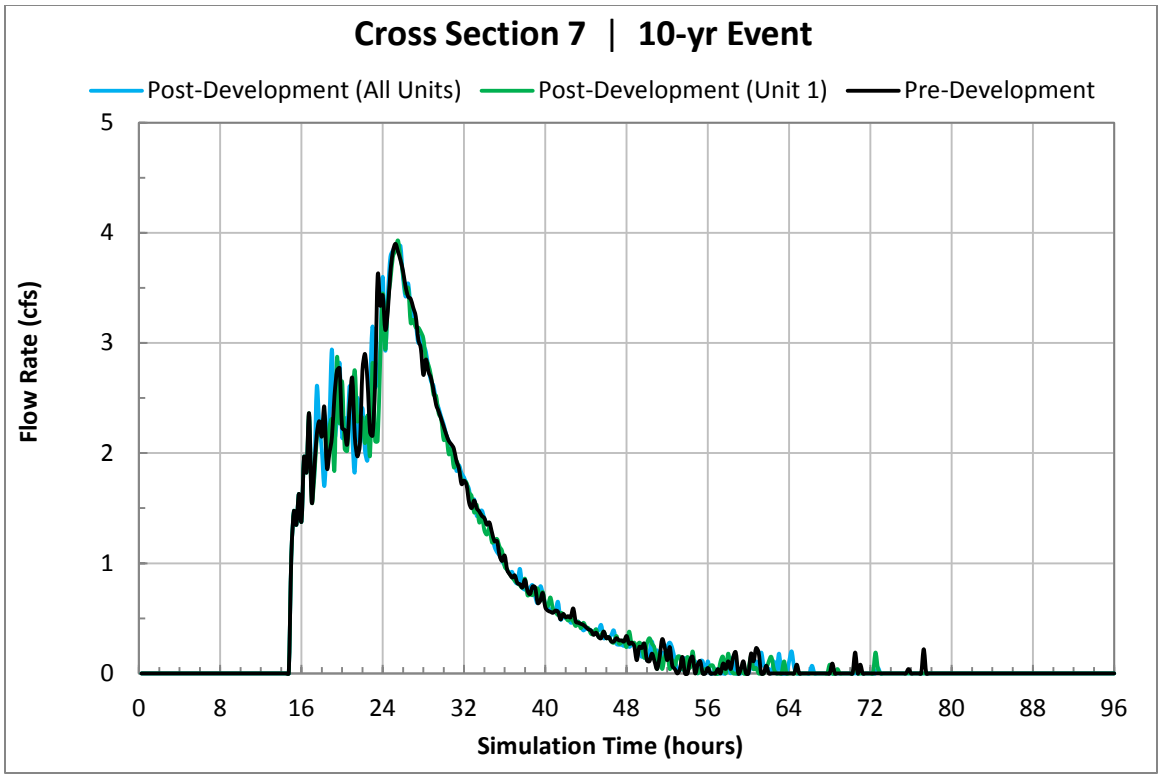

Cross Section 2 | 10-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
0
20
40
60
80
100
120
140
160
180
200
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 3 | 10-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
240
220
200
180
160
140
120
100
80
60
40
20
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 4 | 10-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
100
90
80
70
60
50
40
30
20
10
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

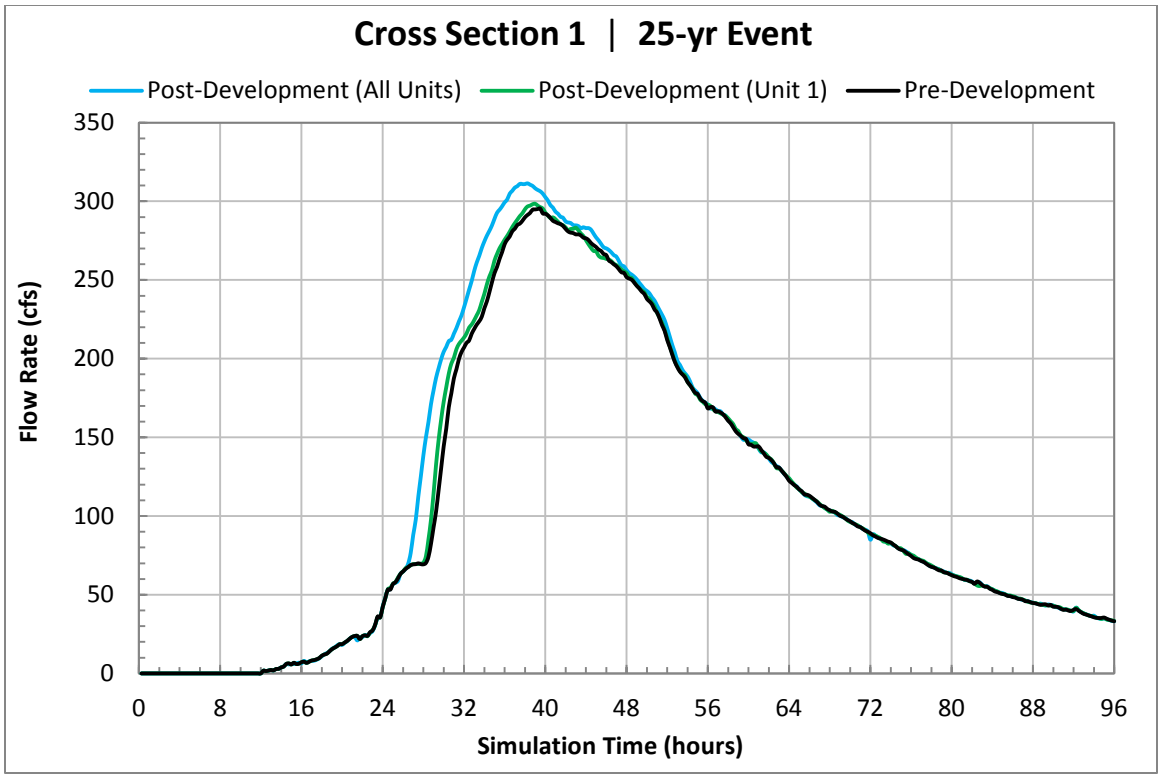

Cross Section 5 | 10-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
160
140
120
100
80
60
40
20
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

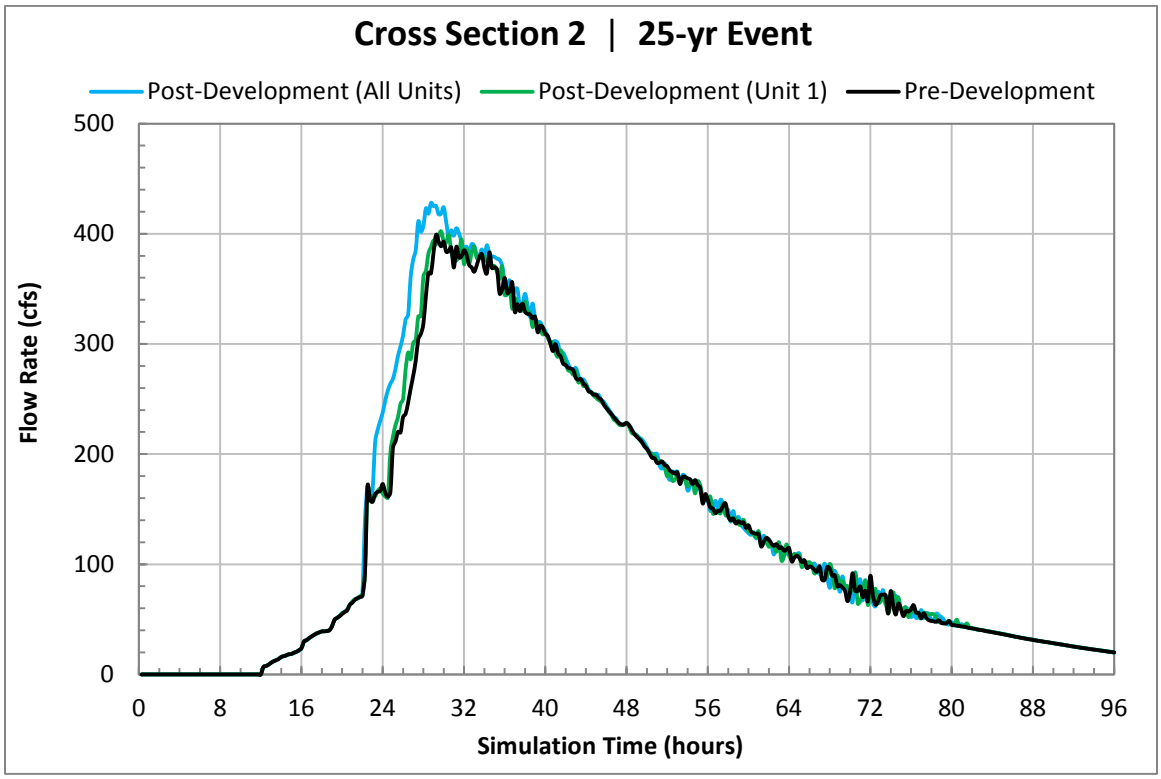

Cross Section 6 | 10-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
2
1
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

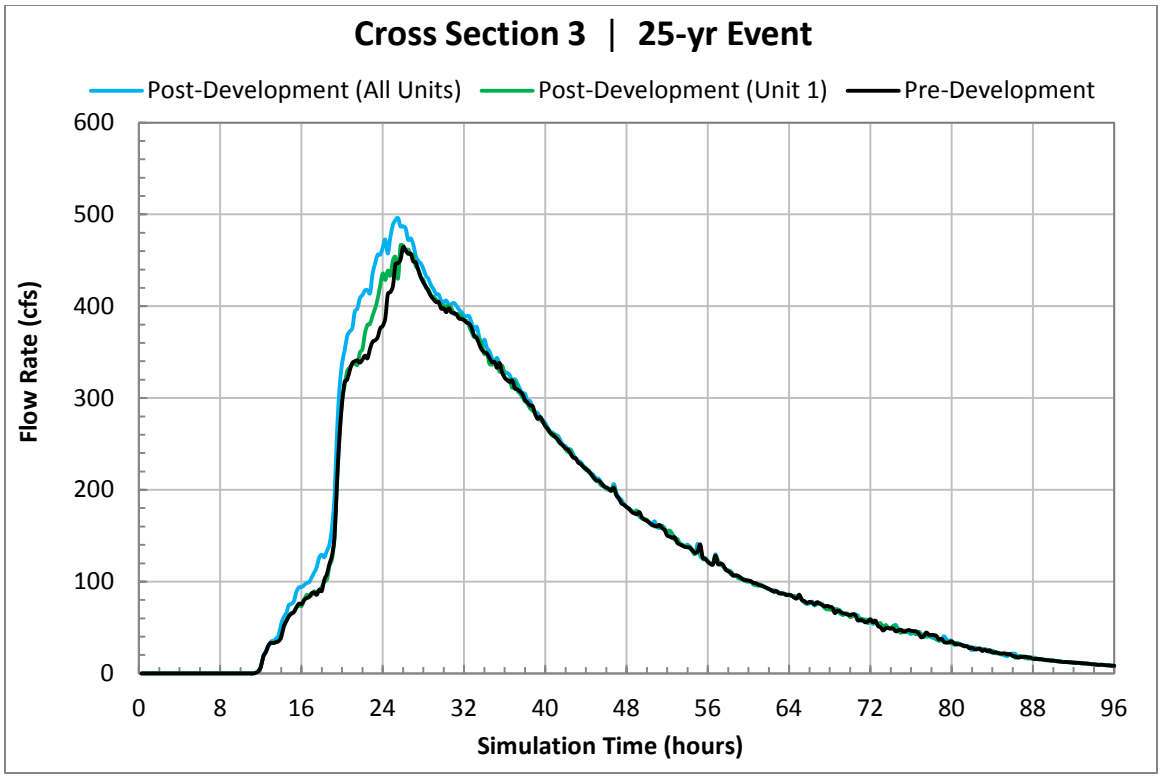

Cross Section 7 | 10-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
0
1
2
3
4
5
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

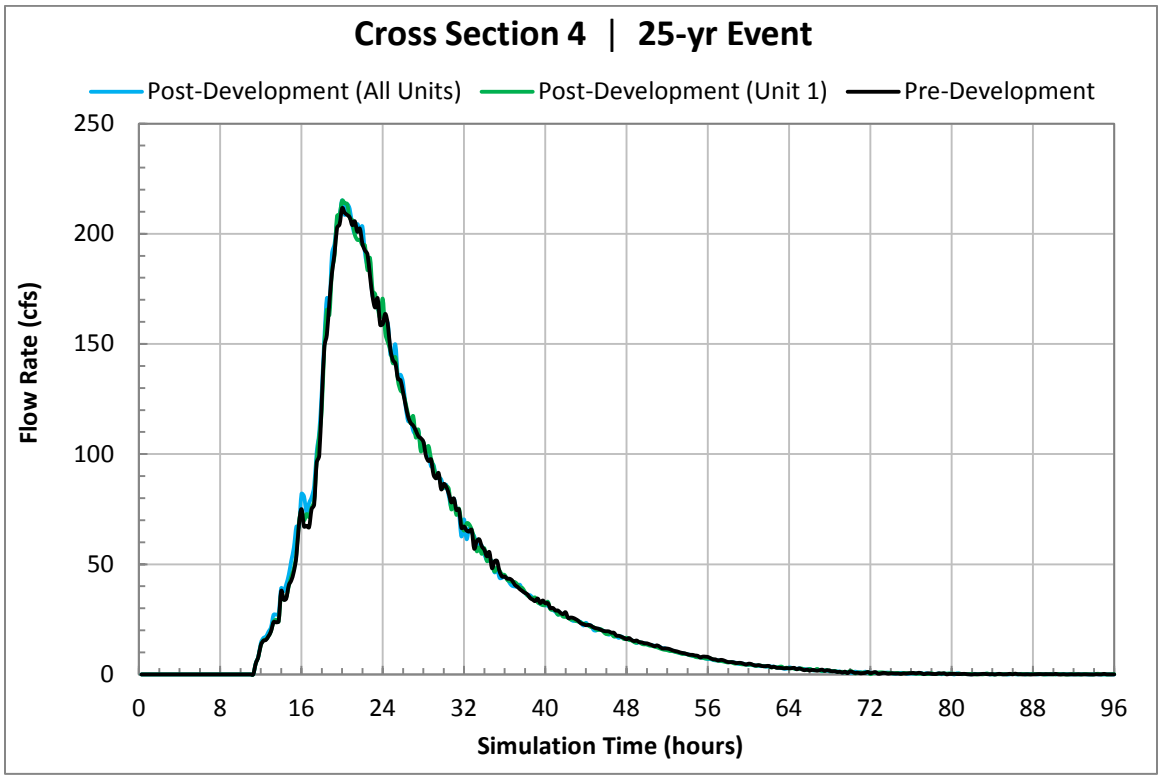
APPENDIX E

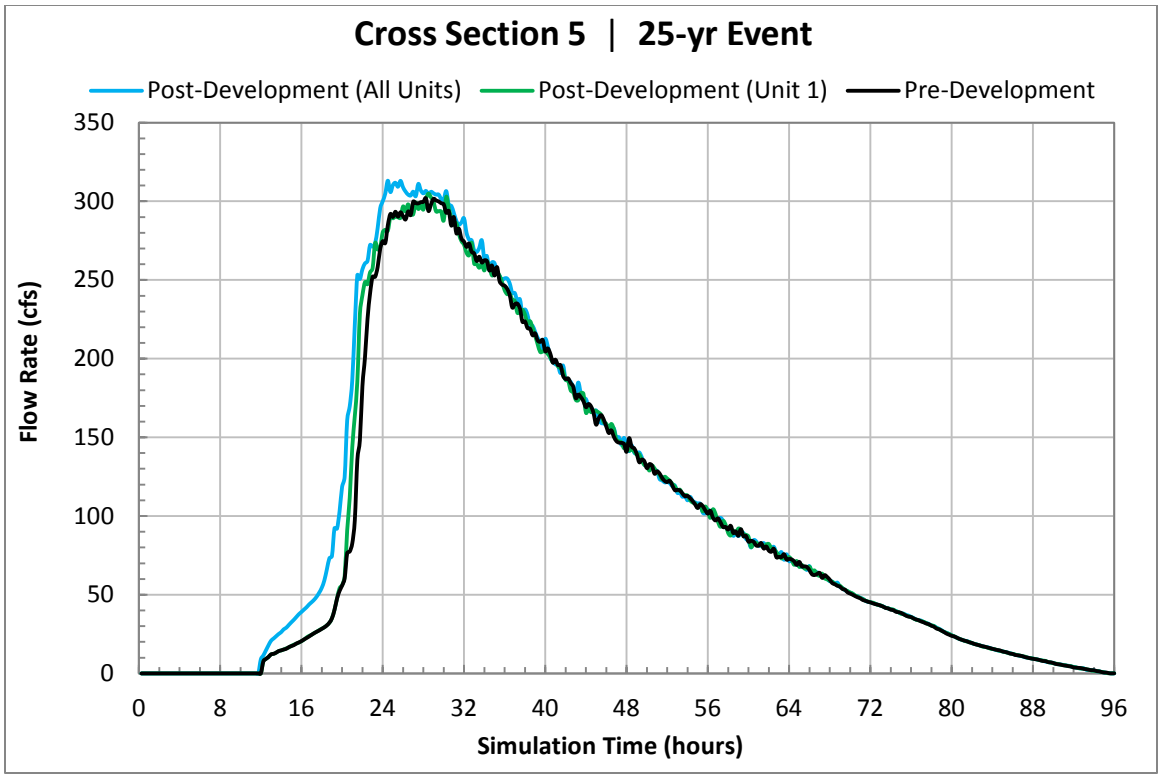
25-Year Event Hydrographs for Flow Measurement Cross-Sections

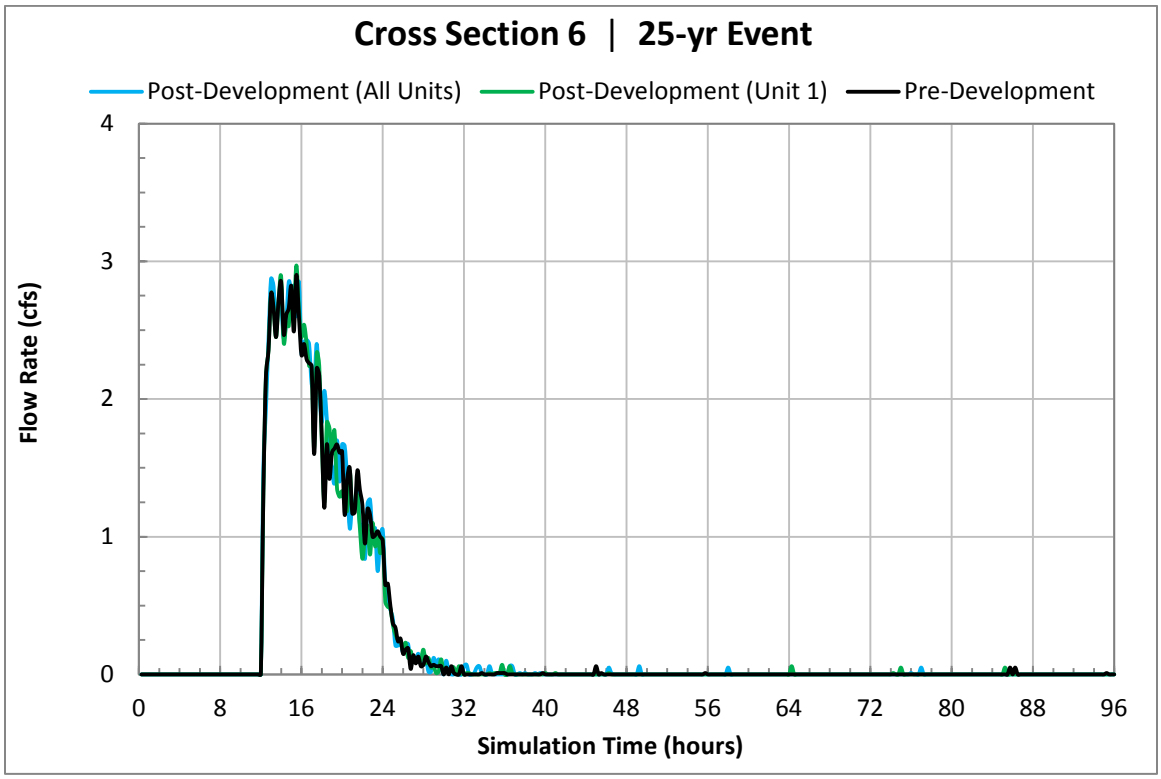

Cross Section 1 | 25-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
350
300
250
200
150
100
50
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

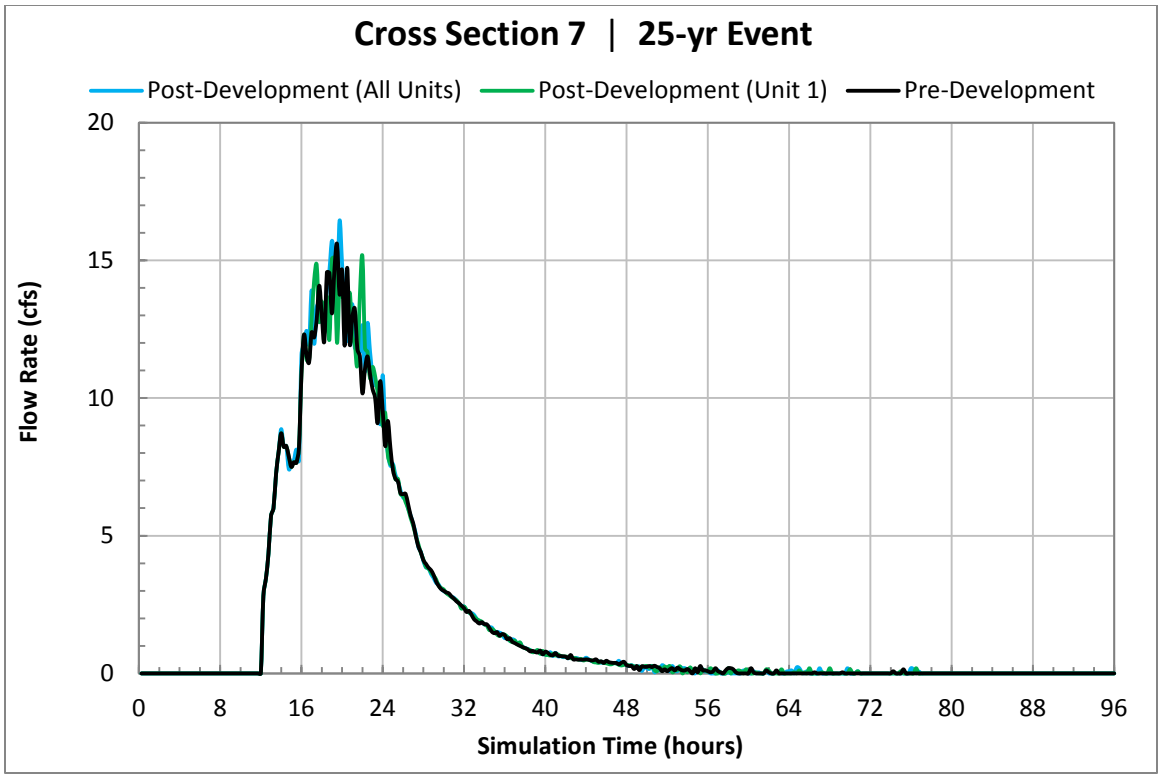

Cross Section 2 | 25-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
500
400
300
200
100
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 3 | 25-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
600
500
400
300
200
100
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 4 | 25-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
250
200
150
100
50
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

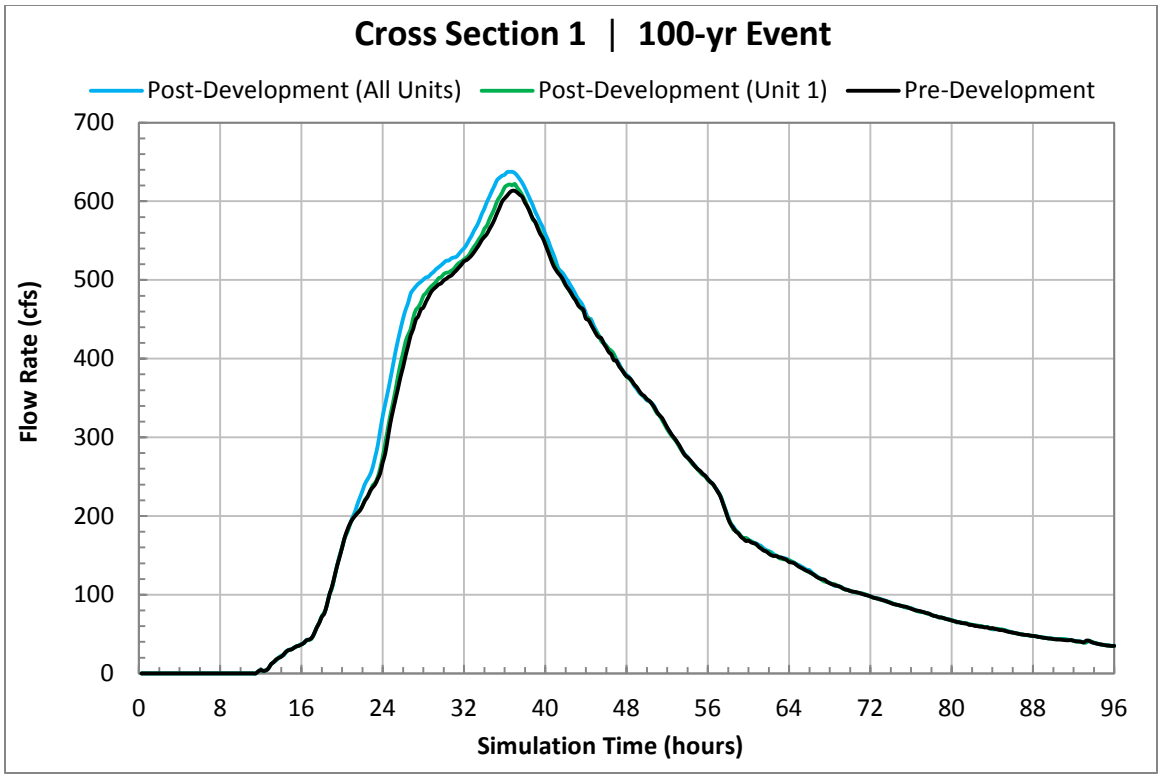

Cross Section 5 | 25-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
350
300
250
200
150
100
50
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

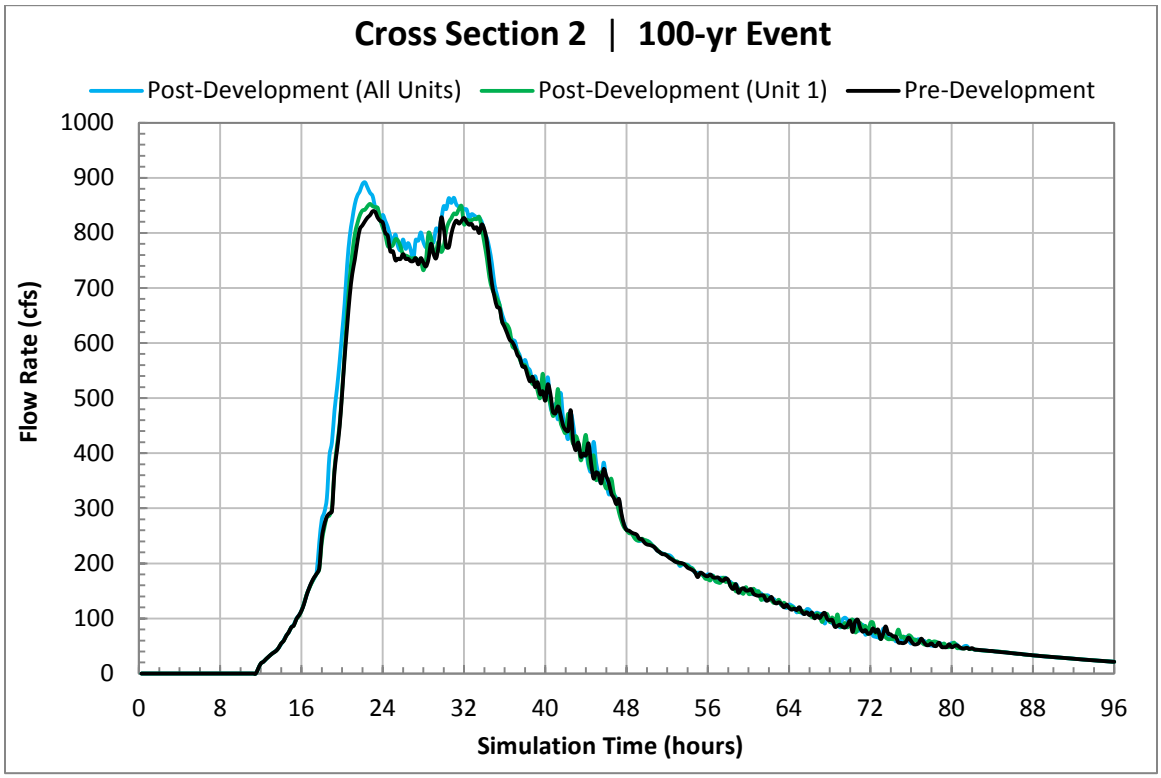

Cross Section 6 | 25-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
4
3
2
1
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

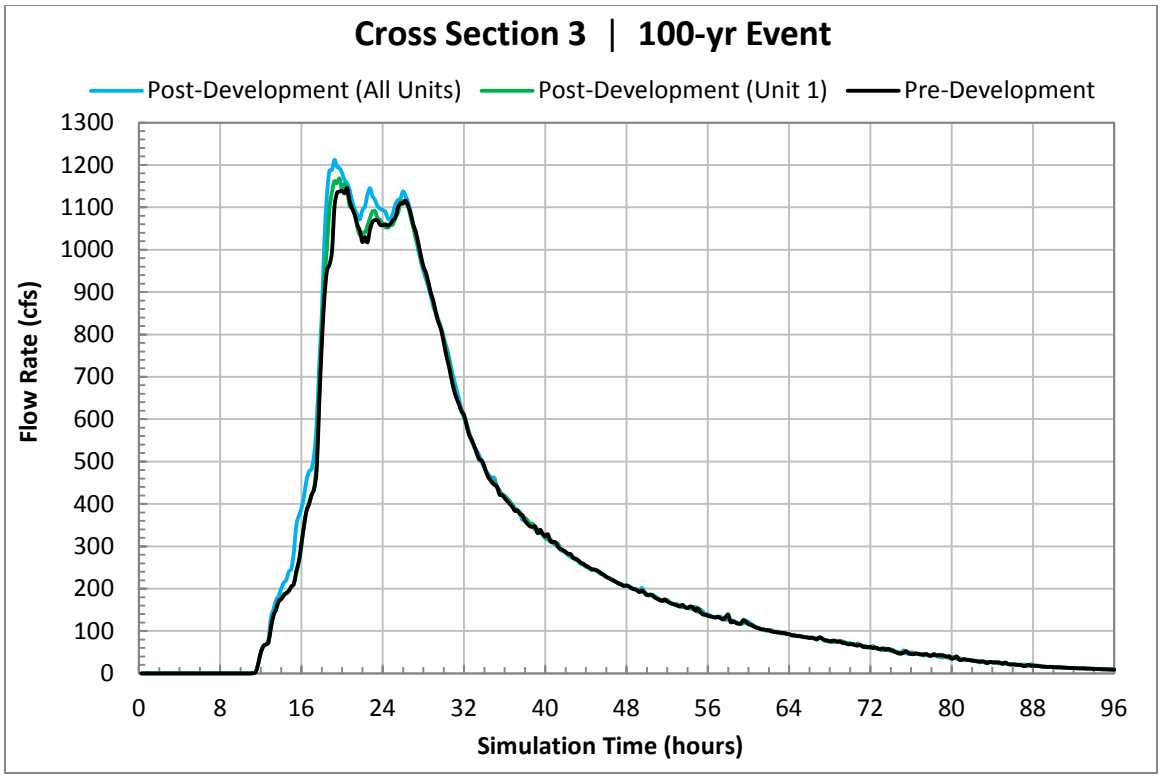

Cross Section 7 | 25-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
20
15
10
5
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

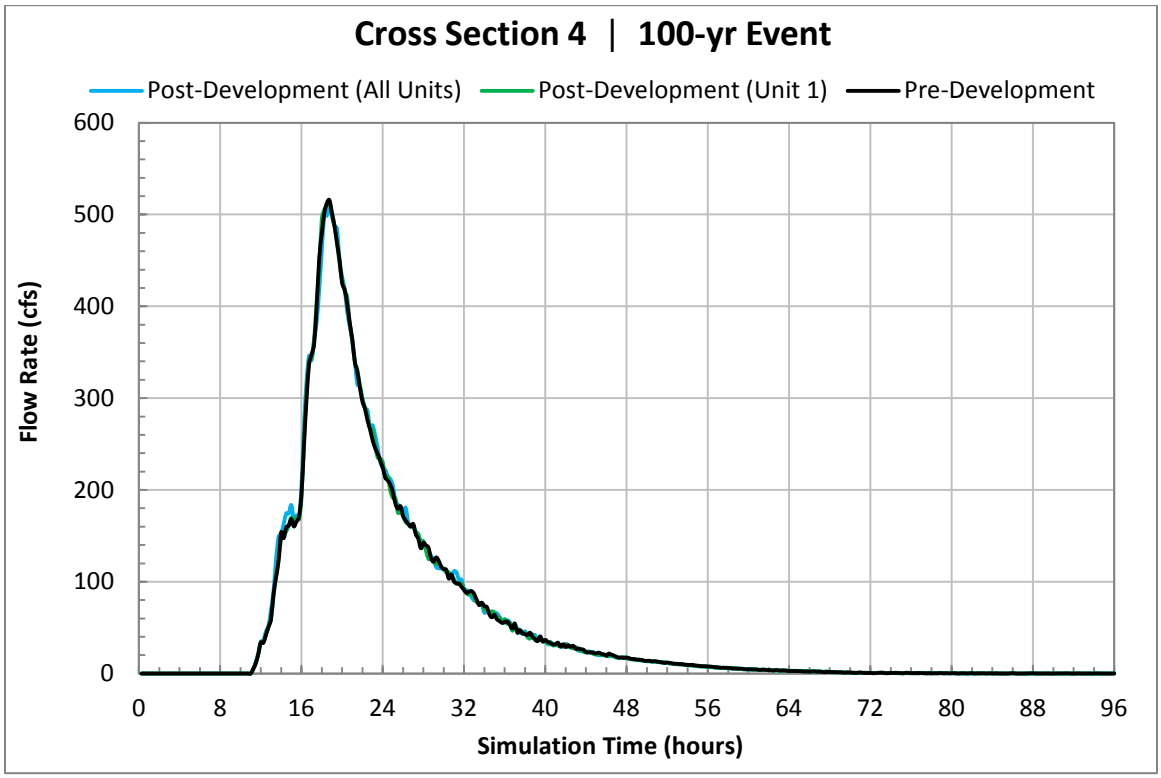
APPENDIX F

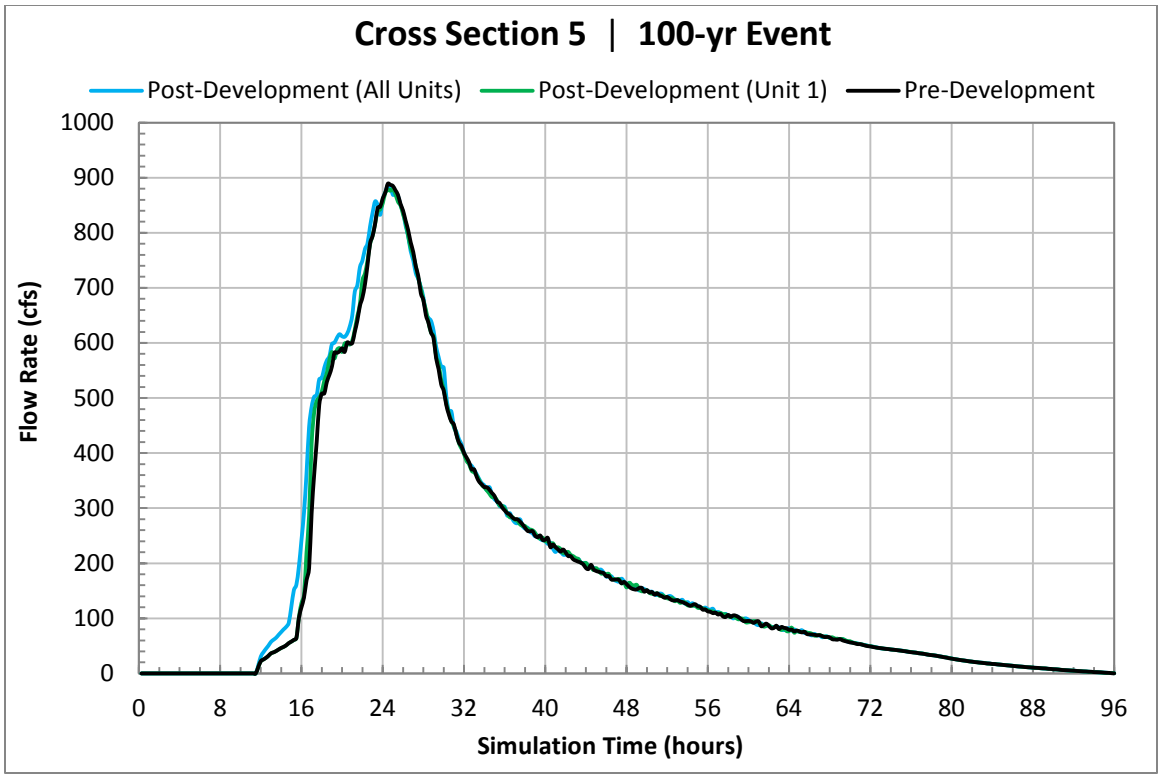
100-Year Event Hydrographs for Flow Measurement Cross-Sections

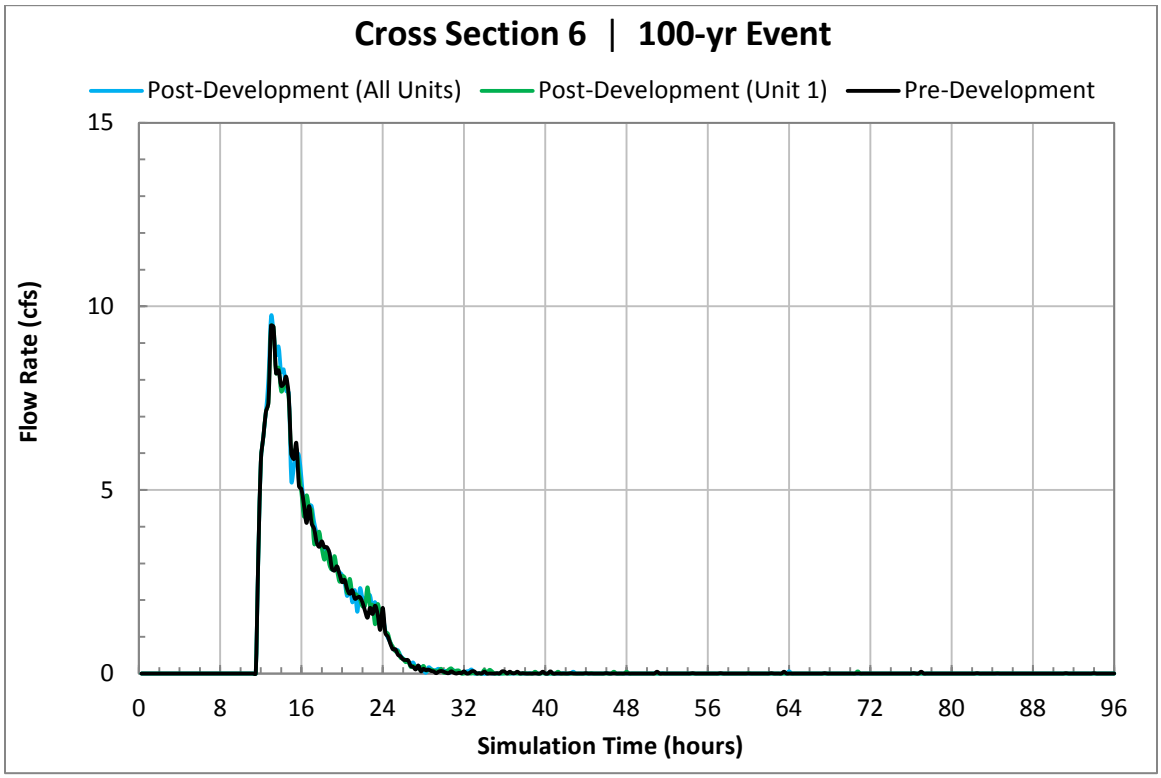

Cross Section 1 | 100-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
0
100
200
300
400
500
600
700
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

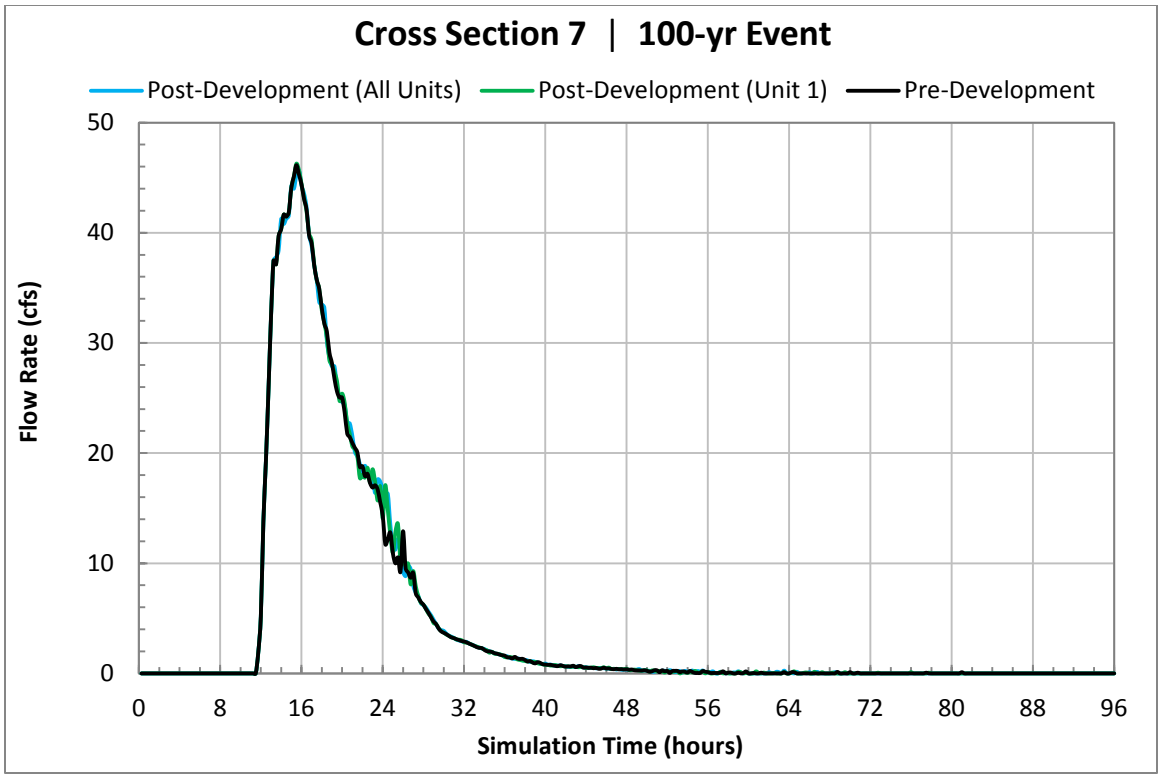

Cross Section 2 | 100-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
0
100
200
300
400
500
600
700
800
900
1000
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 3 | 100-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 4 | 100-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
600
500
400
300
200
100
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 5 | 100-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
1000
900
800
700
600
500
400
300
200
100
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 6 | 100-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
15
10
5
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)


Cross Section 7 | 100-yr Event
Post-Development (All Units)
Post-Development (Unit 1)
Pre-Development
Flow Rate (cfs)
50
40
30
20
10
0
0
8
16
24
32
40
48
56
64
72
80
88
96
Simulation Time (hours)

APPENDIX D ONE LINE DIAGRAM AND SWITCHYARD LAYOUT

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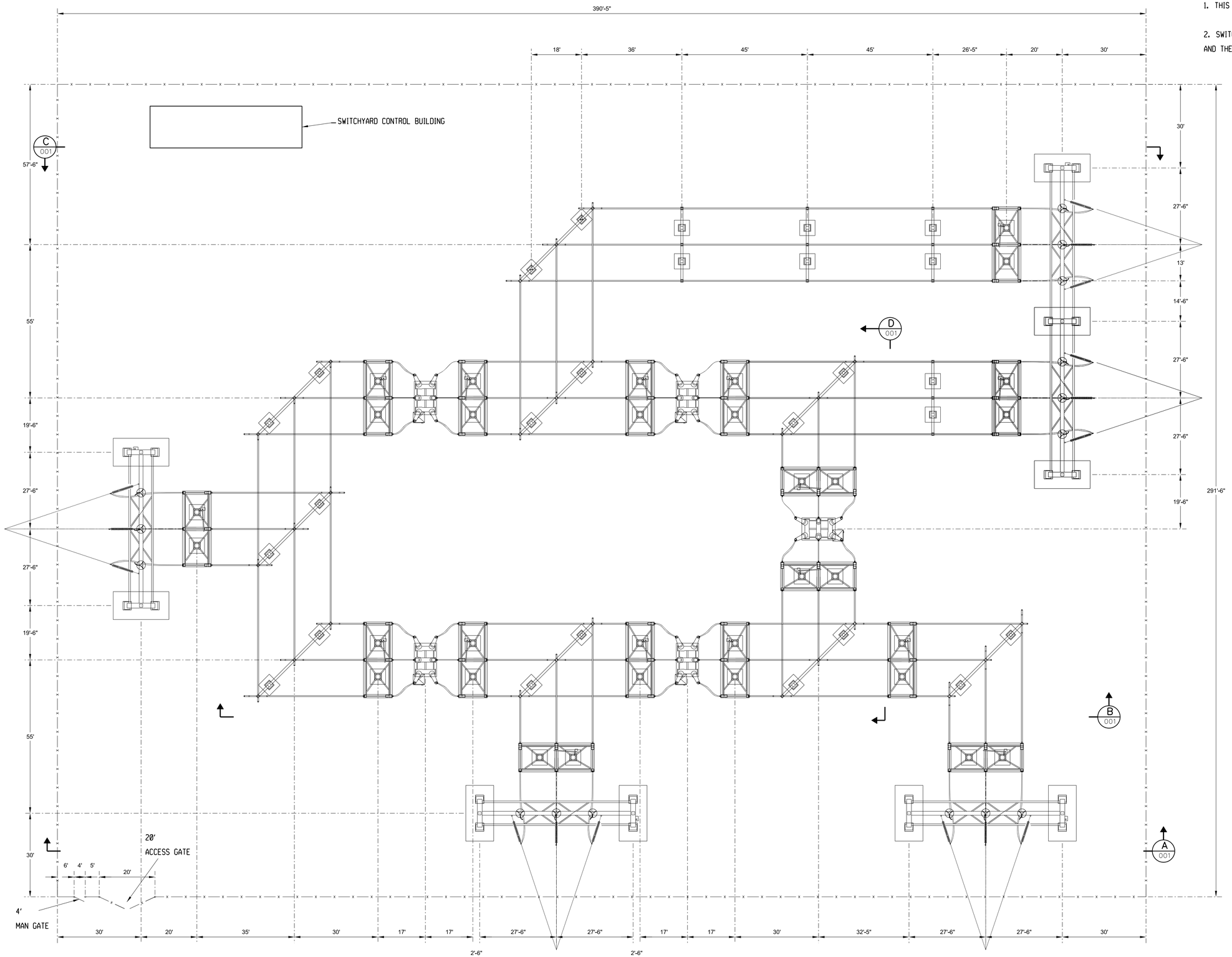
NOTE:

1. THIS DRAWING IS CONCEPTUAL AND IS NOT INTENDED FOR DETAIL DESIGN.

2. SWITCHYARD SHALL HAVE A MINIMUM 30' DRIVE ISLE BETWEEN EQUIPMENT AND THE FENCE.



NOT FOR CONSTRUCTION
FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	ENGINEER/ TECH. SPEC.	PROJECT ENGINEER	PROJECT MANAGER
A	03.27.13	ISSUED FOR 3D MODEL	PA	AB	PA	AB	AB	RH	AZ

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

APPROVED STATUS — DATE — REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED 'HOLD' RETAINS PRELIMINARY STATUS.
LDE

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY: P. ANGUIANO	
CHECKED BY: A. BOLSTAD	
LEAD DESIGNER: P. ANGUIANO	
ENGINEER/TECH SPECIALIST: A. BOLSTAD	
PROJECT ENGINEERING MANAGER: R. HILL	
PROJECT MANAGER: A. ZIMMERMAN	

Zero Harm — Leadership, No Incidents, Safe Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE:
STATE:
LIC. NO.:
DATE:

WorleyParsons
resources & energy

CLIENT/PROJECT TITLE
NEXTERA BLYTHE SOLAR ENERGY CENTER
BLYTHE SOLAR POWER PROJECT
RIVERSIDE COUNTY, CA

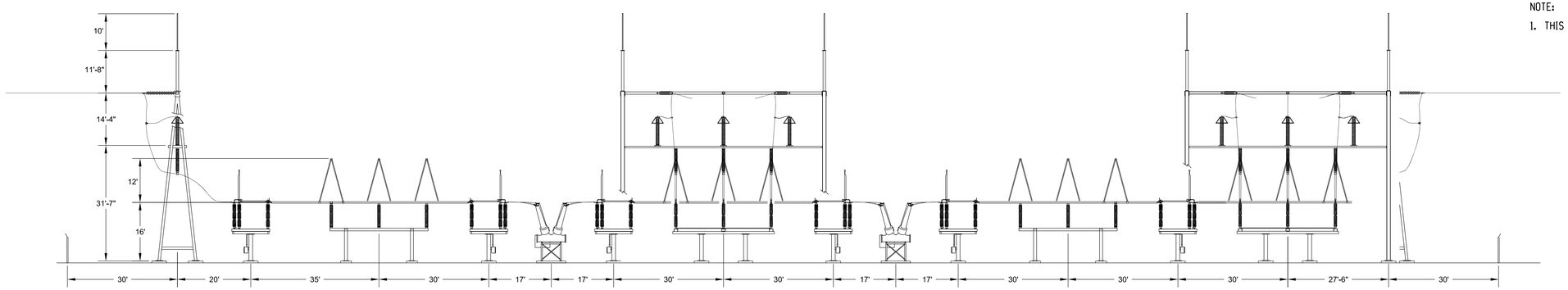
230kV SWITCHYARD GENERAL ARRANGEMENT

SCALE: 1/16" = 1'-0"
DRAWING SIZE: ARCH D (36" x 24")
WORLEYPARSONS DWG. NO.: BSPP-1-SK-111-102-002
REV: A

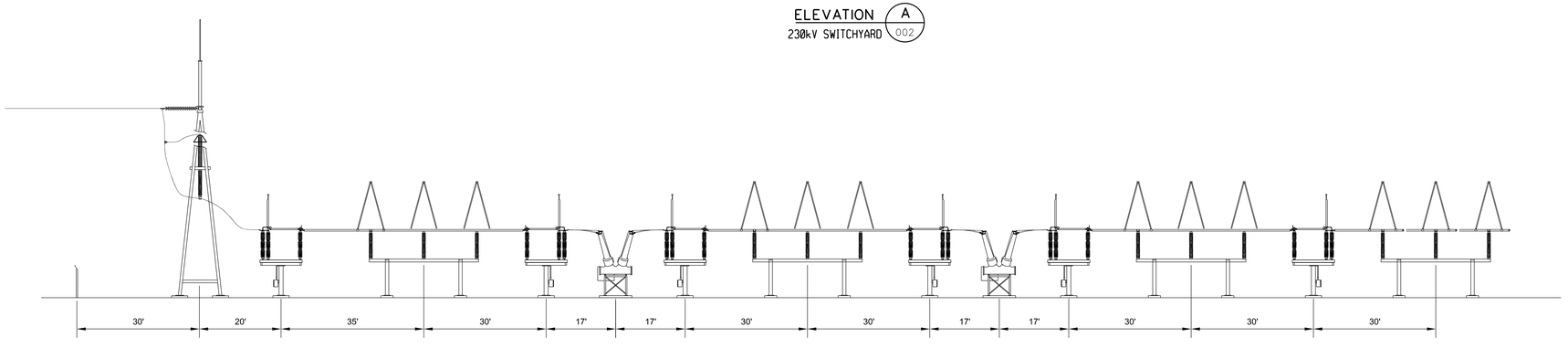
$$DESIGN-FILE-NAME$$
$$$$DATE$$$ $$$$TIME$$$$$

NOTE:

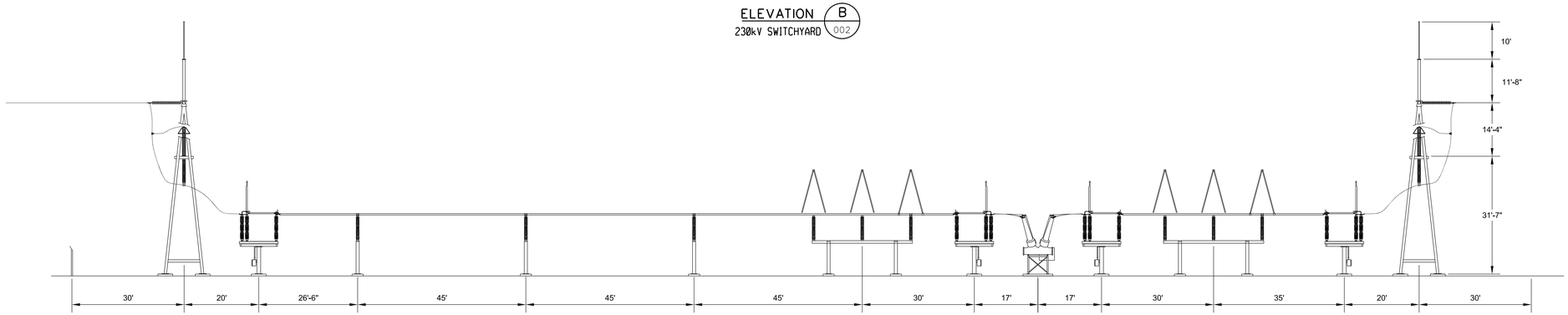
1. THIS DRAWING IS CONCEPTUAL AND IS NOT INTENDED FOR DETAIL DESIGN.



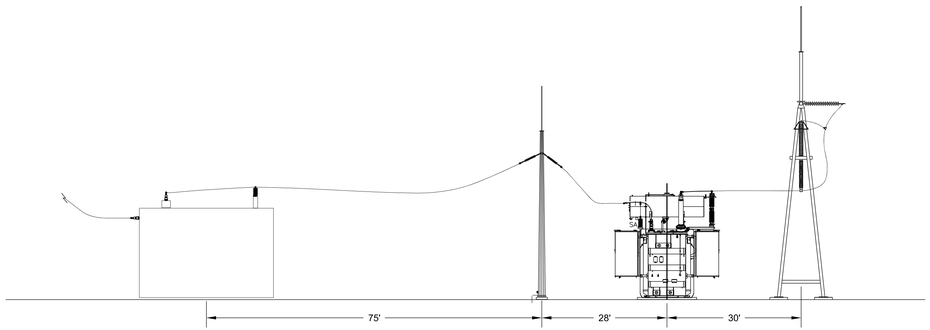
ELEVATION A
230kV SWITCHYARD 002



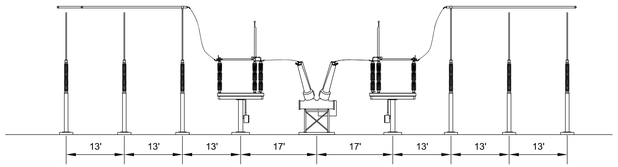
ELEVATION B
230kV SWITCHYARD 002



ELEVATION C
230kV SWITCHYARD 002



34.5kV CIRCUIT BREAKER AND
GSUs AT EACH UNIT IN THE FIELD
(UNIT STEP UP TRANSFORMER)



ELEVATION D
230kV SWITCHYARD 002

NOT FOR CONSTRUCTION
FOR PERMITTING ONLY

REV	DATE	DESCRIPTION	DRAWN	CHECKED	LEAD DESIGNER	ENGINEER/ TECH SPECIALIST	PROJECT ENGINEER	PROJECT MANAGER
B	03.27.13	ISSUED FOR 3D MODEL	PA	AB	PA	AB	AB	RH	AZ
A	02.07.13	ISSUED FOR 3D MODEL	PA	AB	PA	AB	AB	RH	AZ

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

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

ORIGINATING PERSONNEL	
DRAWN BY	P. ANGUIANO
CHECKED BY	A. BOLSTAD
LEAD DESIGNER	P. ANGUIANO
ENGINEER/TECH SPECIALIST	A. BOLSTAD
PROJECT ENGINEERING MANAGER	R. HILL
PROJECT MANAGER	A. ZIMMERMAN

PROFESSIONAL ENGINEER'S SEAL

Zero Harm — Leadership, No Incidents, Safe Behavior

ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF
PE: _____ STATE: _____
LIC. NO.: _____ DATE: _____

WorleyParsons
resources & energy

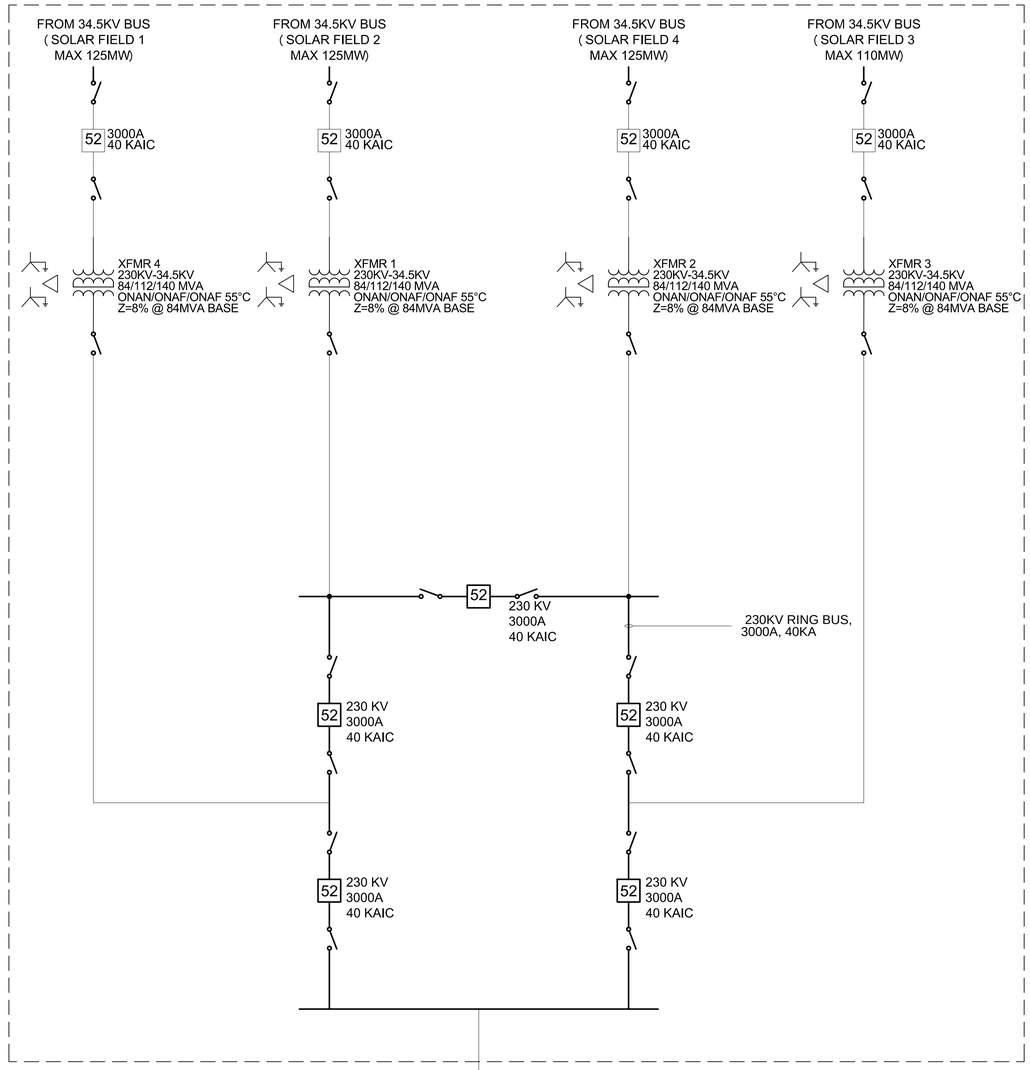
CLIENT/PROJECT TITLE
NEXTERA BLYTHE SOLAR ENERGY CENTER
BLYTHE SOLAR POWER PROJECT
RIVERSIDE COUNTY, CA

230kV SWITCHYARD ELEVATIONS

SCALE 1/16" = 1'-0" | DRAWING SIZE ARCH D (36" x 24")

WORLEYPARSONS DWG. NO. BSPP-1-SK-111-102-001 | REV B

$$DESIGN-FILE-NAME$$
$$DATE$$ $$TIME$$



NOTES:

1. NOMINAL GENERATION OUTPUT (485 MW) EXCLUDES POWER SYSTEM LOSSES.

LEGEND

- TRANSFORMER WINDING CONNECTION
- POWER TRANSFORMER
- 52 GAS CIRCUIT BREAKER
- DISCONNECT SWITCH

NEXTera ENERGY RESOURCES

DRAWN BY	GO
DESIGNED BY	DG
CHECKED BY	SP

DATE:	DESCRIPTION:
11/01/12	CONCEPTUAL REVIEW
1/2/13	DOWNSIZE (485MW)

PROJECT:

BLYTHE SOLAR POWER PROJECT

CLIENT

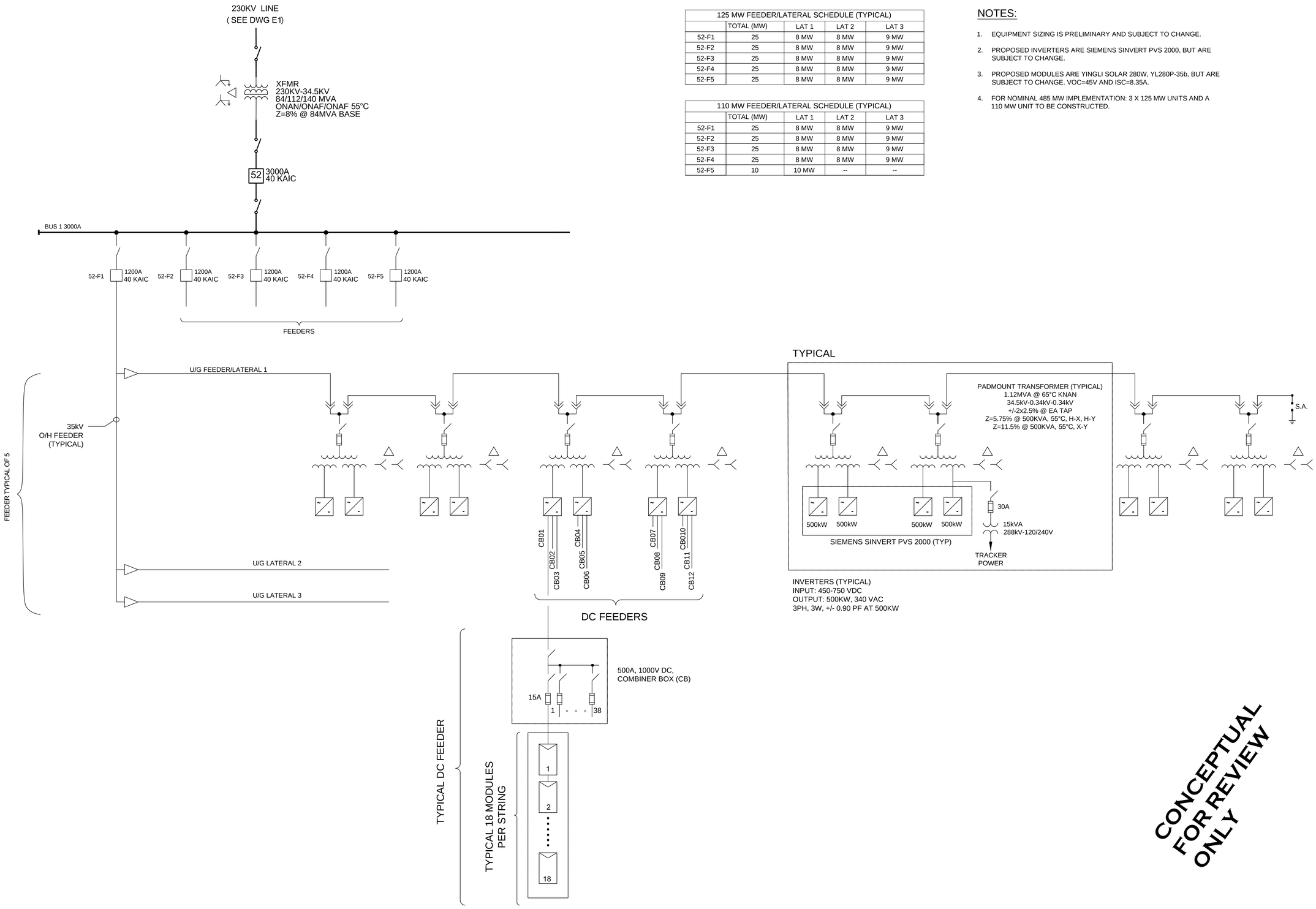
NEXTERA

SHEET TITLE:

CONCEPTUAL HIGH VOLTAGE SINGLE LINE DIAGRAM

SHEET NO.:

E1



125 MW FEEDER/LATERAL SCHEDULE (TYPICAL)				
	TOTAL (MW)	LAT 1	LAT 2	LAT 3
52-F1	25	8 MW	8 MW	9 MW
52-F2	25	8 MW	8 MW	9 MW
52-F3	25	8 MW	8 MW	9 MW
52-F4	25	8 MW	8 MW	9 MW
52-F5	25	8 MW	8 MW	9 MW

110 MW FEEDER/LATERAL SCHEDULE (TYPICAL)				
	TOTAL (MW)	LAT 1	LAT 2	LAT 3
52-F1	25	8 MW	8 MW	9 MW
52-F2	25	8 MW	8 MW	9 MW
52-F3	25	8 MW	8 MW	9 MW
52-F4	25	8 MW	8 MW	9 MW
52-F5	10	10 MW	--	--

NOTES:

1. EQUIPMENT SIZING IS PRELIMINARY AND SUBJECT TO CHANGE.
2. PROPOSED INVERTERS ARE SIEMENS SINVERT PVS 2000, BUT ARE SUBJECT TO CHANGE.
3. PROPOSED MODULES ARE YINGLI SOLAR 280W, YL280P-35b, BUT ARE SUBJECT TO CHANGE. VOC=45V AND ISC=8.35A.
4. FOR NOMINAL 485 MW IMPLEMENTATION: 3 X 125 MW UNITS AND A 110 MW UNIT TO BE CONSTRUCTED.

CONCEPTUAL FOR REVIEW ONLY

NEXTera ENERGY RESOURCES

DRAWN BY GO
DESIGNED BY DG
CHECKED BY SP

DATE:	DESCRIPTION:
11/01/12	CONCEPTUAL REVIEW
1/2/13	DOWNSIZE (485 MW)

PROJECT:

BLYTHE SOLAR POWER PROJECT

CLIENT

NEXTERA

SHEET TITLE:

CONCEPTUAL MV COLLECTOR SYSTEM

SINGLE LINE DIAGRAM

E2

APPENDIX E AIR QUALITY AND GREENHOUSE GAS CONSTRUCTION AND OPERATIONS AND MAINTENANCE EMISSIONS AND SCREENING HEALTH RISK ASSESSMENT RESULTS AND CONSTRUCTION SCHEDULE AND EQUIPMENT USE INFORMATION

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Appendix E

Air Quality and Greenhouse Gas
Construction and
Operations and Maintenance Emissions

And

Screening Health Risk Assessment Results

Construction Emissions

Table 1
Construction Equipment Emission Factors

Equipment	Fuel	HP	Model Year[a]	OFFROAD Model Category	Emissions Factors (lb/hr)[b]								
					CO	ROG	NOx	SO2	PM10	PM2.5	CO2	CH4	N2O
Air Compressor	Diesel	25	2008	Air Compressors	5.95E-02	1.74E-02	1.10E-01	1.83E-04	3.86E-03	3.56E-03	1.44E+01	1.57E-03	3.76E-04
Cat 140H Grader	Diesel	185	2006	Graders	3.66E-01	1.48E-01	1.47E+00	1.93E-03	4.33E-02	3.98E-02	1.72E+02	1.33E-02	4.47E-03
Cat 583T Pipelayer	Diesel	310	2006	Other Construction Equipment	4.72E-01	1.55E-01	1.14E+00	2.49E-03	5.42E-02	4.99E-02	2.54E+02	1.40E-02	6.59E-03
Cat BG600D Paver	Diesel	173	2007	Pavers	7.42E-01	8.35E-02	5.80E-01	1.44E-03	4.02E-02	3.70E-02	1.28E+02	7.53E-03	3.34E-03
Crane - Boom Truck	Diesel	250	2006	Cranes	2.39E-01	9.68E-02	9.61E-01	1.26E-03	2.83E-02	2.60E-02	1.12E+02	8.73E-03	2.91E-03
Deere 210LE Skip Loader	Diesel	78	2008	Rubber Tired Loaders	3.93E-01	4.11E-02	3.18E-01	6.90E-04	2.31E-02	2.13E-02	5.89E+01	3.71E-03	1.54E-03
Dozer Cat D6R	Diesel	185	2006	Crawler Tractors	3.54E-01	1.43E-01	1.42E+00	1.87E-03	4.19E-02	3.86E-02	1.66E+02	1.29E-02	4.31E-03
Generator	Diesel	30	2008	Generator Sets	1.82E-01	1.26E-02	2.57E-01	3.96E-04	8.11E-03	7.46E-03	3.06E+01	1.14E-03	7.98E-04
Roller Vibrator/compactor/other	Diesel	350	2006	Rollers	4.05E-01	1.30E-01	9.78E-01	2.15E-03	4.62E-02	4.25E-02	2.19E+02	1.17E-02	5.67E-03
Scraper Cat 623	Diesel	365	2006	Scrapers	6.43E-01	2.72E-01	1.52E+00	3.15E-03	7.98E-02	7.35E-02	3.21E+02	2.45E-02	8.34E-03
Skip Loader	Diesel	78	2008	Rubber Tired Loaders	3.93E-01	4.11E-02	3.18E-01	6.90E-04	2.31E-02	2.13E-02	5.89E+01	3.71E-03	1.54E-03
Telehandler	Diesel	99	2008	Forklifts	2.21E-01	2.64E-02	1.74E-01	3.66E-04	1.33E-02	1.22E-02	3.12E+01	2.38E-03	8.17E-04
Track Trencher	Diesel	115	2007	Trenchers	4.14E-01	5.06E-02	5.95E-01	7.61E-04	3.25E-02	2.99E-02	6.48E+01	4.56E-03	1.70E-03

[a] Earliest model year required to meet at least Tier 3 emission standards

[b] All except N2O calculated by dividing California statewide daily emissions by daily operating hours from OFFROAD2007 for calendar year 2014
N_2O calculated from 0.26 g/gal from Table 13.7 of 2013 Climate Action Registry Default Emission Factors, downloaded from
http://www.theclimateregistry.org/downloads/2013/01/2013-Climate-Registry-Default-Emissions-Factors.pdf
Fuel use for N2O calculation calculated by dividing California statewide daily fuel consumption by daily operating hours from OFFROAD2007 for calendar year 2014

CARB released the OFFROAD 2011 off-road equipment emissions model in September 2011. The OFFROAD 2011 model was developed primarily to support CARB regulatory activities to reduce emissions from in-use off-road equipment. The OFFROAD 2011 model does not include emissions and emission factors for all of the types of construction equipment that are anticipated to be used for construction activities for the Modified Project. It also does not include emissions of CO, SO2 or greenhouse gases. Because of the limitations in the OFFROAD 2011 model, it was not used for these analyses. Emission factors calculated using the OFFROAD 2011 model are generally lower than emission factors calculated using the OFFROAD 2007 model. Therefore, use of the emission factors calculated using the OFFROAD 2007 model provides a conservative estimate of emissions.

Table 2
EMFAC 2011 Motor Vehicle Emission Factors, Riverside County, 2014

Vehicle Class	Fuel	Fuel Use (mpg)[a]	TOG (lb/mi)[a]	CO (lb/mi)[a]	ROG (lb/mi)[a]	NOx (lb/mi)[a]	SO2 (lb/mi)[a]	PM10 Exh. (lb/mi)[a]	PM2.5 Exh. (lb/mi)[a]	CO2 (lb/mi)[a]	CH4 (lb/mi)[b]	N2O (lb/mi)[b]	PM10 Tire Wear (lb/mi)[a]	PM10 Brake Wear (lb/mi)[a]	PM2.5 Tire Wear (lb/mi)[a]	PM2.5 Brake Wear (lb/mi)[a]
LDA	GAS	2.43E+01	4.30E-04	3.70E-03	3.95E-04	3.15E-04	7.73E-06	4.38E-06	3.99E-06	6.78E-01	2.99E-05	1.31E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDA	DSL	2.80E+01	9.12E-05	4.48E-04	8.01E-05	1.27E-03	7.58E-06	5.84E-05	5.37E-05	6.87E-01	3.72E-06	2.61E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT1	GAS	2.09E+01	1.14E-03	9.00E-03	1.07E-03	8.20E-04	8.98E-06	1.03E-05	9.39E-06	7.91E-01	6.41E-05	3.41E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT1	DSL	2.76E+01	1.72E-04	6.92E-04	1.51E-04	1.59E-03	7.69E-06	1.26E-04	1.16E-04	6.96E-01	7.03E-06	2.65E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT2	GAS	1.78E+01	5.37E-04	5.07E-03	4.90E-04	5.82E-04	1.05E-05	4.57E-06	4.18E-06	9.55E-01	4.13E-05	2.42E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT2	DSL	2.81E+01	1.12E-04	5.19E-04	9.80E-05	1.46E-03	7.55E-06	7.70E-05	7.08E-05	6.94E-01	4.55E-06	2.60E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD1	GAS	1.36E+01	1.59E-03	9.50E-03	1.52E-03	2.78E-03	1.38E-05	3.75E-06	3.45E-06	1.34E+00	5.77E-05	1.15E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD1	DSL	1.92E+01	3.01E-04	1.55E-03	2.64E-04	1.23E-02	1.11E-05	6.03E-05	5.55E-05	1.14E+00	1.23E-05	3.82E-05	2.65E-05	1.69E-04	6.61E-06	7.22E-05
LHD2	GAS	1.36E+01	1.37E-03	8.28E-03	1.31E-03	2.55E-03	1.38E-05	3.50E-06	3.16E-06	1.34E+00	5.19E-05	1.06E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD2	DSL	1.92E+01	2.85E-04	1.48E-03	2.50E-04	1.18E-02	1.11E-05	5.82E-05	5.36E-05	1.14E+00	1.16E-05	3.81E-05	2.65E-05	1.97E-04	6.61E-06	8.43E-05
MCY	GAS	3.77E+01	1.02E-02	7.48E-02	9.56E-03	2.94E-03	4.98E-06	2.50E-06	2.00E-06	3.51E-01	4.59E-04	1.22E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MDV	GAS	1.40E+01	7.44E-04	7.05E-03	6.71E-04	9.05E-04	1.34E-05	5.24E-06	4.82E-06	1.24E+00	6.66E-05	3.76E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MDV	DSL	2.79E+01	9.07E-05	4.14E-04	7.96E-05	1.02E-03	7.59E-06	6.47E-05	5.95E-05	7.29E-01	3.70E-06	2.62E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MH	GAS	1.43E+01	4.27E-04	1.25E-02	3.64E-04	2.28E-03	1.31E-05	3.45E-06	3.12E-06	1.28E+00	5.41E-05	9.51E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MH	DSL	9.40E+00	3.24E-04	1.16E-03	2.85E-04	1.52E-02	2.26E-05	4.75E-04	4.37E-04	2.33E+00	1.32E-05	7.77E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
Motor Coach	DSL	5.79E+00	6.70E-04	3.09E-03	5.88E-04	2.26E-02	3.66E-05	3.66E-04	3.37E-04	3.78E+00	2.73E-05	1.26E-04	2.65E-05	2.87E-04	6.61E-06	1.23E-04
OBUS	GAS	1.25E+01	3.84E-03	4.18E-02	3.59E-03	7.69E-03	1.50E-05	6.97E-06	5.79E-06	1.41E+00	1.71E-04	3.20E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
PTO	DSL	4.68E+00	1.31E-03	5.35E-03	1.15E-03	2.71E-02	4.53E-05	6.03E-04	5.55E-04	4.68E+00	5.33E-05	1.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SBUS	GAS	1.08E+01	2.30E-03	3.08E-02	2.13E-03	2.60E-03	1.73E-05	9.62E-06	8.14E-06	1.66E+00	1.67E-04	1.08E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
SBUS	DSL	7.20E+00	5.84E-04	1.79E-03	5.13E-04	2.61E-02	2.95E-05	2.60E-04	2.39E-04	3.04E+00	2.38E-05	1.02E-04	2.65E-05	1.64E-03	6.61E-06	7.04E-04
T6 Ag	DSL	9.23E+00	1.06E-03	3.14E-03	9.35E-04	1.77E-02	2.30E-05	8.54E-04	7.86E-04	2.37E+00	4.34E-05	7.92E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 Public	DSL	8.98E+00	1.30E-04	5.64E-04	1.14E-04	1.75E-02	2.36E-05	9.74E-05	8.96E-05	2.44E+00	5.32E-06	8.14E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 CAIRP heavy	DSL	9.35E+00	2.96E-04	1.21E-03	2.60E-04	1.05E-02	2.27E-05	2.31E-04	2.13E-04	2.34E+00	1.21E-05	7.82E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 CAIRP small	DSL	9.41E+00	3.20E-04	1.50E-03	2.81E-04	6.79E-03	2.25E-05	3.23E-04	2.97E-04	2.33E+00	1.31E-05	7.77E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 OOS heavy	DSL	9.35E+00	2.96E-04	1.21E-03	2.60E-04	1.05E-02	2.27E-05	2.31E-04	2.13E-04	2.34E+00	1.21E-05	7.82E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 OOS small	DSL	9.41E+00	3.20E-04	1.50E-03	2.81E-04	6.79E-03	2.25E-05	3.23E-04	2.97E-04	2.33E+00	1.31E-05	7.77E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate construction heavy	DSL	9.26E+00	4.54E-04	1.44E-03	3.99E-04	1.77E-02	2.29E-05	3.26E-04	3.00E-04	2.36E+00	1.85E-05	7.89E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate construction small	DSL	9.37E+00	5.22E-04	2.00E-03	4.58E-04	1.10E-02	2.26E-05	4.89E-04	4.50E-04	2.34E+00	2.13E-05	7.80E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate heavy	DSL	9.27E+00	4.23E-04	1.40E-03	3.72E-04	1.61E-02	2.29E-05	2.98E-04	2.74E-04	2.36E+00	1.73E-05	7.89E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate small	DSL	9.37E+00	4.70E-04	1.85E-03	4.13E-04	9.80E-03	2.26E-05	4.25E-04	3.91E-04	2.34E+00	1.92E-05	7.80E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 utility	DSL	9.07E+00	1.24E-04	6.69E-04	1.09E-04	1.06E-02	2.34E-05	8.46E-05	7.79E-05	2.41E+00	5.04E-06	8.06E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6TS	GAS	1.30E+01	3.19E-03	3.44E-02	2.99E-03	5.99E-03	1.44E-05	6.83E-06	5.79E-06	1.36E+00	1.33E-04	2.49E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
T7 Ag	DSL	5.93E+00	1.50E-03	5.57E-03	1.32E-03	3.06E-02	3.57E-05	1.04E-03	9.57E-04	3.69E+00	6.11E-05	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 CAIRP	DSL	5.78E+00	7.50E-04	4.14E-03	6.59E-04	1.60E-02	3.67E-05	4.14E-04	3.81E-04	3.78E+00	3.06E-05	1.26E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 CAIRP construction	DSL	5.78E+00	7.73E-04	4.04E-03	6.79E-04	1.64E-02	3.67E-05	3.82E-04	3.52E-04	3.79E+00	3.15E-05	1.26E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 NNOOS	DSL	5.74E+00	7.04E-04	4.00E-03	6.18E-04	9.32E-03	3.69E-05	3.08E-04	2.84E-04	3.81E+00	2.87E-05	1.27E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 NOOS	DSL	5.71E+00	7.88E-04	4.30E-03	6.92E-04	1.63E-02	3.71E-05	3.99E-04	3.67E-04	3.83E+00	3.22E-05	1.28E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 POLA	DSL	5.77E+00	9.16E-04	5.23E-03	8.05E-04	1.44E-02	3.67E-05	2.79E-04	2.57E-04	3.79E+00	3.74E-05	1.27E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 Public	DSL	4.99E+00	5.54E-04	2.33E-03	4.87E-04	4.14E-02	4.25E-05	1.89E-04	1.74E-04	4.39E+00	2.26E-05	1.47E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 Single	DSL	5.96E+00	8.09E-04	3.25E-03	7.11E-04	2.48E-02	3.56E-05	4.90E-04	4.51E-04	3.67E+00	3.30E-05	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 single construction	DSL	5.97E+00	8.17E-04	3.20E-03	7.17E-04	2.58E-02	3.55E-05	5.01E-04	4.61E-04	3.67E+00	3.33E-05	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 SWCV	DSL	5.44E+00	4.66E-04	2.07E-03	4.10E-04	3.29E-02	3.90E-05	2.07E-04	1.91E-04	4.03E+00	1.90E-05	1.34E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 tractor	DSL	6.00E+00	9.53E-04	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 tractor construction	DSL	5.94E+00	1.18E-03	4.81E-03	1.04E-03	2.74E-02	3.57E-05	7.53E-04	6.93E-04	3.69E+00	4.83E-05	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 utility	DSL	5.04E+00	7.18E-04	3.61E-03	6.31E-04	2.59E-02	4.21E-05	1.39E-04	1.28E-04	4.34E+00	2.93E-05	1.45E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7IS	GAS	1.27E+01	2.92E-03	9.34E-02	2.60E-03	1.44E-02	1.48E-05	2.95E-06	2.43E-06	1.31E+00	2.14E-04	5.97E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
UBUS	GAS	1.08E+01	4.09E-03	4.37E-02	3.81E-03	9.01E-03	1.73E-05	7.06E-06	6.10E-06	1.63E+00	1.82E-04	3.75E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
UBUS	DSL	3.97E+00	1.41E-03	6.12E-03	1.24E-03	3.08E-02	5.34E-05	5.18E-04	4.76E-04	5.51E+00	5.76E-05	1.84E-04	1.76E-05	1.86E-03	4.41E-06	7.95E-04
All Other Buses	DSL	9.24E+00	6.02E-04	1.89E-03	5.29E-04	1.69E-02	2.30E-05	4.24E-04	3.90E-04	2.37E+00	2.46E-05	7.91E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04

[a] Calculated by dividing total emissions in Riverside County in 2014 by total VMT in Riverside County from EMFAC2011 web based access (http://www.arb.ca.gov/emfac/)

[b] Gasoline CH4 calculated by dividing total CH4 emissions in Riverside County by total VMT in Riverside County from EMFAC2011-LDV (http://www.arb.ca.gov/msei/emfac2011_ldv.htm)
Diesel CH4 calculated as 0.0408 x TOG; gasoline N2O calculated as 0.0416 x NOx; diesel N2O calculated as 0.3316 [g/gal] / fuel consumption [mi/gal] / 453.6 [g/lb]
(http://www.arb.ca.gov/msei/emfac2011-faq.htm#emfac2011_web_db_qstn07)

Table 3
Motor Vehicle Exhaust Emission Factors

Vehicle	Fuel	GVWR (lb)	EMFAC2011 Category	Emissions Factors (lb/mi)								
				CO	ROG	NOx	SO2	PM10	PM2.5	CO2	CH4	N2O
5000 gal Water Truck	DSL	34,000	T7 Single	3.25E-03	7.11E-04	2.48E-02	3.56E-05	4.90E-04	4.51E-04	3.67E+00	3.30E-05	1.23E-04
Low Bed Delivery Trucks	DSL	80,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Architechtural Truck	DSL	55,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Cabling Trucks	DSL	80,000	T7 Single	3.25E-03	7.11E-04	2.48E-02	3.56E-05	4.90E-04	4.51E-04	3.67E+00	3.30E-05	1.23E-04
Off-site Concrete Truck	DSL	55,000	T7 Single	3.25E-03	7.11E-04	2.48E-02	3.56E-05	4.90E-04	4.51E-04	3.67E+00	3.30E-05	1.23E-04
Off-Site Electrical Truck	DSL	55,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Fencing Trucks	DSL	80,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Flat Bed Trucks	DSL	80,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Fuel & Lube	DSL	21,000	T6 instate small	1.85E-03	4.13E-04	9.80E-03	2.26E-05	4.25E-04	3.91E-04	2.34E+00	1.92E-05	7.80E-05
Off-Site Gravel Rock/AC trucks	DSL	80,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-site Insulation Truck	DSL	55,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Inverters	DSL	80,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Mechanical Truck	DSL	55,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site PV Panel Trucks	DSL	80,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-site Roof truck	DSL	55,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Structural Steel truck	DSL	55,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Tracker Trucks	DSL	80,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-site Wall Truck	DSL	55,000	T7 tractor	4.02E-03	8.37E-04	2.58E-02	3.53E-05	6.33E-04	5.82E-04	3.65E+00	3.89E-05	1.22E-04
Off-Site Water Trucks	DSL	55,000	T7 Single	3.25E-03	7.11E-04	2.48E-02	3.56E-05	4.90E-04	4.51E-04	3.67E+00	3.30E-05	1.23E-04
On-Site Dump Truck	DSL	30,000	T6 instate heavy	1.40E-03	3.72E-04	1.61E-02	2.29E-05	2.98E-04	2.74E-04	2.36E+00	1.73E-05	7.89E-05
On-Site Flatbed Delivery Truck	DSL	30,000	T6 instate heavy	1.40E-03	3.72E-04	1.61E-02	2.29E-05	2.98E-04	2.74E-04	2.36E+00	1.73E-05	7.89E-05
On-Site Heavy Duty Pick Up Truck	DSL	21,000	T6 instate small	1.85E-03	4.13E-04	9.80E-03	2.26E-05	4.25E-04	3.91E-04	2.34E+00	1.92E-05	7.80E-05
On-Site Lube/Fuel Trucks	DSL	21,000	T6 instate small	1.85E-03	4.13E-04	9.80E-03	2.26E-05	4.25E-04	3.91E-04	2.34E+00	1.92E-05	7.80E-05
On-Site Pick Up Truck	DSL	21,000	T6 instate small	1.85E-03	4.13E-04	9.80E-03	2.26E-05	4.25E-04	3.91E-04	2.34E+00	1.92E-05	7.80E-05
On-Site Service Truck	DSL	21,000	T6 instate small	1.85E-03	4.13E-04	9.80E-03	2.26E-05	4.25E-04	3.91E-04	2.34E+00	1.92E-05	7.80E-05
Porto-Let Truck	DSL	24,000	T6 instate small	1.85E-03	4.13E-04	9.80E-03	2.26E-05	4.25E-04	3.91E-04	2.34E+00	1.92E-05	7.80E-05
Off-Site Worker Commute Car	GAS	N/A	LDT1	9.00E-03	1.07E-03	8.20E-04	8.98E-06	1.03E-05	9.39E-06	7.91E-01	6.41E-05	3.41E-05
Off-Site Worker Commuter Bus, Small	DSL	N/A	All Other Buses	1.89E-03	5.29E-04	1.69E-02	2.30E-05	4.24E-04	3.90E-04	2.37E+00	2.46E-05	7.91E-05

Table 4
Emission Factors for Fugitive Particulate Matter Emissions from On-Site Motor Vehicles on Unpaved Surfaces

					PM10						PM2.5					
Vehicle Type	Weight (tons)	Silt Content (%)[a]	Fuel	EMFAC2011 Category	Uncontrolled Entrained Road Dust (lb/mi)[b]	Control Efficiency (%)[c]	Controlled Entrained Road Dust (lb/mi)	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)	Uncontrolled Entrained Road Dust (lb/mi)[d]	Control Efficiency (%)[c]	Controlled Entrained Road Dust (lb/mi)	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)
5000 gal Water Truck	17	18.03	DSL	T7 Single	0.00E+00	81%	0.00E+00	7.94E-05	1.36E-04	2.15E-04	0.00E+00	81%	0.00E+00	1.98E-05	5.83E-05	7.82E-05
On-Site Dump Truck	15	18.03	DSL	T6 instate heavy	4.46E+00	81%	8.48E-01	2.65E-05	2.87E-04	8.49E-01	4.46E-01	81%	8.48E-02	6.61E-06	1.23E-04	8.50E-02
On-Site Flatbed Delivery Truck	15	18.03	DSL	T6 instate heavy	4.46E+00	81%	8.48E-01	2.65E-05	2.87E-04	8.49E-01	4.46E-01	81%	8.48E-02	6.61E-06	1.23E-04	8.50E-02
On-Site Heavy Duty Pick Up Truck	10.5	18.03	DSL	T6 instate small	3.80E+00	81%	7.22E-01	2.65E-05	2.87E-04	7.23E-01	3.80E-01	81%	7.22E-02	6.61E-06	1.23E-04	7.24E-02
On-Site Lube/Fuel Trucks	10.5	18.03	DSL	T6 instate small	3.80E+00	81%	7.22E-01	2.65E-05	2.87E-04	7.23E-01	3.80E-01	81%	7.22E-02	6.61E-06	1.23E-04	7.24E-02
On-Site Pick Up Truck	10.5	18.03	DSL	T6 instate small	3.80E+00	81%	7.22E-01	2.65E-05	2.87E-04	7.23E-01	3.80E-01	81%	7.22E-02	6.61E-06	1.23E-04	7.24E-02
On-Site Service Truck	10.5	18.03	DSL	T6 instate small	3.80E+00	81%	7.22E-01	2.65E-05	2.87E-04	7.23E-01	3.80E-01	81%	7.22E-02	6.61E-06	1.23E-04	7.24E-02

[a] From Blythe AFC Geotechnical Report (Appendix B)

[b] Emission factor [lb/mi] = 1.5 x (silt content [%] / 12)$^{0.9}$ x (weight [tons] / 3)$^{0.45}$
from AP-42 Section 13.2.2, Unpaved Roads, 11/06

[c] Combined control efficiency for limiting vehicle speed to 15 mph (57%, from SCAQMD CEQA mitigation measures, Table XI-A) and watering twice per day (55% from SCAQMD CEQA mitigation measures, Table XI-D) downloaded from http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM_fugitive.html

[d] Emission factor [lb/mi] = 0.15 x (silt content [%] / 12)$^{0.9}$ x (weight [tons] / 3)$^{0.45}$
from AP-42 Section 13.2.2, Unpaved Roads, 11/06

Table 5
Emission Factors for Fugitive Particulate Matter Emissions from Off-Site Motor Vehicles on Paved Roads

Vehicle Type	Weight (tons)[a]	Road Type	Silt Loading (g/m^2)[a]	Fuel	EMFAC2011 Category	PM10				PM2.5			
						Entrained Road Dust (lb/mi)[b]	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)	Entrained Road Dust (lb/mi)[c]	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)
Low Bed Delivery Trucks	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Architechtural Truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Cabling Trucks	3	Collector	0.035	DSL	T7 Single	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-site Concrete Truck	3	Collector	0.035	DSL	T7 Single	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Electrical Truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Fencing Trucks	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Flat Bed Trucks	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Fuel & Lube	3	Collector	0.035	DSL	T6 instate small	2.90E-04	2.65E-05	2.87E-04	6.04E-04	7.84E-05	6.61E-06	1.23E-04	2.08E-04
Off-Site Gravel Rock/AC trucks	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-site Insulation Truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Inverters	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Mechanical Truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site PV Panel Trucks	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-site Roof truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Structural Steel truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Tracker Trucks	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-site Wall Truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Off-Site Water Trucks	3	Collector	0.035	DSL	T7 Single	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04
Porto-Let Truck	3	Collector	0.035	DSL	T6 instate small	2.90E-04	2.65E-05	2.87E-04	6.04E-04	7.84E-05	6.61E-06	1.23E-04	2.08E-04
Off-Site Worker Commute Car	3	Collector	0.035	GAS	LDT1	2.90E-04	1.76E-05	8.10E-05	3.89E-04	7.84E-05	4.41E-06	3.47E-05	1.18E-04
Off-Site Worker Commuter Bus, Small	3	Collector	0.035	DSL	All Other Buses	2.90E-04	2.65E-05	2.87E-04	6.04E-04	7.84E-05	6.61E-06	1.23E-04	2.08E-04

[a] From ARB Emission Inventory Methodology 7.9, Entrained Paved Road Dust (1997)

[b] Emission factor [lb/mi] = 0.0022 x (silt loading [g/m^2]$^{0.91}$ x (weight [tons])$^{1.02}$
from AP-42 Section 13.2.1, Paved Roads, 01/11

[c] Emission factor [lb/mi] = 0.00054 x (silt loading [g/m^2]$^{0.91}$ x (weight [tons])$^{1.02}$
from AP-42 Section 13.2.1, Paved Roads, 01/11

Table 6
Earthwork Fugitive PM Emission Factors
Soil handling

Emission Factor [lb/cu. yd] = k x 0.0032 x (mean wind speed [mi/hr] / 5)$^{1.3}$ / (moisture [%] / 2)$^{1.4}$ x (number drops per ton) x (density [ton/cu. yd])
Reference: AP-42, Equation (1), Section 13.2.4, November 2006

Table 6a Soil Handling Reference Data		
Parameter	**Value**	**Basis**
Particle Size Multiplier (k) for PM10	0.35	AP-42, Section 13.2.4
Particle Size Multiplier (k) for PM2.5	0.053	AP-42, Section 13.2.4
Mean Wind Speed	7.8	Blythe Airport 2002-2004 wind speed average
Moisture	15	SCAQMD 1993 CEQA Air Quality Handbook, Moist Soil
Number Drops	2	Assumption - 2 drops each for cutting and filling operation
Soil Density	1.215	Table 2.46, Handbook of Solid Waste Management

Table E.2-4b Soil Handling Fugitive Emission Factors		
PM10 Emission Factor (Uncontrolled)	2.89E-04	lb/cu. yd
PM2.5 Emission Factor (Uncontrolled)	4.38E-05	lb/cu. yd
Reduction from watering*	0%	---
Controlled PM10 Emission Factor	2.89E-04	lb/cu. yd
Controlled PM2.5 Emission Factor	4.38E-05	lb/cu. yd

[a] The assumed moisture content is based on frequent watering of exposed surfaces. Assumed no control efficiency for watering so as to not double c
Emissions [pounds per day] = Controlled emission factor [pounds per cubic yard] x Volume soil handled [cubic yards per day]

Storage Pile Wind Erosion

Emission Factor [lb/day-acre] = J x 1.7 x (silt content [%] / 1.5) x (365 / 235) x (percentage of time unobstructed wind exceeds 12 mph / 15)
Reference: MDAQMD Emission Inventory Guidance Mineral Handling and Processing Industries, April 2000

Table6b Storage Pile Wind Erosion Reference Data		
Parameter	**Value**	**Basis**
Particulate Aerodynamic Factor (J) for PM10	0.5	MDAQMD Emission Inventory Guidance Mineral Handling and Processing Industries, April
Particulate Aerodynamic Factor (J) for PM2.5	0.2	2000
Silt Content	18.03	Blythe AFC Geotechnical Report (Appendix B)
Pct. time wind > 12 mph	20.6	Blythe Airport 2002-2004 Meteorological data

Table E.2-4d Storage Pile Wind Erosion Fugitive Emission Factors		
PM10 Emission Factor (Uncontrolled)	21.8	lb/day-acre
PM2.5 Emission Factor (Uncontrolled)	8.7	lb/day-acre
Reduction from Watering Twice/Day[b]	50%	---
Controlled PM10 Emission Factor	10.9	lb/day-acre
Controlled PM2.5 Emission Factor[a]	4.4	lb/day-acre

[b] For daily water applicatin rate of 1,703 gallons/acre, MDAQMD April 2000
Emissions [pounds per day] = Controlled emission factor [pounds per acre-day] x Storage pile surface area [acres]

Bulldozing, Scraping and Grading

Emission Factor [lb/hr] = 2.76 x k x (silt content [%])$^{1.5}$ / (moisture)$^{1.4}$
Reference: MDAQMD Emission Inventory Guidance Mineral Handling and Processing Industries, April 2000

Table 6c Bulldozing, Scraping and Grading Reference Data		
Parameter	**Value**	**Basis**
Particulate Aerodynamic Factor (k) for PM10	0.36	MDAQMD Emission Inventory Guidance Mineral Handling and Processing Industries, April
Particulate Aerodynamic Factor (k) for PM2.5	0.11	2000
Silt Content	18.03	Blythe AFC Geotechnical Report (Appendix B)
Moisture	15	SCAQMD 1993 CEQA Air Quality Handbook, Moist Soil

Table E.2-4f Bulldozing, Scraping and Grading Fugitive Emission Factors		
PM10 Emission Factor (Uncontrolled)	1.717	lb/hr
PM2.5 Emission Factor (Uncontrolled)	0.525	lb/hr
Reduction from watering*	0%	---
Controlled PM10 Emission Factor	1.717	lb/hr
Controlled PM2.5 Emission Factor[a]	0.525	lb/hr

[c] The assumed moisture content is based on frequent watering of exposed surfaces. Assumed no control efficiency for watering so as to not double c
Emissions [pounds per day] = Controlled emission factor [pounds per hour] x Bulldozing or grading time [hours/day]

Table 7-a
Construction Equipment Numbers

Equipment	Hr/Day	Number Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	6	1	1	1	0	1	1	1	0	1	1	1	0
Skip Loader	4	1	1	1	0	1	1	1	0	1	1	1	0
Track Trencher	8	1	1	1	0	1	1	1	0	1	1	1	0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	8	0	0	0	1	1	1	1	1	1	1	1	1
Generator	8	0	0	0	2	2	2	2	2	2	2	2	2
Scraper Cat 623	8	0	0	0	2	2	2	2	2	2	2	2	2
Deere 210LE Skip Loader	8	0	0	0	1	1	1	1	1	1	1	1	1
Cat 140H Grader	8	0	0	0	2	2	2	2	2	2	2	2	2
Roller Vibrator/compactor/other	6	0	0	0	1	1	1	1	1	1	1	1	1
Cat BG600D Paver	6	0	0	0	0	1	1	1	1	0	0	0	0
PV PANEL CONSTRUCTION													
Generator	8	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	8	0	0	0	0	0	0	0	0	0	0	0	0
Dozer Cat D6R	4	0	0	0	0	0	0	0	0	0	0	0	0
Deere 210LE Skip Loader	8	0	0	0	0	0	0	0	0	0	0	0	0
Telehandler	8	0	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	8	0	0	0	0	0	0	0	0	0	0	0	0
Cat 583T Pipelayer	6	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	6	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	6	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	6	0	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	6	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cat BG600D Paver	6	0	0	0	0	0	0	0	0	0	0	0	0
Roller Vibrator/compactor/other	6	0	0	0	0	0	0	0	0	0	0	0	0

Table 7-a
Construction Equipment Numb

Equipment	Number Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	1	1	1	0	0	0	0	0	0	0	0	0	0
Skip Loader	1	1	1	0	0	0	0	0	0	0	0	0	0
Track Trencher	1	1	1	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0	1	1	1	1	1	1	1	1	1	0	1	1
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	0	2	2	2	2	2	2	2	2	2	0	2	2
Deere 210LE Skip Loader	0	1	1	1	1	1	1	1	1	1	0	1	1
Cat 140H Grader	0	2	2	2	2	2	2	2	2	2	0	2	2
Roller Vibrator/compactor/other	0	1	1	1	1	1	1	1	1	1	0	1	1
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION													
Generator	2	2	2	2	2	2	2	2	0	2	2	2	2
Air Compressor	2	2	2	2	2	2	2	2	0	2	2	2	2
Dozer Cat D6R	1	1	1	1	1	1	1	1	0	1	1	1	1
Deere 210LE Skip Loader	1	1	1	1	1	1	1	1	0	1	1	1	1
Telehandler	2	2	2	2	2	2	2	2	0	2	2	2	2
Track Trencher	1	1	1	1	1	1	1	1	0	1	1	1	1
Cat 583T Pipelayer	1	1	1	1	1	1	1	1	0	1	1	1	1
SUBSTATION-BLDG-WATER T													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	1	1	1	1	0	0	0
Skip Loader	0	0	0	0	0	0	1	1	1	1	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	1	1	1	1	0	0	0
Testing & Commissioning													
Cat BG600D Paver	0	0	0	0	0	0	0	0	1	1	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	1	1	0	0	0

Table 7-a
Construction Equipment Numb

Equipment	Number Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	1	1	1	1	1	1	1	0	1	1	1	1	1
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	2	2	2	2	2	2	2	0	2	2	2	2	2
Deere 210LE Skip Loader	1	1	1	1	1	1	1	0	1	1	1	1	1
Cat 140H Grader	2	2	2	2	2	2	2	0	2	2	2	2	2
Roller Vibrator/compactor/other	1	1	1	1	1	1	1	0	1	1	1	1	1
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION													
Generator	2	2	2	2	0	2	2	2	2	2	2	2	2
Air Compressor	2	2	2	2	0	2	2	2	2	2	2	2	2
Dozer Cat D6R	1	1	1	1	0	1	1	1	1	1	1	1	1
Deere 210LE Skip Loader	1	1	1	1	0	1	1	1	1	1	1	1	1
Telehandler	2	2	2	2	0	2	2	2	2	2	2	2	2
Track Trencher	1	1	1	1	0	1	1	1	1	1	1	1	1
Cat 583T Pipelayer	1	1	1	1	0	1	1	1	1	1	1	1	1
SUBSTATION-BLDG-WATER TA													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cat BG600D Paver	0	0	0	0	1	1	0	0	0	0	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 7-a
Construction Equipment Numb

Equipment	Number Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	1	1	1	1	0	0	0	0	0	0
Generator	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	2	2	2	2	0	0	0	0	0	0
Deere 210LE Skip Loader	1	1	1	1	0	0	0	0	0	0
Cat 140H Grader	2	2	2	2	0	0	0	0	0	0
Roller Vibrator/compactor/other	1	1	1	1	0	0	0	0	0	0
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION										
Generator	0	2	2	2	2	2	2	2	2	0
Air Compressor	0	2	2	2	2	2	2	2	2	0
Dozer Cat D6R	0	1	1	1	1	1	1	1	1	0
Deere 210LE Skip Loader	0	1	1	1	1	1	1	1	1	0
Telehandler	0	2	2	2	2	2	2	2	2	0
Track Trencher	0	1	1	1	1	1	1	1	1	0
Cat 583T Pipelayer	0	1	1	1	1	1	1	1	1	0
SUBSTATION-BLDG-WATER T										
Generator	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning										
Cat BG600D Paver	1	1	0	0	0	0	0	0	1	1
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	1	1

Table 7-b
Monthly Construction Equipment Use

Equipment	Hours/Month[a]												
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION													
Generator	132	132	132	0	132	132	132	0	132	132	132	0	132
Skip Loader	88	88	88	0	88	88	88	0	88	88	88	0	88
Track Trencher	176	176	176	0	176	176	176	0	176	176	176	0	176
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	0	0	0	176	176	176	176	176	176	176	176	176	0
Generator	0	0	0	352	352	352	352	352	352	352	352	352	0
Scraper Cat 623	0	0	0	352	352	352	352	352	352	352	352	352	0
Deere 210LE Skip Loader	0	0	0	176	176	176	176	176	176	176	176	176	0
Cat 140H Grader	0	0	0	352	352	352	352	352	352	352	352	352	0
Roller Vibrator/compactor/other	0	0	0	132	132	132	132	132	132	132	132	132	0
Cat BG600D Paver	0	0	0	0	132	132	132	132	0	0	0	0	0
PV PANEL CONSTRUCTION													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	352
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	352
Dozer Cat D6R	0	0	0	0	0	0	0	0	0	0	0	0	88
Deere 210LE Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	176
Telehandler	0	0	0	0	0	0	0	0	0	0	0	0	352
Track Trencher	0	0	0	0	0	0	0	0	0	0	0	0	176
Cat 583T Pipelayer	0	0	0	0	0	0	0	0	0	0	0	0	132
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/month

Table 7-b
Monthly Construction Equipme

Equipment	Hours/Month[a] Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
FENCE - MOBILIZATION													
Generator	132	132	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	88	88	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	176	176	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	176	176	176	176	176	176	176	176	176	0	176	176	176
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	352	352	352	352	352	352	352	352	352	0	352	352	352
Deere 210LE Skip Loader	176	176	176	176	176	176	176	176	176	0	176	176	176
Cat 140H Grader	352	352	352	352	352	352	352	352	352	0	352	352	352
Roller Vibrator/compactor/other	132	132	132	132	132	132	132	132	132	0	132	132	132
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION													
Generator	352	352	352	352	352	352	352	0	352	352	352	352	352
Air Compressor	352	352	352	352	352	352	352	0	352	352	352	352	352
Dozer Cat D6R	88	88	88	88	88	88	88	0	88	88	88	88	88
Deere 210LE Skip Loader	176	176	176	176	176	176	176	0	176	176	176	176	176
Telehandler	352	352	352	352	352	352	352	0	352	352	352	352	352
Track Trencher	176	176	176	176	176	176	176	0	176	176	176	176	176
Cat 583T Pipelayer	132	132	132	132	132	132	132	0	132	132	132	132	132
SUBSTATION-BLDG-WATER TA													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	132	132	132	132	0	0	0	0
Skip Loader	0	0	0	0	0	132	132	132	132	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	132	132	132	132	0	0	0	0
Testing & Commissioning													
Cat BG600D Paver	0	0	0	0	0	0	0	132	132	0	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	132	132	0	0	0	0

[a] Based on 22 working days/mont

Table 7-b
Monthly Construction Equipme

Equipment	Hours/Month[a] Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
FENCE - MOBILIZATION													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	176	176	176	176	176	176	0	176	176	176	176	176	176
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	352	352	352	352	352	352	0	352	352	352	352	352	352
Deere 210LE Skip Loader	176	176	176	176	176	176	0	176	176	176	176	176	176
Cat 140H Grader	352	352	352	352	352	352	0	352	352	352	352	352	352
Roller Vibrator/compactor/other	132	132	132	132	132	132	0	132	132	132	132	132	132
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION													
Generator	352	352	352	0	352	352	352	352	352	352	352	352	0
Air Compressor	352	352	352	0	352	352	352	352	352	352	352	352	0
Dozer Cat D6R	88	88	88	0	88	88	88	88	88	88	88	88	0
Deere 210LE Skip Loader	176	176	176	0	176	176	176	176	176	176	176	176	0
Telehandler	352	352	352	0	352	352	352	352	352	352	352	352	0
Track Trencher	176	176	176	0	176	176	176	176	176	176	176	176	0
Cat 583T Pipelayer	132	132	132	0	132	132	132	132	132	132	132	132	0
SUBSTATION-BLDG-WATER TA													
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cat BG600D Paver	0	0	0	132	132	0	0	0	0	0	0	0	132
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/mont

Table 7-b
Monthly Construction Equipme

Equipment	Hours/Month[a] Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION									
Generator	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD									
Dozer Cat D6R	176	176	176	0	0	0	0	0	0
Generator	0	0	0	0	0	0	0	0	0
Scraper Cat 623	352	352	352	0	0	0	0	0	0
Deere 210LE Skip Loader	176	176	176	0	0	0	0	0	0
Cat 140H Grader	352	352	352	0	0	0	0	0	0
Roller Vibrator/compactor/other	132	132	132	0	0	0	0	0	0
Cat BG600D Paver	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION									
Generator	352	352	352	352	352	352	352	352	0
Air Compressor	352	352	352	352	352	352	352	352	0
Dozer Cat D6R	88	88	88	88	88	88	88	88	0
Deere 210LE Skip Loader	176	176	176	176	176	176	176	176	0
Telehandler	352	352	352	352	352	352	352	352	0
Track Trencher	176	176	176	176	176	176	176	176	0
Cat 583T Pipelayer	132	132	132	132	132	132	132	132	0
SUBSTATION-BLDG-WATER TA									
Generator	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0
Testing & Commissioning									
Cat BG600D Paver	132	0	0	0	0	0	0	132	132
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	132	132

[a] Based on 22 working days/mont

Table 7-c
Monthly Construction Equipment CO Emissions

Equipment	Emission Factor (lb/hr)	CO Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	1.82E-01	24.0	24.0	24.0	0.0	24.0	24.0	24.0	0.0	24.0	24.0	24.0	0.0
Skip Loader	3.93E-01	34.6	34.6	34.6	0.0	34.6	34.6	34.6	0.0	34.6	34.6	34.6	0.0
Track Trencher	4.14E-01	72.9	72.9	72.9	0.0	72.9	72.9	72.9	0.0	72.9	72.9	72.9	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	3.54E-01	0.0	0.0	0.0	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3
Generator	1.82E-01	0.0	0.0	0.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
Scraper Cat 623	6.43E-01	0.0	0.0	0.0	226.5	226.5	226.5	226.5	226.5	226.5	226.5	226.5	226.5
Deere 210LE Skip Loader	3.93E-01	0.0	0.0	0.0	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
Cat 140H Grader	3.66E-01	0.0	0.0	0.0	128.7	128.7	128.7	128.7	128.7	128.7	128.7	128.7	128.7
Roller Vibrator/compactor/other	4.05E-01	0.0	0.0	0.0	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
Cat BG600D Paver	7.42E-01	0.0	0.0	0.0	0.0	98.0	98.0	98.0	98.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	1.82E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	5.95E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	3.54E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	3.93E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	2.21E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	4.14E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	4.72E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	1.82E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	5.95E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	3.93E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	2.39E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	7.42E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	4.05E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**131.5**	**131.5**	**131.5**	**604.0**	**833.5**	**833.5**	**833.5**	**702.0**	**735.5**	**735.5**	**735.5**	**604.0**

Table 7-c
Monthly Construction Equipme

Equipment	CO Emissions (lb/month) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	24.0	24.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	34.6	34.6	34.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	72.9	72.9	72.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	0.0	62.3	62.3
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	226.5	226.5	226.5	226.5	226.5	226.5	226.5	226.5	226.5	0.0	226.5	226.5
Deere 210LE Skip Loader	0.0	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	0.0	69.2	69.2
Cat 140H Grader	0.0	128.7	128.7	128.7	128.7	128.7	128.7	128.7	128.7	128.7	0.0	128.7	128.7
Roller Vibrator/compactor/other	0.0	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	0.0	53.4	53.4
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	0.0	63.9	63.9	63.9	63.9
Air Compressor	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	0.0	20.9	20.9	20.9	20.9
Dozer Cat D6R	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	0.0	31.1	31.1	31.1	31.1
Deere 210LE Skip Loader	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	0.0	69.2	69.2	69.2	69.2
Telehandler	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	0.0	77.7	77.7	77.7	77.7
Track Trencher	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	0.0	72.9	72.9	72.9	72.9
Cat 583T Pipelayer	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	0.0	62.3	62.3	62.3	62.3
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	7.9	7.9	7.9	7.9	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	51.9	51.9	51.9	51.9	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	31.5	31.5	31.5	31.5	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.0	98.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.4	53.4	0.0	0.0	0.0
TOTAL (lb/month)	**529.6**	**1,069.7**	**1,069.7**	**938.2**	**938.2**	**938.2**	**1,029.5**	**1,029.5**	**782.8**	**1,180.9**	**398.2**	**938.2**	**938.2**

Table 7-c
Monthly Construction Equipme

Equipment	CO Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	62.3	62.3	62.3	62.3	62.3	62.3	62.3	0.0	62.3	62.3	62.3	62.3	62.3
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	226.5	226.5	226.5	226.5	226.5	226.5	226.5	0.0	226.5	226.5	226.5	226.5	226.5
Deere 210LE Skip Loader	69.2	69.2	69.2	69.2	69.2	69.2	69.2	0.0	69.2	69.2	69.2	69.2	69.2
Cat 140H Grader	128.7	128.7	128.7	128.7	128.7	128.7	128.7	0.0	128.7	128.7	128.7	128.7	128.7
Roller Vibrator/compactor/other	53.4	53.4	53.4	53.4	53.4	53.4	53.4	0.0	53.4	53.4	53.4	53.4	53.4
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	63.9	63.9	63.9	63.9	0.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
Air Compressor	20.9	20.9	20.9	20.9	0.0	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
Dozer Cat D6R	31.1	31.1	31.1	31.1	0.0	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
Deere 210LE Skip Loader	69.2	69.2	69.2	69.2	0.0	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
Telehandler	77.7	77.7	77.7	77.7	0.0	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
Track Trencher	72.9	72.9	72.9	72.9	0.0	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
Cat 583T Pipelayer	62.3	62.3	62.3	62.3	0.0	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	98.0	98.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**938.2**	**938.2**	**938.2**	**938.2**	**638.1**	**1,036.2**	**938.2**	**398.2**	**938.2**	**938.2**	**938.2**	**938.2**	**938.2**

Table 7-c
Monthly Construction Equipme

Equipment	CO Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	62.3	62.3	62.3	62.3	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	226.5	226.5	226.5	226.5	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	69.2	69.2	69.2	69.2	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	128.7	128.7	128.7	128.7	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	53.4	53.4	53.4	53.4	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	0.0
Air Compressor	0.0	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	0.0
Dozer Cat D6R	0.0	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	0.0
Deere 210LE Skip Loader	0.0	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	0.0
Telehandler	0.0	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	0.0
Track Trencher	0.0	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	0.0
Cat 583T Pipelayer	0.0	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	0.0
SUBSTATION-BLDG-WATER T										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	98.0	98.0	0.0	0.0	0.0	0.0	0.0	0.0	98.0	98.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.4	53.4
TOTAL (lb/month)	**638.1**	**1,036.2**	**938.2**	**938.2**	**398.2**	**398.2**	**398.2**	**398.2**	**549.6**	**151.4**

Table 7-d
Monthly Construction Equipment ROG Emissions

Equipment	Emission Factor (lb/hr)	ROG Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	1.26E-02	1.7	1.7	1.7	0.0	1.7	1.7	1.7	0.0	1.7	1.7	1.7	0.0
Skip Loader	4.11E-02	3.6	3.6	3.6	0.0	3.6	3.6	3.6	0.0	3.6	3.6	3.6	0.0
Track Trencher	5.06E-02	8.9	8.9	8.9	0.0	8.9	8.9	8.9	0.0	8.9	8.9	8.9	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	1.43E-01	0.0	0.0	0.0	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
Generator	1.26E-02	0.0	0.0	0.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Scraper Cat 623	2.72E-01	0.0	0.0	0.0	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
Deere 210LE Skip Loader	4.11E-02	0.0	0.0	0.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Cat 140H Grader	1.48E-01	0.0	0.0	0.0	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
Roller Vibrator/compactor/other	1.30E-01	0.0	0.0	0.0	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
Cat BG600D Paver	8.35E-02	0.0	0.0	0.0	0.0	11.0	11.0	11.0	11.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	1.26E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.74E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	1.43E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	4.11E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	2.64E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	5.06E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	1.55E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	1.26E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.74E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	4.11E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	9.68E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	8.35E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	1.30E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**14.2**	**14.2**	**14.2**	**201.7**	**226.9**	**226.9**	**226.9**	**212.7**	**215.9**	**215.9**	**215.9**	**201.7**

Table 7-d
Monthly Construction Equipme

	ROG Emissions (lb/month)												
Equipment	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
Generator	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	3.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	8.9	8.9	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	0.0	25.2	25.2
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	0.0	95.7	95.7
Deere 210LE Skip Loader	0.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	0.0	7.2	7.2
Cat 140H Grader	0.0	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	0.0	51.9	51.9
Roller Vibrator/compactor/other	0.0	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	0.0	17.2	17.2
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0.0	4.4	4.4	4.4	4.4
Air Compressor	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0.0	6.1	6.1	6.1	6.1
Dozer Cat D6R	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	0.0	12.6	12.6	12.6	12.6
Deere 210LE Skip Loader	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	0.0	7.2	7.2	7.2	7.2
Telehandler	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	0.0	9.3	9.3	9.3	9.3
Track Trencher	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	0.0	8.9	8.9	8.9	8.9
Cat 583T Pipelayer	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	0.0	20.4	20.4	20.4	20.4
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.4	5.4	5.4	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	12.8	12.8	12.8	12.8	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	11.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2	17.2	0.0	0.0	0.0
TOTAL (lb/month)	**83.2**	**280.5**	**280.5**	**266.3**	**266.3**	**266.3**	**286.8**	**286.8**	**245.9**	**315.0**	**69.0**	**266.3**	**266.3**

Table 7-d
Monthly Construction Equipme

Equipment	ROG Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	25.2	25.2	25.2	25.2	25.2	25.2	25.2	0.0	25.2	25.2	25.2	25.2	25.2
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	95.7	95.7	95.7	95.7	95.7	95.7	95.7	0.0	95.7	95.7	95.7	95.7	95.7
Deere 210LE Skip Loader	7.2	7.2	7.2	7.2	7.2	7.2	7.2	0.0	7.2	7.2	7.2	7.2	7.2
Cat 140H Grader	51.9	51.9	51.9	51.9	51.9	51.9	51.9	0.0	51.9	51.9	51.9	51.9	51.9
Roller Vibrator/compactor/other	17.2	17.2	17.2	17.2	17.2	17.2	17.2	0.0	17.2	17.2	17.2	17.2	17.2
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	4.4	4.4	4.4	4.4	0.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Air Compressor	6.1	6.1	6.1	6.1	0.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Dozer Cat D6R	12.6	12.6	12.6	12.6	0.0	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
Deere 210LE Skip Loader	7.2	7.2	7.2	7.2	0.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Telehandler	9.3	9.3	9.3	9.3	0.0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
Track Trencher	8.9	8.9	8.9	8.9	0.0	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Cat 583T Pipelayer	20.4	20.4	20.4	20.4	0.0	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	11.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**266.3**	**266.3**	**266.3**	**266.3**	**208.3**	**277.3**	**266.3**	**69.0**	**266.3**	**266.3**	**266.3**	**266.3**	**266.3**

Table 7-d
Monthly Construction Equipme

Equipment	ROG Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	25.2	25.2	25.2	25.2	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	95.7	95.7	95.7	95.7	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	7.2	7.2	7.2	7.2	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	51.9	51.9	51.9	51.9	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	17.2	17.2	17.2	17.2	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0.0
Air Compressor	0.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0.0
Dozer Cat D6R	0.0	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	0.0
Deere 210LE Skip Loader	0.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	0.0
Telehandler	0.0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	0.0
Track Trencher	0.0	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	0.0
Cat 583T Pipelayer	0.0	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	0.0
SUBSTATION-BLDG-WATER T										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	11.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	11.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2	17.2
TOTAL (lb/month)	**208.3**	**277.3**	**266.3**	**266.3**	**69.0**	**69.0**	**69.0**	**69.0**	**97.2**	**28.2**

Table 7-e
Monthly Construction Equipment NOx Emissions

Equipment	Emission Factor (lb/hr)	NOx Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	2.57E-01	33.9	33.9	33.9	0.0	33.9	33.9	33.9	0.0	33.9	33.9	33.9	0.0
Skip Loader	3.18E-01	28.0	28.0	28.0	0.0	28.0	28.0	28.0	0.0	28.0	28.0	28.0	0.0
Track Trencher	5.95E-01	104.7	104.7	104.7	0.0	104.7	104.7	104.7	0.0	104.7	104.7	104.7	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	1.42E+00	0.0	0.0	0.0	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5
Generator	2.57E-01	0.0	0.0	0.0	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
Scraper Cat 623	1.52E+00	0.0	0.0	0.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0
Deere 210LE Skip Loader	3.18E-01	0.0	0.0	0.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
Cat 140H Grader	1.47E+00	0.0	0.0	0.0	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2
Roller Vibrator/compactor/other	9.78E-01	0.0	0.0	0.0	129.1	129.1	129.1	129.1	129.1	129.1	129.1	129.1	129.1
Cat BG600D Paver	5.80E-01	0.0	0.0	0.0	0.0	76.6	76.6	76.6	76.6	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	2.57E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.10E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	1.42E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	3.18E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	1.74E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	5.95E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	1.14E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	2.57E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.10E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	3.18E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	9.61E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	5.80E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	9.78E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**166.6**	**166.6**	**166.6**	**1,578.2**	**1,821.4**	**1,821.4**	**1,821.4**	**1,654.8**	**1,744.8**	**1,744.8**	**1,744.8**	**1,578.2**

Table 7-e
Monthly Construction Equipme

Equipment	NOx Emissions (lb/month) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	33.9	33.9	33.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	28.0	28.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	104.7	104.7	104.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	0.0	250.5	250.5
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	0.0	534.0	534.0
Deere 210LE Skip Loader	0.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	0.0	56.0	56.0
Cat 140H Grader	0.0	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	0.0	518.2	518.2
Roller Vibrator/compactor/other	0.0	129.1	129.1	129.1	129.1	129.1	129.1	129.1	129.1	129.1	0.0	129.1	129.1
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	0.0	90.5	90.5	90.5	90.5
Air Compressor	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	0.0	38.8	38.8	38.8	38.8
Dozer Cat D6R	125.2	125.2	125.2	125.2	125.2	125.2	125.2	125.2	0.0	125.2	125.2	125.2	125.2
Deere 210LE Skip Loader	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	0.0	56.0	56.0	56.0	56.0
Telehandler	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	0.0	61.3	61.3	61.3	61.3
Track Trencher	104.7	104.7	104.7	104.7	104.7	104.7	104.7	104.7	0.0	104.7	104.7	104.7	104.7
Cat 583T Pipelayer	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4	0.0	150.4	150.4	150.4	150.4
SUBSTATION-BLDG-WATER TA													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	14.5	14.5	14.5	14.5	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	42.0	42.0	42.0	42.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	126.8	126.8	126.8	126.8	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.6	76.6	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.1	129.1	0.0	0.0	0.0
TOTAL (lb/month)	**793.5**	**2,281.2**	**2,281.2**	**2,114.5**	**2,114.5**	**2,114.5**	**2,297.9**	**2,297.9**	**1,876.7**	**2,503.6**	**626.9**	**2,114.5**	**2,114.5**

Table 7-e
Monthly Construction Equipme

Equipment	NOx Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	250.5	250.5	250.5	250.5	250.5	250.5	250.5	0.0	250.5	250.5	250.5	250.5	250.5
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	534.0	534.0	534.0	534.0	534.0	534.0	534.0	0.0	534.0	534.0	534.0	534.0	534.0
Deere 210LE Skip Loader	56.0	56.0	56.0	56.0	56.0	56.0	56.0	0.0	56.0	56.0	56.0	56.0	56.0
Cat 140H Grader	518.2	518.2	518.2	518.2	518.2	518.2	518.2	0.0	518.2	518.2	518.2	518.2	518.2
Roller Vibrator/compactor/other	129.1	129.1	129.1	129.1	129.1	129.1	129.1	0.0	129.1	129.1	129.1	129.1	129.1
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	90.5	90.5	90.5	90.5	0.0	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
Air Compressor	38.8	38.8	38.8	38.8	0.0	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8
Dozer Cat D6R	125.2	125.2	125.2	125.2	0.0	125.2	125.2	125.2	125.2	125.2	125.2	125.2	125.2
Deere 210LE Skip Loader	56.0	56.0	56.0	56.0	0.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
Telehandler	61.3	61.3	61.3	61.3	0.0	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
Track Trencher	104.7	104.7	104.7	104.7	0.0	104.7	104.7	104.7	104.7	104.7	104.7	104.7	104.7
Cat 583T Pipelayer	150.4	150.4	150.4	150.4	0.0	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4
SUBSTATION-BLDG-WATER TA													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	76.6	76.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**2,114.5**	**2,114.5**	**2,114.5**	**2,114.5**	**1,564.3**	**2,191.1**	**2,114.5**	**626.9**	**2,114.5**	**2,114.5**	**2,114.5**	**2,114.5**	**2,114.5**

Table 7-e
Monthly Construction Equipme

Equipment	NOx Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	250.5	250.5	250.5	250.5	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	534.0	534.0	534.0	534.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	56.0	56.0	56.0	56.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	518.2	518.2	518.2	518.2	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	129.1	129.1	129.1	129.1	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	0.0
Air Compressor	0.0	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	0.0
Dozer Cat D6R	0.0	125.2	125.2	125.2	125.2	125.2	125.2	125.2	125.2	0.0
Deere 210LE Skip Loader	0.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	0.0
Telehandler	0.0	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	0.0
Track Trencher	0.0	104.7	104.7	104.7	104.7	104.7	104.7	104.7	104.7	0.0
Cat 583T Pipelayer	0.0	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4	0.0
SUBSTATION-BLDG-WATER T										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	76.6	76.6	0.0	0.0	0.0	0.0	0.0	0.0	76.6	76.6
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.1	129.1
TOTAL (lb/month)	**1,564.3**	**2,191.1**	**2,114.5**	**2,114.5**	**626.9**	**626.9**	**626.9**	**626.9**	**832.5**	**205.7**

Table 7-f
Monthly Construction Equipment SOx Emissions

Equipment	Emission Factor (lb/hr)	SOx Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	3.96E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
Skip Loader	6.90E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
Track Trencher	7.61E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	1.87E-03	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Generator	3.96E-04	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Scraper Cat 623	3.15E-03	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Deere 210LE Skip Loader	6.90E-04	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cat 140H Grader	1.93E-03	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Roller Vibrator/compactor/other	2.15E-03	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Cat BG600D Paver	1.44E-03	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	3.96E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.83E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	1.87E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	6.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	3.66E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	7.61E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	2.49E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	3.96E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.83E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	6.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	1.26E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	1.44E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	2.15E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.2**	**0.2**	**0.2**	**2.7**	**3.1**	**3.1**	**3.1**	**2.9**	**2.9**	**2.9**	**2.9**	**2.7**

Table 7-f
Monthly Construction Equipme

Equipment	SOx Emissions (lb/month) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	1.1	1.1
Deere 210LE Skip Loader	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Cat 140H Grader	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Roller Vibrator/compactor/other	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Air Compressor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Dozer Cat D6R	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Deere 210LE Skip Loader	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Telehandler	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Track Trencher	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Cat 583T Pipelayer	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0
TOTAL (lb/month)	**1.3**	**3.9**	**3.9**	**3.6**	**3.6**	**3.6**	**3.9**	**3.9**	**3.3**	**4.4**	**1.1**	**3.6**	**3.6**

Table 7-f
Monthly Construction Equipme

Equipment	SOx Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	1.1	1.1	1.1	1.1	1.1
Deere 210LE Skip Loader	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Cat 140H Grader	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7
Roller Vibrator/compactor/other	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Air Compressor	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Dozer Cat D6R	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Deere 210LE Skip Loader	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Telehandler	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Track Trencher	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cat 583T Pipelayer	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**3.6**	**3.6**	**3.6**	**3.6**	**2.7**	**3.8**	**3.6**	**1.1**	**3.6**	**3.6**	**3.6**	**3.6**	**3.6**

Table 7-f
Monthly Construction Equipme

Equipment	SOx Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Air Compressor	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Dozer Cat D6R	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Deere 210LE Skip Loader	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Telehandler	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Track Trencher	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Cat 583T Pipelayer	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
SUBSTATION-BLDG-WATER T										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
TOTAL (lb/month)	**2.7**	**3.8**	**3.6**	**3.6**	**1.1**	**1.1**	**1.1**	**1.1**	**1.6**	**0.5**

Table 7-g
Monthly Construction Equipment PM10 Emissions

Equipment	Emission Factor (lb/hr)	PM10 Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	8.11E-03	1.1	1.1	1.1	0.0	1.1	1.1	1.1	0.0	1.1	1.1	1.1	0.0
Skip Loader	2.31E-02	2.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0
Track Trencher	3.25E-02	5.7	5.7	5.7	0.0	5.7	5.7	5.7	0.0	5.7	5.7	5.7	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	4.19E-02	0.0	0.0	0.0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Generator	8.11E-03	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Scraper Cat 623	7.98E-02	0.0	0.0	0.0	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
Deere 210LE Skip Loader	2.31E-02	0.0	0.0	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Cat 140H Grader	4.33E-02	0.0	0.0	0.0	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
Roller Vibrator/compactor/other	4.62E-02	0.0	0.0	0.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Cat BG600D Paver	4.02E-02	0.0	0.0	0.0	0.0	5.3	5.3	5.3	5.3	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	8.11E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.86E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	4.19E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	2.31E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	1.33E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	3.25E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	5.42E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	8.11E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.86E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	2.31E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	2.83E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	4.02E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	4.62E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**8.8**	**8.8**	**8.8**	**63.7**	**77.9**	**77.9**	**77.9**	**69.1**	**72.6**	**72.6**	**72.6**	**63.7**

Table 7-g
Monthly Construction Equipme

Equipment	PM10 Emissions (lb/month) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	5.7	5.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	0.0	7.4	7.4
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	0.0	28.1	28.1
Deere 210LE Skip Loader	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0	4.1	4.1
Cat 140H Grader	0.0	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	0.0	15.2	15.2
Roller Vibrator/compactor/other	0.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0.0	6.1	6.1
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0	2.9	2.9	2.9	2.9
Air Compressor	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4
Dozer Cat D6R	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0	3.7	3.7	3.7	3.7
Deere 210LE Skip Loader	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0	4.1	4.1	4.1	4.1
Telehandler	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.0	4.7	4.7	4.7	4.7
Track Trencher	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	0.0	5.7	5.7	5.7	5.7
Cat 583T Pipelayer	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	0.0	7.2	7.2	7.2	7.2
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.1	3.1	3.1	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7	3.7	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	6.1	0.0	0.0	0.0
TOTAL (lb/month)	**38.4**	**99.2**	**99.2**	**90.4**	**90.4**	**90.4**	**97.7**	**97.7**	**79.6**	**109.1**	**29.5**	**90.4**	**90.4**

Table 7-g
Monthly Construction Equipme

Equipment	PM10 Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	7.4	7.4	7.4	7.4	7.4	7.4	7.4	0.0	7.4	7.4	7.4	7.4	7.4
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	28.1	28.1	28.1	28.1	28.1	28.1	28.1	0.0	28.1	28.1	28.1	28.1	28.1
Deere 210LE Skip Loader	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0	4.1	4.1	4.1	4.1	4.1
Cat 140H Grader	15.2	15.2	15.2	15.2	15.2	15.2	15.2	0.0	15.2	15.2	15.2	15.2	15.2
Roller Vibrator/compactor/other	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0.0	6.1	6.1	6.1	6.1	6.1
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	2.9	2.9	2.9	2.9	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Air Compressor	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Dozer Cat D6R	3.7	3.7	3.7	3.7	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Deere 210LE Skip Loader	4.1	4.1	4.1	4.1	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Telehandler	4.7	4.7	4.7	4.7	0.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Track Trencher	5.7	5.7	5.7	5.7	0.0	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Cat 583T Pipelayer	7.2	7.2	7.2	7.2	0.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
SUBSTATION-BLDG-WATER TA													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**90.4**	**90.4**	**90.4**	**90.4**	**66.2**	**95.7**	**90.4**	**29.5**	**90.4**	**90.4**	**90.4**	**90.4**	**90.4**

Table 7-g
Monthly Construction Equipme

Equipment	PM10 Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	7.4	7.4	7.4	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	28.1	28.1	28.1	28.1	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	4.1	4.1	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	15.2	15.2	15.2	15.2	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	6.1	6.1	6.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0
Air Compressor	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
Dozer Cat D6R	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0
Deere 210LE Skip Loader	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0
Telehandler	0.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.0
Track Trencher	0.0	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	0.0
Cat 583T Pipelayer	0.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	0.0
SUBSTATION-BLDG-WATER TA										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	6.1
TOTAL (lb/month)	**66.2**	**95.7**	**90.4**	**90.4**	**29.5**	**29.5**	**29.5**	**29.5**	**40.9**	**11.4**

Tabke 7-h
Monthly Construction Equipment PM2.5 Emissions

Equipment	Emission Factor (lb/hr)	PM2.5 Emissions (lb/month)											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	7.46E-03	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0
Skip Loader	2.13E-02	1.9	1.9	1.9	0.0	1.9	1.9	1.9	0.0	1.9	1.9	1.9	0.0
Track Trencher	2.99E-02	5.3	5.3	5.3	0.0	5.3	5.3	5.3	0.0	5.3	5.3	5.3	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	3.86E-02	0.0	0.0	0.0	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Generator	7.46E-03	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Scraper Cat 623	7.35E-02	0.0	0.0	0.0	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
Deere 210LE Skip Loader	2.13E-02	0.0	0.0	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Cat 140H Grader	3.98E-02	0.0	0.0	0.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Roller Vibrator/compactor/other	4.25E-02	0.0	0.0	0.0	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Cat BG600D Paver	3.70E-02	0.0	0.0	0.0	0.0	4.9	4.9	4.9	4.9	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	7.46E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.56E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	3.86E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	2.13E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	1.22E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	2.99E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	4.99E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	7.46E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.56E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	2.13E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	2.60E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	3.70E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	4.25E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**8.1**	**8.1**	**8.1**	**58.6**	**71.7**	**71.7**	**71.7**	**63.5**	**66.8**	**66.8**	**66.8**	**58.6**

Tabke 7-h
Monthly Construction Equipme

Equipment	PM2.5 Emissions (lb/month)												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	0.0	6.8	6.8
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9	0.0	25.9	25.9
Deere 210LE Skip Loader	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0	3.7	3.7
Cat 140H Grader	0.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	0.0	14.0	14.0
Roller Vibrator/compactor/other	0.0	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	5.6	5.6
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.0	2.6	2.6	2.6	2.6
Air Compressor	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3
Dozer Cat D6R	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0	3.4	3.4	3.4	3.4
Deere 210LE Skip Loader	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0	3.7	3.7	3.7	3.7
Telehandler	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0	4.3	4.3	4.3	4.3
Track Trencher	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	0.0	5.3	5.3	5.3	5.3
Cat 583T Pipelayer	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	0.0	6.6	6.6	6.6	6.6
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	2.8	2.8	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	4.9	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	5.6	0.0	0.0	0.0
TOTAL (lb/month)	**35.3**	**91.3**	**91.3**	**83.2**	**83.2**	**83.2**	**89.9**	**89.9**	**73.2**	**100.4**	**27.2**	**83.2**	**83.2**

Tabke 7-h
Monthly Construction Equipme

Equipment	PM2.5 Emissions (lb/month)												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	6.8	6.8	6.8	6.8	6.8	6.8	6.8	0.0	6.8	6.8	6.8	6.8	6.8
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	25.9	25.9	25.9	25.9	25.9	25.9	25.9	0.0	25.9	25.9	25.9	25.9	25.9
Deere 210LE Skip Loader	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0	3.7	3.7	3.7	3.7	3.7
Cat 140H Grader	14.0	14.0	14.0	14.0	14.0	14.0	14.0	0.0	14.0	14.0	14.0	14.0	14.0
Roller Vibrator/compactor/other	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	5.6	5.6	5.6	5.6	5.6
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	2.6	2.6	2.6	2.6	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Air Compressor	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Dozer Cat D6R	3.4	3.4	3.4	3.4	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Deere 210LE Skip Loader	3.7	3.7	3.7	3.7	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Telehandler	4.3	4.3	4.3	4.3	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Track Trencher	5.3	5.3	5.3	5.3	0.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Cat 583T Pipelayer	6.6	6.6	6.6	6.6	0.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**83.2**	**83.2**	**83.2**	**83.2**	**60.9**	**88.1**	**83.2**	**27.2**	**83.2**	**83.2**	**83.2**	**83.2**	**83.2**

Tabke 7-h
Monthly Construction Equipme

Equipment	PM2.5 Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	6.8	6.8	6.8	6.8	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	25.9	25.9	25.9	25.9	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	3.7	3.7	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	14.0	14.0	14.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.0
Air Compressor	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0
Dozer Cat D6R	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0
Deere 210LE Skip Loader	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0
Telehandler	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
Track Trencher	0.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	0.0
Cat 583T Pipelayer	0.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	0.0
SUBSTATION-BLDG-WATER T										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	4.9	4.9
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	5.6
TOTAL (lb/month)	**60.9**	**88.1**	**83.2**	**83.2**	**27.2**	**27.2**	**27.2**	**27.2**	**37.7**	**10.5**

Table 7-i
Monthly Construction Equipment CO2 Emissions

Equipment	Emission Factor (lb/hr)	CO2 Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	3.06E+01	4,038.5	4,038.5	4,038.5	0.0	4,038.5	4,038.5	4,038.5	0.0	4,038.5	4,038.5	4,038.5	0.0
Skip Loader	5.89E+01	5,179.9	5,179.9	5,179.9	0.0	5,179.9	5,179.9	5,179.9	0.0	5,179.9	5,179.9	5,179.9	0.0
Track Trencher	6.48E+01	11,411.3	11,411.3	11,411.3	0.0	11,411.3	11,411.3	11,411.3	0.0	11,411.3	11,411.3	11,411.3	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	1.66E+02	0.0	0.0	0.0	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9
Generator	3.06E+01	0.0	0.0	0.0	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3
Scraper Cat 623	3.21E+02	0.0	0.0	0.0	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2
Deere 210LE Skip Loader	5.89E+01	0.0	0.0	0.0	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7
Cat 140H Grader	1.72E+02	0.0	0.0	0.0	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3
Roller Vibrator/compactor/other	2.19E+02	0.0	0.0	0.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0
Cat BG600D Paver	1.28E+02	0.0	0.0	0.0	0.0	16,906.5	16,906.5	16,906.5	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	3.06E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.44E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	1.66E+02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	5.89E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	3.12E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	6.48E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	2.54E+02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	3.06E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.44E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	5.89E+01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	1.12E+02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	1.28E+02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	2.19E+02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**20,629.7**	**20,629.7**	**20,629.7**	**252,782.4**	**290,318.7**	**290,318.7**	**290,318.7**	**269,689.0**	**273,412.1**	**273,412.1**	**273,412.1**	**252,782.4**

Table 7-i
Monthly Construction Equipme

Equipment	CO2 Emissions (lb/month) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	4,038.5	4,038.5	4,038.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	5,179.9	5,179.9	5,179.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	11,411.3	11,411.3	11,411.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	0.0	29,212.9	29,212.9
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	0.0	113,051.2	113,051.2
Deere 210LE Skip Loader	0.0	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	0.0	10,359.7	10,359.7
Cat 140H Grader	0.0	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	0.0	60,520.3	60,520.3
Roller Vibrator/compactor/other	0.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	0.0	28,869.0	28,869.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	0.0	10,769.3	10,769.3	10,769.3	10,769.3
Air Compressor	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	0.0	5,085.6	5,085.6	5,085.6	5,085.6
Dozer Cat D6R	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	0.0	14,606.4	14,606.4	14,606.4	14,606.4
Deere 210LE Skip Loader	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	0.0	10,359.7	10,359.7	10,359.7	10,359.7
Telehandler	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	0.0	10,980.2	10,980.2	10,980.2	10,980.2
Track Trencher	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	0.0	11,411.3	11,411.3	11,411.3	11,411.3
Cat 583T Pipelayer	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	0.0	33,532.8	33,532.8	33,532.8	33,532.8
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	1,907.1	1,907.1	1,907.1	1,907.1	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	7,769.8	7,769.8	7,769.8	7,769.8	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	14,793.3	14,793.3	14,793.3	14,793.3	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,906.5	16,906.5	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28,869.0	28,869.0	0.0	0.0	0.0
TOTAL (lb/month)	**117,375.1**	**359,388.3**	**359,388.3**	**338,758.6**	**338,758.6**	**338,758.6**	**363,228.8**	**363,228.8**	**312,258.9**	**409,004.3**	**96,745.4**	**338,758.6**	**338,758.6**

Table 7-i
Monthly Construction Equipme

Equipment	CO2 Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9	0.0	29,212.9	29,212.9	29,212.9	29,212.9	29,212.9
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2	0.0	113,051.2	113,051.2	113,051.2	113,051.2	113,051.2
Deere 210LE Skip Loader	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	0.0	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7
Cat 140H Grader	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3	0.0	60,520.3	60,520.3	60,520.3	60,520.3	60,520.3
Roller Vibrator/compactor/other	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0	0.0	28,869.0	28,869.0	28,869.0	28,869.0	28,869.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	10,769.3	10,769.3	10,769.3	10,769.3	0.0	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3
Air Compressor	5,085.6	5,085.6	5,085.6	5,085.6	0.0	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6
Dozer Cat D6R	14,606.4	14,606.4	14,606.4	14,606.4	0.0	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4
Deere 210LE Skip Loader	10,359.7	10,359.7	10,359.7	10,359.7	0.0	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7
Telehandler	10,980.2	10,980.2	10,980.2	10,980.2	0.0	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2
Track Trencher	11,411.3	11,411.3	11,411.3	11,411.3	0.0	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3
Cat 583T Pipelayer	33,532.8	33,532.8	33,532.8	33,532.8	0.0	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	16,906.5	16,906.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**338,758.6**	**338,758.6**	**338,758.6**	**338,758.6**	**258,919.7**	**355,665.1**	**338,758.6**	**96,745.4**	**338,758.6**	**338,758.6**	**338,758.6**	**338,758.6**	**338,758.6**

Table 7-i
Monthly Construction Equipme

Equipment	CO2 Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	29,212.9	29,212.9	29,212.9	29,212.9	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	113,051.2	113,051.2	113,051.2	113,051.2	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	10,359.7	10,359.7	10,359.7	10,359.7	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	60,520.3	60,520.3	60,520.3	60,520.3	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	28,869.0	28,869.0	28,869.0	28,869.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	10,769.3	0.0
Air Compressor	0.0	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	5,085.6	0.0
Dozer Cat D6R	0.0	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	14,606.4	0.0
Deere 210LE Skip Loader	0.0	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	10,359.7	0.0
Telehandler	0.0	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	10,980.2	0.0
Track Trencher	0.0	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	11,411.3	0.0
Cat 583T Pipelayer	0.0	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	33,532.8	0.0
SUBSTATION-BLDG-WATER T										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	16,906.5	16,906.5	0.0	0.0	0.0	0.0	0.0	0.0	16,906.5	16,906.5
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28,869.0	28,869.0
TOTAL (lb/month)	**258,919.7**	**355,665.1**	**338,758.6**	**338,758.6**	**96,745.4**	**96,745.4**	**96,745.4**	**96,745.4**	**142,521.0**	**45,775.5**

Tabke 7-j
Monthly Construction Equipment CH4 Emissions

Equipment	Emission Factor (lb/hr)	CH4 Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	1.14E-03	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
Skip Loader	3.71E-03	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0
Track Trencher	4.56E-03	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	1.29E-02	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Generator	1.14E-03	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Scraper Cat 623	2.45E-02	0.0	0.0	0.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Deere 210LE Skip Loader	3.71E-03	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Cat 140H Grader	1.33E-02	0.0	0.0	0.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Roller Vibrator/compactor/other	1.17E-02	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Cat BG600D Paver	7.53E-03	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	1.14E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.57E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	1.29E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	3.71E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	2.38E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	4.56E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	1.40E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	1.14E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.57E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	3.71E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	8.73E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	7.53E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	1.17E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**1.3**	**1.3**	**1.3**	**18.2**	**20.5**	**20.5**	**20.5**	**19.2**	**19.5**	**19.5**	**19.5**	**18.2**

Tabke 7-j
Monthly Construction Equipme

Equipment	CH4 Emissions (lb/month) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0	2.3	2.3
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0	8.6	8.6
Deere 210LE Skip Loader	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Cat 140H Grader	0.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.0	4.7	4.7
Roller Vibrator/compactor/other	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	1.5	1.5
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Air Compressor	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
Dozer Cat D6R	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	1.1	1.1	1.1	1.1
Deere 210LE Skip Loader	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Telehandler	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
Track Trencher	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
Cat 583T Pipelayer	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.0	1.8	1.8	1.8	1.8
SUBSTATION-BLDG-WATER TA													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0
TOTAL (lb/month)	**7.5**	**25.3**	**25.3**	**24.0**	**24.0**	**24.0**	**25.9**	**25.9**	**22.2**	**28.4**	**6.2**	**24.0**	**24.0**

Tabke 7-j
Monthly Construction Equipme

Equipment	CH4 Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3	2.3
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0	8.6	8.6	8.6	8.6	8.6
Deere 210LE Skip Loader	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7
Cat 140H Grader	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.0	4.7	4.7	4.7	4.7	4.7
Roller Vibrator/compactor/other	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Air Compressor	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Dozer Cat D6R	1.1	1.1	1.1	1.1	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Deere 210LE Skip Loader	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Telehandler	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Track Trencher	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Cat 583T Pipelayer	1.8	1.8	1.8	1.8	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**24.0**	**24.0**	**24.0**	**24.0**	**18.8**	**25.0**	**24.0**	**6.2**	**24.0**	**24.0**	**24.0**	**24.0**	**24.0**

Tabke 7-j
Monthly Construction Equipme

Equipment	CH4 Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	8.6	8.6	8.6	8.6	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	4.7	4.7	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Air Compressor	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
Dozer Cat D6R	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0
Deere 210LE Skip Loader	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Telehandler	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
Track Trencher	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
Cat 583T Pipelayer	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.0
SUBSTATION-BLDG-WATER TA										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
TOTAL (lb/month)	**18.8**	**25.0**	**24.0**	**24.0**	**6.2**	**6.2**	**6.2**	**6.2**	**8.8**	**2.5**

Table 7-k
Monthly Construction Equipment N2O Emissions

Equipment	Emission Factor (lb/hr)	N2O Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Generator	7.98E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
Skip Loader	1.54E-03	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
Track Trencher	1.70E-03	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Dozer Cat D6R	4.31E-03	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Generator	7.98E-04	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Scraper Cat 623	8.34E-03	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Deere 210LE Skip Loader	1.54E-03	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Cat 140H Grader	4.47E-03	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Roller Vibrator/compactor/other	5.67E-03	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Cat BG600D Paver	3.34E-03	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	7.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.76E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	4.31E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	1.54E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	8.17E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	1.70E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	6.59E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Generator	7.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.76E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	1.54E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	2.91E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	3.34E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	5.67E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.5**	**0.5**	**0.5**	**6.6**	**7.6**	**7.6**	**7.6**	**7.0**	**7.1**	**7.1**	**7.1**	**6.6**

Table 7-k
Monthly Construction Equipme

Equipment	N2O Emissions (lb/month) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Generator	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0	2.9	2.9
Deere 210LE Skip Loader	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
Cat 140H Grader	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6
Roller Vibrator/compactor/other	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Air Compressor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Dozer Cat D6R	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Telehandler	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Track Trencher	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Cat 583T Pipelayer	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
SUBSTATION-BLDG-WATER TA													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0
TOTAL (lb/month)	**3.1**	**9.3**	**9.3**	**8.8**	**8.8**	**8.8**	**9.4**	**9.4**	**8.1**	**10.6**	**2.5**	**8.8**	**8.8**

Table 7-k
Monthly Construction Equipme

Equipment	N2O Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD													
Dozer Cat D6R	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0	2.9	2.9	2.9	2.9	2.9
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
Cat 140H Grader	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6	1.6
Roller Vibrator/compactor/other	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
Generator	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Air Compressor	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Dozer Cat D6R	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Telehandler	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Track Trencher	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Cat 583T Pipelayer	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
SUBSTATION-BLDG-WATER T													
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**8.8**	**8.8**	**8.8**	**8.8**	**6.7**	**9.3**	**8.8**	**2.5**	**8.8**	**8.8**	**8.8**	**8.8**	**8.8**

Table 7-k
Monthly Construction Equipme

Equipment	N2O Emissions (lb/month) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD										
Dozer Cat D6R	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Generator	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Air Compressor	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Dozer Cat D6R	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Deere 210LE Skip Loader	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Telehandler	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Track Trencher	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Cat 583T Pipelayer	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
SUBSTATION-BLDG-WATER TA										
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Cat BG600D Paver	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
TOTAL (lb/month)	**6.7**	**9.3**	**8.8**	**8.8**	**2.5**	**2.5**	**2.5**	**2.5**	**3.7**	**1.2**

Table 8-a
On-Site Motor Vehicle Numbers

Vehicle Type	Miles/ Day	Number Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	25	3	3	3	0	3	3	3	0	3	3	3	0
On-Site Flatbed Delivery Truck	25	2	2	2	0	2	2	2	0	2	2	2	0
5000 gal Water Truck	20	1	1	1	0	1	1	1	0	1	1	1	0
On-Site Service Truck	25	1	1	1	0	1	1	1	0	1	1	1	0
On-Site Lube/Fuel Trucks	25	8	8	8	0	8	8	8	0	8	8	8	0
On-Site Dump Truck	20	1	1	1	0	1	1	1	0	1	1	1	0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	20	0	0	0	3	3	3	3	3	3	3	3	3
On-Site Heavy Duty Pick Up Truck	20	0	0	0	2	2	2	2	2	2	2	2	2
On-Site Flatbed Delivery Truck	20	0	0	0	1	1	1	1	1	1	1	1	1
On-Site Lube/Fuel Trucks	25	0	0	0	6	0	0	0	6	6	6	6	6
On-Site Service Truck	25	0	0	0	6	0	0	0	0	0	0	0	0
On-Site Dump Truck	20	0	0	0	10	10	10	10	10	4	4	4	4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	25	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Heavy Duty Pick Up Truck	20	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	25	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	25	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	20	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	20	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	20	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	20	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	25	0	0	0	0	0	0	0	0	0	0	0	0

Table 8-a
On-Site Motor Vehicle Numbers

Vehicle Type	Number Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	3	3	3	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	2	2	2	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	1	1	1	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	1	1	1	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	8	8	8	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	1	1	1	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0	3	3	3	3	3	3	3	3	3	0	3	3
On-Site Heavy Duty Pick Up Truck	0	2	2	2	2	2	2	2	2	2	0	2	2
On-Site Flatbed Delivery Truck	0	1	1	1	1	1	1	1	1	1	0	1	1
On-Site Lube/Fuel Trucks	0	0	0	6	6	6	6	6	6	6	0	6	6
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	4	4	4	4	4	4	4	4	4	0	4	4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3	3	3	3	3	3	3	3	0	3	3	3	3
On-Site Heavy Duty Pick Up Truck	1	1	1	1	1	1	1	1	0	1	1	1	1
On-Site Flatbed Delivery Truck	2	2	2	2	2	2	2	2	0	2	2	2	2
On-Site Service Truck	2	2	2	2	2	2	2	2	0	2	2	2	2
On-Site Dump Truck	1	1	1	1	1	1	1	1	0	1	1	1	1
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	1	1	1	1	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	1	1	1	1	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	1	1	1	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	2	2	2	0	0	0

Table 8-a
On-Site Motor Vehicle Numbers

Vehicle Type	Number Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	3	3	3	3	3	3	3	0	3	3	3	3	3
On-Site Heavy Duty Pick Up Truck	2	2	2	2	2	2	2	0	2	2	2	2	2
On-Site Flatbed Delivery Truck	1	1	1	1	1	1	1	0	1	1	1	1	1
On-Site Lube/Fuel Trucks	6	6	6	6	6	6	6	0	6	6	6	6	6
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	4	4	4	4	4	4	4	0	5	5	5	5	5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3	3	3	3	0	3	3	3	3	3	3	3	3
On-Site Heavy Duty Pick Up Truck	1	1	1	1	0	1	1	1	1	1	1	1	1
On-Site Flatbed Delivery Truck	2	2	2	2	0	2	2	2	2	2	2	2	2
On-Site Service Truck	2	2	2	2	0	2	2	2	2	2	2	2	2
On-Site Dump Truck	1	1	1	1	0	1	1	1	1	1	1	1	1
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	8	8
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	1	1	1	0	0	0	0	0	0	1
On-Site Service Truck	0	0	0	2	2	2	0	0	0	0	0	0	2

Table 8-a
On-Site Motor Vehicle Numbers

Vehicle Type	Number Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	3	3	3	3	0	0	0	0	0	0
On-Site Heavy Duty Pick Up Truck	2	2	2	2	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	1	1	1	1	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	6	6	6	6	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	5	5	5	5	0	0	0	0	0	0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0	3	3	3	3	3	3	3	3	0
On-Site Heavy Duty Pick Up Truck	0	1	1	1	1	1	1	1	1	0
On-Site Flatbed Delivery Truck	0	2	2	2	2	2	2	2	2	0
On-Site Service Truck	0	2	2	2	2	2	2	2	2	0
On-Site Dump Truck	0	1	1	1	1	1	1	1	1	0
On-Site Lube/Fuel Trucks	0	8	8	8	8	8	8	8	8	0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	1	1	0	0	0	0	0	1	1	1
On-Site Service Truck	2	2	0	0	0	0	0	2	2	2

Table 8-b
Monthly On-Site Motor Vehicle Use

Vehicle Type	Miles/Month[a]												
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION													
On-Site Pick Up Truck	1,650	1,650	1,650	0	1,650	1,650	1,650	0	1,650	1,650	1,650	0	1,650
On-Site Flatbed Delivery Truck	1,100	1,100	1,100	0	1,100	1,100	1,100	0	1,100	1,100	1,100	0	1,100
5000 gal Water Truck	440	440	440	0	440	440	440	0	440	440	440	0	440
On-Site Service Truck	550	550	550	0	550	550	550	0	550	550	550	0	550
On-Site Lube/Fuel Trucks	4,400	4,400	4,400	0	4,400	4,400	4,400	0	4,400	4,400	4,400	0	4,400
On-Site Dump Truck	440	440	440	0	440	440	440	0	440	440	440	0	440
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	0	0	0	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	0
On-Site Heavy Duty Pick Up Truck	0	0	0	880	880	880	880	880	880	880	880	880	0
On-Site Flatbed Delivery Truck	0	0	0	440	440	440	440	440	440	440	440	440	0
On-Site Lube/Fuel Trucks	0	0	0	3,300	0	0	0	3,300	3,300	3,300	3,300	3,300	0
On-Site Service Truck	0	0	0	3,300	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	4,400	4,400	4,400	4,400	4,400	1,760	1,760	1,760	1,760	0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	1,650
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	440
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	1,100
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	1,100
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0	0	0	440
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/month

Table 8-b
Monthly On-Site Motor Vehicle Use

Vehicle Type	Miles/Month[a]												
	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
FENCE - MOBILIZATION													
On-Site Pick Up Truck	1,650	1,650	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	1,100	1,100	0	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	440	440	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	550	550	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	4,400	4,400	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	440	440	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	0	1,320	1,320	1,320
On-Site Heavy Duty Pick Up Truck	880	880	880	880	880	880	880	880	880	0	880	880	880
On-Site Flatbed Delivery Truck	440	440	440	440	440	440	440	440	440	0	440	440	440
On-Site Lube/Fuel Trucks	0	0	3,300	3,300	3,300	3,300	3,300	3,300	3,300	0	3,300	3,300	3,300
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1,760	0	1,760	1,760	1,760
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1,650	1,650	1,650	1,650	1,650	1,650	1,650	0	1,650	1,650	1,650	1,650	1,650
On-Site Heavy Duty Pick Up Truck	440	440	440	440	440	440	440	0	440	440	440	440	440
On-Site Flatbed Delivery Truck	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0	1,100	1,100	1,100	1,100	1,100
On-Site Service Truck	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0	1,100	1,100	1,100	1,100	1,100
On-Site Dump Truck	440	440	440	440	440	440	440	0	440	440	440	440	440
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	440	440	440	440	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	440	440	440	440	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	440	440	440	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	1,100	1,100	1,100	0	0	0	0

[a] Based on 22 working days/month

Table 8-b
Monthly On-Site Motor Vehicle Use

Vehicle Type	Miles/Month[a]												
	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	1,320	1,320	1,320	1,320	1,320	1,320	0	1,320	1,320	1,320	1,320	1,320	1,320
On-Site Heavy Duty Pick Up Truck	880	880	880	880	880	880	0	880	880	880	880	880	880
On-Site Flatbed Delivery Truck	440	440	440	440	440	440	0	440	440	440	440	440	440
On-Site Lube/Fuel Trucks	3,300	3,300	3,300	3,300	3,300	3,300	0	3,300	3,300	3,300	3,300	3,300	3,300
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	1,760	1,760	1,760	1,760	1,760	1,760	0	2,200	2,200	2,200	2,200	2,200	2,200
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1,650	1,650	1,650	0	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	0
On-Site Heavy Duty Pick Up Truck	440	440	440	0	440	440	440	440	440	440	440	440	0
On-Site Flatbed Delivery Truck	1,100	1,100	1,100	0	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0
On-Site Service Truck	1,100	1,100	1,100	0	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0
On-Site Dump Truck	440	440	440	0	440	440	440	440	440	440	440	440	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	4,400	4,400	0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	440	440	440	0	0	0	0	0	0	440	440
On-Site Service Truck	0	0	1,100	1,100	1,100	0	0	0	0	0	0	1,100	1,100

[a] Based on 22 working days/month

Table 8-b
Monthly On-Site Motor Vehicle Use

Vehicle Type	Miles/Month[a]								
	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION									
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING									
5000 gal Water Truck	1,320	1,320	1,320	0	0	0	0	0	0
On-Site Heavy Duty Pick Up Truck	880	880	880	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	440	440	440	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	3,300	3,300	3,300	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	2,200	2,200	2,200	0	0	0	0	0	0
PV PANEL CONSTRUCTION									
On-Site Pick Up Truck	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	0
On-Site Heavy Duty Pick Up Truck	440	440	440	440	440	440	440	440	0
On-Site Flatbed Delivery Truck	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0
On-Site Service Truck	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0
On-Site Dump Truck	440	440	440	440	440	440	440	440	0
On-Site Lube/Fuel Trucks	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	0
SUBSTATION-BLDG-WATER TANK									
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0
Testing & Commissioning									
On-Site Heavy Duty Pick Up Truck	440	0	0	0	0	0	440	440	440
On-Site Service Truck	1,100	0	0	0	0	0	1,100	1,100	1,100

[a] Based on 22 working days/month

Table 8-c
Monthly On-Site Motor Vehicle CO Emissions

Vehicle Type	Emission Factor (lb/mi)	CO Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	1.85E-03	3.1	3.1	3.1	0.0	3.1	3.1	3.1	0.0	3.1	3.1	3.1	0.0
On-Site Flatbed Delivery Truck	1.40E-03	1.5	1.5	1.5	0.0	1.5	1.5	1.5	0.0	1.5	1.5	1.5	0.0
5000 gal Water Truck	3.25E-03	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0
On-Site Service Truck	1.85E-03	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0
On-Site Lube/Fuel Trucks	1.85E-03	8.1	8.1	8.1	0.0	8.1	8.1	8.1	0.0	8.1	8.1	8.1	0.0
On-Site Dump Truck	1.40E-03	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	3.25E-03	0.0	0.0	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
On-Site Flatbed Delivery Truck	1.40E-03	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	1.85E-03	0.0	0.0	0.0	6.1	0.0	0.0	0.0	6.1	6.1	6.1	6.1	6.1
On-Site Service Truck	1.85E-03	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.40E-03	0.0	0.0	0.0	6.2	6.2	6.2	6.2	6.2	2.5	2.5	2.5	2.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**15.8**	**15.8**	**15.8**	**24.9**	**28.5**	**28.5**	**28.5**	**18.8**	**30.9**	**30.9**	**30.9**	**15.1**

Table 8-c
Monthly On-Site Motor Vehicle CO

	CO Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	3.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	8.1	8.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0	4.3	4.3
On-Site Heavy Duty Pick Up Truck	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6
On-Site Flatbed Delivery Truck	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0.0	6.1	6.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0	2.5	2.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1	3.1	3.1
On-Site Heavy Duty Pick Up Truck	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
On-Site Flatbed Delivery Truck	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5
On-Site Service Truck	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0
On-Site Dump Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	0.0	0.0	0.0
TOTAL (lb/month)	**23.8**	**32.8**	**32.8**	**23.1**	**23.1**	**23.1**	**24.6**	**27.4**	**19.4**	**27.4**	**8.1**	**23.1**	**23.1**

Table 8-c
Monthly On-Site Motor Vehicle CO

	CO Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0	4.3	4.3	4.3	4.3	4.3
On-Site Heavy Duty Pick Up Truck	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6	1.6
On-Site Flatbed Delivery Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0.0	6.1	6.1	6.1	6.1	6.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0	3.1	3.1	3.1	3.1	3.1
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3.1	3.1	3.1	3.1	0.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
On-Site Heavy Duty Pick Up Truck	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
On-Site Flatbed Delivery Truck	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
On-Site Service Truck	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
On-Site Dump Truck	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	8.1
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8
On-Site Service Truck	0.0	0.0	0.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
TOTAL (lb/month)	**23.1**	**23.1**	**23.1**	**26.0**	**17.9**	**26.0**	**23.1**	**8.1**	**23.8**	**23.8**	**23.8**	**31.9**	**34.7**

Table 8-c
Monthly On-Site Motor Vehicle CO

	CO Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	4.3	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	6.1	6.1	6.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	3.1	3.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
On-Site Flatbed Delivery Truck	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0
On-Site Service Truck	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
On-Site Dump Truck	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
On-Site Lube/Fuel Trucks	0.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
On-Site Service Truck	2.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
TOTAL (lb/month)	**18.6**	**34.7**	**31.9**	**31.9**	**16.2**	**16.2**	**16.2**	**19.0**	**19.0**	**2.8**

Table 8-d
Monthly On-Site Motor Vehicle ROG Emissions

Vehicle Type	Emission Factor (lb/mi)	ROG Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	4.13E-04	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.0
On-Site Flatbed Delivery Truck	3.72E-04	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0
5000 gal Water Truck	7.11E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0
On-Site Service Truck	4.13E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
On-Site Lube/Fuel Trucks	4.13E-04	1.8	1.8	1.8	0.0	1.8	1.8	1.8	0.0	1.8	1.8	1.8	0.0
On-Site Dump Truck	3.72E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	7.11E-04	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
On-Site Flatbed Delivery Truck	3.72E-04	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Lube/Fuel Trucks	4.13E-04	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4
On-Site Service Truck	4.13E-04	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	3.72E-04	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	0.7	0.7	0.7	0.7
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**3.6**	**3.6**	**3.6**	**5.8**	**6.7**	**6.7**	**6.7**	**4.5**	**7.1**	**7.1**	**7.1**	**3.5**

Table 8-d
Monthly On-Site Motor Vehicle ROG

	ROG Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9
On-Site Heavy Duty Pick Up Truck	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
On-Site Flatbed Delivery Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
On-Site Flatbed Delivery Truck	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
On-Site Service Truck	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
On-Site Dump Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0
TOTAL (lb/month)	**5.5**	**7.6**	**7.6**	**5.4**	**5.4**	**5.4**	**5.7**	**6.4**	**4.5**	**6.4**	**1.9**	**5.4**	**5.4**

Table 8-d
Monthly On-Site Motor Vehicle ROG

	ROG Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9
On-Site Heavy Duty Pick Up Truck	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4
On-Site Flatbed Delivery Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2
On-Site Lube/Fuel Trucks	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.8	0.8	0.8	0.8	0.8
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Flatbed Delivery Truck	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
On-Site Service Truck	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
On-Site Dump Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
On-Site Service Truck	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
TOTAL (lb/month)	**5.4**	**5.4**	**5.4**	**6.0**	**4.1**	**6.0**	**5.4**	**1.9**	**5.5**	**5.5**	**5.5**	**7.4**	**8.0**

Table 8-d
Monthly On-Site Motor Vehicle ROG

	ROG Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Flatbed Delivery Truck	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
On-Site Service Truck	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
On-Site Dump Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Lube/Fuel Trucks	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
On-Site Service Truck	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
TOTAL (lb/month)	**4.3**	**8.0**	**7.4**	**7.4**	**3.7**	**3.7**	**3.7**	**4.3**	**4.3**	**0.6**

Table 8-e

Monthly On-Site Motor Vehicle NOx Emissions

Vehicle Type	Emission Factor (lb/mi)	NOx Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	9.80E-03	16.2	16.2	16.2	0.0	16.2	16.2	16.2	0.0	16.2	16.2	16.2	0.0
On-Site Flatbed Delivery Truck	1.61E-02	17.7	17.7	17.7	0.0	17.7	17.7	17.7	0.0	17.7	17.7	17.7	0.0
5000 gal Water Truck	2.48E-02	10.9	10.9	10.9	0.0	10.9	10.9	10.9	0.0	10.9	10.9	10.9	0.0
On-Site Service Truck	9.80E-03	5.4	5.4	5.4	0.0	5.4	5.4	5.4	0.0	5.4	5.4	5.4	0.0
On-Site Lube/Fuel Trucks	9.80E-03	43.1	43.1	43.1	0.0	43.1	43.1	43.1	0.0	43.1	43.1	43.1	0.0
On-Site Dump Truck	1.61E-02	7.1	7.1	7.1	0.0	7.1	7.1	7.1	0.0	7.1	7.1	7.1	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	2.48E-02	0.0	0.0	0.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
On-Site Flatbed Delivery Truck	1.61E-02	0.0	0.0	0.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
On-Site Lube/Fuel Trucks	9.80E-03	0.0	0.0	0.0	32.3	0.0	0.0	0.0	32.3	32.3	32.3	32.3	32.3
On-Site Service Truck	9.80E-03	0.0	0.0	0.0	32.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.61E-02	0.0	0.0	0.0	71.0	71.0	71.0	71.0	71.0	28.4	28.4	28.4	28.4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.61E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.61E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.61E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**100.4**	**100.4**	**100.4**	**184.1**	**219.8**	**219.8**	**219.8**	**151.8**	**209.6**	**209.6**	**209.6**	**109.2**

Table 8-e
Monthly On-Site Motor Vehicle NOx

	NOx Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	16.2	16.2	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	17.7	17.7	17.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	10.9	10.9	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	5.4	5.4	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	43.1	43.1	43.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	7.1	7.1	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	0.0	32.7	32.7
On-Site Heavy Duty Pick Up Truck	0.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0	8.6	8.6
On-Site Flatbed Delivery Truck	0.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	0.0	7.1	7.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	32.3	32.3	32.3	32.3	32.3	32.3	32.3	0.0	32.3	32.3
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	0.0	28.4	28.4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	0.0	16.2	16.2	16.2	16.2
On-Site Heavy Duty Pick Up Truck	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0	4.3	4.3	4.3	4.3
On-Site Flatbed Delivery Truck	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	0.0	17.7	17.7	17.7	17.7
On-Site Service Truck	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	0.0	10.8	10.8	10.8	10.8
On-Site Dump Truck	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	0.0	7.1	7.1	7.1	7.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3	4.3	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	10.8	10.8	0.0	0.0	0.0
TOTAL (lb/month)	**156.5**	**233.4**	**233.4**	**165.3**	**165.3**	**165.3**	**176.7**	**191.8**	**135.7**	**191.8**	**56.1**	**165.3**	**165.3**

Table 8-e
Monthly On-Site Motor Vehicle NOx

	NOx Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	32.7	32.7	32.7	32.7	32.7	32.7	32.7	0.0	32.7	32.7	32.7	32.7	32.7
On-Site Heavy Duty Pick Up Truck	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0	8.6	8.6	8.6	8.6	8.6
On-Site Flatbed Delivery Truck	7.1	7.1	7.1	7.1	7.1	7.1	7.1	0.0	7.1	7.1	7.1	7.1	7.1
On-Site Lube/Fuel Trucks	32.3	32.3	32.3	32.3	32.3	32.3	32.3	0.0	32.3	32.3	32.3	32.3	32.3
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	28.4	28.4	28.4	28.4	28.4	28.4	28.4	0.0	35.5	35.5	35.5	35.5	35.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	16.2	16.2	16.2	16.2	0.0	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
On-Site Heavy Duty Pick Up Truck	4.3	4.3	4.3	4.3	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
On-Site Flatbed Delivery Truck	17.7	17.7	17.7	17.7	0.0	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
On-Site Service Truck	10.8	10.8	10.8	10.8	0.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
On-Site Dump Truck	7.1	7.1	7.1	7.1	0.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1	43.1
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	4.3
On-Site Service Truck	0.0	0.0	0.0	10.8	10.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	10.8
TOTAL (lb/month)	**165.3**	**165.3**	**165.3**	**180.4**	**124.3**	**180.4**	**165.3**	**56.1**	**172.4**	**172.4**	**172.4**	**215.5**	**230.6**

Table 8-e
Monthly On-Site Motor Vehicle NOx

	NOx Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	32.7	32.7	32.7	32.7	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	8.6	8.6	8.6	8.6	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	7.1	7.1	7.1	7.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	32.3	32.3	32.3	32.3	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	35.5	35.5	35.5	35.5	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	0.0
On-Site Heavy Duty Pick Up Truck	0.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0.0
On-Site Flatbed Delivery Truck	0.0	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	0.0
On-Site Service Truck	0.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	0.0
On-Site Dump Truck	0.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	0.0
On-Site Lube/Fuel Trucks	0.0	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	4.3	4.3	0.0	0.0	0.0	0.0	0.0	4.3	4.3	4.3
On-Site Service Truck	10.8	10.8	0.0	0.0	0.0	0.0	0.0	10.8	10.8	10.8
TOTAL (lb/month)	**131.4**	**230.6**	**215.5**	**215.5**	**99.2**	**99.2**	**99.2**	**114.3**	**114.3**	**15.1**

Table 8-f
Monthly On-Site Motor Vehicle SOx Emissions

Vehicle Type	Emission Factor (lb/mi)	SOx Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2.26E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Dump Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2.26E-05	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.29E-05	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.2**	**0.2**	**0.2**	**0.3**	**0.4**	**0.4**	**0.4**	**0.3**	**0.4**	**0.4**	**0.4**	**0.2**

Table 8-f
Monthly On-Site Motor Vehicle SOx

	SOx Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**0.3**	**0.4**	**0.4**	**0.3**	**0.3**	**0.3**	**0.3**	**0.4**	**0.2**	**0.4**	**0.1**	**0.3**	**0.3**

Table 8-f
Monthly On-Site Motor Vehicle SOx

	SOx Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**0.3**	**0.3**	**0.3**	**0.3**	**0.2**	**0.3**	**0.3**	**0.1**	**0.3**	**0.3**	**0.3**	**0.4**	**0.4**

Table 8-f
Monthly On-Site Motor Vehicle SOx

	SOx Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**0.2**	**0.4**	**0.4**	**0.4**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.0**

Table 8-g
Monthly On-Site Motor Vehicle Exhaust PM10 Emissions

Vehicle Type	Emission Factor (lb/mi)	Exhaust PM10 Emissions (lb/month)											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	4.25E-04	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.0
On-Site Flatbed Delivery Truck	2.98E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0
5000 gal Water Truck	4.90E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
On-Site Service Truck	4.25E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
On-Site Lube/Fuel Trucks	4.25E-04	1.9	1.9	1.9	0.0	1.9	1.9	1.9	0.0	1.9	1.9	1.9	0.0
On-Site Dump Truck	2.98E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	4.90E-04	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
On-Site Flatbed Delivery Truck	2.98E-04	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	4.25E-04	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4
On-Site Service Truck	4.25E-04	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.98E-04	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	0.5	0.5	0.5	0.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**3.5**	**3.5**	**3.5**	**5.3**	**5.9**	**5.9**	**5.9**	**3.9**	**6.6**	**6.6**	**6.6**	**3.1**

Table 8-g
Monthly On-Site Motor Vehicle Exh

	Exhaust PM10 Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
On-Site Heavy Duty Pick Up Truck	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
On-Site Flatbed Delivery Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
On-Site Service Truck	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0
TOTAL (lb/month)	**5.3**	**7.0**	**7.0**	**4.9**	**4.9**	**4.9**	**5.2**	**5.9**	**4.1**	**5.9**	**1.8**	**4.9**	**4.9**

Table 8-g
Monthly On-Site Motor Vehicle Exh

Vehicle Type	Exhaust PM10 Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6
On-Site Heavy Duty Pick Up Truck	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.7	0.7	0.7	0.7	0.7
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
On-Site Service Truck	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
On-Site Service Truck	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
TOTAL (lb/month)	**4.9**	**4.9**	**4.9**	**5.5**	**3.7**	**5.5**	**4.9**	**1.8**	**5.0**	**5.0**	**5.0**	**6.9**	**7.5**

Table 8-g
Monthly On-Site Motor Vehicle Exh

	Exhaust PM10 Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Flatbed Delivery Truck	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
On-Site Service Truck	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
On-Site Dump Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Lube/Fuel Trucks	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
On-Site Service Truck	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
TOTAL (lb/month)	**3.9**	**7.5**	**6.9**	**6.9**	**3.7**	**3.7**	**3.7**	**4.3**	**4.3**	**0.7**

Table 8-h

Monthly On-Site Motor Vehicle Exhaust PM2.5 Emissions

Vehicle Type	Emission Factor (lb/mi)	Exhaust PM2.5 Emissions (lb/month)											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	3.91E-04	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0
On-Site Flatbed Delivery Truck	2.74E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0
5000 gal Water Truck	4.51E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
On-Site Service Truck	3.91E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
On-Site Lube/Fuel Trucks	3.91E-04	1.7	1.7	1.7	0.0	1.7	1.7	1.7	0.0	1.7	1.7	1.7	0.0
On-Site Dump Truck	2.74E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	4.51E-04	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
On-Site Flatbed Delivery Truck	2.74E-04	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	3.91E-04	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
On-Site Service Truck	3.91E-04	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.74E-04	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2	0.5	0.5	0.5	0.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**3.2**	**3.2**	**3.2**	**4.8**	**5.5**	**5.5**	**5.5**	**3.6**	**6.0**	**6.0**	**6.0**	**2.8**

Table 8-h
Monthly On-Site Motor Vehicle Exh

Vehicle Type	Exhaust PM2.5 Emissions (lb/month)												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
On-Site Heavy Duty Pick Up Truck	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
On-Site Flatbed Delivery Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
On-Site Service Truck	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.0	0.0
TOTAL (lb/month)	**4.9**	**6.4**	**6.4**	**4.5**	**4.5**	**4.5**	**4.8**	**5.4**	**3.7**	**5.4**	**1.7**	**4.5**	**4.5**

Table 8-h
Monthly On-Site Motor Vehicle Exh

	Exhaust PM2.5 Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6
On-Site Heavy Duty Pick Up Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3	1.3
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.6	0.6	0.6	0.6	0.6
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
On-Site Service Truck	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
On-Site Service Truck	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4
TOTAL (lb/month)	**4.5**	**4.5**	**4.5**	**5.1**	**3.4**	**5.1**	**4.5**	**1.7**	**4.6**	**4.6**	**4.6**	**6.3**	**6.9**

Table 8-h
Monthly On-Site Motor Vehicle Exh

	Exhaust PM2.5 Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Flatbed Delivery Truck	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
On-Site Service Truck	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
On-Site Dump Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Lube/Fuel Trucks	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
On-Site Service Truck	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
TOTAL (lb/month)	**3.6**	**6.9**	**6.3**	**6.3**	**3.4**	**3.4**	**3.4**	**4.0**	**4.0**	**0.6**

Table 8-i
Monthly On-Site Motor Vehicle Fugitive PM10 Emissions

Vehicle Type	Emission Factor (lb/mi)	Fugitive PM10 Emissions (lb/month)											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	7.23E-01	1,192.6	1,192.6	1,192.6	0.0	1,192.6	1,192.6	1,192.6	0.0	1,192.6	1,192.6	1,192.6	0.0
On-Site Flatbed Delivery Truck	8.49E-01	933.4	933.4	933.4	0.0	933.4	933.4	933.4	0.0	933.4	933.4	933.4	0.0
5000 gal Water Truck	2.15E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Service Truck	7.23E-01	397.5	397.5	397.5	0.0	397.5	397.5	397.5	0.0	397.5	397.5	397.5	0.0
On-Site Lube/Fuel Trucks	7.23E-01	3,180.2	3,180.2	3,180.2	0.0	3,180.2	3,180.2	3,180.2	0.0	3,180.2	3,180.2	3,180.2	0.0
On-Site Dump Truck	8.49E-01	373.4	373.4	373.4	0.0	373.4	373.4	373.4	0.0	373.4	373.4	373.4	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	2.15E-04	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0
On-Site Flatbed Delivery Truck	8.49E-01	0.0	0.0	0.0	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
On-Site Lube/Fuel Trucks	7.23E-01	0.0	0.0	0.0	2,385.1	0.0	0.0	0.0	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1
On-Site Service Truck	7.23E-01	0.0	0.0	0.0	2,385.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.49E-01	0.0	0.0	0.0	3,733.6	3,733.6	3,733.6	3,733.6	3,733.6	1,493.4	1,493.4	1,493.4	1,493.4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.49E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.49E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.49E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**6,077.1**	**6,077.1**	**6,077.1**	**9,513.5**	**10,820.4**	**10,820.4**	**10,820.4**	**7,128.4**	**10,965.3**	**10,965.3**	**10,965.3**	**4,888.2**

Table 8-i
Monthly On-Site Motor Vehicle Fug

	Fugitive PM10 Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	1,192.6	1,192.6	1,192.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	933.4	933.4	933.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	397.5	397.5	397.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	3,180.2	3,180.2	3,180.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	373.4	373.4	373.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
On-Site Heavy Duty Pick Up Truck	0.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	0.0	636.0	636.0
On-Site Flatbed Delivery Truck	0.0	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	0.0	373.4	373.4
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1	0.0	2,385.1	2,385.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	0.0	1,493.4	1,493.4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	0.0	1,192.6	1,192.6	1,192.6	1,192.6
On-Site Heavy Duty Pick Up Truck	318.0	318.0	318.0	318.0	318.0	318.0	318.0	318.0	0.0	318.0	318.0	318.0	318.0
On-Site Flatbed Delivery Truck	933.4	933.4	933.4	933.4	933.4	933.4	933.4	933.4	0.0	933.4	933.4	933.4	933.4
On-Site Service Truck	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	0.0	795.0	795.0	795.0	795.0
On-Site Dump Truck	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	0.0	373.4	373.4	373.4	373.4
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	318.0	318.0	318.0	318.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	373.4	373.4	373.4	373.4	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	318.0	318.0	318.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	795.0	795.0	795.0	0.0	0.0	0.0
TOTAL (lb/month)	**9,689.5**	**12,192.6**	**12,192.6**	**8,500.6**	**8,500.6**	**8,500.6**	**9,192.0**	**10,305.1**	**6,692.7**	**10,305.1**	**3,612.4**	**8,500.6**	**8,500.6**

Table 8-i
Monthly On-Site Motor Vehicle Fug

	Fugitive PM10 Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
On-Site Heavy Duty Pick Up Truck	636.0	636.0	636.0	636.0	636.0	636.0	636.0	0.0	636.0	636.0	636.0	636.0	636.0
On-Site Flatbed Delivery Truck	373.4	373.4	373.4	373.4	373.4	373.4	373.4	0.0	373.4	373.4	373.4	373.4	373.4
On-Site Lube/Fuel Trucks	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1	0.0	2,385.1	2,385.1	2,385.1	2,385.1	2,385.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	0.0	1,866.8	1,866.8	1,866.8	1,866.8	1,866.8
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1,192.6	1,192.6	1,192.6	1,192.6	0.0	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6
On-Site Heavy Duty Pick Up Truck	318.0	318.0	318.0	318.0	0.0	318.0	318.0	318.0	318.0	318.0	318.0	318.0	318.0
On-Site Flatbed Delivery Truck	933.4	933.4	933.4	933.4	0.0	933.4	933.4	933.4	933.4	933.4	933.4	933.4	933.4
On-Site Service Truck	795.0	795.0	795.0	795.0	0.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0
On-Site Dump Truck	373.4	373.4	373.4	373.4	0.0	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,180.2	3,180.2
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	318.0	318.0	318.0	0.0	0.0	0.0	0.0	0.0	0.0	318.0
On-Site Service Truck	0.0	0.0	0.0	795.0	795.0	795.0	0.0	0.0	0.0	0.0	0.0	0.0	795.0
TOTAL (lb/month)	**8,500.6**	**8,500.6**	**8,500.6**	**9,613.7**	**6,001.3**	**9,613.7**	**8,500.6**	**3,612.4**	**8,874.0**	**8,874.0**	**8,874.0**	**12,054.1**	**13,167.2**

Table 8-i
Monthly On-Site Motor Vehicle Fug

	Fugitive PM10 Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	636.0	636.0	636.0	636.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	373.4	373.4	373.4	373.4	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2,385.1	2,385.1	2,385.1	2,385.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1,866.8	1,866.8	1,866.8	1,866.8	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	1,192.6	0.0
On-Site Heavy Duty Pick Up Truck	0.0	318.0	318.0	318.0	318.0	318.0	318.0	318.0	318.0	0.0
On-Site Flatbed Delivery Truck	0.0	933.4	933.4	933.4	933.4	933.4	933.4	933.4	933.4	0.0
On-Site Service Truck	0.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	795.0	0.0
On-Site Dump Truck	0.0	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	0.0
On-Site Lube/Fuel Trucks	0.0	3,180.2	3,180.2	3,180.2	3,180.2	3,180.2	3,180.2	3,180.2	3,180.2	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	318.0	318.0	0.0	0.0	0.0	0.0	0.0	318.0	318.0	318.0
On-Site Service Truck	795.0	795.0	0.0	0.0	0.0	0.0	0.0	795.0	795.0	795.0
TOTAL (lb/month)	**6,374.7**	**13,167.2**	**12,054.1**	**12,054.1**	**6,792.5**	**6,792.5**	**6,792.5**	**7,905.6**	**7,905.6**	**1,113.1**

Table 8-j
Monthly On-Site Motor Vehicle Fugitive PM2.5 Emissions

Vehicle Type	Emission Factor (lb/mi)	Fugitive PM2.5 Emissions (lb/month)											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	7.24E-02	119.4	119.4	119.4	0.0	119.4	119.4	119.4	0.0	119.4	119.4	119.4	0.0
On-Site Flatbed Delivery Truck	8.50E-02	93.4	93.4	93.4	0.0	93.4	93.4	93.4	0.0	93.4	93.4	93.4	0.0
5000 gal Water Truck	7.82E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.24E-02	39.8	39.8	39.8	0.0	39.8	39.8	39.8	0.0	39.8	39.8	39.8	0.0
On-Site Lube/Fuel Trucks	7.24E-02	318.4	318.4	318.4	0.0	318.4	318.4	318.4	0.0	318.4	318.4	318.4	0.0
On-Site Dump Truck	8.50E-02	37.4	37.4	37.4	0.0	37.4	37.4	37.4	0.0	37.4	37.4	37.4	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	7.82E-05	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
On-Site Flatbed Delivery Truck	8.50E-02	0.0	0.0	0.0	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
On-Site Lube/Fuel Trucks	7.24E-02	0.0	0.0	0.0	238.8	0.0	0.0	0.0	238.8	238.8	238.8	238.8	238.8
On-Site Service Truck	7.24E-02	0.0	0.0	0.0	238.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.50E-02	0.0	0.0	0.0	373.8	373.8	373.8	373.8	373.8	149.5	149.5	149.5	149.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.50E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.50E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.50E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**608.5**	**608.5**	**608.5**	**952.6**	**1,083.5**	**1,083.5**	**1,083.5**	**713.8**	**1,098.1**	**1,098.1**	**1,098.1**	**489.5**

Table 8-j
Monthly On-Site Motor Vehicle Fug

	Fugitive PM2.5 Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	119.4	119.4	119.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	93.4	93.4	93.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	39.8	39.8	39.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	318.4	318.4	318.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	37.4	37.4	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Heavy Duty Pick Up Truck	0.0	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	0.0	63.7	63.7
On-Site Flatbed Delivery Truck	0.0	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	0.0	37.4	37.4
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	238.8	238.8	238.8	238.8	238.8	238.8	238.8	0.0	238.8	238.8
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	0.0	149.5	149.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	0.0	119.4	119.4	119.4	119.4
On-Site Heavy Duty Pick Up Truck	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	0.0	31.8	31.8	31.8	31.8
On-Site Flatbed Delivery Truck	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	0.0	93.4	93.4	93.4	93.4
On-Site Service Truck	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	0.0	79.6	79.6	79.6	79.6
On-Site Dump Truck	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	0.0	37.4	37.4	37.4	37.4
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	31.8	31.8	31.8	31.8	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	37.4	37.4	37.4	37.4	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.8	31.8	31.8	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.6	79.6	79.6	0.0	0.0	0.0
TOTAL (lb/month)	**970.2**	**1,220.9**	**1,220.9**	**851.2**	**851.2**	**851.2**	**920.5**	**1,031.9**	**670.2**	**1,031.9**	**361.7**	**851.2**	**851.2**

Table 8-j
Monthly On-Site Motor Vehicle Fug

	Fugitive PM2.5 Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Heavy Duty Pick Up Truck	63.7	63.7	63.7	63.7	63.7	63.7	63.7	0.0	63.7	63.7	63.7	63.7	63.7
On-Site Flatbed Delivery Truck	37.4	37.4	37.4	37.4	37.4	37.4	37.4	0.0	37.4	37.4	37.4	37.4	37.4
On-Site Lube/Fuel Trucks	238.8	238.8	238.8	238.8	238.8	238.8	238.8	0.0	238.8	238.8	238.8	238.8	238.8
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	149.5	149.5	149.5	149.5	149.5	149.5	149.5	0.0	186.9	186.9	186.9	186.9	186.9
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	119.4	119.4	119.4	119.4	0.0	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4
On-Site Heavy Duty Pick Up Truck	31.8	31.8	31.8	31.8	0.0	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
On-Site Flatbed Delivery Truck	93.4	93.4	93.4	93.4	0.0	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
On-Site Service Truck	79.6	79.6	79.6	79.6	0.0	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
On-Site Dump Truck	37.4	37.4	37.4	37.4	0.0	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	318.4	318.4
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	31.8	31.8	31.8	0.0	0.0	0.0	0.0	0.0	0.0	31.8
On-Site Service Truck	0.0	0.0	0.0	79.6	79.6	79.6	0.0	0.0	0.0	0.0	0.0	0.0	79.6
TOTAL (lb/month)	**851.2**	**851.2**	**851.2**	**962.7**	**601.0**	**962.7**	**851.2**	**361.7**	**888.6**	**888.6**	**888.6**	**1,207.1**	**1,318.5**

Table 8-j
Monthly On-Site Motor Vehicle Fug

	Fugitive PM2.5 Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	63.7	63.7	63.7	63.7	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	37.4	37.4	37.4	37.4	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	238.8	238.8	238.8	238.8	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	186.9	186.9	186.9	186.9	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	0.0
On-Site Heavy Duty Pick Up Truck	0.0	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	0.0
On-Site Flatbed Delivery Truck	0.0	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	0.0
On-Site Service Truck	0.0	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	0.0
On-Site Dump Truck	0.0	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	0.0
On-Site Lube/Fuel Trucks	0.0	318.4	318.4	318.4	318.4	318.4	318.4	318.4	318.4	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	31.8	31.8	0.0	0.0	0.0	0.0	0.0	31.8	31.8	31.8
On-Site Service Truck	79.6	79.6	0.0	0.0	0.0	0.0	0.0	79.6	79.6	79.6
TOTAL (lb/month)	**638.4**	**1,318.5**	**1,207.1**	**1,207.1**	**680.2**	**680.2**	**680.2**	**791.6**	**791.6**	**111.5**

Table 8-k
Monthly On-Site Motor Vehicle CO2 Emissions

Vehicle Type	Emission Factor (lb/mi)	CO2 Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	2.34E+00	3,853.3	3,853.3	3,853.3	0.0	3,853.3	3,853.3	3,853.3	0.0	3,853.3	3,853.3	3,853.3	0.0
On-Site Flatbed Delivery Truck	2.36E+00	2,598.0	2,598.0	2,598.0	0.0	2,598.0	2,598.0	2,598.0	0.0	2,598.0	2,598.0	2,598.0	0.0
5000 gal Water Truck	3.67E+00	1,615.4	1,615.4	1,615.4	0.0	1,615.4	1,615.4	1,615.4	0.0	1,615.4	1,615.4	1,615.4	0.0
On-Site Service Truck	2.34E+00	1,284.4	1,284.4	1,284.4	0.0	1,284.4	1,284.4	1,284.4	0.0	1,284.4	1,284.4	1,284.4	0.0
On-Site Lube/Fuel Trucks	2.34E+00	10,275.6	10,275.6	10,275.6	0.0	10,275.6	10,275.6	10,275.6	0.0	10,275.6	10,275.6	10,275.6	0.0
On-Site Dump Truck	2.36E+00	1,039.2	1,039.2	1,039.2	0.0	1,039.2	1,039.2	1,039.2	0.0	1,039.2	1,039.2	1,039.2	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	3.67E+00	0.0	0.0	0.0	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3
On-Site Heavy Duty Pick Up Truck	2.34E+00	0.0	0.0	0.0	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1
On-Site Flatbed Delivery Truck	2.36E+00	0.0	0.0	0.0	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2
On-Site Lube/Fuel Trucks	2.34E+00	0.0	0.0	0.0	7,706.7	0.0	0.0	0.0	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7
On-Site Service Truck	2.34E+00	0.0	0.0	0.0	7,706.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.36E+00	0.0	0.0	0.0	10,391.9	10,391.9	10,391.9	10,391.9	10,391.9	4,156.8	4,156.8	4,156.8	4,156.8
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.36E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.36E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.36E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**20,665.9**	**20,665.9**	**20,665.9**	**33,745.8**	**38,998.4**	**38,998.4**	**38,998.4**	**26,039.2**	**40,470.0**	**40,470.0**	**40,470.0**	**19,804.0**

Table 8-k
Monthly On-Site Motor Vehicle CO2

	CO2 Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	3,853.3	3,853.3	3,853.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2,598.0	2,598.0	2,598.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	1,615.4	1,615.4	1,615.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1,284.4	1,284.4	1,284.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	10,275.6	10,275.6	10,275.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1,039.2	1,039.2	1,039.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	0.0	4,846.3	4,846.3
On-Site Heavy Duty Pick Up Truck	0.0	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	0.0	2,055.1	2,055.1
On-Site Flatbed Delivery Truck	0.0	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	0.0	1,039.2	1,039.2
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7	0.0	7,706.7	7,706.7
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	0.0	4,156.8	4,156.8
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	0.0	3,853.3	3,853.3	3,853.3	3,853.3
On-Site Heavy Duty Pick Up Truck	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	0.0	1,027.6	1,027.6	1,027.6	1,027.6
On-Site Flatbed Delivery Truck	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	0.0	2,598.0	2,598.0	2,598.0	2,598.0
On-Site Service Truck	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	0.0	2,568.9	2,568.9	2,568.9	2,568.9
On-Site Dump Truck	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	0.0	1,039.2	1,039.2	1,039.2	1,039.2
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	1,027.6	1,027.6	1,027.6	1,027.6	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	1,039.2	1,039.2	1,039.2	1,039.2	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,027.6	1,027.6	1,027.6	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,568.9	2,568.9	2,568.9	0.0	0.0	0.0
TOTAL (lb/month)	**31,752.9**	**43,850.2**	**43,850.2**	**30,891.0**	**30,891.0**	**30,891.0**	**32,957.7**	**36,554.2**	**25,467.2**	**36,554.2**	**11,087.0**	**30,891.0**	**30,891.0**

Table 8-k
Monthly On-Site Motor Vehicle CO2

	CO2 Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3	0.0	4,846.3	4,846.3	4,846.3	4,846.3	4,846.3
On-Site Heavy Duty Pick Up Truck	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1	0.0	2,055.1	2,055.1	2,055.1	2,055.1	2,055.1
On-Site Flatbed Delivery Truck	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	0.0	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2
On-Site Lube/Fuel Trucks	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7	0.0	7,706.7	7,706.7	7,706.7	7,706.7	7,706.7
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	4,156.8	0.0	5,196.0	5,196.0	5,196.0	5,196.0	5,196.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3,853.3	3,853.3	3,853.3	3,853.3	0.0	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3
On-Site Heavy Duty Pick Up Truck	1,027.6	1,027.6	1,027.6	1,027.6	0.0	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6
On-Site Flatbed Delivery Truck	2,598.0	2,598.0	2,598.0	2,598.0	0.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0
On-Site Service Truck	2,568.9	2,568.9	2,568.9	2,568.9	0.0	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9
On-Site Dump Truck	1,039.2	1,039.2	1,039.2	1,039.2	0.0	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,275.6	10,275.6
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	1,027.6	1,027.6	1,027.6	0.0	0.0	0.0	0.0	0.0	0.0	1,027.6
On-Site Service Truck	0.0	0.0	0.0	2,568.9	2,568.9	2,568.9	0.0	0.0	0.0	0.0	0.0	0.0	2,568.9
TOTAL (lb/month)	**30,891.0**	**30,891.0**	**30,891.0**	**34,487.4**	**23,400.5**	**34,487.4**	**30,891.0**	**11,087.0**	**31,930.2**	**31,930.2**	**31,930.2**	**42,205.7**	**45,802.2**

Table 8-k
Monthly On-Site Motor Vehicle CO2

	CO2 Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	4,846.3	4,846.3	4,846.3	4,846.3	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	2,055.1	2,055.1	2,055.1	2,055.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1,039.2	1,039.2	1,039.2	1,039.2	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7,706.7	7,706.7	7,706.7	7,706.7	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	5,196.0	5,196.0	5,196.0	5,196.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	0.0
On-Site Heavy Duty Pick Up Truck	0.0	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	1,027.6	0.0
On-Site Flatbed Delivery Truck	0.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	2,598.0	0.0
On-Site Service Truck	0.0	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	2,568.9	0.0
On-Site Dump Truck	0.0	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	1,039.2	0.0
On-Site Lube/Fuel Trucks	0.0	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	1,027.6	1,027.6	0.0	0.0	0.0	0.0	0.0	1,027.6	1,027.6	1,027.6
On-Site Service Truck	2,568.9	2,568.9	0.0	0.0	0.0	0.0	0.0	2,568.9	2,568.9	2,568.9
TOTAL (lb/month)	**24,439.7**	**45,802.2**	**42,205.7**	**42,205.7**	**21,362.5**	**21,362.5**	**21,362.5**	**24,959.0**	**24,959.0**	**3,596.4**

Table 8-l

Monthly On-Site Motor Vehicle CH4 Emissions

Vehicle Type	Emission Factor (lb/mi)	CH4 Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.73E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	3.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.92E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Dump Truck	1.73E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	3.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.73E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.92E-05	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Service Truck	1.92E-05	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.73E-05	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.73E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.73E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.73E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**	**0.2**	**0.3**	**0.3**	**0.3**	**0.2**

Table 8-I

Monthly On-Site Motor Vehicle CH4

	CH4 Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**0.3**	**0.4**	**0.4**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.2**	**0.3**	**0.1**	**0.2**	**0.2**

Table 8-I

Monthly On-Site Motor Vehicle CH4

	CH4 Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**0.2**	**0.2**	**0.2**	**0.3**	**0.2**	**0.3**	**0.2**	**0.1**	**0.3**	**0.3**	**0.3**	**0.3**	**0.4**

Table 8-l

Monthly On-Site Motor Vehicle CH4

	CH4 Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**0.2**	**0.4**	**0.3**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.0**

Table 8-m
Monthly On-Site Motor Vehicle N2O Emissions

Vehicle Type	Emission Factor (lb/mi)	N2O Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	7.80E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Flatbed Delivery Truck	7.89E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
5000 gal Water Truck	1.23E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Service Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7.80E-05	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0
On-Site Dump Truck	7.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	1.23E-04	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Heavy Duty Pick Up Truck	7.80E-05	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Flatbed Delivery Truck	7.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7.80E-05	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3
On-Site Service Truck	7.80E-05	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	7.89E-05	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	7.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	7.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	7.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.7**	**0.7**	**0.7**	**1.1**	**1.3**	**1.3**	**1.3**	**0.9**	**1.4**	**1.4**	**1.4**	**0.7**

Table 8-m
Monthly On-Site Motor Vehicle N2O

	N2O Emissions (lb/month)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
On-Site Heavy Duty Pick Up Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
On-Site Service Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
TOTAL (lb/month)	**1.1**	**1.5**	**1.5**	**1.0**	**1.0**	**1.0**	**1.1**	**1.2**	**0.9**	**1.2**	**0.4**	**1.0**	**1.0**

Table 8-m
Monthly On-Site Motor Vehicle N2O

	N2O Emissions (lb/month)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2
On-Site Heavy Duty Pick Up Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.2	0.2
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Service Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
TOTAL (lb/month)	**1.0**	**1.0**	**1.0**	**1.2**	**0.8**	**1.2**	**1.0**	**0.4**	**1.1**	**1.1**	**1.1**	**1.4**	**1.5**

Table 8-m
Monthly On-Site Motor Vehicle N2O

	N2O Emissions (lb/month)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Service Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
TOTAL (lb/month)	**0.8**	**1.5**	**1.4**	**1.4**	**0.7**	**0.7**	**0.7**	**0.8**	**0.8**	**0.1**

Table 9-a
Daily Earthwork Quantities

Type	Units	Amount Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Cut	CY/Day	5	5	5	0	5	5	5	0	5	5	5	0
Fill	CY/Day	5	5	5	0	5	5	5	0	5	5	5	0
Total Cut and Fill	CY/Day	10	10	10	0	10	10	10	0	10	10	10	0
Bulldozing, Scraping and Grading	Hr/Day	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Cut	CY/Day	0	0	0	582	582	582	582	582	582	582	582	582
Fill	CY/Day	0	0	0	445	445	445	445	445	445	445	445	445
Total Cut and Fill	CY/Day	0	0	0	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027
Bulldozing, Scraping and Grading	Hr/Day	0	0	0	40	40	40	40	40	40	40	40	40
PV PANEL CONSTRUCTION													
Cut	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Fill	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	Hr/Day	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Cut	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Fill	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	Hr/Day	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cut	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Fill	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	CY/Day	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	Hr/Day	0	0	0	0	0	0	0	0	0	0	0	0

Table 9-a
Daily Earthwork Quantities

Type	Amount												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Cut	5	5	5	0	0	0	0	0	0	0	0	0	0
Fill	5	5	5	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	10	10	10	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO													
Cut	0	582	582	582	582	582	582	582	582	582	0	582	582
Fill	0	445	445	445	445	445	445	445	445	445	0	445	445
Total Cut and Fill	0	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	0	1,027	1,027
Bulldozing, Scraping and Grading	0	40	40	40	40	40	40	40	40	40	0	40	40
PV PANEL CONSTRUCTION													
Cut	80	80	80	80	80	80	80	80	0	80	80	80	80
Fill	65	65	65	65	65	65	65	65	0	65	65	65	65
Total Cut and Fill	145	145	145	145	145	145	145	145	0	145	145	145	145
Bulldozing, Scraping and Grading	4	4	4	4	4	4	4	4	0	4	4	4	4
SUBSTATION-BLDG-WATER TANK CO													
Cut	0	0	0	0	0	0	30	30	30	30	0	0	0
Fill	0	0	0	0	0	0	30	30	30	30	0	0	0
Total Cut and Fill	0	0	0	0	0	0	60	60	60	60	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cut	0	0	0	0	0	0	0	0	0	0	0	0	0
Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9-a
Daily Earthwork Quantities

Type	Amount												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Cut	0	0	0	0	0	0	0	0	0	0	0	0	0
Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO													
Cut	582	582	582	582	582	582	582	0	582	582	582	582	582
Fill	445	445	445	445	445	445	445	0	445	445	445	445	445
Total Cut and Fill	1,027	1,027	1,027	1,027	1,027	1,027	1,027	0	1,027	1,027	1,027	1,027	1,027
Bulldozing, Scraping and Grading	40	40	40	40	40	40	40	0	40	40	40	40	40
PV PANEL CONSTRUCTION													
Cut	80	80	80	80	0	80	80	80	80	80	80	80	80
Fill	65	65	65	65	0	65	65	65	65	65	65	65	65
Total Cut and Fill	145	145	145	145	0	145	145	145	145	145	145	145	145
Bulldozing, Scraping and Grading	4	4	4	4	0	4	4	4	4	4	4	4	4
SUBSTATION-BLDG-WATER TANK CO													
Cut	0	0	0	0	0	0	0	0	0	0	0	0	0
Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cut	0	0	0	0	0	0	0	0	0	0	0	0	0
Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9-a
Daily Earthwork Quantities

Type	Amount									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Cut	0	0	0	0	0	0	0	0	0	0
Fill	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO										
Cut	582	582	582	582	0	0	0	0	0	0
Fill	445	445	445	445	0	0	0	0	0	0
Total Cut and Fill	1,027	1,027	1,027	1,027	0	0	0	0	0	0
Bulldozing, Scraping and Grading	40	40	40	40	0	0	0	0	0	0
PV PANEL CONSTRUCTION										
Cut	0	80	80	80	80	80	80	80	80	0
Fill	0	65	65	65	65	65	65	65	65	0
Total Cut and Fill	0	145	145	145	145	145	145	145	145	0
Bulldozing, Scraping and Grading	0	4	4	4	4	4	4	4	4	0
SUBSTATION-BLDG-WATER TANK CO										
Cut	0	0	0	0	0	0	0	0	0	0
Fill	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning										
Cut	0	0	0	0	0	0	0	0	0	0
Fill	0	0	0	0	0	0	0	0	0	0
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0

Table 9-b
Monthly Earthwork Quantities

Type	Units	Monthly Amount[a]											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Total Cut and Fill	CY/Month	220	220	220	0	220	220	220	0	220	220	220	0
Bulldozing, Scraping and Grading	Hr/Month	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Total Cut and Fill	CY/Month	0	0	0	22,594	22,594	22,594	22,594	22,594	22,594	22,594	22,594	22,594
Bulldozing, Scraping and Grading	Hr/Month	0	0	0	880	880	880	880	880	880	880	880	880
PV PANEL CONSTRUCTION													
Total Cut and Fill	CY/Month	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	Hr/Month	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Total Cut and Fill	CY/Month	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	Hr/Month	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Total Cut and Fill	CY/Month	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	Hr/Month	0	0	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/month

Table 9-b
Monthly Earthwork Quantities

Type	Monthly Amount[a]												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Total Cut and Fill	220	220	220	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	0	22,594	22,594	22,594	22,594	22,594	22,594	22,594	22,594	22,594	0	22,594	22,594
Bulldozing, Scraping and Grading	0	880	880	880	880	880	880	880	880	880	0	880	880
PV PANEL CONSTRUCTION													
Total Cut and Fill	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	0	3,190	3,190	3,190	3,190
Bulldozing, Scraping and Grading	88	88	88	88	88	88	88	88	0	88	88	88	88
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0	0	0	0	0	0	1,320	1,320	1,320	1,320	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/month

Table 9-b
Monthly Earthwork Quantities

Type	Monthly Amount[a]												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	22,594	22,594	22,594	22,594	22,594	22,594	22,594	0	22,594	22,594	22,594	22,594	22,594
Bulldozing, Scraping and Grading	880	880	880	880	880	880	880	0	880	880	880	880	880
PV PANEL CONSTRUCTION													
Total Cut and Fill	3,190	3,190	3,190	3,190	0	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190
Bulldozing, Scraping and Grading	88	88	88	88	0	88	88	88	88	88	88	88	88
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/month

Table 9-b
Monthly Earthwork Quantities

Type	Monthly Amount[a]									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO										
Total Cut and Fill	22,594	22,594	22,594	22,594	0	0	0	0	0	0
Bulldozing, Scraping and Grading	880	880	880	880	0	0	0	0	0	0
PV PANEL CONSTRUCTION										
Total Cut and Fill	0	3,190	3,190	3,190	3,190	3,190	3,190	3,190	3,190	0
Bulldozing, Scraping and Grading	0	88	88	88	88	88	88	88	88	0
SUBSTATION-BLDG-WATER TANK CO										
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning										
Total Cut and Fill	0	0	0	0	0	0	0	0	0	0
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/month

Table 9-c
Monthly Earthwork Fugitive PM10 Emissions

Type	Emission Factor (lb/unit)	Fugitive PM10 Emissions (lb/month)											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Total Cut and Fill	2.89E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.1**	**0.1**	**0.1**	**1,517.2**	**1,517.2**	**1,517.2**	**1,517.2**	**1,517.2**	**1,517.2**	**1,517.2**	**1,517.2**	**1,517.2**

Table 9-d
Monthly Earthwork Fugitive PM2.5 Emissions

Type	Emission Factor	Fugitive PM2.5 Emissions (lb/month)											
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.0**	**0.0**	**0.0**	**462.6**	**462.6**	**462.6**	**462.6**	**462.6**	**462.6**	**462.6**	**462.6**	**462.6**

Table 9-c

Monthly Earthwork Fugitive PM10 Emi

Type	Fugitive PM10 Emissions (lb/month)												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Total Cut and Fill	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	0.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	0.0	6.5	6.5
Bulldozing, Scraping and Grading	0.0	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	0.0	1,510.6	1,510.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Bulldozing, Scraping and Grading	151.1	151.1	151.1	151.1	151.1	151.1	151.1	151.1	0.0	151.1	151.1	151.1	151.1
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**152.0**	**1,669.2**	**1,669.2**	**1,669.2**	**1,669.2**	**1,669.2**	**1,669.5**	**1,669.5**	**1,517.5**	**1,669.5**	**152.0**	**1,669.2**	**1,669.2**

Table 9-d

Monthly Earthwork Fugitive PM2.5 Emi

Type	Fugitive PM2.5 Emissions (lb/month)												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0
Bulldozing, Scraping and Grading	0.0	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	0.0	461.6	461.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Bulldozing, Scraping and Grading	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	0.0	46.2	46.2	46.2	46.2
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**46.3**	**508.9**	**508.9**	**508.9**	**508.9**	**508.9**	**508.9**	**508.9**	**462.6**	**508.9**	**46.3**	**508.9**	**508.9**

Table 9-c

Monthly Earthwork Fugitive PM10 Emi

Type	Fugitive PM10 Emissions (lb/month)												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	6.5	6.5	6.5	6.5	6.5	6.5	6.5	0.0	6.5	6.5	6.5	6.5	6.5
Bulldozing, Scraping and Grading	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6	0.0	1,510.6	1,510.6	1,510.6	1,510.6	1,510.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Bulldozing, Scraping and Grading	151.1	151.1	151.1	151.1	0.0	151.1	151.1	151.1	151.1	151.1	151.1	151.1	151.1
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**1,669.2**	**1,669.2**	**1,669.2**	**1,669.2**	**1,517.2**	**1,669.2**	**1,669.2**	**152.0**	**1,669.2**	**1,669.2**	**1,669.2**	**1,669.2**	**1,669.2**

Table 9-d

Monthly Earthwork Fugitive PM2.5 Emi

Type	Fugitive PM2.5 Emissions (lb/month)												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0
Bulldozing, Scraping and Grading	461.6	461.6	461.6	461.6	461.6	461.6	461.6	0.0	461.6	461.6	461.6	461.6	461.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Bulldozing, Scraping and Grading	46.2	46.2	46.2	46.2	0.0	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**508.9**	**508.9**	**508.9**	**508.9**	**462.6**	**508.9**	**508.9**	**46.3**	**508.9**	**508.9**	**508.9**	**508.9**	**508.9**

Table 9-c

Monthly Earthwork Fugitive PM10 Emi

Type	Fugitive PM10 Emissions (lb/month)									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO										
Total Cut and Fill	6.5	6.5	6.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1,510.6	1,510.6	1,510.6	1,510.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Total Cut and Fill	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
Bulldozing, Scraping and Grading	0.0	151.1	151.1	151.1	151.1	151.1	151.1	151.1	151.1	0.0
SUBSTATION-BLDG-WATER TANK CO										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**1,517.2**	**1,669.2**	**1,669.2**	**1,669.2**	**152.0**	**152.0**	**152.0**	**152.0**	**152.0**	**0.0**

Table 9-d

Monthly Earthwork Fugitive PM2.5 Emi

Type	Fugitive PM2.5 Emissions (lb/month)									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO										
Total Cut and Fill	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	461.6	461.6	461.6	461.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Total Cut and Fill	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Bulldozing, Scraping and Grading	0.0	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	0.0
SUBSTATION-BLDG-WATER TANK CO										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**462.6**	**508.9**	**508.9**	**508.9**	**46.3**	**46.3**	**46.3**	**46.3**	**46.3**	**0.0**

Table 10-a
Daily Asphaltic Paving

Type	Units	Amount Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Paving	Acres/Day	0.00	0.00	0.00	0.00	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Paving	Acres/Day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
PV PANEL CONSTRUCTION													
Paving	Acres/Day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Paving	Acres/Day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	Acres/Day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 10-b
Monthly Asphaltic Paving Fugitive ROG Emissions

Type	Emission Factor (lb/acre)[a]	Monthly Emissions (lb/month)[b] Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Paving	2.62	0.00	0.00	0.00	0.00	11.53	11.53	11.53	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.76	5.76
PV PANEL CONSTRUCTION													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL (lb/month)		**0.00**	**0.00**	**0.00**	**0.00**	**11.53**	**11.53**	**11.53**	**0.00**	**0.00**	**0.00**	**5.76**	**5.76**

[a] From CalEEMod Emission Estimator Model, Version 2011.1.1, 2011

[b] Based on 22 working days/month

Table 10-a
Daily Asphaltic Paving

Type	Amount												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.00

Table 10-b
Monthly Asphaltic Paving Fugitive RO(

Type	Monthly Emissions (lb/month)[b]												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	5.76	5.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.21	7.21	0.00	0.00	0.00
TOTAL (lb/month)	**0.00**	**5.76**	**5.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**7.21**	**7.21**	**0.00**	**0.00**	**0.00**

[a] From CalEEMod Emission Estimator M(

[b] Based on 22 working days/month

Table 10-a
Daily Asphaltic Paving

Type	Amount												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 10-b
Monthly Asphaltic Paving Fugitive RO(

Type	Monthly Emissions (lb/month)[b]												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	7.21	7.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL (lb/month)	**0.00**	**0.00**	**0.00**	**0.00**	**7.21**	**7.21**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

[a] From CalEEMod Emission Estimator M(

[b] Based on 22 working days/month

Table 10-a
Daily Asphaltic Paving

Type	Amount									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning										
Paving	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.13

Table 10-b
Monthly Asphaltic Paving Fugitive RO(

Type	Monthly Emissions (lb/month)[b]									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning										
Paving	7.21	7.21	0.00	0.00	0.00	0.00	0.00	0.00	7.21	7.21
TOTAL (lb/month)	**7.21**	**7.21**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**7.21**	**7.21**

[a] From CalEEMod Emission Estimator M(

[b] Based on 22 working days/month

Table 11-a
Construction Equipment Numbers

Equipment	Fuel	HP	Hours	Number Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11
FENCE - MOBILIZATION														
Generator	Diesel	30	1	1	1	1	0	1	1	1	0	1	1	1
Skip Loader	Diesel	78	1	1	1	1	0	1	1	1	0	1	1	1
Track Trencher	Diesel	115	1	1	1	1	0	1	1	1	0	1	1	1
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	Diesel	185	1	0	0	0	1	1	1	1	1	1	1	1
Generator	Diesel	30	1	0	0	0	2	2	2	2	2	2	2	2
Scraper Cat 623	Diesel	365	1	0	0	0	2	2	2	2	2	2	2	2
Deere 210LE Skip Loader	Diesel	78	1	0	0	0	1	1	1	1	1	1	1	1
Cat 140H Grader	Diesel	185	1	0	0	0	2	2	2	2	2	2	2	2
Roller Vibrator/compactor/other	Diesel	350	1	0	0	0	1	1	1	1	1	1	1	1
Cat BG600D Paver	Diesel	173	1	0	0	0	0	1	1	1	1	0	0	0
PV PANEL CONSTRUCTION														
Generator	Diesel	30	1	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	Diesel	25	1	0	0	0	0	0	0	0	0	0	0	0
Dozer Cat D6R	Diesel	185	1	0	0	0	0	0	0	0	0	0	0	0
Deere 210LE Skip Loader	Diesel	78	1	0	0	0	0	0	0	0	0	0	0	0
Telehandler	Diesel	99	1	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	Diesel	115	1	0	0	0	0	0	0	0	0	0	0	0
Cat 583T Pipelayer	Diesel	310	1	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	Diesel	30	1	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	Diesel	25	1	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	Diesel	78	1	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	Diesel	250	1	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning														
Cat BG600D Paver	Diesel	173	1	0	0	0	0	0	0	0	0	0	0	0
Roller Vibrator/compactor/other	Diesel	350	1	0	0	0	0	0	0	0	0	0	0	0

Table 11-a

Construction Equipment Numb

Equipment	Number Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION														
Generator	0	1	1	1	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	1	1	1	0	0	0	0	0	0	0	0	0	0
Track Trencher	0	1	1	1	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	1	0	1	1	1	1	1	1	1	1	1	0	1	1
Generator	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	2	0	2	2	2	2	2	2	2	2	2	0	2	2
Deere 210LE Skip Loader	1	0	1	1	1	1	1	1	1	1	1	0	1	1
Cat 140H Grader	2	0	2	2	2	2	2	2	2	2	2	0	2	2
Roller Vibrator/compactor/other	1	0	1	1	1	1	1	1	1	1	1	0	1	1
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION														
Generator	0	2	2	2	2	2	2	2	2	0	2	2	2	2
Air Compressor	0	2	2	2	2	2	2	2	2	0	2	2	2	2
Dozer Cat D6R	0	1	1	1	1	1	1	1	1	0	1	1	1	1
Deere 210LE Skip Loader	0	1	1	1	1	1	1	1	1	0	1	1	1	1
Telehandler	0	2	2	2	2	2	2	2	2	0	2	2	2	2
Track Trencher	0	1	1	1	1	1	1	1	1	0	1	1	1	1
Cat 583T Pipelayer	0	1	1	1	1	1	1	1	1	0	1	1	1	1
SUBSTATION-BLDG-WATER TA														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	1	1	1	1	0	0	0
Skip Loader	0	0	0	0	0	0	0	1	1	1	1	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	1	1	1	1	0	0	0
Testing & Commissioning														
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	0	1	1	0	0	0

Table 11-a

Construction Equipment Numb

Equipment	Number Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
FENCE - MOBILIZATION														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	1	1	1	1	1	1	1	0	1	1	1	1	1	1
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	2	2	2	2	2	2	2	0	2	2	2	2	2	2
Deere 210LE Skip Loader	1	1	1	1	1	1	1	0	1	1	1	1	1	1
Cat 140H Grader	2	2	2	2	2	2	2	0	2	2	2	2	2	2
Roller Vibrator/compactor/other	1	1	1	1	1	1	1	0	1	1	1	1	1	1
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION														
Generator	2	2	2	2	0	2	2	2	2	2	2	2	2	0
Air Compressor	2	2	2	2	0	2	2	2	2	2	2	2	2	0
Dozer Cat D6R	1	1	1	1	0	1	1	1	1	1	1	1	1	0
Deere 210LE Skip Loader	1	1	1	1	0	1	1	1	1	1	1	1	1	0
Telehandler	2	2	2	2	0	2	2	2	2	2	2	2	2	0
Track Trencher	1	1	1	1	0	1	1	1	1	1	1	1	1	0
Cat 583T Pipelayer	1	1	1	1	0	1	1	1	1	1	1	1	1	0
SUBSTATION-BLDG-WATER TA														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning														
Cat BG600D Paver	0	0	0	0	1	1	0	0	0	0	0	0	0	1
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 11-a
Construction Equipment Numb

Equipment	Number Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION									
Generator	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD									
Dozer Cat D6R	1	1	1	0	0	0	0	0	0
Generator	0	0	0	0	0	0	0	0	0
Scraper Cat 623	2	2	2	0	0	0	0	0	0
Deere 210LE Skip Loader	1	1	1	0	0	0	0	0	0
Cat 140H Grader	2	2	2	0	0	0	0	0	0
Roller Vibrator/compactor/other	1	1	1	0	0	0	0	0	0
Cat BG600D Paver	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION									
Generator	2	2	2	2	2	2	2	2	0
Air Compressor	2	2	2	2	2	2	2	2	0
Dozer Cat D6R	1	1	1	1	1	1	1	1	0
Deere 210LE Skip Loader	1	1	1	1	1	1	1	1	0
Telehandler	2	2	2	2	2	2	2	2	0
Track Trencher	1	1	1	1	1	1	1	1	0
Cat 583T Pipelayer	1	1	1	1	1	1	1	1	0
SUBSTATION-BLDG-WATER TA									
Generator	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0
Testing & Commissioning									
Cat BG600D Paver	1	0	0	0	0	0	0	1	1
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	1	1

Table 11-b

Hourly Construction Equipment Use

Equipment	Hours/Day Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14
FENCE - MOBILIZATION														
Generator	1	1	1	0	1	1	1	0	1	1	1	0	1	1
Skip Loader	1	1	1	0	1	1	1	0	1	1	1	0	1	1
Track Trencher	1	1	1	0	1	1	1	0	1	1	1	0	1	1
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	0	0	0	1	1	1	1	1	1	1	1	1	0	1
Generator	0	0	0	2	2	2	2	2	2	2	2	2	0	0
Scraper Cat 623	0	0	0	2	2	2	2	2	2	2	2	2	0	2
Deere 210LE Skip Loader	0	0	0	1	1	1	1	1	1	1	1	1	0	1
Cat 140H Grader	0	0	0	2	2	2	2	2	2	2	2	2	0	2
Roller Vibrator/compactor/other	0	0	0	1	1	1	1	1	1	1	1	1	0	1
Cat BG600D Paver	0	0	0	0	1	1	1	1	0	0	0	0	0	0
PV PANEL CONSTRUCTION														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Dozer Cat D6R	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Deere 210LE Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Telehandler	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Track Trencher	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Cat 583T Pipelayer	0	0	0	0	0	0	0	0	0	0	0	0	1	1
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning														
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 11-b
Hourly Construction Equipment

Equipment	Hours/Day Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28
FENCE - MOBILIZATION														
Generator	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	1	1	1	1	1	1	1	1	0	1	1	1	1	1
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	2	2	2	2	2	2	2	2	0	2	2	2	2	2
Deere 210LE Skip Loader	1	1	1	1	1	1	1	1	0	1	1	1	1	1
Cat 140H Grader	2	2	2	2	2	2	2	2	0	2	2	2	2	2
Roller Vibrator/compactor/other	1	1	1	1	1	1	1	1	0	1	1	1	1	1
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION														
Generator	2	2	2	2	2	2	0	2	2	2	2	2	2	2
Air Compressor	2	2	2	2	2	2	0	2	2	2	2	2	2	2
Dozer Cat D6R	1	1	1	1	1	1	0	1	1	1	1	1	1	1
Deere 210LE Skip Loader	1	1	1	1	1	1	0	1	1	1	1	1	1	1
Telehandler	2	2	2	2	2	2	0	2	2	2	2	2	2	2
Track Trencher	1	1	1	1	1	1	0	1	1	1	1	1	1	1
Cat 583T Pipelayer	1	1	1	1	1	1	0	1	1	1	1	1	1	1
SUBSTATION-BLDG-WATER TA														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	1	1	1	1	0	0	0	0	0	0
Skip Loader	0	0	0	0	1	1	1	1	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	1	1	1	1	0	0	0	0	0	0
Testing & Commissioning														
Cat BG600D Paver	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	1	1	0	0	0	0	0	0

Table 11-b
Hourly Construction Equipment

Equipment	Hours/Day Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42
FENCE - MOBILIZATION														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	1	1	1	1	0	1	1	1	1	1	1	1	1	1
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scraper Cat 623	2	2	2	2	0	2	2	2	2	2	2	2	2	2
Deere 210LE Skip Loader	1	1	1	1	0	1	1	1	1	1	1	1	1	1
Cat 140H Grader	2	2	2	2	0	2	2	2	2	2	2	2	2	2
Roller Vibrator/compactor/other	1	1	1	1	0	1	1	1	1	1	1	1	1	1
Cat BG600D Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV PANEL CONSTRUCTION														
Generator	2	0	2	2	2	2	2	2	2	2	0	2	2	2
Air Compressor	2	0	2	2	2	2	2	2	2	2	0	2	2	2
Dozer Cat D6R	1	0	1	1	1	1	1	1	1	1	0	1	1	1
Deere 210LE Skip Loader	1	0	1	1	1	1	1	1	1	1	0	1	1	1
Telehandler	2	0	2	2	2	2	2	2	2	2	0	2	2	2
Track Trencher	1	0	1	1	1	1	1	1	1	1	0	1	1	1
Cat 583T Pipelayer	1	0	1	1	1	1	1	1	1	1	0	1	1	1
SUBSTATION-BLDG-WATER TA														
Generator	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning														
Cat BG600D Paver	0	1	1	0	0	0	0	0	0	0	1	1	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 11-b
Hourly Construction Equipment

Equipment	Hours/Day					
	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION						
Generator	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0
Track Trencher	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRAD						
Dozer Cat D6R	0	0	0	0	0	0
Generator	0	0	0	0	0	0
Scraper Cat 623	0	0	0	0	0	0
Deere 210LE Skip Loader	0	0	0	0	0	0
Cat 140H Grader	0	0	0	0	0	0
Roller Vibrator/compactor/other	0	0	0	0	0	0
Cat BG600D Paver	0	0	0	0	0	0
PV PANEL CONSTRUCTION						
Generator	2	2	2	2	2	0
Air Compressor	2	2	2	2	2	0
Dozer Cat D6R	1	1	1	1	1	0
Deere 210LE Skip Loader	1	1	1	1	1	0
Telehandler	2	2	2	2	2	0
Track Trencher	1	1	1	1	1	0
Cat 583T Pipelayer	1	1	1	1	1	0
SUBSTATION-BLDG-WATER TA						
Generator	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0
Skip Loader	0	0	0	0	0	0
Crane - Boom Truck	0	0	0	0	0	0
Testing & Commissioning						
Cat BG600D Paver	0	0	0	0	1	1
Roller Vibrator/compactor/other	0	0	0	0	1	1

Table 11-c
Hourly Construction Equipment CO Emissions

Equipment	Emission Factor (lb/hr)	CO Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Generator	1.82E-01	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Skip Loader	3.93E-01	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4
Track Trencher	4.14E-01	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	3.54E-01	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Generator	1.82E-01	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Scraper Cat 623	6.43E-01	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0
Deere 210LE Skip Loader	3.93E-01	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Cat 140H Grader	3.66E-01	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Roller Vibrator/compactor/other	4.05E-01	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Cat BG600D Paver	7.42E-01	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	1.82E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Air Compressor	5.95E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Dozer Cat D6R	3.54E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Deere 210LE Skip Loader	3.93E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Telehandler	2.21E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Track Trencher	4.14E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Cat 583T Pipelayer	4.72E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	1.82E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	5.95E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	3.93E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	2.39E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	7.42E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	4.05E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**1.0**	**1.0**	**1.0**	**3.5**	**5.3**	**5.3**	**5.3**	**4.3**	**4.5**	**4.5**	**4.5**	**3.5**	**3.5**

Table 11-c
Hourly Construction Equipment

Equipment	CO Emissions (lb/hr) Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27
FENCE - MOBILIZATION														
Generator	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3
Deere 210LE Skip Loader	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Cat 140H Grader	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Roller Vibrator/compactor/other	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
Air Compressor	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Dozer Cat D6R	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
Deere 210LE Skip Loader	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
Telehandler	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
Track Trencher	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
Cat 583T Pipelayer	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**6.7**	**6.7**	**5.7**	**5.7**	**5.7**	**6.4**	**6.4**	**5.0**	**7.6**	**2.6**	**5.7**	**5.7**	**5.7**	**5.7**

Table 11-c
Hourly Construction Equipment

Equipment	CO Emissions (lb/hr) Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Deere 210LE Skip Loader	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Cat 140H Grader	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Roller Vibrator/compactor/other	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
Air Compressor	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Dozer Cat D6R	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
Deere 210LE Skip Loader	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
Telehandler	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
Track Trencher	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
Cat 583T Pipelayer	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**5.7**	**5.7**	**3.9**	**6.5**	**5.7**	**2.6**	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**	**3.9**	**6.5**	**5.7**

Table 11-c
Hourly Construction Equipment

Equipment	CO Emissions (lb/hr) Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD							
Dozer Cat D6R	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION							
Generator	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Air Compressor	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Dozer Cat D6R	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Deere 210LE Skip Loader	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Telehandler	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Track Trencher	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Cat 583T Pipelayer	0.5	0.5	0.5	0.5	0.5	0.5	0.0
SUBSTATION-BLDG-WATER TA							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning							
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.7	0.7
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.4	0.4
TOTAL (lb/hr)	**5.7**	**2.6**	**2.6**	**2.6**	**2.6**	**3.7**	**1.1**

Table 11-d
Hourly Construction Equipment ROG Emissions

Equipment	Emission Factor (lb/hr)	ROG Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Generator	1.26E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	4.11E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	5.06E-02	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	1.43E-01	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Generator	1.26E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	2.72E-01	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Deere 210LE Skip Loader	4.11E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	1.48E-01	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Roller Vibrator/compactor/other	1.30E-01	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Cat BG600D Paver	8.35E-02	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	1.26E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.74E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	1.43E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Deere 210LE Skip Loader	4.11E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	2.64E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Track Trencher	5.06E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cat 583T Pipelayer	1.55E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	1.26E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.74E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	4.11E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	9.68E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	8.35E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	1.30E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.1**	**0.1**	**0.1**	**1.2**	**1.4**	**1.4**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.2**	**0.6**

Table 11-d
Hourly Construction Equipment

Equipment	ROG Emissions (lb/hr) Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Roller Vibrator/compactor/other	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Track Trencher	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Cat 583T Pipelayer	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**1.8**	**1.8**	**1.7**	**1.7**	**1.7**	**1.8**	**1.8**	**1.5**	**2.0**	**0.5**	**1.7**	**1.7**	**1.7**	**1.7**

Table 11-d
Hourly Construction Equipment

Equipment	ROG Emissions (lb/hr) Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Roller Vibrator/compactor/other	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Track Trencher	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Cat 583T Pipelayer	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**1.7**	**1.7**	**1.2**	**1.7**	**1.7**	**0.5**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.2**	**1.7**	**1.7**

Table 11-d
Hourly Construction Equipment

Equipment	ROG Emissions (lb/hr) Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD							
Dozer Cat D6R	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Track Trencher	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Cat 583T Pipelayer	0.2	0.2	0.2	0.2	0.2	0.2	0.0
SUBSTATION-BLDG-WATER TA							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning							
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.1	0.1
TOTAL (lb/hr)	**1.7**	**0.5**	**0.5**	**0.5**	**0.5**	**0.7**	**0.2**

Table 11-e

Hourly Construction Equipment NOx Emissions

Equipment	Emission Factor (lb/hr)	NOx Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Generator	2.57E-01	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3
Skip Loader	3.18E-01	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3
Track Trencher	5.95E-01	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	1.42E+00	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
Generator	2.57E-01	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Scraper Cat 623	1.52E+00	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
Deere 210LE Skip Loader	3.18E-01	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Cat 140H Grader	1.47E+00	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0
Roller Vibrator/compactor/other	9.78E-01	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Cat BG600D Paver	5.80E-01	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	2.57E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Air Compressor	1.10E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Dozer Cat D6R	1.42E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Deere 210LE Skip Loader	3.18E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Telehandler	1.74E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Track Trencher	5.95E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Cat 583T Pipelayer	1.14E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	2.57E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.10E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	3.18E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	9.61E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	5.80E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	9.78E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**1.2**	**1.2**	**1.2**	**9.2**	**11.0**	**11.0**	**11.0**	**9.8**	**10.4**	**10.4**	**10.4**	**9.2**	**5.7**

Table 11-e
Hourly Construction Equipment

Equipment	NOx Emissions (lb/hr) Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27
FENCE - MOBILIZATION														
Generator	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Cat 140H Grader	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0	2.9	2.9	2.9	2.9
Roller Vibrator/compactor/other	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5
Air Compressor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2
Dozer Cat D6R	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3
Telehandler	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3
Track Trencher	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6
Cat 583T Pipelayer	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	1.1	1.1	1.1	1.1	1.1	1.1
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**14.4**	**14.4**	**13.3**	**13.3**	**13.3**	**14.6**	**14.6**	**11.6**	**16.2**	**4.6**	**13.3**	**13.3**	**13.3**	**13.3**

Table 11-e
Hourly Construction Equipment

Equipment	NOx Emissions (lb/hr) Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Cat 140H Grader	2.9	2.9	2.9	2.9	2.9	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Roller Vibrator/compactor/other	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
Air Compressor	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
Dozer Cat D6R	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4
Deere 210LE Skip Loader	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
Telehandler	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
Track Trencher	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
Cat 583T Pipelayer	1.1	1.1	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	1.1	1.1
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**13.3**	**13.3**	**9.3**	**13.8**	**13.3**	**4.6**	**13.3**	**13.3**	**13.3**	**13.3**	**13.3**	**9.3**	**13.8**	**13.3**

Table 11-e
Hourly Construction Equipment

Equipment	NOx Emissions (lb/hr) Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD							
Dozer Cat D6R	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	2.9	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION							
Generator	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Air Compressor	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Dozer Cat D6R	1.4	1.4	1.4	1.4	1.4	1.4	0.0
Deere 210LE Skip Loader	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Telehandler	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Track Trencher	0.6	0.6	0.6	0.6	0.6	0.6	0.0
Cat 583T Pipelayer	1.1	1.1	1.1	1.1	1.1	1.1	0.0
SUBSTATION-BLDG-WATER TA							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning							
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.6	0.6
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	1.0	1.0
TOTAL (lb/hr)	**13.3**	**4.6**	**4.6**	**4.6**	**4.6**	**6.1**	**1.6**

Table 11-f

Hourly Construction Equipment SOx Emissions

Equipment	Emission Factor (lb/hr)	SOx Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Generator	3.96E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	6.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	7.61E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	1.87E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	3.96E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	3.15E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	6.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	1.93E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	2.15E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	1.44E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	3.96E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.83E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	1.87E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	6.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	3.66E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	7.61E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	2.49E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	3.96E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	1.83E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	6.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	1.26E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	1.44E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	2.15E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 11-f
Hourly Construction Equipment

Equipment	SOx Emissions (lb/hr) Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 11-f
Hourly Construction Equipment

Equipment	SOx Emissions (lb/hr) Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 11-f
Hourly Construction Equipment

Equipment	SOx Emissions (lb/hr) Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD							
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TA							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning							
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 11-g
Hourly Construction Equipment PM10 Emissions

Equipment	Emission Factor (lb/hr)	PM10 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Generator	8.11E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	2.31E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	3.25E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	4.19E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	8.11E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	7.98E-02	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Deere 210LE Skip Loader	2.31E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	4.33E-02	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Roller Vibrator/compactor/other	4.62E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	4.02E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	8.11E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.86E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	4.19E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	2.31E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	1.33E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	3.25E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	5.42E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	8.11E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.86E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	2.31E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	2.83E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	4.02E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	4.62E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.1**	**0.1**	**0.1**	**0.4**	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.3**

Table 11-g
Hourly Construction Equipment

Equipment	PM10 Emissions (lb/hr) Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.5**	**0.7**	**0.2**	**0.6**	**0.6**	**0.6**	**0.6**

Table 11-g
Hourly Construction Equipment

Equipment	PM10 Emissions (lb/hr) Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.6**	**0.6**	**0.4**	**0.6**	**0.6**	**0.2**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.4**	**0.6**	**0.6**

Table 11-g
Hourly Construction Equipment

Equipment	PM10 Emissions (lb/hr) Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD							
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.1	0.1	0.1	0.1	0.1	0.1	0.0
SUBSTATION-BLDG-WATER TA							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning							
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.6**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.1**

Table 11-h
Hourly Construction Equipment PM2.5 Emissions

Equipment	Emission Factor (lb/hr)	PM2.5 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Generator	7.46E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	2.13E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	2.99E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Dozer Cat D6R	3.86E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	7.46E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	7.35E-02	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Deere 210LE Skip Loader	2.13E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	3.98E-02	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Roller Vibrator/compactor/other	4.25E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	3.70E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	7.46E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.56E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	3.86E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	2.13E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	1.22E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	2.99E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	4.99E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Generator	7.46E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	3.56E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	2.13E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	2.60E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	3.70E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	4.25E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.1**	**0.1**	**0.1**	**0.3**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.3**	**0.2**

Table 11-h
Hourly Construction Equipment

	PM2.5 Emissions (lb/hr)													
Equipment	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**	**Month 26**	**Month 27**
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.6**	**0.6**	**0.5**	**0.5**	**0.5**	**0.6**	**0.6**	**0.5**	**0.6**	**0.2**	**0.5**	**0.5**	**0.5**	**0.5**

Table 11-h
Hourly Construction Equipment

Equipment	PM2.5 Emissions (lb/hr) Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41
FENCE - MOBILIZATION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD														
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TA														
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.5**	**0.5**	**0.4**	**0.6**	**0.5**	**0.2**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.4**	**0.6**	**0.5**

Table 11-h
Hourly Construction Equipment

Equipment	PM2.5 Emissions (lb/hr) Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRAD							
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scraper Cat 623	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 140H Grader	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dozer Cat D6R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deere 210LE Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Telehandler	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Trencher	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cat 583T Pipelayer	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TA							
Generator	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Compressor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skip Loader	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crane - Boom Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning							
Cat BG600D Paver	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roller Vibrator/compactor/other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.5**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.1**

Table 12-a
On-Site Motor Vehicle Numbers

Vehicle Type	Miles/ Hour	Number Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	6	3	3	3	0	3	3	3	0	3	3	3	0
On-Site Flatbed Delivery Truck	8	2	2	2	0	2	2	2	0	2	2	2	0
5000 gal Water Truck	5	1	1	1	0	1	1	1	0	1	1	1	0
On-Site Service Truck	13	1	1	1	0	1	1	1	0	1	1	1	0
On-Site Lube/Fuel Trucks	8	8	8	8	0	8	8	8	0	8	8	8	0
On-Site Dump Truck	7	1	1	1	0	1	1	1	0	1	1	1	0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	5	0	0	0	3	3	3	3	3	3	3	3	3
On-Site Heavy Duty Pick Up Truck	7	0	0	0	2	2	2	2	2	2	2	2	2
On-Site Flatbed Delivery Truck	7	0	0	0	1	1	1	1	1	1	1	1	1
On-Site Lube/Fuel Trucks	8	0	0	0	6	0	0	0	6	6	6	6	6
On-Site Service Truck	8	0	0	0	6	0	0	0	0	0	0	0	0
On-Site Dump Truck	7	0	0	0	10	10	10	10	10	4	4	4	4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	8	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Heavy Duty Pick Up Truck	7	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	8	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	8	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	7	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	8	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	7	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	7	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	7	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	8	0	0	0	0	0	0	0	0	0	0	0	0

Table 12-a
On-Site Motor Vehicle Numbers

Vehicle Type	Number Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	3	3	3	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	2	2	2	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	1	1	1	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	1	1	1	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	8	8	8	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	1	1	1	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0	3	3	3	3	3	3	3	3	3	0	3	3
On-Site Heavy Duty Pick Up Truck	0	2	2	2	2	2	2	2	2	2	0	2	2
On-Site Flatbed Delivery Truck	0	1	1	1	1	1	1	1	1	1	0	1	1
On-Site Lube/Fuel Trucks	0	0	0	6	6	6	6	6	6	6	0	6	6
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	4	4	4	4	4	4	4	4	4	0	4	4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3	3	3	3	3	3	3	3	0	3	3	3	3
On-Site Heavy Duty Pick Up Truck	1	1	1	1	1	1	1	1	0	1	1	1	1
On-Site Flatbed Delivery Truck	2	2	2	2	2	2	2	2	0	2	2	2	2
On-Site Service Truck	2	2	2	2	2	2	2	2	0	2	2	2	2
On-Site Dump Truck	1	1	1	1	1	1	1	1	0	1	1	1	1
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	1	1	1	1	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	1	1	1	1	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	1	1	1	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	2	2	2	0	0	0

Table 12-a
On-Site Motor Vehicle Numbers

Vehicle Type	Number Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	3	3	3	3	3	3	3	0	3	3	3	3	3
On-Site Heavy Duty Pick Up Truck	2	2	2	2	2	2	2	0	2	2	2	2	2
On-Site Flatbed Delivery Truck	1	1	1	1	1	1	1	0	1	1	1	1	1
On-Site Lube/Fuel Trucks	6	6	6	6	6	6	6	0	6	6	6	6	6
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	4	4	4	4	4	4	4	0	5	5	5	5	5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3	3	3	3	0	3	3	3	3	3	3	3	3
On-Site Heavy Duty Pick Up Truck	1	1	1	1	0	1	1	1	1	1	1	1	1
On-Site Flatbed Delivery Truck	2	2	2	2	0	2	2	2	2	2	2	2	2
On-Site Service Truck	2	2	2	2	0	2	2	2	2	2	2	2	2
On-Site Dump Truck	1	1	1	1	0	1	1	1	1	1	1	1	1
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	8	8
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	1	1	1	0	0	0	0	0	0	1
On-Site Service Truck	0	0	0	2	2	2	0	0	0	0	0	0	2

Table 12-a
On-Site Motor Vehicle Numbers

Vehicle Type	Number Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	3	3	3	3	0	0	0	0	0	0
On-Site Heavy Duty Pick Up Truck	2	2	2	2	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	1	1	1	1	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	6	6	6	6	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	5	5	5	5	0	0	0	0	0	0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0	3	3	3	3	3	3	3	3	0
On-Site Heavy Duty Pick Up Truck	0	1	1	1	1	1	1	1	1	0
On-Site Flatbed Delivery Truck	0	2	2	2	2	2	2	2	2	0
On-Site Service Truck	0	2	2	2	2	2	2	2	2	0
On-Site Dump Truck	0	1	1	1	1	1	1	1	1	0
On-Site Lube/Fuel Trucks	0	8	8	8	8	8	8	8	8	0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	1	1	0	0	0	0	0	1	1	1
On-Site Service Truck	2	2	0	0	0	0	0	2	2	2

Table 12-b
Hourly On-Site Motor Vehicle Use

Vehicle Type	Miles/Hour Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION													
On-Site Pick Up Truck	18	18	18	0	18	18	18	0	18	18	18	0	18
On-Site Flatbed Delivery Truck	16	16	16	0	16	16	16	0	16	16	16	0	16
5000 gal Water Truck	5	5	5	0	5	5	5	0	5	5	5	0	5
On-Site Service Truck	13	13	13	0	13	13	13	0	13	13	13	0	13
On-Site Lube/Fuel Trucks	64	64	64	0	64	64	64	0	64	64	64	0	64
On-Site Dump Truck	7	7	7	0	7	7	7	0	7	7	7	0	7
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	0	0	0	15	15	15	15	15	15	15	15	15	0
On-Site Heavy Duty Pick Up Truck	0	0	0	14	14	14	14	14	14	14	14	14	0
On-Site Flatbed Delivery Truck	0	0	0	7	7	7	7	7	7	7	7	7	0
On-Site Lube/Fuel Trucks	0	0	0	48	0	0	0	48	48	48	48	48	0
On-Site Service Truck	0	0	0	48	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	70	70	70	70	70	28	28	28	28	0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	24
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	7
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	16
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	16
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0	0	0	7
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 12-b
Hourly On-Site Motor Vehicle Use

Vehicle Type	Miles/Hour												
	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
FENCE - MOBILIZATION													
On-Site Pick Up Truck	18	18	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	16	16	0	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	5	5	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	13	13	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	64	64	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	7	7	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	15	15	15	15	15	15	15	15	15	0	15	15	15
On-Site Heavy Duty Pick Up Truck	14	14	14	14	14	14	14	14	14	0	14	14	14
On-Site Flatbed Delivery Truck	7	7	7	7	7	7	7	7	7	0	7	7	7
On-Site Lube/Fuel Trucks	0	0	48	48	48	48	48	48	48	0	48	48	48
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	28	28	28	28	28	28	28	28	28	0	28	28	28
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	24	24	24	24	24	24	24	0	24	24	24	24	24
On-Site Heavy Duty Pick Up Truck	7	7	7	7	7	7	7	0	7	7	7	7	7
On-Site Flatbed Delivery Truck	16	16	16	16	16	16	16	0	16	16	16	16	16
On-Site Service Truck	16	16	16	16	16	16	16	0	16	16	16	16	16
On-Site Dump Truck	7	7	7	7	7	7	7	0	7	7	7	7	7
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	7	7	7	7	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	7	7	7	7	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	7	7	7	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	16	16	16	0	0	0	0

Table 12-b
Hourly On-Site Motor Vehicle Use

Vehicle Type	Miles/Hour												
	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	15	15	15	15	15	15	0	15	15	15	15	15	15
On-Site Heavy Duty Pick Up Truck	14	14	14	14	14	14	0	14	14	14	14	14	14
On-Site Flatbed Delivery Truck	7	7	7	7	7	7	0	7	7	7	7	7	7
On-Site Lube/Fuel Trucks	48	48	48	48	48	48	0	48	48	48	48	48	48
On-Site Service Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	28	28	28	28	28	28	0	35	35	35	35	35	35
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	24	24	24	0	24	24	24	24	24	24	24	24	0
On-Site Heavy Duty Pick Up Truck	7	7	7	0	7	7	7	7	7	7	7	7	0
On-Site Flatbed Delivery Truck	16	16	16	0	16	16	16	16	16	16	16	16	0
On-Site Service Truck	16	16	16	0	16	16	16	16	16	16	16	16	0
On-Site Dump Truck	7	7	7	0	7	7	7	7	7	7	7	7	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0	0	64	64	0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0	0	7	7	7	0	0	0	0	0	0	7	7
On-Site Service Truck	0	0	16	16	16	0	0	0	0	0	0	16	16

Table 12-b
Hourly On-Site Motor Vehicle Use

Vehicle Type	Miles/Hour								
	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION									
On-Site Pick Up Truck	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0
5000 gal Water Truck	0	0	0	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING									
5000 gal Water Truck	15	15	15	0	0	0	0	0	0
On-Site Heavy Duty Pick Up Truck	14	14	14	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	7	7	7	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	48	48	48	0	0	0	0	0	0
On-Site Service Truck	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	35	35	35	0	0	0	0	0	0
PV PANEL CONSTRUCTION									
On-Site Pick Up Truck	24	24	24	24	24	24	24	24	0
On-Site Heavy Duty Pick Up Truck	7	7	7	7	7	7	7	7	0
On-Site Flatbed Delivery Truck	16	16	16	16	16	16	16	16	0
On-Site Service Truck	16	16	16	16	16	16	16	16	0
On-Site Dump Truck	7	7	7	7	7	7	7	7	0
On-Site Lube/Fuel Trucks	64	64	64	64	64	64	64	64	0
SUBSTATION-BLDG-WATER TANK									
On-Site Heavy Duty Pick Up Truck	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	0	0	0	0	0	0	0	0	0
Testing & Commissioning									
On-Site Heavy Duty Pick Up Truck	7	0	0	0	0	0	7	7	7
On-Site Service Truck	16	0	0	0	0	0	16	16	16

Table 12-c
Hourly On-Site Motor Vehicle CO Emissions

Vehicle Type	Emission Factor (lb/mi)	CO Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	3.25E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.85E-03	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Dump Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	3.25E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.85E-03	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Service Truck	1.85E-03	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.40E-03	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.40E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.2**	**0.2**	**0.2**	**0.4**	**0.4**	**0.4**	**0.4**	**0.3**	**0.4**	**0.4**	**0.4**	**0.2**

Table 12-c
Hourly On-Site Motor Vehicle CO E

Vehicle Type	CO Emissions (lb/hr) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.3**	**0.5**	**0.5**	**0.3**	**0.3**	**0.3**	**0.4**	**0.4**	**0.3**	**0.4**	**0.1**	**0.3**	**0.3**

Table 12-c
Hourly On-Site Motor Vehicle CO E

Vehicle Type	CO Emissions (lb/hr) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.3**	**0.3**	**0.3**	**0.4**	**0.3**	**0.4**	**0.3**	**0.1**	**0.3**	**0.3**	**0.3**	**0.5**	**0.5**

Table 12-c
Hourly On-Site Motor Vehicle CO E

Vehicle Type	CO Emissions (lb/hr) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.3**	**0.5**	**0.5**	**0.5**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.0**

Table 12-d
Hourly On-Site Motor Vehicle ROG Emissions

Vehicle Type	Emission Factor (lb/mi)	ROG Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	7.11E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	7.11E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	3.72E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**

Table 12-d
Hourly On-Site Motor Vehicle ROG

	ROG Emissions (lb/hr)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**

Table 12-d
Hourly On-Site Motor Vehicle ROG

	ROG Emissions (lb/hr)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

Table 12-d
Hourly On-Site Motor Vehicle ROG

	ROG Emissions (lb/hr)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**

Table 12-e
Hourly On-Site Motor Vehicle NOx Emissions

Vehicle Type	Emission Factor (lb/mi)	NOx Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	9.80E-03	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
On-Site Flatbed Delivery Truck	1.61E-02	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0
5000 gal Water Truck	2.48E-02	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Service Truck	9.80E-03	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
On-Site Lube/Fuel Trucks	9.80E-03	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0
On-Site Dump Truck	1.61E-02	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	2.48E-02	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Flatbed Delivery Truck	1.61E-02	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	9.80E-03	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
On-Site Service Truck	9.80E-03	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.61E-02	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.61E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	1.61E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.61E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**1.4**	**1.4**	**1.4**	**2.7**	**3.2**	**3.2**	**3.2**	**2.2**	**3.0**	**3.0**	**3.0**	**1.5**

Table 12-e

Hourly On-Site Motor Vehicle NOx I

Vehicle Type	NOx Emissions (lb/hr) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
On-Site Heavy Duty Pick Up Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Flatbed Delivery Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
On-Site Heavy Duty Pick Up Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
On-Site Service Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
TOTAL (lb/hr)	**2.3**	**3.3**	**3.3**	**2.4**	**2.4**	**2.4**	**2.6**	**2.8**	**2.0**	**2.8**	**0.8**	**2.4**	**2.4**

Table 12-e

Hourly On-Site Motor Vehicle NOx I

	NOx Emissions (lb/hr)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4
On-Site Heavy Duty Pick Up Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.6	0.6	0.6	0.6	0.6
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Heavy Duty Pick Up Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Flatbed Delivery Truck	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
On-Site Service Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
On-Site Dump Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
On-Site Service Truck	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TOTAL (lb/hr)	**2.4**	**2.4**	**2.4**	**2.6**	**1.8**	**2.6**	**2.4**	**0.8**	**2.5**	**2.5**	**2.5**	**3.1**	**3.3**

Table 12-e

Hourly On-Site Motor Vehicle NOx I

Vehicle Type	NOx Emissions (lb/hr) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Flatbed Delivery Truck	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
On-Site Service Truck	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Dump Truck	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Lube/Fuel Trucks	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
On-Site Service Truck	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
TOTAL (lb/hr)	**1.9**	**3.3**	**3.1**	**3.1**	**1.5**	**1.5**	**1.5**	**1.7**	**1.7**	**0.2**

Table 12-f
Hourly On-Site Motor Vehicle SOx Emissions

Vehicle Type	Emission Factor (lb/mi)	SOx Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.29E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 12-f

Hourly On-Site Motor Vehicle SOx E

Vehicle Type	SOx Emissions (lb/hr) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 12-f

Hourly On-Site Motor Vehicle SOx E

Vehicle Type	SOx Emissions (lb/hr) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 12-f

Hourly On-Site Motor Vehicle SOx E

Vehicle Type	SOx Emissions (lb/hr) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 12-g
Hourly On-Site Motor Vehicle Exhaust PM10 Emissions

Vehicle Type	Emission Factor (lb/mi)	Exhaust PM10 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	4.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	4.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.98E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**

Table 12-g
Hourly On-Site Motor Vehicle Exha

Vehicle Type	Exhaust PM10 Emissions (lb/hr) Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**

Table 12-g
Hourly On-Site Motor Vehicle Exha

Vehicle Type	Exhaust PM10 Emissions (lb/hr) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

Table 12-g
Hourly On-Site Motor Vehicle Exha

Vehicle Type	Exhaust PM10 Emissions (lb/hr) Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**

Table 12-h
Hourly On-Site Motor Vehicle Exhaust PM2.5 Emissions

Vehicle Type	Emission Factor (lb/mi)	Exhaust PM2.5 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	4.51E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	4.51E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	2.74E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**

Table 12-h
Hourly On-Site Motor Vehicle Exha

Vehicle Type	Exhaust PM2.5 Emissions (lb/hr)												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**

Table 12-h
Hourly On-Site Motor Vehicle Exha

Vehicle Type	Exhaust PM2.5 Emissions (lb/hr)												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

Table 12-h
Hourly On-Site Motor Vehicle Exha

Vehicle Type	Exhaust PM2.5 Emissions (lb/hr)									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.0**

Table 12-i

Hourly On-Site Motor Vehicle Fugitive PM10 Emissions

Vehicle Type	Emission Factor (lb/mi)	Fugitive PM10 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	7.23E-01	13.0	13.0	13.0	0.0	13.0	13.0	13.0	0.0	13.0	13.0	13.0	0.0
On-Site Flatbed Delivery Truck	8.49E-01	13.6	13.6	13.6	0.0	13.6	13.6	13.6	0.0	13.6	13.6	13.6	0.0
5000 gal Water Truck	2.15E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.23E-01	9.4	9.4	9.4	0.0	9.4	9.4	9.4	0.0	9.4	9.4	9.4	0.0
On-Site Lube/Fuel Trucks	7.23E-01	46.3	46.3	46.3	0.0	46.3	46.3	46.3	0.0	46.3	46.3	46.3	0.0
On-Site Dump Truck	8.49E-01	5.9	5.9	5.9	0.0	5.9	5.9	5.9	0.0	5.9	5.9	5.9	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	2.15E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
On-Site Flatbed Delivery Truck	8.49E-01	0.0	0.0	0.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
On-Site Lube/Fuel Trucks	7.23E-01	0.0	0.0	0.0	34.7	0.0	0.0	0.0	34.7	34.7	34.7	34.7	34.7
On-Site Service Truck	7.23E-01	0.0	0.0	0.0	34.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.49E-01	0.0	0.0	0.0	59.4	59.4	59.4	59.4	59.4	23.8	23.8	23.8	23.8
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.49E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.49E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.49E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.23E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**88.2**	**88.2**	**88.2**	**144.8**	**163.6**	**163.6**	**163.6**	**110.2**	**162.7**	**162.7**	**162.7**	**74.5**

Table 12-i
Hourly On-Site Motor Vehicle Fugit

	Fugitive PM10 Emissions (lb/hr)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	13.0	13.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	13.6	13.6	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	9.4	9.4	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	46.3	46.3	46.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	5.9	5.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	0.0	10.1	10.1
On-Site Flatbed Delivery Truck	0.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	0.0	5.9	5.9
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	34.7	34.7	34.7	34.7	34.7	34.7	34.7	0.0	34.7	34.7
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	0.0	23.8	23.8
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	0.0	17.3	17.3	17.3	17.3
On-Site Heavy Duty Pick Up Truck	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	0.0	5.1	5.1	5.1	5.1
On-Site Flatbed Delivery Truck	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	0.0	13.6	13.6	13.6	13.6
On-Site Service Truck	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	0.0	11.6	11.6	11.6	11.6
On-Site Dump Truck	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	0.0	5.9	5.9	5.9	5.9
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	5.1	5.1	5.1	5.1	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9	5.9	5.9	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	5.1	5.1	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	11.6	11.6	0.0	0.0	0.0
TOTAL (lb/hr)	**141.7**	**181.5**	**181.5**	**128.0**	**128.0**	**128.0**	**139.0**	**155.6**	**102.1**	**155.6**	**53.5**	**128.0**	**128.0**

Table 12-i

Hourly On-Site Motor Vehicle Fugit

	Fugitive PM10 Emissions (lb/hr)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	10.1	10.1	10.1	10.1	10.1	10.1	10.1	0.0	10.1	10.1	10.1	10.1	10.1
On-Site Flatbed Delivery Truck	5.9	5.9	5.9	5.9	5.9	5.9	5.9	0.0	5.9	5.9	5.9	5.9	5.9
On-Site Lube/Fuel Trucks	34.7	34.7	34.7	34.7	34.7	34.7	34.7	0.0	34.7	34.7	34.7	34.7	34.7
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	23.8	23.8	23.8	23.8	23.8	23.8	23.8	0.0	29.7	29.7	29.7	29.7	29.7
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	17.3	17.3	17.3	17.3	0.0	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
On-Site Heavy Duty Pick Up Truck	5.1	5.1	5.1	5.1	0.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
On-Site Flatbed Delivery Truck	13.6	13.6	13.6	13.6	0.0	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
On-Site Service Truck	11.6	11.6	11.6	11.6	0.0	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
On-Site Dump Truck	5.9	5.9	5.9	5.9	0.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.3	46.3
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	5.1	5.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0	5.1
On-Site Service Truck	0.0	0.0	0.0	11.6	11.6	11.6	0.0	0.0	0.0	0.0	0.0	0.0	11.6
TOTAL (lb/hr)	**128.0**	**128.0**	**128.0**	**144.6**	**91.1**	**144.6**	**128.0**	**53.5**	**133.9**	**133.9**	**133.9**	**180.2**	**196.8**

Table 12-i
Hourly On-Site Motor Vehicle Fugit

	Fugitive PM10 Emissions (lb/hr)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	10.1	10.1	10.1	10.1	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	5.9	5.9	5.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	34.7	34.7	34.7	34.7	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	29.7	29.7	29.7	29.7	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	0.0
On-Site Heavy Duty Pick Up Truck	0.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	0.0
On-Site Flatbed Delivery Truck	0.0	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	0.0
On-Site Service Truck	0.0	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	0.0
On-Site Dump Truck	0.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	0.0
On-Site Lube/Fuel Trucks	0.0	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	5.1	5.1	0.0	0.0	0.0	0.0	0.0	5.1	5.1	5.1
On-Site Service Truck	11.6	11.6	0.0	0.0	0.0	0.0	0.0	11.6	11.6	11.6
TOTAL (lb/hr)	**97.1**	**196.8**	**180.2**	**180.2**	**99.7**	**99.7**	**99.7**	**116.4**	**116.4**	**16.6**

Table 12-j
Hourly On-Site Motor Vehicle Fugitive PM2.5 Emissions

Vehicle Type	Emission Factor (lb/mi)	Fugitive PM2.5 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
On-Site Pick Up Truck	7.24E-02	1.3	1.3	1.3	0.0	1.3	1.3	1.3	0.0	1.3	1.3	1.3	0.0
On-Site Flatbed Delivery Truck	8.50E-02	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0
5000 gal Water Truck	7.82E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.24E-02	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.0
On-Site Lube/Fuel Trucks	7.24E-02	4.6	4.6	4.6	0.0	4.6	4.6	4.6	0.0	4.6	4.6	4.6	0.0
On-Site Dump Truck	8.50E-02	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
5000 gal Water Truck	7.82E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
On-Site Flatbed Delivery Truck	8.50E-02	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	7.24E-02	0.0	0.0	0.0	3.5	0.0	0.0	0.0	3.5	3.5	3.5	3.5	3.5
On-Site Service Truck	7.24E-02	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.50E-02	0.0	0.0	0.0	5.9	5.9	5.9	5.9	5.9	2.4	2.4	2.4	2.4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.50E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	8.50E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	8.50E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	7.24E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**8.8**	**8.8**	**8.8**	**14.5**	**16.4**	**16.4**	**16.4**	**11.0**	**16.3**	**16.3**	**16.3**	**7.5**

Table 12-j
Hourly On-Site Motor Vehicle Fugit

	Fugitive PM2.5 Emissions (lb/hr)												
Vehicle Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	4.6	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0
On-Site Flatbed Delivery Truck	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0	3.5	3.5
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0	2.4	2.4
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7
On-Site Heavy Duty Pick Up Truck	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
On-Site Flatbed Delivery Truck	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4
On-Site Service Truck	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	1.2	1.2	1.2	1.2
On-Site Dump Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	0.0	0.0	0.0
TOTAL (lb/hr)	**14.2**	**18.2**	**18.2**	**12.8**	**12.8**	**12.8**	**13.9**	**15.6**	**10.2**	**15.6**	**5.4**	**12.8**	**12.8**

Table 12-j
Hourly On-Site Motor Vehicle Fugit

	Fugitive PM2.5 Emissions (lb/hr)												
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING													
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0
On-Site Flatbed Delivery Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0	3.5	3.5	3.5	3.5	3.5
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0	3.0	3.0	3.0	3.0	3.0
PV PANEL CONSTRUCTION													
On-Site Pick Up Truck	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
On-Site Heavy Duty Pick Up Truck	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
On-Site Flatbed Delivery Truck	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
On-Site Service Truck	1.2	1.2	1.2	1.2	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
On-Site Dump Truck	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6
SUBSTATION-BLDG-WATER TANK													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
On-Site Service Truck	0.0	0.0	0.0	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2
TOTAL (lb/hr)	**12.8**	**12.8**	**12.8**	**14.5**	**9.1**	**14.5**	**12.8**	**5.4**	**13.4**	**13.4**	**13.4**	**18.0**	**19.7**

Table 12-j
Hourly On-Site Motor Vehicle Fugit

	Fugitive PM2.5 Emissions (lb/hr)									
Vehicle Type	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION										
On-Site Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING										
5000 gal Water Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Heavy Duty Pick Up Truck	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Lube/Fuel Trucks	3.5	3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Service Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Dump Truck	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
On-Site Pick Up Truck	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
On-Site Heavy Duty Pick Up Truck	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
On-Site Flatbed Delivery Truck	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
On-Site Service Truck	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
On-Site Dump Truck	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
On-Site Lube/Fuel Trucks	0.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0
SUBSTATION-BLDG-WATER TANK										
On-Site Heavy Duty Pick Up Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Flatbed Delivery Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
On-Site Heavy Duty Pick Up Truck	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
On-Site Service Truck	1.2	1.2	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2
TOTAL (lb/hr)	**9.7**	**19.7**	**18.0**	**18.0**	**10.0**	**10.0**	**10.0**	**11.7**	**11.7**	**1.7**

Table 13-a
Hourly Earthwork Quantities

Type	Units	Amount Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Cut[a]	CY/Hr	0.63	0.63	0.63	0.00	0.63	0.63	0.63	0.00	0.63	0.63	0.63	0.00
Fill[a]	CY/Hr	0.63	0.63	0.63	0.00	0.63	0.63	0.63	0.00	0.63	0.63	0.63	0.00
Total Cut and Fill	CY/Hr	1.25	1.25	1.25	0.00	1.25	1.25	1.25	0.00	1.25	1.25	1.25	0.00
Bulldozing, Scraping and Grading	Hr/Hr	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Cut[a]	CY/Hr	0.00	0.00	0.00	72.75	72.75	72.75	72.75	72.75	72.75	72.75	72.75	72.75
Fill[a]	CY/Hr	0.00	0.00	0.00	55.63	55.63	55.63	55.63	55.63	55.63	55.63	55.63	55.63
Total Cut and Fill	CY/Hr	0.00	0.00	0.00	128.38	128.38	128.38	128.38	128.38	128.38	128.38	128.38	128.38
Bulldozing, Scraping and Grading	Hr/Hr	0	0	0	5	5	5	5	5	5	5	5	5
PV PANEL CONSTRUCTION													
Cut[a]	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	Hr/Hr	0	0	0	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Cut[a]	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	Hr/Hr	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cut[a]	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	CY/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	Hr/Hr	0	0	0	0	0	0	0	0	0	0	0	0

[a] Hourly quantity = Daily quantity / 8 working hr/day

Table 13-a
Hourly Earthwork Quantities

Type	Amount												
	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Cut[a]	0.63	0.63	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.63	0.63	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	1.25	1.25	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO													
Cut[a]	0.00	72.75	72.75	72.75	72.75	72.75	72.75	72.75	72.75	72.75	0.00	72.75	72.75
Fill[a]	0.00	55.63	55.63	55.63	55.63	55.63	55.63	55.63	55.63	55.63	0.00	55.63	55.63
Total Cut and Fill	0.00	128.38	128.38	128.38	128.38	128.38	128.38	128.38	128.38	128.38	0.00	128.38	128.38
Bulldozing, Scraping and Grading	0	5	5	5	5	5	5	5	5	5	0	5	5
PV PANEL CONSTRUCTION													
Cut[a]	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.00	10.00	10.00	10.00	10.00
Fill[a]	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	0.00	8.13	8.13	8.13	8.13
Total Cut and Fill	18.13	18.13	18.13	18.13	18.13	18.13	18.13	18.13	0.00	18.13	18.13	18.13	18.13
Bulldozing, Scraping and Grading	1	1	1	1	1	1	1	1	0	1	1	1	1
SUBSTATION-BLDG-WATER TANK CO													
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	3.75	3.75	3.75	3.75	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	3.75	3.75	3.75	3.75	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	7.50	7.50	7.50	7.50	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Hourly quantity = Daily quantity / 8 work

Table 13-a
Hourly Earthwork Quantities

Type	Amount												
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO													
Cut[a]	72.75	72.75	72.75	72.75	72.75	72.75	72.75	0.00	72.75	72.75	72.75	72.75	72.75
Fill[a]	55.63	55.63	55.63	55.63	55.63	55.63	55.63	0.00	55.63	55.63	55.63	55.63	55.63
Total Cut and Fill	128.38	128.38	128.38	128.38	128.38	128.38	128.38	0.00	128.38	128.38	128.38	128.38	128.38
Bulldozing, Scraping and Grading	5	5	5	5	5	5	5	0	5	5	5	5	5
PV PANEL CONSTRUCTION													
Cut[a]	10.00	10.00	10.00	10.00	0.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Fill[a]	8.13	8.13	8.13	8.13	0.00	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13
Total Cut and Fill	18.13	18.13	18.13	18.13	0.00	18.13	18.13	18.13	18.13	18.13	18.13	18.13	18.13
Bulldozing, Scraping and Grading	1	1	1	1	0	1	1	1	1	1	1	1	1
SUBSTATION-BLDG-WATER TANK CO													
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning													
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Hourly quantity = Daily quantity / 8 work

Table 13-a
Hourly Earthwork Quantities

Type	Amount									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO										
Cut[a]	72.75	72.75	72.75	72.75	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	55.63	55.63	55.63	55.63	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	128.38	128.38	128.38	128.38	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	5	5	5	5	0	0	0	0	0	0
PV PANEL CONSTRUCTION										
Cut[a]	0.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	0.00
Fill[a]	0.00	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	0.00
Total Cut and Fill	0.00	18.13	18.13	18.13	18.13	18.13	18.13	18.13	18.13	0.00
Bulldozing, Scraping and Grading	0	1	1	1	1	1	1	1	1	0
SUBSTATION-BLDG-WATER TANK CO										
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning										
Cut[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fill[a]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cut and Fill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing, Scraping and Grading	0	0	0	0	0	0	0	0	0	0

[a] Hourly quantity = Daily quantity / 8 work

Table 13-b
Hourly Earthwork Fugitive PM10 Emissions

Type	Emission Factor (lb/unit)	Fugitive PM10 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	2.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.72E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.0**	**0.0**	**0.0**	**8.6**	**8.6**	**8.6**	**8.6**	**8.6**	**8.6**	**8.6**	**8.6**	**8.6**

Table 13-c
Hourly Earthwork Fugitive PM2.5 Emissions

Type	Emission Factor	Fugitive PM2.5 Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	4.38E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	5.25E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)		**0.0**	**0.0**	**0.0**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**

Table 13-b

Hourly Earthwork Fugitive PM10 Emiss

	Fugitive PM10 Emissions (lb/hr)												
Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0	8.6	8.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**1.7**	**10.3**	**10.3**	**10.3**	**10.3**	**10.3**	**10.3**	**10.3**	**8.6**	**10.3**	**1.7**	**10.3**	**10.3**

Table 13-c

Hourly Earthwork Fugitive PM2.5 Emis

	Fugitive PM2.5 Emissions (lb/hr)												
Type	**Month 13**	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.0	2.6	2.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**0.5**	**3.2**	**3.2**	**3.2**	**3.2**	**3.2**	**3.2**	**3.2**	**2.6**	**3.2**	**0.5**	**3.2**	**3.2**

Table 13-b

Hourly Earthwork Fugitive PM10 Emiss

	Fugitive PM10 Emissions (lb/hr)												
Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0	8.6	8.6	8.6	8.6	8.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**10.3**	**10.3**	**10.3**	**10.3**	**8.6**	**10.3**	**10.3**	**1.7**	**10.3**	**10.3**	**10.3**	**10.3**	**10.3**

Table 13-c

Hourly Earthwork Fugitive PM2.5 Emis

	Fugitive PM2.5 Emissions (lb/hr)												
Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.0	2.6	2.6	2.6	2.6	2.6
PV PANEL CONSTRUCTION													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SUBSTATION-BLDG-WATER TANK CO													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning													
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**3.2**	**3.2**	**3.2**	**3.2**	**2.6**	**3.2**	**3.2**	**0.5**	**3.2**	**3.2**	**3.2**	**3.2**	**3.2**

Table 13-b

Hourly Earthwork Fugitive PM10 Emiss

Type	Fugitive PM10 Emissions (lb/hr)									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	8.6	8.6	8.6	8.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
SUBSTATION-BLDG-WATER TANK CO										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**8.6**	**10.3**	**10.3**	**10.3**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**0.0**

Table 13-c

Hourly Earthwork Fugitive PM2.5 Emis

Type	Fugitive PM2.5 Emissions (lb/hr)									
	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	2.6	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
SUBSTATION-BLDG-WATER TANK CO										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning										
Total Cut and Fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulldozing, Scraping and Grading	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/hr)	**2.6**	**3.2**	**3.2**	**3.2**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.0**

Table 14-a
Hourly Asphaltic Paving

Type	Units	Amount[a] Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Paving	Acres/Hr	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Paving	Acres/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
PV PANEL CONSTRUCTION													
Paving	Acres/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Paving	Acres/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	Acres/Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

[a] Hourly amount = Daily amount / 8 working hours/day

Table 14-b
Hourly Asphaltic Paving Fugitive ROG Emissions

Type	Emission Factor (lb/acre)[a]	Hourly Emissions (lb/hr) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
FENCE - MOBILIZATION													
Paving	2.62	0.00	0.00	0.00	0.00	1.44	1.44	1.44	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.72
PV PANEL CONSTRUCTION													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CONSTRUCTION													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL (lb/month)		**0.00**	**0.00**	**0.00**	**0.00**	**1.44**	**1.44**	**1.44**	**0.00**	**0.00**	**0.00**	**0.72**	**0.72**

[a] From CalEEMod Emission Estimator Model, Version 2011.1.1, 2011

Table 14-a
Hourly Asphaltic Paving

Type	Amount[a] Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00

[a] Hourly amount = Daily amount / 8 worki

Table 14-b
Hourly Asphaltic Paving Fugitive ROG

Type	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.00
TOTAL (lb/month)	**0.00**	**0.72**	**0.72**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.90**	**0.90**	**0.00**	**0.00**	**0.00**

[a] From CalEEMod Emission Estimator M

Table 14-a
Hourly Asphaltic Paving

Type	Amount[a] Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00

[a] Hourly amount = Daily amount / 8 worki

Table 14-b
Hourly Asphaltic Paving Fugitive ROG

Type	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
FENCE - MOBILIZATION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO													
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning													
Paving	0.00	0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL (lb/month)	**0.00**	**0.00**	**0.00**	**0.00**	**0.90**	**0.90**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

[a] From CalEEMod Emission Estimator M

Table 14-a
Hourly Asphaltic Paving

Type	Amount[a] Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning										
Paving	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02

[a] Hourly amount = Daily amount / 8 worki

Table 14-b
Hourly Asphaltic Paving Fugitive ROG

Type	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CIVIL IMPROVEMENTS - GRADING/RO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PV PANEL CONSTRUCTION										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUBSTATION-BLDG-WATER TANK CO										
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Testing & Commissioning										
Paving	0.90	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90
TOTAL (lb/month)	**0.90**	**0.90**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.90**	**0.90**

[a] From CalEEMod Emission Estimator M

Table 15-a
On-Site Construction CO Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	3.5	3.7	4.2	4.6	4.8	4.9	4.9	5.0	5.2	5.2	5.4	5.3	5.4
On-Site Motor Vehicle Exhaust	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
12-Month Total (ton/year)	**3.6**	**3.9**	**4.3**	**4.8**	**5.0**	**5.0**	**5.1**	**5.2**	**5.3**	**5.4**	**5.6**	**5.4**	**5.6**
Maximum 12-Month Total (ton/year)	**5.8**												
Monthly Emissions (lb/month)													
Equipment Exhaust	131.5	131.5	131.5	604.0	833.5	833.5	833.5	702.0	735.5	735.5	735.5	604.0	529.6
On-Site Motor Vehicle Exhaust	15.8	15.8	15.8	24.9	28.5	28.5	28.5	18.8	30.9	30.9	30.9	15.1	23.8
Monthly Total (lb/month)	**147.3**	**147.3**	**147.3**	**628.9**	**861.9**	**861.9**	**861.9**	**720.8**	**766.4**	**766.4**	**766.4**	**619.1**	**553.5**
Maximum Monthly Emissions (lb/month)	**1,208.4**												
Daily Emissions (lb/day)[b]													
Equipment Exhaust	6.0	6.0	6.0	27.5	37.9	37.9	37.9	31.9	33.4	33.4	33.4	27.5	24.1
On-Site Motor Vehicle Exhaust	0.7	0.7	0.7	1.1	1.3	1.3	1.3	0.9	1.4	1.4	1.4	0.7	1.1
Daily Total (lb/day)	**6.7**	**6.7**	**6.7**	**28.6**	**39.2**	**39.2**	**39.2**	**32.8**	**34.8**	**34.8**	**34.8**	**28.1**	**25.2**
Maximum Daily Emissions (lb/day)	**54.9**												
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	1.0	1.0	1.0	3.5	5.3	5.3	5.3	4.3	4.5	4.5	4.5	3.5	3.5
On-Site Motor Vehicle Exhaust	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.2	0.3
Hourly Total (lb/hour)	**1.2**	**1.2**	**1.2**	**3.9**	**5.7**	**5.7**	**5.7**	**4.5**	**5.0**	**5.0**	**5.0**	**3.7**	**3.9**
Maximum Hourly Emissions (lb/hr)	**8.0**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

[c] Hourly emissions are based on simultaneous operation of all emission sources

Source[a]	Hourly (lb/hr)	Daily (lb/day)	Annual (ton/year)
Equipment Exhaust	7.57	53.68	5.63
Motor Vehicle Exhaust	0.40	1.25	0.14
Maximum On-Site Total	**7.96**	**54.93**	**5.77**
Peak Month	**22**	**22**	**14**

[a] Emissions from source during period with maximum on-site total emissions

Table 15-a
On-Site Construction CO Emissions Summa

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	5.6	5.6	5.5	5.5	5.5	5.3	5.3	5.3	5.1	5.0	5.3	5.3	5.3
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12-Month Total (ton/year)	**5.8**	**5.7**	**5.6**	**5.6**	**5.6**	**5.5**	**5.5**	**5.4**	**5.2**	**5.1**	**5.4**	**5.4**	**5.4**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	1,069.7	1,069.7	938.2	938.2	938.2	1,029.5	1,029.5	782.8	1,180.9	398.2	938.2	938.2	938.2
On-Site Motor Vehicle Exhaust	32.8	32.8	23.1	23.1	23.1	24.6	27.4	19.4	27.4	8.1	23.1	23.1	23.1
Monthly Total (lb/month)	**1,102.6**	**1,102.6**	**961.4**	**961.4**	**961.4**	**1,054.1**	**1,057.0**	**802.2**	**1,208.4**	**406.2**	**961.4**	**961.4**	**961.4**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	48.6	48.6	42.6	42.6	42.6	46.8	46.8	35.6	53.7	18.1	42.6	42.6	42.6
On-Site Motor Vehicle Exhaust	1.5	1.5	1.1	1.1	1.1	1.1	1.2	0.9	1.2	0.4	1.1	1.1	1.1
Daily Total (lb/day)	**50.1**	**50.1**	**43.7**	**43.7**	**43.7**	**47.9**	**48.0**	**36.5**	**54.9**	**18.5**	**43.7**	**43.7**	**43.7**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	6.7	6.7	5.7	5.7	5.7	6.4	6.4	5.0	7.6	2.6	5.7	5.7	5.7
On-Site Motor Vehicle Exhaust	0.5	0.5	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.1	0.3	0.3	0.3
Hourly Total (lb/hour)	**7.2**	**7.2**	**6.1**	**6.1**	**6.1**	**6.8**	**6.8**	**5.3**	**8.0**	**2.7**	**6.1**	**6.1**	**6.1**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-a
On-Site Construction CO Emissions Summa

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	5.3	5.1	5.2	5.2	5.3	5.0	4.7	4.7	4.4	4.3	3.9	3.4	2.9
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1
12-Month Total (ton/year)	**5.4**	**5.2**	**5.3**	**5.3**	**5.5**	**5.1**	**4.9**	**4.9**	**4.6**	**4.4**	**4.0**	**3.5**	**3.0**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	938.2	938.2	938.2	638.1	1,036.2	938.2	398.2	938.2	938.2	938.2	938.2	938.2	638.1
On-Site Motor Vehicle Exhaust	23.1	23.1	26.0	17.9	26.0	23.1	8.1	23.8	23.8	23.8	31.9	34.7	18.6
Monthly Total (lb/month)	**961.4**	**961.4**	**964.2**	**656.0**	**1,062.2**	**961.4**	**406.2**	**962.0**	**962.0**	**962.0**	**970.1**	**973.0**	**656.6**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	42.6	42.6	42.6	29.0	47.1	42.6	18.1	42.6	42.6	42.6	42.6	42.6	29.0
On-Site Motor Vehicle Exhaust	1.1	1.1	1.2	0.8	1.2	1.1	0.4	1.1	1.1	1.1	1.4	1.6	0.8
Daily Total (lb/day)	**43.7**	**43.7**	**43.8**	**29.8**	**48.3**	**43.7**	**18.5**	**43.7**	**43.7**	**43.7**	**44.1**	**44.2**	**29.8**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	5.7	5.7	5.7	3.9	6.5	5.7	2.6	5.7	5.7	5.7	5.7	5.7	3.9
On-Site Motor Vehicle Exhaust	0.3	0.3	0.4	0.3	0.4	0.3	0.1	0.3	0.3	0.3	0.5	0.5	0.3
Hourly Total (lb/hour)	**6.1**	**6.1**	**6.1**	**4.2**	**6.8**	**6.1**	**2.7**	**6.1**	**6.1**	**6.1**	**6.2**	**6.2**	**4.2**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-a
On-Site Construction CO Emissions Summa

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Equipment Exhaust	2.6	2.1	1.6	1.1	0.9	0.7	0.5	0.4	0.1
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**2.7**	**2.2**	**1.7**	**1.2**	**1.0**	**0.8**	**0.6**	**0.4**	**0.1**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Equipment Exhaust	1,036.2	938.2	938.2	398.2	398.2	398.2	398.2	549.6	151.4
On-Site Motor Vehicle Exhaust	34.7	31.9	31.9	16.2	16.2	16.2	19.0	19.0	2.8
Monthly Total (lb/month)	**1,071.0**	**970.1**	**970.1**	**414.3**	**414.3**	**414.3**	**417.2**	**568.6**	**154.3**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Equipment Exhaust	47.1	42.6	42.6	18.1	18.1	18.1	18.1	25.0	6.9
On-Site Motor Vehicle Exhaust	1.6	1.4	1.4	0.7	0.7	0.7	0.9	0.9	0.1
Daily Total (lb/day)	**48.7**	**44.1**	**44.1**	**18.8**	**18.8**	**18.8**	**19.0**	**25.8**	**7.0**
Maximum Daily Emissions (lb/day)									
Hourly Emissions (lb/hr)[c]									
Equipment Exhaust	6.5	5.7	5.7	2.6	2.6	2.6	2.6	3.7	1.1
On-Site Motor Vehicle Exhaust	0.5	0.5	0.5	0.2	0.2	0.2	0.3	0.3	0.0
Hourly Total (lb/hour)	**7.0**	**6.2**	**6.2**	**2.8**	**2.8**	**2.8**	**2.8**	**4.0**	**1.2**
Maximum Hourly Emissions (lb/hr)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-b
On-Site Construction ROG Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	1.0	1.0	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.4	1.5
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paving Fugitive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**1.0**	**1.1**	**1.2**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.5**	**1.5**	**1.6**	**1.5**	**1.5**
Maximum 12-Month Total (ton/year)	**1.6**												
Monthly Emissions (lb/month)													
Equipment Exhaust	14.2	14.2	14.2	201.7	226.9	226.9	226.9	212.7	215.9	215.9	215.9	201.7	83.2
On-Site Motor Vehicle Exhaust	3.6	3.6	3.6	5.8	6.7	6.7	6.7	4.5	7.1	7.1	7.1	3.5	5.5
Paving Fugitive	0.0	0.0	0.0	0.0	11.5	11.5	11.5	0.0	0.0	0.0	5.8	5.8	0.0
Monthly Total (lb/month)	**17.8**	**17.8**	**17.8**	**207.5**	**245.1**	**245.1**	**245.1**	**217.2**	**223.0**	**223.0**	**228.7**	**210.9**	**88.7**
Maximum Monthly Emissions (lb/month)	**328.5**												
Daily Emissions (lb/day)[b]													
Equipment Exhaust	0.6	0.6	0.6	9.2	10.3	10.3	10.3	9.7	9.8	9.8	9.8	9.2	3.8
On-Site Motor Vehicle Exhaust	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3
Paving Fugitive	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.3	0.3	0.0
Daily Total (lb/day)	**0.8**	**0.8**	**0.8**	**9.4**	**11.1**	**11.1**	**11.1**	**9.9**	**10.1**	**10.1**	**10.4**	**9.6**	**4.0**
Maximum Daily Emissions (lb/day)	**14.9**												
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.1	0.1	0.1	1.2	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.2	0.6
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
Paving Fugitive	0.0	0.0	0.0	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.7	0.7	0.0
Hourly Total (lb/hour)	**0.2**	**0.2**	**0.2**	**1.3**	**2.9**	**2.9**	**2.9**	**1.3**	**1.4**	**1.4**	**2.1**	**1.9**	**0.7**
Maximum Hourly Emissions (lb/hr)	**3.0**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

[c] Hourly emissions are based on simultaneous operation of all emission sources

Source[a]	Hourly (lb/hr)	Daily (lb/day)	Annual (ton/year)
Equipment Exhaust	2.02	14.32	1.55
Motor Vehicle Exhaust	0.09	0.29	0.03
Paving Fugitive	0.90	0.33	0.01
Maximum On-Site Total	**3.02**	**14.93**	**1.59**
Peak Month	**22**	**22**	**14**

[a] Emissions from source during period with maximum on-site total emissions

Table 15-b
On-Site Construction ROG Emissions Sumr

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.5
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paving Fugitive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	**1.5**	**1.5**	**1.5**	**1.4**	**1.4**	**1.5**	**1.5**	**1.5**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	280.5	280.5	266.3	266.3	266.3	286.8	286.8	245.9	315.0	69.0	266.3	266.3	266.3
On-Site Motor Vehicle Exhaust	7.6	7.6	5.4	5.4	5.4	5.7	6.4	4.5	6.4	1.9	5.4	5.4	5.4
Paving Fugitive	5.8	5.8	0.0	0.0	0.0	0.0	0.0	7.2	7.2	0.0	0.0	0.0	0.0
Monthly Total (lb/month)	**293.9**	**293.9**	**271.7**	**271.7**	**271.7**	**292.5**	**293.1**	**257.6**	**328.5**	**70.9**	**271.7**	**271.7**	**271.7**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	12.7	12.7	12.1	12.1	12.1	13.0	13.0	11.2	14.3	3.1	12.1	12.1	12.1
On-Site Motor Vehicle Exhaust	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.1	0.2	0.2	0.2
Paving Fugitive	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0
Daily Total (lb/day)	**13.4**	**13.4**	**12.3**	**12.3**	**12.3**	**13.3**	**13.3**	**11.7**	**14.9**	**3.2**	**12.3**	**12.3**	**12.3**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	1.8	1.8	1.7	1.7	1.7	1.8	1.8	1.5	2.0	0.5	1.7	1.7	1.7
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Paving Fugitive	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0
Hourly Total (lb/hour)	**2.6**	**2.6**	**1.7**	**1.7**	**1.7**	**1.9**	**1.9**	**2.5**	**3.0**	**0.5**	**1.7**	**1.7**	**1.7**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Paving Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-b
On-Site Construction ROG Emissions Sumr

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	1.5	1.4	1.5	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.0	0.8	0.7
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paving Fugitive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**1.4**	**1.3**	**1.3**	**1.2**	**1.1**	**1.0**	**0.9**	**0.7**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	266.3	266.3	266.3	208.3	277.3	266.3	69.0	266.3	266.3	266.3	266.3	266.3	208.3
On-Site Motor Vehicle Exhaust	5.4	5.4	6.0	4.1	6.0	5.4	1.9	5.5	5.5	5.5	7.4	8.0	4.3
Paving Fugitive	0.0	0.0	0.0	7.2	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2
Monthly Total (lb/month)	**271.7**	**271.7**	**272.3**	**219.6**	**290.5**	**271.7**	**70.9**	**271.8**	**271.8**	**271.8**	**273.6**	**274.3**	**219.8**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	12.1	12.1	12.1	9.5	12.6	12.1	3.1	12.1	12.1	12.1	12.1	12.1	9.5
On-Site Motor Vehicle Exhaust	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.3	0.3	0.3	0.3	0.4	0.2
Paving Fugitive	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Daily Total (lb/day)	**12.3**	**12.3**	**12.4**	**10.0**	**13.2**	**12.3**	**3.2**	**12.4**	**12.4**	**12.4**	**12.4**	**12.5**	**10.0**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	1.7	1.7	1.7	1.2	1.7	1.7	0.5	1.7	1.7	1.7	1.7	1.7	1.2
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Paving Fugitive	0.0	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Hourly Total (lb/hour)	**1.7**	**1.7**	**1.7**	**2.2**	**2.7**	**1.7**	**0.5**	**1.7**	**1.7**	**1.7**	**1.8**	**1.8**	**2.2**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Paving Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-b
On-Site Construction ROG Emissions Sumr

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Equipment Exhaust	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paving Fugitive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**0.6**	**0.5**	**0.4**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**	**0.0**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Equipment Exhaust	277.3	266.3	266.3	69.0	69.0	69.0	69.0	97.2	28.2
On-Site Motor Vehicle Exhaust	8.0	7.4	7.4	3.7	3.7	3.7	4.3	4.3	0.6
Paving Fugitive	7.2	0.0	0.0	0.0	0.0	0.0	0.0	7.2	7.2
Monthly Total (lb/month)	**292.5**	**273.6**	**273.6**	**72.7**	**72.7**	**72.7**	**73.4**	**108.8**	**36.0**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Equipment Exhaust	12.6	12.1	12.1	3.1	3.1	3.1	3.1	4.4	1.3
On-Site Motor Vehicle Exhaust	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.0
Paving Fugitive	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
Daily Total (lb/day)	**13.3**	**12.4**	**12.4**	**3.3**	**3.3**	**3.3**	**3.3**	**4.9**	**1.6**
Maximum Daily Emissions (lb/day)									
Hourly Emissions (lb/hr)[c]									
Equipment Exhaust	1.7	1.7	1.7	0.5	0.5	0.5	0.5	0.7	0.2
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Paving Fugitive	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
Hourly Total (lb/hour)	**2.8**	**1.8**	**1.8**	**0.6**	**0.6**	**0.6**	**0.6**	**1.7**	**1.1**
Maximum Hourly Emissions (lb/hr)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Paving Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-c
On-Site Construction NOx Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	8.0	8.3	9.4	10.4	10.7	10.8	11.0	11.2	11.6	11.6	12.0	11.4	11.7
On-Site Motor Vehicle Exhaust	1.0	1.0	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0
12-Month Total (ton/year)	**9.0**	**9.4**	**10.5**	**11.6**	**11.9**	**12.0**	**12.1**	**12.3**	**12.7**	**12.7**	**13.1**	**12.4**	**12.7**
Maximum 12-Month Total (ton/year)	**13.4**												
Monthly Emissions (lb/month)													
Equipment Exhaust	166.6	166.6	166.6	1,578.2	1,821.4	1,821.4	1,821.4	1,654.8	1,744.8	1,744.8	1,744.8	1,578.2	793.5
On-Site Motor Vehicle Exhaust	100.4	100.4	100.4	184.1	219.8	219.8	219.8	151.8	209.6	209.6	209.6	109.2	156.5
Monthly Total (lb/month)	**267.1**	**267.1**	**267.1**	**1,762.2**	**2,041.2**	**2,041.2**	**2,041.2**	**1,806.5**	**1,954.4**	**1,954.4**	**1,954.4**	**1,687.3**	**950.0**
Maximum Monthly Emissions (lb/month)	**2,695.3**												
Daily Emissions (lb/day)[b]													
Equipment Exhaust	7.6	7.6	7.6	71.7	82.8	82.8	82.8	75.2	79.3	79.3	79.3	71.7	36.1
On-Site Motor Vehicle Exhaust	4.6	4.6	4.6	8.4	10.0	10.0	10.0	6.9	9.5	9.5	9.5	5.0	7.1
Daily Total (lb/day)	**12.1**	**12.1**	**12.1**	**80.1**	**92.8**	**92.8**	**92.8**	**82.1**	**88.8**	**88.8**	**88.8**	**76.7**	**43.2**
Maximum Daily Emissions (lb/day)	**122.5**												
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	1.2	1.2	1.2	9.2	11.0	11.0	11.0	9.8	10.4	10.4	10.4	9.2	5.7
On-Site Motor Vehicle Exhaust	1.4	1.4	1.4	2.7	3.2	3.2	3.2	2.2	3.0	3.0	3.0	1.5	2.3
Hourly Total (lb/hour)	**2.6**	**2.6**	**2.6**	**11.9**	**14.1**	**14.1**	**14.1**	**12.0**	**13.4**	**13.4**	**13.4**	**10.8**	**8.0**
Maximum Hourly Emissions (lb/hr)	**19.0**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

[c] Hourly emissions are based on simultaneous operation of all emission sources

Source[a]	Hourly (lb/hr)	Daily (lb/day)	Annual (ton/year)
Equipment Exhaust	16.20	113.80	12.37
Motor Vehicle Exhaust	2.78	8.72	1.02
Maximum On-Site Total	**18.98**	**122.51**	**13.39**
Peak Month	**22**	**22**	**14**

[a] Emissions from source during period with maximum on-site total emissions

Table 15-c
On-Site Construction NOx Emissions Summ

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	12.4	12.3	12.2	12.2	12.2	11.9	11.9	11.8	11.2	11.0	11.7	11.7	11.7
On-Site Motor Vehicle Exhaust	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0
12-Month Total (ton/year)	**13.4**	**13.3**	**13.2**	**13.2**	**13.2**	**12.9**	**12.8**	**12.7**	**12.0**	**11.8**	**12.6**	**12.6**	**12.7**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	2,281.2	2,281.2	2,114.5	2,114.5	2,114.5	2,297.9	2,297.9	1,876.7	2,503.6	626.9	2,114.5	2,114.5	2,114.5
On-Site Motor Vehicle Exhaust	233.4	233.4	165.3	165.3	165.3	176.7	191.8	135.7	191.8	56.1	165.3	165.3	165.3
Monthly Total (lb/month)	**2,514.5**	**2,514.5**	**2,279.8**	**2,279.8**	**2,279.8**	**2,474.6**	**2,489.7**	**2,012.4**	**2,695.3**	**683.0**	**2,279.8**	**2,279.8**	**2,279.8**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	103.7	103.7	96.1	96.1	96.1	104.4	104.4	85.3	113.8	28.5	96.1	96.1	96.1
On-Site Motor Vehicle Exhaust	10.6	10.6	7.5	7.5	7.5	8.0	8.7	6.2	8.7	2.5	7.5	7.5	7.5
Daily Total (lb/day)	**114.3**	**114.3**	**103.6**	**103.6**	**103.6**	**112.5**	**113.2**	**91.5**	**122.5**	**31.0**	**103.6**	**103.6**	**103.6**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	14.4	14.4	13.3	13.3	13.3	14.6	14.6	11.6	16.2	4.6	13.3	13.3	13.3
On-Site Motor Vehicle Exhaust	3.3	3.3	2.4	2.4	2.4	2.6	2.8	2.0	2.8	0.8	2.4	2.4	2.4
Hourly Total (lb/hour)	**17.8**	**17.8**	**15.6**	**15.6**	**15.6**	**17.2**	**17.4**	**13.6**	**19.0**	**5.4**	**15.6**	**15.6**	**15.6**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-c
On-Site Construction NOx Emissions Summ

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	11.7	11.4	11.5	11.5	11.7	11.0	10.2	10.2	9.5	8.8	7.9	6.8	5.8
On-Site Motor Vehicle Exhaust	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.7
12-Month Total (ton/year)	**12.7**	**12.4**	**12.5**	**12.5**	**12.8**	**12.0**	**11.2**	**11.2**	**10.5**	**9.8**	**8.8**	**7.6**	**6.4**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	2,114.5	2,114.5	2,114.5	1,564.3	2,191.1	2,114.5	626.9	2,114.5	2,114.5	2,114.5	2,114.5	2,114.5	1,564.3
On-Site Motor Vehicle Exhaust	165.3	165.3	180.4	124.3	180.4	165.3	56.1	172.4	172.4	172.4	215.5	230.6	131.4
Monthly Total (lb/month)	**2,279.8**	**2,279.8**	**2,294.9**	**1,688.5**	**2,371.5**	**2,279.8**	**683.0**	**2,286.9**	**2,286.9**	**2,286.9**	**2,330.0**	**2,345.1**	**1,695.6**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	96.1	96.1	96.1	71.1	99.6	96.1	28.5	96.1	96.1	96.1	96.1	96.1	71.1
On-Site Motor Vehicle Exhaust	7.5	7.5	8.2	5.6	8.2	7.5	2.5	7.8	7.8	7.8	9.8	10.5	6.0
Daily Total (lb/day)	**103.6**	**103.6**	**104.3**	**76.8**	**107.8**	**103.6**	**31.0**	**104.0**	**104.0**	**104.0**	**105.9**	**106.6**	**77.1**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	13.3	13.3	13.3	9.3	13.8	13.3	4.6	13.3	13.3	13.3	13.3	13.3	9.3
On-Site Motor Vehicle Exhaust	2.4	2.4	2.6	1.8	2.6	2.4	0.8	2.5	2.5	2.5	3.1	3.3	1.9
Hourly Total (lb/hour)	**15.6**	**15.6**	**15.9**	**11.0**	**16.4**	**15.6**	**5.4**	**15.7**	**15.7**	**15.7**	**16.4**	**16.6**	**11.2**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-c
On-Site Construction NOx Emissions Summ

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Equipment Exhaust	5.0	3.9	2.8	1.8	1.5	1.1	0.8	0.5	0.1
On-Site Motor Vehicle Exhaust	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.0
12-Month Total (ton/year)	**5.6**	**4.4**	**3.2**	**2.0**	**1.7**	**1.3**	**1.0**	**0.6**	**0.1**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Equipment Exhaust	2,191.1	2,114.5	2,114.5	626.9	626.9	626.9	626.9	832.5	205.7
On-Site Motor Vehicle Exhaust	230.6	215.5	215.5	99.2	99.2	99.2	114.3	114.3	15.1
Monthly Total (lb/month)	**2,421.7**	**2,330.0**	**2,330.0**	**726.1**	**726.1**	**726.1**	**741.2**	**946.8**	**220.7**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Equipment Exhaust	99.6	96.1	96.1	28.5	28.5	28.5	28.5	37.8	9.3
On-Site Motor Vehicle Exhaust	10.5	9.8	9.8	4.5	4.5	4.5	5.2	5.2	0.7
Daily Total (lb/day)	**110.1**	**105.9**	**105.9**	**33.0**	**33.0**	**33.0**	**33.7**	**43.0**	**10.0**
Maximum Daily Emissions (lb/day)									
Hourly Emissions (lb/hr)[c]									
Equipment Exhaust	13.8	13.3	13.3	4.6	4.6	4.6	4.6	6.1	1.6
On-Site Motor Vehicle Exhaust	3.3	3.1	3.1	1.5	1.5	1.5	1.7	1.7	0.2
Hourly Total (lb/hour)	**17.2**	**16.4**	**16.4**	**6.0**	**6.0**	**6.0**	**6.2**	**7.8**	**1.8**
Maximum Hourly Emissions (lb/hr)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-d
On-Site Construction SOx Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum 12-Month Total (ton/year)	**0.0**												
Monthly Emissions (lb/month)													
Equipment Exhaust	0.2	0.2	0.2	2.7	3.1	3.1	3.1	2.9	2.9	2.9	2.9	2.7	1.3
On-Site Motor Vehicle Exhaust	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.2	0.3
Monthly Total (lb/month)	**0.4**	**0.4**	**0.4**	**3.0**	**3.5**	**3.5**	**3.5**	**3.1**	**3.3**	**3.3**	**3.3**	**2.9**	**1.6**
Maximum Monthly Emissions (lb/month)	**4.7**												
Daily Emissions (lb/day)[b]													
Equipment Exhaust	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Total (lb/day)	**0.0**	**0.0**	**0.0**	**0.1**	**0.2**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**	**0.1**	**0.1**
Maximum Daily Emissions (lb/day)	**0.2**												
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hourly Total (lb/hour)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum Hourly Emissions (lb/hr)	**0.0**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

[c] Hourly emissions are based on simultaneous operation of all emission sources

Source[a]	Hourly (lb/hr)	Daily (lb/day)	Annual (ton/year)
Equipment Exhaust	0.03	0.20	0.02
Motor Vehicle Exhaust	0.01	0.02	0.00
Maximum On-Site Total	**0.03**	**0.21**	**0.02**
Peak Month	**22**	**22**	**14**

[a] Emissions from source during period with maximum on-site total emissions

Table 15-d
On-Site Construction SOx Emissions Summ

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	3.9	3.9	3.6	3.6	3.6	3.9	3.9	3.3	4.4	1.1	3.6	3.6	3.6
On-Site Motor Vehicle Exhaust	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.2	0.4	0.1	0.3	0.3	0.3
Monthly Total (lb/month)	**4.3**	**4.3**	**3.9**	**3.9**	**3.9**	**4.2**	**4.2**	**3.5**	**4.7**	**1.2**	**3.9**	**3.9**	**3.9**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.0	0.2	0.2	0.2
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Total (lb/day)	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hourly Total (lb/hour)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-d
On-Site Construction SOx Emissions Summ

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	3.6	3.6	3.6	2.7	3.8	3.6	1.1	3.6	3.6	3.6	3.6	3.6	2.7
On-Site Motor Vehicle Exhaust	0.3	0.3	0.3	0.2	0.3	0.3	0.1	0.3	0.3	0.3	0.4	0.4	0.2
Monthly Total (lb/month)	**3.9**	**3.9**	**3.9**	**2.9**	**4.1**	**3.9**	**1.2**	**3.9**	**3.9**	**3.9**	**4.0**	**4.0**	**3.0**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	0.2	0.2	0.2	0.1	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.1
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Total (lb/day)	**0.2**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hourly Total (lb/hour)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-d
On-Site Construction SOx Emissions Summ

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Equipment Exhaust	3.8	3.6	3.6	1.1	1.1	1.1	1.1	1.6	0.5
On-Site Motor Vehicle Exhaust	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.0
Monthly Total (lb/month)	**4.2**	**4.0**	**4.0**	**1.3**	**1.3**	**1.3**	**1.3**	**1.8**	**0.5**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Equipment Exhaust	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daily Total (lb/day)	**0.2**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
Maximum Daily Emissions (lb/day)									
Hourly Emissions (lb/hr)[c]									
Equipment Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hourly Total (lb/hour)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum Hourly Emissions (lb/hr)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-e
On-Site Construction PM10 Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	52.6	54.4	57.4	60.5	60.0	58.8	57.7	56.8	58.4	56.3	56.0	52.3	54.1
Earthwork Fugitive	6.8	6.9	7.7	8.6	8.6	8.7	8.8	8.9	9.0	9.0	9.0	8.3	8.4
12-Month Total (ton/year)	**59.8**	**61.7**	**65.6**	**69.5**	**69.1**	**68.0**	**67.0**	**66.2**	**67.9**	**65.8**	**65.5**	**61.2**	**63.1**
Maximum 12-Month Total (ton/year)	**69.5**												
Monthly Emissions (lb/month)													
Equipment Exhaust	8.8	8.8	8.8	63.7	77.9	77.9	77.9	69.1	72.6	72.6	72.6	63.7	38.4
On-Site Motor Vehicle Exhaust	3.5	3.5	3.5	5.3	5.9	5.9	5.9	3.9	6.6	6.6	6.6	3.1	5.3
On-Site Motor Vehicle Fugitive	6,077.1	6,077.1	6,077.1	9,513.5	10,820.4	10,820.4	10,820.4	7,128.4	10,965.3	10,965.3	10,965.3	4,888.2	9,689.5
Earthwork Fugitive	0.1	0.1	0.1	1,517.2	1,517.2	1,517.2	1,517.2	1,517.2	1,517.2	1,517.2	1,517.2	1,517.2	152.0
Monthly Total (lb/month)	**6,089.5**	**6,089.5**	**6,089.5**	**11,099.7**	**12,421.4**	**12,421.4**	**12,421.4**	**8,718.5**	**12,561.7**	**12,561.7**	**12,561.7**	**6,472.2**	**9,885.2**
Maximum Monthly Emissions (lb/month)	**14,939.6**												
Daily Emissions (lb/day)[b]													
Equipment Exhaust	0.4	0.4	0.4	2.9	3.5	3.5	3.5	3.1	3.3	3.3	3.3	2.9	1.7
On-Site Motor Vehicle Exhaust	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.1	0.2
On-Site Motor Vehicle Fugitive	276.2	276.2	276.2	432.4	491.8	491.8	491.8	324.0	498.4	498.4	498.4	222.2	440.4
Earthwork Fugitive	0.0	0.0	0.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	6.9
Daily Total (lb/day)	**276.8**	**276.8**	**276.8**	**504.5**	**564.6**	**564.6**	**564.6**	**396.3**	**571.0**	**571.0**	**571.0**	**294.2**	**449.3**
Maximum Daily Emissions (lb/day)	**679.1**												
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.1	0.1	0.1	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
On-Site Motor Vehicle Fugitive	88.2	88.2	88.2	144.8	163.6	163.6	163.6	110.2	162.7	162.7	162.7	74.5	141.7
Earthwork Fugitive	0.0	0.0	0.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	1.7
Hourly Total (lb/hour)	**88.3**	**88.3**	**88.3**	**153.9**	**172.8**	**172.8**	**172.8**	**119.2**	**171.8**	**171.8**	**171.8**	**83.6**	**143.7**
Maximum Hourly Emissions (lb/hr)	**207.9**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

[c] Hourly emissions are based on simultaneous operation of all emission sources

Source[a]	Hourly (lb/hr)	Daily (lb/day)	Annual (ton/year)
Equipment Exhaust	0.60	4.35	0.44
Motor Vehicle Exhaust	0.11	0.34	0.03
On-Site Motor Vehicle Fugitive	196.82	598.51	60.48
Earthwork Fugitive	10.34	75.87	8.57
Maximum On-Site Total	**207.87**	**679.07**	**69.53**
Peak Month	**40**	**40**	**4**

[a] Emissions from source during period with maximum on-site total emissions

Table 15-e
On-Site Construction PM10 Emissions Sum

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	53.5	51.7	49.8	49.8	50.4	49.1	49.3	48.4	46.9	46.2	48.8	49.0	50.8
Earthwork Fugitive	9.2	9.2	9.2	9.2	9.2	9.1	9.1	9.1	8.4	8.4	9.2	9.2	9.2
12-Month Total (ton/year)	**63.2**	**61.4**	**59.5**	**59.5**	**60.1**	**58.8**	**59.0**	**58.1**	**55.8**	**55.1**	**58.5**	**58.7**	**60.5**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	99.2	99.2	90.4	90.4	90.4	97.7	97.7	79.6	109.1	29.5	90.4	90.4	90.4
On-Site Motor Vehicle Exhaust	7.0	7.0	4.9	4.9	4.9	5.2	5.9	4.1	5.9	1.8	4.9	4.9	4.9
On-Site Motor Vehicle Fugitive	12,192.6	12,192.6	8,500.6	8,500.6	8,500.6	9,192.0	10,305.1	6,692.7	10,305.1	3,612.4	8,500.6	8,500.6	8,500.6
Earthwork Fugitive	1,669.2	1,669.2	1,669.2	1,669.2	1,669.2	1,669.5	1,669.5	1,517.5	1,669.5	152.0	1,669.2	1,669.2	1,669.2
Monthly Total (lb/month)	**13,968.0**	**13,968.0**	**10,265.1**	**10,265.1**	**10,265.1**	**10,964.5**	**12,078.2**	**8,293.9**	**12,089.6**	**3,795.7**	**10,265.1**	**10,265.1**	**10,265.1**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	4.5	4.5	4.1	4.1	4.1	4.4	4.4	3.6	5.0	1.3	4.1	4.1	4.1
On-Site Motor Vehicle Exhaust	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.1	0.2	0.2	0.2
On-Site Motor Vehicle Fugitive	554.2	554.2	386.4	386.4	386.4	417.8	468.4	304.2	468.4	164.2	386.4	386.4	386.4
Earthwork Fugitive	75.9	75.9	75.9	75.9	75.9	75.9	75.9	69.0	75.9	6.9	75.9	75.9	75.9
Daily Total (lb/day)	**634.9**	**634.9**	**466.6**	**466.6**	**466.6**	**498.4**	**549.0**	**377.0**	**549.5**	**172.5**	**466.6**	**466.6**	**466.6**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.2	0.6	0.6	0.6
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
On-Site Motor Vehicle Fugitive	181.5	181.5	128.0	128.0	128.0	139.0	155.6	102.1	155.6	53.5	128.0	128.0	128.0
Earthwork Fugitive	10.3	10.3	10.3	10.3	10.3	10.3	10.3	8.6	10.3	1.7	10.3	10.3	10.3
Hourly Total (lb/hour)	**192.6**	**192.6**	**139.0**	**139.0**	**139.0**	**150.0**	**166.7**	**111.3**	**166.8**	**55.4**	**139.0**	**139.0**	**139.0**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
On-Site Motor Vehicle Fugitive
Earthwork Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-e
On-Site Construction PM10 Emissions Sum

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	53.1	52.0	54.4	55.6	58.6	57.2	56.3	57.9	57.5	57.0	53.1	47.1	40.5
Earthwork Fugitive	9.2	9.1	9.1	9.1	9.2	8.4	7.7	7.7	6.9	6.1	5.3	4.5	3.6
12-Month Total (ton/year)	**62.8**	**61.7**	**64.0**	**65.2**	**68.3**	**66.1**	**64.5**	**66.1**	**64.8**	**63.5**	**58.8**	**51.9**	**44.4**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	90.4	90.4	90.4	66.2	95.7	90.4	29.5	90.4	90.4	90.4	90.4	90.4	66.2
On-Site Motor Vehicle Exhaust	4.9	4.9	5.5	3.7	5.5	4.9	1.8	5.0	5.0	5.0	6.9	7.5	3.9
On-Site Motor Vehicle Fugitive	8,500.6	8,500.6	9,613.7	6,001.3	9,613.7	8,500.6	3,612.4	8,874.0	8,874.0	8,874.0	12,054.1	13,167.2	6,374.7
Earthwork Fugitive	1,669.2	1,669.2	1,669.2	1,517.2	1,669.2	1,669.2	152.0	1,669.2	1,669.2	1,669.2	1,669.2	1,669.2	1,517.2
Monthly Total (lb/month)	**10,265.1**	**10,265.1**	**11,378.8**	**7,588.4**	**11,384.1**	**10,265.1**	**3,795.7**	**10,638.6**	**10,638.6**	**10,638.6**	**13,820.6**	**14,934.3**	**7,961.9**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	4.1	4.1	4.1	3.0	4.4	4.1	1.3	4.1	4.1	4.1	4.1	4.1	3.0
On-Site Motor Vehicle Exhaust	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.2
On-Site Motor Vehicle Fugitive	386.4	386.4	437.0	272.8	437.0	386.4	164.2	403.4	403.4	403.4	547.9	598.5	289.8
Earthwork Fugitive	75.9	75.9	75.9	69.0	75.9	75.9	6.9	75.9	75.9	75.9	75.9	75.9	69.0
Daily Total (lb/day)	**466.6**	**466.6**	**517.2**	**344.9**	**517.5**	**466.6**	**172.5**	**483.6**	**483.6**	**483.6**	**628.2**	**678.8**	**361.9**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.6	0.6	0.6	0.4	0.6	0.6	0.2	0.6	0.6	0.6	0.6	0.6	0.4
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Motor Vehicle Fugitive	128.0	128.0	144.6	91.1	144.6	128.0	53.5	133.9	133.9	133.9	180.2	196.8	97.1
Earthwork Fugitive	10.3	10.3	10.3	8.6	10.3	10.3	1.7	10.3	10.3	10.3	10.3	10.3	8.6
Hourly Total (lb/hour)	**139.0**	**139.0**	**155.6**	**100.2**	**155.6**	**139.0**	**55.4**	**144.9**	**144.9**	**144.9**	**191.2**	**207.8**	**106.2**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
On-Site Motor Vehicle Fugitive
Earthwork Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-e
On-Site Construction PM10 Emissions Sum

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Equipment Exhaust	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	37.3	30.7	24.7	18.7	15.3	11.9	8.5	4.5	0.6
Earthwork Fugitive	2.9	2.0	1.2	0.4	0.3	0.2	0.2	0.1	0.0
12-Month Total (ton/year)	**40.4**	**32.9**	**26.0**	**19.1**	**15.6**	**12.1**	**8.7**	**4.6**	**0.6**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Equipment Exhaust	95.7	90.4	90.4	29.5	29.5	29.5	29.5	40.9	11.4
On-Site Motor Vehicle Exhaust	7.5	6.9	6.9	3.7	3.7	3.7	4.3	4.3	0.7
On-Site Motor Vehicle Fugitive	13,167.2	12,054.1	12,054.1	6,792.5	6,792.5	6,792.5	7,905.6	7,905.6	1,113.1
Earthwork Fugitive	1,669.2	1,669.2	1,669.2	152.0	152.0	152.0	152.0	152.0	0.0
Monthly Total (lb/month)	**14,939.6**	**13,820.6**	**13,820.6**	**6,977.7**	**6,977.7**	**6,977.7**	**8,091.5**	**8,102.9**	**1,125.1**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Equipment Exhaust	4.4	4.1	4.1	1.3	1.3	1.3	1.3	1.9	0.5
On-Site Motor Vehicle Exhaust	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Motor Vehicle Fugitive	598.5	547.9	547.9	308.8	308.8	308.8	359.3	359.3	50.6
Earthwork Fugitive	75.9	75.9	75.9	6.9	6.9	6.9	6.9	6.9	0.0
Daily Total (lb/day)	**679.1**	**628.2**	**628.2**	**317.2**	**317.2**	**317.2**	**367.8**	**368.3**	**51.1**
Maximum Daily Emissions (lb/day)									
Hourly Emissions (lb/hr)[c]									
Equipment Exhaust	0.6	0.6	0.6	0.2	0.2	0.2	0.2	0.3	0.1
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Motor Vehicle Fugitive	196.8	180.2	180.2	99.7	99.7	99.7	116.4	116.4	16.6
Earthwork Fugitive	10.3	10.3	10.3	1.7	1.7	1.7	1.7	1.7	0.0
Hourly Total (lb/hour)	**207.9**	**191.2**	**191.2**	**101.7**	**101.7**	**101.7**	**118.4**	**118.4**	**16.7**
Maximum Hourly Emissions (lb/hr)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
On-Site Motor Vehicle Fugitive
Earthwork Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-f
On-Site Construction PM2.5 Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	5.3	5.4	5.8	6.1	6.0	5.9	5.8	5.7	5.9	5.6	5.6	5.2	5.4
Earthwork Fugitive	2.1	2.1	2.4	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.5	2.6
12-Month Total (ton/year)	**7.7**	**7.9**	**8.5**	**9.1**	**9.1**	**9.0**	**8.9**	**8.9**	**9.1**	**8.9**	**8.9**	**8.3**	**8.5**
Maximum 12-Month Total (ton/year)	**9.2**												
Monthly Emissions (lb/month)													
Equipment Exhaust	8.1	8.1	8.1	58.6	71.7	71.7	71.7	63.5	66.8	66.8	66.8	58.6	35.3
On-Site Motor Vehicle Exhaust	3.2	3.2	3.2	4.8	5.5	5.5	5.5	3.6	6.0	6.0	6.0	2.8	4.9
On-Site Motor Vehicle Fugitive	608.5	608.5	608.5	952.6	1,083.5	1,083.5	1,083.5	713.8	1,098.1	1,098.1	1,098.1	489.5	970.2
Earthwork Fugitive	0.0	0.0	0.0	462.6	462.6	462.6	462.6	462.6	462.6	462.6	462.6	462.6	46.3
Monthly Total (lb/month)	**619.9**	**619.9**	**619.9**	**1,478.7**	**1,623.2**	**1,623.2**	**1,623.2**	**1,243.5**	**1,633.4**	**1,633.4**	**1,633.4**	**1,013.6**	**1,056.7**
Maximum Monthly Emissions (lb/month)	**1,922.4**												
Daily Emissions (lb/day)[b]													
Equipment Exhaust	0.4	0.4	0.4	2.7	3.3	3.3	3.3	2.9	3.0	3.0	3.0	2.7	1.6
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.2
On-Site Motor Vehicle Fugitive	27.7	27.7	27.7	43.3	49.3	49.3	49.3	32.4	49.9	49.9	49.9	22.3	44.1
Earthwork Fugitive	0.0	0.0	0.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	2.1
Daily Total (lb/day)	**28.2**	**28.2**	**28.2**	**67.2**	**73.8**	**73.8**	**73.8**	**56.5**	**74.2**	**74.2**	**74.2**	**46.1**	**48.0**
Maximum Daily Emissions (lb/day)	**87.4**												
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.1	0.1	0.1	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
On-Site Motor Vehicle Fugitive	8.8	8.8	8.8	14.5	16.4	16.4	16.4	11.0	16.3	16.3	16.3	7.5	14.2
Earthwork Fugitive	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.5
Hourly Total (lb/hour)	**8.9**	**8.9**	**8.9**	**17.6**	**19.5**	**19.5**	**19.5**	**14.1**	**19.4**	**19.4**	**19.4**	**10.5**	**15.0**
Maximum Hourly Emissions (lb/hr)	**23.5**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

[c] Hourly emissions are based on simultaneous operation of all emission sources

Source[a]	Hourly (lb/hr)	Daily (lb/day)	Annual (ton/year)
Equipment Exhaust	0.55	4.00	0.46
Motor Vehicle Exhaust	0.11	0.32	0.03
On-Site Motor Vehicle Fugitive	19.71	59.93	5.87
Earthwork Fugitive	3.15	23.13	2.80
Maximum On-Site Total	**23.52**	**87.38**	**9.16**
Peak Month	**40**	**40**	**31**

[a] Emissions from source during period with maximum on-site total emissions

Table 15-f
On-Site Construction PM2.5 Emissions Sum

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	5.4	5.2	5.0	5.0	5.0	4.9	4.9	4.8	4.7	4.6	4.9	4.9	5.1
Earthwork Fugitive	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.6	2.6	2.8	2.8	2.8
12-Month Total (ton/year)	**8.7**	**8.5**	**8.3**	**8.3**	**8.4**	**8.2**	**8.2**	**8.1**	**7.7**	**7.6**	**8.2**	**8.2**	**8.4**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	91.3	91.3	83.2	83.2	83.2	89.9	89.9	73.2	100.4	27.2	83.2	83.2	83.2
On-Site Motor Vehicle Exhaust	6.4	6.4	4.5	4.5	4.5	4.8	5.4	3.7	5.4	1.7	4.5	4.5	4.5
On-Site Motor Vehicle Fugitive	1,220.9	1,220.9	851.2	851.2	851.2	920.5	1,031.9	670.2	1,031.9	361.7	851.2	851.2	851.2
Earthwork Fugitive	508.9	508.9	508.9	508.9	508.9	508.9	508.9	462.6	508.9	46.3	508.9	508.9	508.9
Monthly Total (lb/month)	**1,827.5**	**1,827.5**	**1,447.8**	**1,447.8**	**1,447.8**	**1,524.1**	**1,636.1**	**1,209.8**	**1,646.6**	**436.8**	**1,447.8**	**1,447.8**	**1,447.8**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	4.2	4.2	3.8	3.8	3.8	4.1	4.1	3.3	4.6	1.2	3.8	3.8	3.8
On-Site Motor Vehicle Exhaust	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
On-Site Motor Vehicle Fugitive	55.5	55.5	38.7	38.7	38.7	41.8	46.9	30.5	46.9	16.4	38.7	38.7	38.7
Earthwork Fugitive	23.1	23.1	23.1	23.1	23.1	23.1	23.1	21.0	23.1	2.1	23.1	23.1	23.1
Daily Total (lb/day)	**83.1**	**83.1**	**65.8**	**65.8**	**65.8**	**69.3**	**74.4**	**55.0**	**74.8**	**19.9**	**65.8**	**65.8**	**65.8**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.2	0.5	0.5	0.5
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
On-Site Motor Vehicle Fugitive	18.2	18.2	12.8	12.8	12.8	13.9	15.6	10.2	15.6	5.4	12.8	12.8	12.8
Earthwork Fugitive	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.6	3.2	0.5	3.2	3.2	3.2
Hourly Total (lb/hour)	**22.0**	**22.0**	**16.6**	**16.6**	**16.6**	**17.7**	**19.4**	**13.4**	**19.5**	**6.1**	**16.6**	**16.6**	**16.6**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
On-Site Motor Vehicle Fugitive
Earthwork Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-f
On-Site Construction PM2.5 Emissions Sum

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Equipment Exhaust	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	5.3	5.2	5.4	5.6	5.9	5.7	5.6	5.8	5.8	5.7	5.3	4.7	4.1
Earthwork Fugitive	2.8	2.8	2.8	2.8	2.8	2.6	2.3	2.3	2.1	1.9	1.6	1.4	1.1
12-Month Total (ton/year)	**8.6**	**8.5**	**8.7**	**8.8**	**9.2**	**8.8**	**8.4**	**8.6**	**8.3**	**8.0**	**7.3**	**6.4**	**5.4**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Equipment Exhaust	83.2	83.2	83.2	60.9	88.1	83.2	27.2	83.2	83.2	83.2	83.2	83.2	60.9
On-Site Motor Vehicle Exhaust	4.5	4.5	5.1	3.4	5.1	4.5	1.7	4.6	4.6	4.6	6.3	6.9	3.6
On-Site Motor Vehicle Fugitive	851.2	851.2	962.7	601.0	962.7	851.2	361.7	888.6	888.6	888.6	1,207.1	1,318.5	638.4
Earthwork Fugitive	508.9	508.9	508.9	462.6	508.9	508.9	46.3	508.9	508.9	508.9	508.9	508.9	462.6
Monthly Total (lb/month)	**1,447.8**	**1,447.8**	**1,559.9**	**1,127.9**	**1,564.7**	**1,447.8**	**436.8**	**1,485.3**	**1,485.3**	**1,485.3**	**1,805.5**	**1,917.5**	**1,165.4**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Equipment Exhaust	3.8	3.8	3.8	2.8	4.0	3.8	1.2	3.8	3.8	3.8	3.8	3.8	2.8
On-Site Motor Vehicle Exhaust	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.2
On-Site Motor Vehicle Fugitive	38.7	38.7	43.8	27.3	43.8	38.7	16.4	40.4	40.4	40.4	54.9	59.9	29.0
Earthwork Fugitive	23.1	23.1	23.1	21.0	23.1	23.1	2.1	23.1	23.1	23.1	23.1	23.1	21.0
Daily Total (lb/day)	**65.8**	**65.8**	**70.9**	**51.3**	**71.1**	**65.8**	**19.9**	**67.5**	**67.5**	**67.5**	**82.1**	**87.2**	**53.0**
Maximum Daily Emissions (lb/day)													
Hourly Emissions (lb/hr)[c]													
Equipment Exhaust	0.5	0.5	0.5	0.4	0.6	0.5	0.2	0.5	0.5	0.5	0.5	0.5	0.4
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
On-Site Motor Vehicle Fugitive	12.8	12.8	14.5	9.1	14.5	12.8	5.4	13.4	13.4	13.4	18.0	19.7	9.7
Earthwork Fugitive	3.2	3.2	3.2	2.6	3.2	3.2	0.5	3.2	3.2	3.2	3.2	3.2	2.6
Hourly Total (lb/hour)	**16.6**	**16.6**	**18.2**	**12.2**	**18.3**	**16.6**	**6.1**	**17.2**	**17.2**	**17.2**	**21.8**	**23.5**	**12.8**
Maximum Hourly Emissions (lb/hr)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
On-Site Motor Vehicle Fugitive
Earthwork Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 15-f
On-Site Construction PM2.5 Emissions Sum

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Equipment Exhaust	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On-Site Motor Vehicle Fugitive	3.7	3.1	2.5	1.9	1.5	1.2	0.8	0.5	0.1
Earthwork Fugitive	0.9	0.6	0.4	0.1	0.1	0.1	0.0	0.0	0.0
12-Month Total (ton/year)	**4.8**	**3.9**	**3.0**	**2.1**	**1.7**	**1.3**	**0.9**	**0.5**	**0.1**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Equipment Exhaust	88.1	83.2	83.2	27.2	27.2	27.2	27.2	37.7	10.5
On-Site Motor Vehicle Exhaust	6.9	6.3	6.3	3.4	3.4	3.4	4.0	4.0	0.6
On-Site Motor Vehicle Fugitive	1,318.5	1,207.1	1,207.1	680.2	680.2	680.2	791.6	791.6	111.5
Earthwork Fugitive	508.9	508.9	508.9	46.3	46.3	46.3	46.3	46.3	0.0
Monthly Total (lb/month)	**1,922.4**	**1,805.5**	**1,805.5**	**757.0**	**757.0**	**757.0**	**869.1**	**879.6**	**122.6**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Equipment Exhaust	4.0	3.8	3.8	1.2	1.2	1.2	1.2	1.7	0.5
On-Site Motor Vehicle Exhaust	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.0
On-Site Motor Vehicle Fugitive	59.9	54.9	54.9	30.9	30.9	30.9	36.0	36.0	5.1
Earthwork Fugitive	23.1	23.1	23.1	2.1	2.1	2.1	2.1	2.1	0.0
Daily Total (lb/day)	**87.4**	**82.1**	**82.1**	**34.4**	**34.4**	**34.4**	**39.5**	**40.0**	**5.6**
Maximum Daily Emissions (lb/day)									
Hourly Emissions (lb/hr)[c]									
Equipment Exhaust	0.6	0.5	0.5	0.2	0.2	0.2	0.2	0.3	0.1
On-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
On-Site Motor Vehicle Fugitive	19.7	18.0	18.0	10.0	10.0	10.0	11.7	11.7	1.7
Earthwork Fugitive	3.2	3.2	3.2	0.5	0.5	0.5	0.5	0.5	0.0
Hourly Total (lb/hour)	**23.5**	**21.8**	**21.8**	**10.8**	**10.8**	**10.8**	**12.4**	**12.5**	**1.8**
Maximum Hourly Emissions (lb/hr)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

[c] Hourly emissions are based on simultaneous c

Source[a]
Equipment Exhaust
Motor Vehicle Exhaust
On-Site Motor Vehicle Fugitive
Earthwork Fugitive
Maximum On-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 16-a
Maxiumum Daily On-Site Criteria Pollutant Construction Emissions Summary

Source	Emissions (lb/day)					
	CO	ROG	NOx	SOx	PM10	PM2.5
Equipment Exhaust	53.7	14.3	113.8	0.2	4.4	4.0
Motor Vehicle Exhaust	1.2	0.3	8.7	0.0	0.3	0.3
Paving Fugitive ROG	--	0.3	--	--	--	--
Motor Vehicle Fugitive PM	--	--	--	--	598.5	59.9
Earthwork Fugitive PM	--	--	--	--	75.9	23.1
TOTAL	**54.9**	**14.9**	**122.5**	**0.2**	**679.1**	**87.4**

Table 16-b
Maxiumum Annual On-Site Criteria Pollutant Construction Emissions Summary

Source	Emissions (ton/yr)					
	CO	ROG	NOx	SOx	PM10	PM2.5
Equipment Exhaust	5.6	1.5	12.4	0.0	0.4	0.5
Motor Vehicle Exhaust	0.1	0.0	1.0	0.0	0.0	0.0
Paving Fugitive ROG	--	0.0	--	--	--	--
Motor Vehicle Fugitive PM	--	--	--	--	60.5	5.9
Earthwork Fugitive PM	--	--	--	--	8.6	2.8
TOTAL	**5.8**	**1.6**	**13.4**	**0.0**	**69.5**	**9.2**

Table 17-a
Off-Site Motor Vehicle Numbers

Vehicle Type	Miles/ Day[a]	Number Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	25	4	4	4	0	4	4	4	0	4	4	4	0	4
Off-Site Water Trucks	25	5	5	5	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	25	1	1	1	0	1	1	1	0	1	1	1	0	1
Off-Site Fencing Trucks	25	4	4	4	0	4	4	4	0	4	4	4	0	4
Off-site Concrete Truck	25	0	0.5	0.5	0	0.5	0.5	0.5	0	0.5	0.5	0.5	0	0.5
Porto-Let Truck	25	4	4	4	0	2	2	2	0	2	2	2	0	4
Off-Site Worker Commuter Bus, Small	50	1	1	1	0	1	1	1	0	1	1	1	0	1
Off-Site Worker Commute Car	50	44	44	44	0	44	44	44	0	44	44	44	0	44
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	25	0	0	0	37	37	37	37	37	37	37	37	37	0
Off-Site Water Trucks	25	0	0	0	8	8	8	8	8	8	8	8	8	0
Low Bed Delivery Trucks	25	0	0	0	2	2	2	2	2	2	2	2	2	0
Porto-Let Truck	25	0	0	0	3	3	3	3	3	3	3	3	3	0
Off-Site Worker Commute Car	50	0	0	0	65	65	65	65	65	65	65	65	65	0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0	5
Off-Site PV Panel Trucks	125	0	0	0	0	0	0	0	0	0	0	0	0	75
Off-Site Inverters	30	0	0	0	0	0	0	0	0	0	0	0	0	4
Off-Site Tracker Trucks	30	0	0	0	0	0	0	0	0	0	0	0	0	12
Off-Site Cabling Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0	2
Off-Site Fuel & Lube	25	0	0	0	0	0	0	0	0	0	0	0	0	8
Off-site Concrete Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	10
Off-Site Electrical Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	5
Low Bed Delivery Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0	5
Porto-Let Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	4
Off-Site Worker Commuter Bus, Small	50	0	0	0	0	0	0	0	0	0	0	0	0	2
Off-Site Worker Commute Car	50	0	0	0	0	0	0	0	0	0	0	0	0	359
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Roof truck	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Wall Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Structural Steel truck	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Mechanical Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Architechtural Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	40	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning														
Off-Site Flat Bed Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	25	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	40	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Except for Off-Site PV Panel Trucks, all travel is assumed to be within Mojave Desert Air Basin. Miles/day for Off-Site PV Panel Trucks is for travel within Mojave Desert Air Basin.

Table 17-a
Off-Site Motor Vehicle Numbers

	Number											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	4	4	0	0	0	0	0	0	0	0	0	0
Off-Site Water Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	1	1	0	0	0	0	0	0	0	0	0	0
Off-Site Fencing Trucks	4	4	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	0.5	0.5	0	0	0	0	0	0	0	0	0	0
Porto-Let Truck	4	4	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commuter Bus, Small	1	1	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	44	44	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	37	37	37	37	37	37	37	37	37	0	37	37
Off-Site Water Trucks	8	8	8	8	8	8	8	8	8	0	8	8
Low Bed Delivery Trucks	2	2	2	2	2	2	2	2	2	0	2	2
Porto-Let Truck	3	3	3	3	3	3	3	3	3	0	3	3
Off-Site Worker Commute Car	65	65	65	65	65	65	65	65	65	0	65	65
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	5	5	5	5	5	5	5	0	5	5	5	5
Off-Site PV Panel Trucks	75	75	75	75	75	75	75	0	75	75	75	75
Off-Site Inverters	4	4	4	4	4	4	4	0	4	4	4	4
Off-Site Tracker Trucks	12	12	12	12	12	12	12	0	12	12	12	12
Off-Site Cabling Trucks	2	2	2	2	2	2	2	0	2	2	2	2
Off-Site Fuel & Lube	8	8	8	8	8	8	8	0	8	8	8	8
Off-site Concrete Truck	10	10	10	10	10	10	10	0	10	10	10	10
Off-Site Electrical Truck	5	5	5	5	5	5	5	0	5	5	5	5
Low Bed Delivery Trucks	5	5	5	5	5	5	5	0	5	5	5	5
Porto-Let Truck	4	4	4	4	4	4	4	0	4	4	4	4
Off-Site Worker Commuter Bus, Small	2	2	2	2	2	2	2	0	2	2	2	2
Off-Site Worker Commute Car	359	359	359	359	359	359	359	0	359	359	359	359
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0
Off-site Roof truck	0	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0
Off-site Wall Truck	0	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0
Off-Site Structural Steel truck	0	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0
Off-Site Mechanical Truck	0	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0
Off-Site Architechtural Truck	0	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	56	56	56	56	0	0	0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0	0	0	0	0	0	0.5	0.5	0.5	0	0	0
Off-Site Fuel & Lube	0	0	0	0	0	0	0.5	0.5	0.5	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	126	126	126	0	0	0

[a] Except for Off-Site PV Panel Trucks, all

Table 17-a
Off-Site Motor Vehicle Numbers

Vehicle Type	Number Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Water Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fencing Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0
Porto-Let Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commuter Bus, Small	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	37	37	37	37	37	37	37	0	37	37	37	37
Off-Site Water Trucks	8	8	8	8	8	8	8	0	8	8	8	8
Low Bed Delivery Trucks	2	2	2	2	2	2	2	0	2	2	2	2
Porto-Let Truck	3	3	3	3	3	3	3	0	3	3	3	3
Off-Site Worker Commute Car	65	65	65	65	65	65	65	0	65	65	65	65
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	5	5	5	5	0	5	5	5	5	5	5	5
Off-Site PV Panel Trucks	75	75	75	75	0	75	75	75	75	75	75	75
Off-Site Inverters	4	0	0	0	0	4	4	4	4	4	0	0
Off-Site Tracker Trucks	12	0	0	0	0	12	12	12	12	12	0	0
Off-Site Cabling Trucks	2	0	0	0	0	2	2	2	2	2	0	0
Off-Site Fuel & Lube	8	8	8	8	0	8	8	8	8	8	8	8
Off-site Concrete Truck	10	10	10	10	0	10	10	10	10	10	10	10
Off-Site Electrical Truck	5	5	5	5	0	5	5	5	5	5	5	5
Low Bed Delivery Trucks	5	5	5	5	0	5	5	5	5	5	5	5
Porto-Let Truck	4	4	4	4	0	4	4	4	4	4	4	4
Off-Site Worker Commuter Bus, Small	2	2	2	2	0	2	2	2	2	2	2	2
Off-Site Worker Commute Car	359	359	359	359	0	359	359	359	359	359	359	359
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Roof truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Wall Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Structural Steel truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Mechanical Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Architechtural Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0	0	0	0.5	0.5	0.5	0	0	0	0	0	0
Off-Site Fuel & Lube	0	0	0	0.5	0.5	0.5	0	0	0	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	126	126	126	0	0	0	0	0	0

[a] Except for Off-Site PV Panel Trucks, all

Table 17-a
Off-Site Motor Vehicle Numbers

Vehicle Type	Number Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0	0	0	0	0	0	0	0	0	0	0
Off-Site Water Trucks	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fencing Trucks	0	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0
Porto-Let Truck	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commuter Bus, Small	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	37	37	37	37	37	0	0	0	0	0	0
Off-Site Water Trucks	8	8	8	8	8	0	0	0	0	0	0
Low Bed Delivery Trucks	2	2	2	2	2	0	0	0	0	0	0
Porto-Let Truck	3	3	3	3	3	0	0	0	0	0	0
Off-Site Worker Commute Car	65	65	65	65	65	0	0	0	0	0	0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	5	0	5	5	5	5	5	5	5	5	0
Off-Site PV Panel Trucks	75	0	75	75	75	75	75	75	75	75	0
Off-Site Inverters	0	0	4	4	4	4	4	4	4	4	0
Off-Site Tracker Trucks	0	0	12	12	12	12	12	12	12	12	0
Off-Site Cabling Trucks	0	0	2	2	2	2	2	2	2	2	0
Off-Site Fuel & Lube	8	0	8	8	8	8	8	8	8	8	0
Off-site Concrete Truck	10	0	10	10	10	10	10	10	10	10	0
Off-Site Electrical Truck	5	0	5	5	5	5	5	5	5	5	0
Low Bed Delivery Trucks	5	0	5	5	5	5	5	5	5	5	0
Porto-Let Truck	4	0	4	4	4	4	4	4	4	4	0
Off-Site Worker Commuter Bus, Small	2	0	3	4	5	6	7	8	9	10	0
Off-Site Worker Commute Car	359	0	359	359	359	359	359	359	359	359	0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0	0	0	0	0	0	0	0	0	0	0
Off-site Roof truck	0	0	0	0	0	0	0	0	0	0	0
Off-site Wall Truck	0	0	0	0	0	0	0	0	0	0	0
Off-Site Structural Steel truck	0	0	0	0	0	0	0	0	0	0	0
Off-Site Mechanical Truck	0	0	0	0	0	0	0	0	0	0	0
Off-Site Architechtural Truck	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.5	0.5	0.5	0	0	0	0	0	0.5	0.5	0.5
Off-Site Fuel & Lube	0.5	0.5	0.5	0	0	0	0	0	0.5	0.5	0.5
Off-site Concrete Truck	0	0	0	0	0	0	0	0	1	1	1
Off-Site Worker Commute Car	126	126	126	0	0	0	0	0	126	126	126

[a] Except for Off-Site PV Panel Trucks, all

Table 17-b
Monthly Off-Site Motor Vehicle Use

Vehicle Type	Miles/Month[a] Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	2,200	2,200	2,200	0	2,200	2,200	2,200	0	2,200	2,200	2,200	0	2,200	2,200
Off-Site Water Trucks	2,750	2,750	2,750	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	550	550	550	0	550	550	550	0	550	550	550	0	550	550
Off-Site Fencing Trucks	2,200	2,200	2,200	0	2,200	2,200	2,200	0	2,200	2,200	2,200	0	2,200	2,200
Off-site Concrete Truck	0	275	275	0	275	275	275	0	275	275	275	0	275	275
Porto-Let Truck	2,200	2,200	2,200	0	1,100	1,100	1,100	0	1,100	1,100	1,100	0	2,200	2,200
Off-Site Worker Commuter Bus, Small	1,100	1,100	1,100	0	1,100	1,100	1,100	0	1,100	1,100	1,100	0	1,100	1,100
Off-Site Worker Commute Car	48,400	48,400	48,400	0	48,400	48,400	48,400	0	48,400	48,400	48,400	0	48,400	48,400
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	0	0	0	20,350	20,350	20,350	20,350	20,350	20,350	20,350	20,350	20,350	0	20,350
Off-Site Water Trucks	0	0	0	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	0	4,400
Low Bed Delivery Trucks	0	0	0	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0	1,100
Porto-Let Truck	0	0	0	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	0	1,650
Off-Site Worker Commute Car	0	0	0	71,500	71,500	71,500	71,500	71,500	71,500	71,500	71,500	71,500	0	71,500
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	0	0	0	0	0	0	0	0	0	0	0	0	2,750	2,750
Off-Site PV Panel Trucks	0	0	0	0	0	0	0	0	0	0	0	0	206,250	206,250
Off-Site Inverters	0	0	0	0	0	0	0	0	0	0	0	0	2,640	2,640
Off-Site Tracker Trucks	0	0	0	0	0	0	0	0	0	0	0	0	7,920	7,920
Off-Site Cabling Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1,100	1,100
Off-Site Fuel & Lube	0	0	0	0	0	0	0	0	0	0	0	0	4,400	4,400
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0	5,500	5,500
Off-Site Electrical Truck	0	0	0	0	0	0	0	0	0	0	0	0	2,750	2,750
Low Bed Delivery Trucks	0	0	0	0	0	0	0	0	0	0	0	0	2,750	2,750
Porto-Let Truck	0	0	0	0	0	0	0	0	0	0	0	0	2,200	2,200
Off-Site Worker Commuter Bus, Small	0	0	0	0	0	0	0	0	0	0	0	0	2,200	2,200
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0	0	394,900	394,900
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Roof truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Wall Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Structural Steel truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Mechanical Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Architechtural Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning														
Off-Site Flat Bed Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[a] Based on 22 working days/month

Table 17-b
Monthly Off-Site Motor Vehicle Use

Vehicle Type	Miles/Month[a] Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	2,200	0	0	0	0	0	0	0	0	0	0	0
Off-Site Water Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	550	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fencing Trucks	2,200	0	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	275	0	0	0	0	0	0	0	0	0	0	0
Porto-Let Truck	2,200	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commuter Bus, Small	1,100	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	48,400	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	20,350	20,350	20,350	20,350	20,350	20,350	20,350	20,350	0	20,350	20,350	20,350
Off-Site Water Trucks	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	0	4,400	4,400	4,400
Low Bed Delivery Trucks	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0	1,100	1,100	1,100
Porto-Let Truck	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650	0	1,650	1,650	1,650
Off-Site Worker Commute Car	71,500	71,500	71,500	71,500	71,500	71,500	71,500	71,500	0	71,500	71,500	71,500
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	2,750	2,750	2,750	2,750	2,750	2,750	0	2,750	2,750	2,750	2,750	2,750
Off-Site PV Panel Trucks	206,250	206,250	206,250	206,250	206,250	206,250	0	206,250	206,250	206,250	206,250	206,250
Off-Site Inverters	2,640	2,640	2,640	2,640	2,640	2,640	0	2,640	2,640	2,640	2,640	2,640
Off-Site Tracker Trucks	7,920	7,920	7,920	7,920	7,920	7,920	0	7,920	7,920	7,920	7,920	7,920
Off-Site Cabling Trucks	1,100	1,100	1,100	1,100	1,100	1,100	0	1,100	1,100	1,100	1,100	1,100
Off-Site Fuel & Lube	4,400	4,400	4,400	4,400	4,400	4,400	0	4,400	4,400	4,400	4,400	4,400
Off-site Concrete Truck	5,500	5,500	5,500	5,500	5,500	5,500	0	5,500	5,500	5,500	5,500	5,500
Off-Site Electrical Truck	2,750	2,750	2,750	2,750	2,750	2,750	0	2,750	2,750	2,750	2,750	2,750
Low Bed Delivery Trucks	2,750	2,750	2,750	2,750	2,750	2,750	0	2,750	2,750	2,750	2,750	2,750
Porto-Let Truck	2,200	2,200	2,200	2,200	2,200	2,200	0	2,200	2,200	2,200	2,200	2,200
Off-Site Worker Commuter Bus, Small	2,200	2,200	2,200	2,200	2,200	2,200	0	2,200	2,200	2,200	2,200	2,200
Off-Site Worker Commute Car	394,900	394,900	394,900	394,900	394,900	394,900	0	394,900	394,900	394,900	394,900	394,900
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0	0	0	0	275	275	275	275	0	0	0	0
Off-site Roof truck	0	0	0	0	275	275	275	275	0	0	0	0
Off-site Wall Truck	0	0	0	0	275	275	275	275	0	0	0	0
Off-Site Structural Steel truck	0	0	0	0	275	275	275	275	0	0	0	0
Off-Site Mechanical Truck	0	0	0	0	275	275	275	275	0	0	0	0
Off-Site Architechtural Truck	0	0	0	0	275	275	275	275	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	49,280	49,280	49,280	49,280	0	0	0	0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0	0	0	0	0	275	275	275	0	0	0	0
Off-Site Fuel & Lube	0	0	0	0	0	275	275	275	0	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	110,880	110,880	110,880	0	0	0	0

[a] Based on 22 working days/month

Table 17-b
Monthly Off-Site Motor Vehicle Use

	Miles/Month[a]											
Vehicle Type	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**	**Month 38**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Water Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Fencing Trucks	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0
Porto-Let Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commuter Bus, Small	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	20,350	20,350	20,350	20,350	20,350	20,350	0	20,350	20,350	20,350	20,350	20,350
Off-Site Water Trucks	4,400	4,400	4,400	4,400	4,400	4,400	0	4,400	4,400	4,400	4,400	4,400
Low Bed Delivery Trucks	1,100	1,100	1,100	1,100	1,100	1,100	0	1,100	1,100	1,100	1,100	1,100
Porto-Let Truck	1,650	1,650	1,650	1,650	1,650	1,650	0	1,650	1,650	1,650	1,650	1,650
Off-Site Worker Commute Car	71,500	71,500	71,500	71,500	71,500	71,500	0	71,500	71,500	71,500	71,500	71,500
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	2,750	2,750	2,750	0	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750
Off-Site PV Panel Trucks	206,250	206,250	206,250	0	206,250	206,250	206,250	206,250	206,250	206,250	206,250	206,250
Off-Site Inverters	0	0	0	0	2,640	2,640	2,640	2,640	2,640	0	0	0
Off-Site Tracker Trucks	0	0	0	0	7,920	7,920	7,920	7,920	7,920	0	0	0
Off-Site Cabling Trucks	0	0	0	0	1,100	1,100	1,100	1,100	1,100	0	0	0
Off-Site Fuel & Lube	4,400	4,400	4,400	0	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400
Off-site Concrete Truck	5,500	5,500	5,500	0	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500
Off-Site Electrical Truck	2,750	2,750	2,750	0	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750
Low Bed Delivery Trucks	2,750	2,750	2,750	0	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750
Porto-Let Truck	2,200	2,200	2,200	0	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Off-Site Worker Commuter Bus, Small	2,200	2,200	2,200	0	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Off-Site Worker Commute Car	394,900	394,900	394,900	0	394,900	394,900	394,900	394,900	394,900	394,900	394,900	394,900
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Roof truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-site Wall Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Structural Steel truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Mechanical Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Architechtural Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0	0	275	275	275	0	0	0	0	0	0	275
Off-Site Fuel & Lube	0	0	275	275	275	0	0	0	0	0	0	275
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	110,880	110,880	110,880	0	0	0	0	0	0	110,880

[a] Based on 22 working days/month

Table 17-b
Monthly Off-Site Motor Vehicle Use

Vehicle Type	Miles/Month[a] Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION										
Off-Site Flat Bed Trucks	0	0	0	0	0	0	0	0	0	0
Off-Site Water Trucks	0	0	0	0	0	0	0	0	0	0
Off-Site Fuel & Lube	0	0	0	0	0	0	0	0	0	0
Off-Site Fencing Trucks	0	0	0	0	0	0	0	0	0	0
Off-site Concrete Truck	0	0	0	0	0	0	0	0	0	0
Porto-Let Truck	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commuter Bus, Small	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0
CIVIL IMPROVEMENTS - GRADING/RO										
Off-Site Gravel Rock/AC trucks	20,350	20,350	20,350	20,350	0	0	0	0	0	0
Off-Site Water Trucks	4,400	4,400	4,400	4,400	0	0	0	0	0	0
Low Bed Delivery Trucks	1,100	1,100	1,100	1,100	0	0	0	0	0	0
Porto-Let Truck	1,650	1,650	1,650	1,650	0	0	0	0	0	0
Off-Site Worker Commute Car	71,500	71,500	71,500	71,500	0	0	0	0	0	0
PV PANEL CONSTRUCTION										
Off-Site Flat Bed Trucks	0	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	0
Off-Site PV Panel Trucks	0	206,250	206,250	206,250	206,250	206,250	206,250	206,250	206,250	0
Off-Site Inverters	0	2,640	2,640	2,640	2,640	2,640	2,640	2,640	2,640	0
Off-Site Tracker Trucks	0	7,920	7,920	7,920	7,920	7,920	7,920	7,920	7,920	0
Off-Site Cabling Trucks	0	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	0
Off-Site Fuel & Lube	0	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	0
Off-site Concrete Truck	0	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	0
Off-Site Electrical Truck	0	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	0
Low Bed Delivery Trucks	0	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	0
Porto-Let Truck	0	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	0
Off-Site Worker Commuter Bus, Small	0	3,300	4,400	5,500	6,600	7,700	8,800	9,900	11,000	0
Off-Site Worker Commute Car	0	394,900	394,900	394,900	394,900	394,900	394,900	394,900	394,900	0
SUBSTATION-BLDG-WATER TANK CO										
Off-site Insulation Truck	0	0	0	0	0	0	0	0	0	0
Off-site Roof truck	0	0	0	0	0	0	0	0	0	0
Off-site Wall Truck	0	0	0	0	0	0	0	0	0	0
Off-Site Structural Steel truck	0	0	0	0	0	0	0	0	0	0
Off-Site Mechanical Truck	0	0	0	0	0	0	0	0	0	0
Off-Site Architechtural Truck	0	0	0	0	0	0	0	0	0	0
Off-Site Worker Commute Car	0	0	0	0	0	0	0	0	0	0
Testing & Commissioning										
Off-Site Flat Bed Trucks	275	275	0	0	0	0	0	275	275	275
Off-Site Fuel & Lube	275	275	0	0	0	0	0	275	275	275
Off-site Concrete Truck	0	0	0	0	0	0	0	550	550	550
Off-Site Worker Commute Car	110,880	110,880	0	0	0	0	0	110,880	110,880	110,880

[a] Based on 22 working days/month

Table 17-c
Monthly Off-Site Motor Vehicle CO Emissions

Vehicle Type	Emission Factor (lb/mi)	CO Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	4.02E-03	8.8	8.8	8.8	0.0	8.8	8.8	8.8	0.0	8.8	8.8	8.8	0.0	8.8
Off-Site Water Trucks	3.25E-03	8.9	8.9	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	1.85E-03	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0
Off-Site Fencing Trucks	4.02E-03	8.8	8.8	8.8	0.0	8.8	8.8	8.8	0.0	8.8	8.8	8.8	0.0	8.8
Off-site Concrete Truck	3.25E-03	0.0	0.9	0.9	0.0	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.0	0.9
Porto-Let Truck	1.85E-03	4.1	4.1	4.1	0.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	4.1
Off-Site Worker Commuter Bus, Small	1.89E-03	2.1	2.1	2.1	0.0	2.1	2.1	2.1	0.0	2.1	2.1	2.1	0.0	2.1
Off-Site Worker Commute Car	9.00E-03	435.6	435.6	435.6	0.0	435.6	435.6	435.6	0.0	435.6	435.6	435.6	0.0	435.6
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	4.02E-03	0.0	0.0	0.0	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	0.0
Off-Site Water Trucks	3.25E-03	0.0	0.0	0.0	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	0.0
Low Bed Delivery Trucks	4.02E-03	0.0	0.0	0.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0.0
Porto-Let Truck	1.85E-03	0.0	0.0	0.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0
Off-Site Worker Commute Car	9.00E-03	0.0	0.0	0.0	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Off-Site PV Panel Trucks	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	828.2
Off-Site Inverters	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6
Off-Site Tracker Trucks	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.8
Off-Site Cabling Trucks	3.25E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Off-Site Fuel & Lube	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1
Off-site Concrete Truck	3.25E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.9
Off-Site Electrical Truck	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Low Bed Delivery Trucks	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Porto-Let Truck	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Off-Site Worker Commuter Bus, Small	1.89E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
Off-Site Worker Commute Car	9.00E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,554.5
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	9.00E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	4.02E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	1.85E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	3.25E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	9.00E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**469.4**	**470.3**	**470.3**	**747.1**	**1,206.4**	**1,206.4**	**1,206.4**	**747.1**	**1,206.4**	**1,206.4**	**1,206.4**	**747.1**	**4,957.3**

Table 17-c
Monthly Off-Site Motor Vehicle CO Emi

	CO Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	8.8	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	8.8	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	435.6	435.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	0.0	81.7	81.7
Off-Site Water Trucks	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	0.0	14.3	14.3
Low Bed Delivery Trucks	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0.0	4.4	4.4
Porto-Let Truck	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1
Off-Site Worker Commute Car	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	643.6	0.0	643.6	643.6
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	11.0	11.0	11.0	11.0	11.0	11.0	11.0	0.0	11.0	11.0	11.0	11.0
Off-Site PV Panel Trucks	828.2	828.2	828.2	828.2	828.2	828.2	828.2	0.0	828.2	828.2	828.2	828.2
Off-Site Inverters	10.6	10.6	10.6	10.6	10.6	10.6	10.6	0.0	10.6	10.6	10.6	10.6
Off-Site Tracker Trucks	31.8	31.8	31.8	31.8	31.8	31.8	31.8	0.0	31.8	31.8	31.8	31.8
Off-Site Cabling Trucks	3.6	3.6	3.6	3.6	3.6	3.6	3.6	0.0	3.6	3.6	3.6	3.6
Off-Site Fuel & Lube	8.1	8.1	8.1	8.1	8.1	8.1	8.1	0.0	8.1	8.1	8.1	8.1
Off-site Concrete Truck	17.9	17.9	17.9	17.9	17.9	17.9	17.9	0.0	17.9	17.9	17.9	17.9
Off-Site Electrical Truck	11.0	11.0	11.0	11.0	11.0	11.0	11.0	0.0	11.0	11.0	11.0	11.0
Low Bed Delivery Trucks	11.0	11.0	11.0	11.0	11.0	11.0	11.0	0.0	11.0	11.0	11.0	11.0
Porto-Let Truck	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0	4.1	4.1	4.1	4.1
Off-Site Worker Commuter Bus, Small	4.2	4.2	4.2	4.2	4.2	4.2	4.2	0.0	4.2	4.2	4.2	4.2
Off-Site Worker Commute Car	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	0.0	3,554.5	3,554.5	3,554.5	3,554.5
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	443.6	443.6	443.6	443.6	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	998.0	998.0	998.0	0.0	0.0	0.0
TOTAL (lb/month)	**5,704.4**	**5,704.4**	**5,243.0**	**5,243.0**	**5,243.0**	**5,693.2**	**6,692.9**	**2,196.9**	**6,692.9**	**4,496.0**	**5,243.0**	**5,243.0**

Table 17-c
Monthly Off-Site Motor Vehicle CO Emi

	CO Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	81.7	81.7	81.7	81.7	81.7	81.7	81.7	0.0	81.7	81.7	81.7	81.7
Off-Site Water Trucks	14.3	14.3	14.3	14.3	14.3	14.3	14.3	0.0	14.3	14.3	14.3	14.3
Low Bed Delivery Trucks	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0.0	4.4	4.4	4.4	4.4
Porto-Let Truck	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1	3.1	3.1
Off-Site Worker Commute Car	643.6	643.6	643.6	643.6	643.6	643.6	643.6	0.0	643.6	643.6	643.6	643.6
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	11.0	11.0	11.0	11.0	0.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Off-Site PV Panel Trucks	828.2	828.2	828.2	828.2	0.0	828.2	828.2	828.2	828.2	828.2	828.2	828.2
Off-Site Inverters	10.6	0.0	0.0	0.0	0.0	10.6	10.6	10.6	10.6	10.6	0.0	0.0
Off-Site Tracker Trucks	31.8	0.0	0.0	0.0	0.0	31.8	31.8	31.8	31.8	31.8	0.0	0.0
Off-Site Cabling Trucks	3.6	0.0	0.0	0.0	0.0	3.6	3.6	3.6	3.6	3.6	0.0	0.0
Off-Site Fuel & Lube	8.1	8.1	8.1	8.1	0.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Off-site Concrete Truck	17.9	17.9	17.9	17.9	0.0	17.9	17.9	17.9	17.9	17.9	17.9	17.9
Off-Site Electrical Truck	11.0	11.0	11.0	11.0	0.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Low Bed Delivery Trucks	11.0	11.0	11.0	11.0	0.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Porto-Let Truck	4.1	4.1	4.1	4.1	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Off-Site Worker Commuter Bus, Small	4.2	4.2	4.2	4.2	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Off-Site Worker Commute Car	3,554.5	3,554.5	3,554.5	3,554.5	0.0	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	998.0	998.0	998.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**5,243.0**	**5,197.0**	**5,197.0**	**6,196.7**	**1,746.7**	**6,242.7**	**5,243.0**	**4,496.0**	**5,243.0**	**5,243.0**	**5,197.0**	**5,197.0**

Table 17-c
Monthly Off-Site Motor Vehicle CO Emi

	CO Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	81.7	81.7	81.7	81.7	81.7	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	14.3	14.3	14.3	14.3	14.3	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	4.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	3.1	3.1	3.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	643.6	643.6	643.6	643.6	643.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	11.0	0.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	0.0
Off-Site PV Panel Trucks	828.2	0.0	828.2	828.2	828.2	828.2	828.2	828.2	828.2	828.2	0.0
Off-Site Inverters	0.0	0.0	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	0.0
Off-Site Tracker Trucks	0.0	0.0	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	0.0
Off-Site Cabling Trucks	0.0	0.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	0.0
Off-Site Fuel & Lube	8.1	0.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	0.0
Off-site Concrete Truck	17.9	0.0	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	0.0
Off-Site Electrical Truck	11.0	0.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	0.0
Low Bed Delivery Trucks	11.0	0.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	0.0
Porto-Let Truck	4.1	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0
Off-Site Worker Commuter Bus, Small	4.2	0.0	6.2	8.3	10.4	12.5	14.5	16.6	18.7	20.8	0.0
Off-Site Worker Commute Car	3,554.5	0.0	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	3,554.5	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
Off-Site Fuel & Lube	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8
Off-Site Worker Commute Car	998.0	998.0	998.0	0.0	0.0	0.0	0.0	0.0	998.0	998.0	998.0
TOTAL (lb/month)	**6,196.7**	**1,746.7**	**6,244.7**	**5,247.2**	**5,249.3**	**4,504.3**	**4,506.4**	**4,508.4**	**5,511.9**	**5,514.0**	**1,001.4**

Table 17-d
Monthly Off-Site Motor Vehicle ROG Emissions

Vehicle Type	Emission Factor (lb/mi)	ROG Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	8.37E-04	1.8	1.8	1.8	0.0	1.8	1.8	1.8	0.0	1.8	1.8	1.8	0.0	1.8
Off-Site Water Trucks	7.11E-04	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	4.13E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Off-Site Fencing Trucks	8.37E-04	1.8	1.8	1.8	0.0	1.8	1.8	1.8	0.0	1.8	1.8	1.8	0.0	1.8
Off-site Concrete Truck	7.11E-04	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Porto-Let Truck	4.13E-04	0.9	0.9	0.9	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.9
Off-Site Worker Commuter Bus, Small	5.29E-04	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.0	0.6
Off-Site Worker Commute Car	1.07E-03	51.6	51.6	51.6	0.0	51.6	51.6	51.6	0.0	51.6	51.6	51.6	0.0	51.6
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	8.37E-04	0.0	0.0	0.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	0.0
Off-Site Water Trucks	7.11E-04	0.0	0.0	0.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0
Low Bed Delivery Trucks	8.37E-04	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
Porto-Let Truck	4.13E-04	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Off-Site Worker Commute Car	1.07E-03	0.0	0.0	0.0	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Off-Site PV Panel Trucks	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172.7
Off-Site Inverters	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Off-Site Tracker Trucks	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
Off-Site Cabling Trucks	7.11E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Off-Site Fuel & Lube	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Off-site Concrete Truck	7.11E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Off-Site Electrical Truck	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Low Bed Delivery Trucks	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
Porto-Let Truck	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Off-Site Worker Commuter Bus, Small	5.29E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Off-Site Worker Commute Car	1.07E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	420.7
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.07E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	8.37E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	4.13E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	7.11E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.07E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**58.9**	**59.1**	**59.1**	**97.9**	**154.6**	**154.6**	**154.6**	**97.9**	**154.6**	**154.6**	**154.6**	**97.9**	**674.8**

Table 17-d
Monthly Off-Site Motor Vehicle ROG Er

	ROG Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	51.6	51.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	0.0	17.0	17.0
Off-Site Water Trucks	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1
Low Bed Delivery Trucks	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9
Porto-Let Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Off-Site Worker Commute Car	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	0.0	76.2	76.2
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3
Off-Site PV Panel Trucks	172.7	172.7	172.7	172.7	172.7	172.7	172.7	0.0	172.7	172.7	172.7	172.7
Off-Site Inverters	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2	2.2	2.2
Off-Site Tracker Trucks	6.6	6.6	6.6	6.6	6.6	6.6	6.6	0.0	6.6	6.6	6.6	6.6
Off-Site Cabling Trucks	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
Off-Site Fuel & Lube	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.0	1.8	1.8	1.8	1.8
Off-site Concrete Truck	3.9	3.9	3.9	3.9	3.9	3.9	3.9	0.0	3.9	3.9	3.9	3.9
Off-Site Electrical Truck	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3
Low Bed Delivery Trucks	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3
Porto-Let Truck	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Off-Site Worker Commuter Bus, Small	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	1.2	1.2	1.2	1.2
Off-Site Worker Commute Car	420.7	420.7	420.7	420.7	420.7	420.7	420.7	0.0	420.7	420.7	420.7	420.7
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	52.5	52.5	52.5	52.5	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	118.1	118.1	118.1	0.0	0.0	0.0
TOTAL (lb/month)	**772.8**	**772.8**	**715.6**	**715.6**	**715.6**	**769.5**	**887.9**	**270.3**	**887.9**	**617.7**	**715.6**	**715.6**

Table 17-d
Monthly Off-Site Motor Vehicle ROG Er

	ROG Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	17.0	17.0	17.0	17.0	17.0	17.0	17.0	0.0	17.0	17.0	17.0	17.0
Off-Site Water Trucks	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1	3.1	3.1
Low Bed Delivery Trucks	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Porto-Let Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Off-Site Worker Commute Car	76.2	76.2	76.2	76.2	76.2	76.2	76.2	0.0	76.2	76.2	76.2	76.2
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Off-Site PV Panel Trucks	172.7	172.7	172.7	172.7	0.0	172.7	172.7	172.7	172.7	172.7	172.7	172.7
Off-Site Inverters	2.2	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2	0.0	0.0
Off-Site Tracker Trucks	6.6	0.0	0.0	0.0	0.0	6.6	6.6	6.6	6.6	6.6	0.0	0.0
Off-Site Cabling Trucks	0.8	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.0	0.0
Off-Site Fuel & Lube	1.8	1.8	1.8	1.8	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Off-site Concrete Truck	3.9	3.9	3.9	3.9	0.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Off-Site Electrical Truck	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Low Bed Delivery Trucks	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Porto-Let Truck	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-Site Worker Commuter Bus, Small	1.2	1.2	1.2	1.2	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Off-Site Worker Commute Car	420.7	420.7	420.7	420.7	0.0	420.7	420.7	420.7	420.7	420.7	420.7	420.7
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	118.1	118.1	118.1	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**715.6**	**706.0**	**706.0**	**824.4**	**216.4**	**834.1**	**715.6**	**617.7**	**715.6**	**715.6**	**706.0**	**706.0**

Table 17-d
Monthly Off-Site Motor Vehicle ROG Er

	ROG Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	17.0	17.0	17.0	17.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	3.1	3.1	3.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	76.2	76.2	76.2	76.2	76.2	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	2.3	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0
Off-Site PV Panel Trucks	172.7	0.0	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	0.0
Off-Site Inverters	0.0	0.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0
Off-Site Tracker Trucks	0.0	0.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	0.0
Off-Site Cabling Trucks	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
Off-Site Fuel & Lube	1.8	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.0
Off-site Concrete Truck	3.9	0.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	0.0
Off-Site Electrical Truck	2.3	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0
Low Bed Delivery Trucks	2.3	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0
Porto-Let Truck	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
Off-Site Worker Commuter Bus, Small	1.2	0.0	1.7	2.3	2.9	3.5	4.1	4.7	5.2	5.8	0.0
Off-Site Worker Commute Car	420.7	0.0	420.7	420.7	420.7	420.7	420.7	420.7	420.7	420.7	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Off-Site Fuel & Lube	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
Off-Site Worker Commute Car	118.1	118.1	118.1	0.0	0.0	0.0	0.0	0.0	118.1	118.1	118.1
TOTAL (lb/month)	**824.4**	**216.4**	**834.6**	**716.8**	**717.3**	**620.0**	**620.6**	**621.2**	**740.6**	**741.2**	**118.8**

Table 17-e
Monthly Off-Site Motor Vehicle NOx Emissions

Vehicle Type	Emission Factor	NOx Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	2.58E-02	56.7	56.7	56.7	0.0	56.7	56.7	56.7	0.0	56.7	56.7	56.7	0.0	56.7
Off-Site Water Trucks	2.48E-02	68.2	68.2	68.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	9.80E-03	5.4	5.4	5.4	0.0	5.4	5.4	5.4	0.0	5.4	5.4	5.4	0.0	5.4
Off-Site Fencing Trucks	2.58E-02	56.7	56.7	56.7	0.0	56.7	56.7	56.7	0.0	56.7	56.7	56.7	0.0	56.7
Off-site Concrete Truck	2.48E-02	0.0	6.8	6.8	0.0	6.8	6.8	6.8	0.0	6.8	6.8	6.8	0.0	6.8
Porto-Let Truck	9.80E-03	21.6	21.6	21.6	0.0	10.8	10.8	10.8	0.0	10.8	10.8	10.8	0.0	21.6
Off-Site Worker Commuter Bus, Small	1.69E-02	18.6	18.6	18.6	0.0	18.6	18.6	18.6	0.0	18.6	18.6	18.6	0.0	18.6
Off-Site Worker Commute Car	8.20E-04	39.7	39.7	39.7	0.0	39.7	39.7	39.7	0.0	39.7	39.7	39.7	0.0	39.7
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	2.58E-02	0.0	0.0	0.0	524.4	524.4	524.4	524.4	524.4	524.4	524.4	524.4	524.4	0.0
Off-Site Water Trucks	2.48E-02	0.0	0.0	0.0	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	0.0
Low Bed Delivery Trucks	2.58E-02	0.0	0.0	0.0	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	0.0
Porto-Let Truck	9.80E-03	0.0	0.0	0.0	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	0.0
Off-Site Worker Commute Car	8.20E-04	0.0	0.0	0.0	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.9
Off-Site PV Panel Trucks	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,315.3
Off-Site Inverters	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.0
Off-Site Tracker Trucks	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	204.1
Off-Site Cabling Trucks	2.48E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3
Off-Site Fuel & Lube	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1
Off-site Concrete Truck	2.48E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	136.4
Off-Site Electrical Truck	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.9
Low Bed Delivery Trucks	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.9
Porto-Let Truck	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6
Off-Site Worker Commuter Bus, Small	1.69E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.2
Off-Site Worker Commute Car	8.20E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	324.0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	8.20E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	2.58E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	9.80E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	2.48E-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	8.20E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**266.9**	**273.7**	**273.7**	**736.7**	**931.4**	**931.4**	**931.4**	**736.7**	**931.4**	**931.4**	**931.4**	**736.7**	**6,595.1**

Table 17-e
Monthly Off-Site Motor Vehicle NOx En

Vehicle Type	NOx Emissions (lb/month)											
	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	56.7	56.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	5.4	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	56.7	56.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	6.8	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	21.6	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	18.6	18.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	39.7	39.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	524.4	524.4	524.4	524.4	524.4	524.4	524.4	524.4	524.4	0.0	524.4	524.4
Off-Site Water Trucks	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	0.0	109.1	109.1
Low Bed Delivery Trucks	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	0.0	28.3	28.3
Porto-Let Truck	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	0.0	16.2	16.2
Off-Site Worker Commute Car	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	0.0	58.7	58.7
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	70.9	70.9	70.9	70.9	70.9	70.9	70.9	0.0	70.9	70.9	70.9	70.9
Off-Site PV Panel Trucks	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	0.0	5,315.3	5,315.3	5,315.3	5,315.3
Off-Site Inverters	68.0	68.0	68.0	68.0	68.0	68.0	68.0	0.0	68.0	68.0	68.0	68.0
Off-Site Tracker Trucks	204.1	204.1	204.1	204.1	204.1	204.1	204.1	0.0	204.1	204.1	204.1	204.1
Off-Site Cabling Trucks	27.3	27.3	27.3	27.3	27.3	27.3	27.3	0.0	27.3	27.3	27.3	27.3
Off-Site Fuel & Lube	43.1	43.1	43.1	43.1	43.1	43.1	43.1	0.0	43.1	43.1	43.1	43.1
Off-site Concrete Truck	136.4	136.4	136.4	136.4	136.4	136.4	136.4	0.0	136.4	136.4	136.4	136.4
Off-Site Electrical Truck	70.9	70.9	70.9	70.9	70.9	70.9	70.9	0.0	70.9	70.9	70.9	70.9
Low Bed Delivery Trucks	70.9	70.9	70.9	70.9	70.9	70.9	70.9	0.0	70.9	70.9	70.9	70.9
Porto-Let Truck	21.6	21.6	21.6	21.6	21.6	21.6	21.6	0.0	21.6	21.6	21.6	21.6
Off-Site Worker Commuter Bus, Small	37.2	37.2	37.2	37.2	37.2	37.2	37.2	0.0	37.2	37.2	37.2	37.2
Off-Site Worker Commute Car	324.0	324.0	324.0	324.0	324.0	324.0	324.0	0.0	324.0	324.0	324.0	324.0
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	40.4	40.4	40.4	40.4	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	2.7	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	91.0	91.0	91.0	0.0	0.0	0.0
TOTAL (lb/month)	**7,331.9**	**7,331.9**	**7,126.4**	**7,126.4**	**7,126.4**	**7,209.3**	**7,310.1**	**920.4**	**7,310.1**	**6,389.6**	**7,126.4**	**7,126.4**

Table 17-e
Monthly Off-Site Motor Vehicle NOx En

Vehicle Type	NOx Emissions (lb/month)											
	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	524.4	524.4	524.4	524.4	524.4	524.4	524.4	0.0	524.4	524.4	524.4	524.4
Off-Site Water Trucks	109.1	109.1	109.1	109.1	109.1	109.1	109.1	0.0	109.1	109.1	109.1	109.1
Low Bed Delivery Trucks	28.3	28.3	28.3	28.3	28.3	28.3	28.3	0.0	28.3	28.3	28.3	28.3
Porto-Let Truck	16.2	16.2	16.2	16.2	16.2	16.2	16.2	0.0	16.2	16.2	16.2	16.2
Off-Site Worker Commute Car	58.7	58.7	58.7	58.7	58.7	58.7	58.7	0.0	58.7	58.7	58.7	58.7
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	70.9	70.9	70.9	70.9	0.0	70.9	70.9	70.9	70.9	70.9	70.9	70.9
Off-Site PV Panel Trucks	5,315.3	5,315.3	5,315.3	5,315.3	0.0	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3
Off-Site Inverters	68.0	0.0	0.0	0.0	0.0	68.0	68.0	68.0	68.0	68.0	0.0	0.0
Off-Site Tracker Trucks	204.1	0.0	0.0	0.0	0.0	204.1	204.1	204.1	204.1	204.1	0.0	0.0
Off-Site Cabling Trucks	27.3	0.0	0.0	0.0	0.0	27.3	27.3	27.3	27.3	27.3	0.0	0.0
Off-Site Fuel & Lube	43.1	43.1	43.1	43.1	0.0	43.1	43.1	43.1	43.1	43.1	43.1	43.1
Off-site Concrete Truck	136.4	136.4	136.4	136.4	0.0	136.4	136.4	136.4	136.4	136.4	136.4	136.4
Off-Site Electrical Truck	70.9	70.9	70.9	70.9	0.0	70.9	70.9	70.9	70.9	70.9	70.9	70.9
Low Bed Delivery Trucks	70.9	70.9	70.9	70.9	0.0	70.9	70.9	70.9	70.9	70.9	70.9	70.9
Porto-Let Truck	21.6	21.6	21.6	21.6	0.0	21.6	21.6	21.6	21.6	21.6	21.6	21.6
Off-Site Worker Commuter Bus, Small	37.2	37.2	37.2	37.2	0.0	37.2	37.2	37.2	37.2	37.2	37.2	37.2
Off-Site Worker Commute Car	324.0	324.0	324.0	324.0	0.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	7.1	7.1	7.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	2.7	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	91.0	91.0	91.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**7,126.4**	**6,827.0**	**6,827.0**	**6,927.7**	**837.5**	**7,227.1**	**7,126.4**	**6,389.6**	**7,126.4**	**7,126.4**	**6,827.0**	**6,827.0**

Table 17-e
Monthly Off-Site Motor Vehicle NOx En

Vehicle Type	NOx Emissions (lb/month)										
	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	524.4	524.4	524.4	524.4	524.4	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	109.1	109.1	109.1	109.1	109.1	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	28.3	28.3	28.3	28.3	28.3	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	16.2	16.2	16.2	16.2	16.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	58.7	58.7	58.7	58.7	58.7	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	70.9	0.0	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	0.0
Off-Site PV Panel Trucks	5,315.3	0.0	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	5,315.3	0.0
Off-Site Inverters	0.0	0.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	0.0
Off-Site Tracker Trucks	0.0	0.0	204.1	204.1	204.1	204.1	204.1	204.1	204.1	204.1	0.0
Off-Site Cabling Trucks	0.0	0.0	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	0.0
Off-Site Fuel & Lube	43.1	0.0	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	0.0
Off-site Concrete Truck	136.4	0.0	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	0.0
Off-Site Electrical Truck	70.9	0.0	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	0.0
Low Bed Delivery Trucks	70.9	0.0	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	0.0
Porto-Let Truck	21.6	0.0	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	0.0
Off-Site Worker Commuter Bus, Small	37.2	0.0	55.8	74.5	93.1	111.7	130.3	148.9	167.5	186.1	0.0
Off-Site Worker Commute Car	324.0	0.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	7.1	7.1	7.1	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1
Off-Site Fuel & Lube	2.7	2.7	2.7	0.0	0.0	0.0	0.0	0.0	2.7	2.7	2.7
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	13.6	13.6
Off-Site Worker Commute Car	91.0	91.0	91.0	0.0	0.0	0.0	0.0	0.0	91.0	91.0	91.0
TOTAL (lb/month)	**6,927.7**	**837.5**	**7,245.8**	**7,163.6**	**7,182.2**	**6,464.1**	**6,482.7**	**6,501.3**	**6,634.3**	**6,652.9**	**114.4**

Table 17-f
Monthly Off-Site Motor Vehicle SOx Emissions

Vehicle Type	Emission Factor (lb/mi)	SOx Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	3.53E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Off-Site Water Trucks	3.56E-05	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	3.53E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Off-site Concrete Truck	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	2.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	8.98E-06	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	3.53E-05	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Off-Site Water Trucks	3.56E-05	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Low Bed Delivery Trucks	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	8.98E-06	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Site PV Panel Trucks	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3
Off-Site Inverters	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Site Tracker Trucks	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Off-Site Cabling Trucks	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-site Concrete Truck	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Off-Site Electrical Truck	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Low Bed Delivery Trucks	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Porto-Let Truck	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	2.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Site Worker Commute Car	8.98E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	8.98E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	3.53E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	2.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	3.56E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	8.98E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**0.8**	**0.8**	**0.8**	**1.6**	**2.3**	**2.3**	**2.3**	**1.6**	**2.3**	**2.3**	**2.3**	**1.6**	**12.6**

Table 17-f
Monthly Off-Site Motor Vehicle SOx Em

	SOx Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Off-Site Water Trucks	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
Low Bed Delivery Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site PV Panel Trucks	7.3	7.3	7.3	7.3	7.3	7.3	7.3	0.0	7.3	7.3	7.3	7.3
Off-Site Inverters	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site Tracker Trucks	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Off-Site Cabling Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-site Concrete Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Off-Site Electrical Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Low Bed Delivery Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site Worker Commute Car	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0	3.5	3.5	3.5	3.5
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0
TOTAL (lb/month)	**14.2**	**14.2**	**13.5**	**13.5**	**13.5**	**14.0**	**15.0**	**3.1**	**15.0**	**11.9**	**13.5**	**13.5**

Table 17-f
Monthly Off-Site Motor Vehicle SOx Em

	SOx Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Off-Site Water Trucks	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Low Bed Delivery Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Off-Site PV Panel Trucks	7.3	7.3	7.3	7.3	0.0	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Off-Site Inverters	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Off-Site Tracker Trucks	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0
Off-Site Cabling Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Off-site Concrete Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Off-Site Electrical Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Low Bed Delivery Trucks	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Off-Site Worker Commute Car	3.5	3.5	3.5	3.5	0.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**13.5**	**13.1**	**13.1**	**14.1**	**2.6**	**14.5**	**13.5**	**11.9**	**13.5**	**13.5**	**13.1**	**13.1**

Table 17-f
Monthly Off-Site Motor Vehicle SOx Em

	SOx Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-Site PV Panel Trucks	7.3	0.0	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	0.0
Off-Site Inverters	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-Site Tracker Trucks	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Off-Site Cabling Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-site Concrete Truck	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Off-Site Electrical Truck	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Low Bed Delivery Trucks	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.0
Off-Site Worker Commute Car	3.5	0.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
TOTAL (lb/month)	**14.1**	**2.6**	**14.6**	**13.6**	**13.6**	**12.0**	**12.1**	**12.1**	**13.1**	**13.2**	**1.0**

Table 17-g
Monthly Off-Site Motor Vehicle Exhaust PM10 Emissions

Vehicle Type	Emission Factor (lb/mi)	Exhaust PM10 Emissions (lb/month)												
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	6.33E-04	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0	1.4
Off-Site Water Trucks	4.90E-04	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	4.25E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Off-Site Fencing Trucks	6.33E-04	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0	1.4	1.4	1.4	0.0	1.4
Off-site Concrete Truck	4.90E-04	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Porto-Let Truck	4.25E-04	0.9	0.9	0.9	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.9
Off-Site Worker Commuter Bus, Small	4.24E-04	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5
Off-Site Worker Commute Car	1.03E-05	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	6.33E-04	0.0	0.0	0.0	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	0.0
Off-Site Water Trucks	4.90E-04	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0
Low Bed Delivery Trucks	6.33E-04	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Porto-Let Truck	4.25E-04	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Off-Site Worker Commute Car	1.03E-05	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Off-Site PV Panel Trucks	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	130.5
Off-Site Inverters	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Off-Site Tracker Trucks	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Off-Site Cabling Trucks	4.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Off-Site Fuel & Lube	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Off-site Concrete Truck	4.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
Off-Site Electrical Truck	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Low Bed Delivery Trucks	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Porto-Let Truck	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Off-Site Worker Commuter Bus, Small	4.24E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Off-Site Worker Commute Car	1.03E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.03E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	6.33E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	4.25E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	4.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.03E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**6.3**	**6.4**	**6.4**	**17.2**	**21.7**	**21.7**	**21.7**	**17.2**	**21.7**	**21.7**	**21.7**	**17.2**	**158.5**

Table 17-g
Monthly Off-Site Motor Vehicle Exhaus

	Exhaust PM10 Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	0.0	12.9	12.9
Off-Site Water Trucks	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2
Low Bed Delivery Trucks	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Porto-Let Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Off-Site Worker Commute Car	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7
Off-Site PV Panel Trucks	130.5	130.5	130.5	130.5	130.5	130.5	130.5	0.0	130.5	130.5	130.5	130.5
Off-Site Inverters	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7
Off-Site Tracker Trucks	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	5.0	5.0	5.0	5.0
Off-Site Cabling Trucks	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
Off-Site Fuel & Lube	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.0	1.9	1.9	1.9	1.9
Off-site Concrete Truck	2.7	2.7	2.7	2.7	2.7	2.7	2.7	0.0	2.7	2.7	2.7	2.7
Off-Site Electrical Truck	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7
Low Bed Delivery Trucks	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7
Porto-Let Truck	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Off-Site Worker Commuter Bus, Small	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Off-Site Worker Commute Car	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0	4.1	4.1	4.1	4.1
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	0.0	0.0	0.0
TOTAL (lb/month)	**175.6**	**175.6**	**170.6**	**170.6**	**170.6**	**172.1**	**173.6**	**20.1**	**173.6**	**153.4**	**170.6**	**170.6**

Table 17-g
Monthly Off-Site Motor Vehicle Exhaus

	Exhaust PM10 Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	12.9	12.9	12.9	12.9	12.9	12.9	12.9	0.0	12.9	12.9	12.9	12.9
Off-Site Water Trucks	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2	2.2	2.2
Low Bed Delivery Trucks	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Porto-Let Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Off-Site Worker Commute Car	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Off-Site PV Panel Trucks	130.5	130.5	130.5	130.5	0.0	130.5	130.5	130.5	130.5	130.5	130.5	130.5
Off-Site Inverters	1.7	0.0	0.0	0.0	0.0	1.7	1.7	1.7	1.7	1.7	0.0	0.0
Off-Site Tracker Trucks	5.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0
Off-Site Cabling Trucks	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0
Off-Site Fuel & Lube	1.9	1.9	1.9	1.9	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Off-site Concrete Truck	2.7	2.7	2.7	2.7	0.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Off-Site Electrical Truck	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Low Bed Delivery Trucks	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Porto-Let Truck	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-Site Worker Commuter Bus, Small	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-Site Worker Commute Car	4.1	4.1	4.1	4.1	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**170.6**	**163.4**	**163.4**	**164.8**	**18.6**	**172.0**	**170.6**	**153.4**	**170.6**	**170.6**	**163.4**	**163.4**

Table 17-g
Monthly Off-Site Motor Vehicle Exhaus

	Exhaust PM10 Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	12.9	12.9	12.9	12.9	12.9	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	2.2	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
Off-Site PV Panel Trucks	130.5	0.0	130.5	130.5	130.5	130.5	130.5	130.5	130.5	130.5	0.0
Off-Site Inverters	0.0	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
Off-Site Tracker Trucks	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0
Off-Site Cabling Trucks	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Off-Site Fuel & Lube	1.9	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.0
Off-site Concrete Truck	2.7	0.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	0.0
Off-Site Electrical Truck	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
Low Bed Delivery Trucks	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
Porto-Let Truck	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
Off-Site Worker Commuter Bus, Small	0.9	0.0	1.4	1.9	2.3	2.8	3.3	3.7	4.2	4.7	0.0
Off-Site Worker Commute Car	4.1	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Off-Site Fuel & Lube	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3
Off-Site Worker Commute Car	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
TOTAL (lb/month)	**164.8**	**18.6**	**172.5**	**171.5**	**172.0**	**155.3**	**155.7**	**156.2**	**158.4**	**158.8**	**1.7**

Table 17-h
Monthly Off-Site Motor Vehicle Exhaust PM2.5 Emissions

Vehicle Type	Emission Factor (lb/mi)	Exhaust PM2.5 Emissions (lb/month)												
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	5.82E-04	1.3	1.3	1.3	0.0	1.3	1.3	1.3	0.0	1.3	1.3	1.3	0.0	1.3
Off-Site Water Trucks	4.51E-04	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	3.91E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Off-Site Fencing Trucks	5.82E-04	1.3	1.3	1.3	0.0	1.3	1.3	1.3	0.0	1.3	1.3	1.3	0.0	1.3
Off-site Concrete Truck	4.51E-04	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Porto-Let Truck	3.91E-04	0.9	0.9	0.9	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.9
Off-Site Worker Commuter Bus, Small	3.90E-04	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4
Off-Site Worker Commute Car	9.39E-06	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	5.82E-04	0.0	0.0	0.0	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	0.0
Off-Site Water Trucks	4.51E-04	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Low Bed Delivery Trucks	5.82E-04	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
Porto-Let Truck	3.91E-04	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
Off-Site Worker Commute Car	9.39E-06	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Off-Site PV Panel Trucks	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120.0
Off-Site Inverters	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Off-Site Tracker Trucks	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
Off-Site Cabling Trucks	4.51E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Off-Site Fuel & Lube	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Off-site Concrete Truck	4.51E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
Off-Site Electrical Truck	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Low Bed Delivery Trucks	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Porto-Let Truck	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Off-Site Worker Commuter Bus, Small	3.90E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Off-Site Worker Commute Car	9.39E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	9.39E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	5.82E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	3.91E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	4.51E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	9.39E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**5.8**	**5.9**	**5.9**	**15.8**	**20.0**	**20.0**	**20.0**	**15.8**	**20.0**	**20.0**	**20.0**	**15.8**	**145.8**

Table 17-h
Monthly Off-Site Motor Vehicle Exhaus

	Exhaust PM2.5 Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	0.0	11.8	11.8
Off-Site Water Trucks	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0
Low Bed Delivery Trucks	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
Porto-Let Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
Off-Site Worker Commute Car	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6
Off-Site PV Panel Trucks	120.0	120.0	120.0	120.0	120.0	120.0	120.0	0.0	120.0	120.0	120.0	120.0
Off-Site Inverters	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5
Off-Site Tracker Trucks	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0	4.6	4.6	4.6	4.6
Off-Site Cabling Trucks	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
Off-Site Fuel & Lube	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7
Off-site Concrete Truck	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0	2.5	2.5	2.5	2.5
Off-Site Electrical Truck	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6
Low Bed Delivery Trucks	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6
Porto-Let Truck	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Off-Site Worker Commuter Bus, Small	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Off-Site Worker Commute Car	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0	3.7	3.7	3.7	3.7
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0
TOTAL (lb/month)	**161.5**	**161.5**	**156.9**	**156.9**	**156.9**	**158.3**	**159.6**	**18.5**	**159.6**	**141.1**	**156.9**	**156.9**

Table 17-h
Monthly Off-Site Motor Vehicle Exhaus

	Exhaust PM2.5 Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	11.8	11.8	11.8	11.8	11.8	11.8	11.8	0.0	11.8	11.8	11.8	11.8
Off-Site Water Trucks	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0
Low Bed Delivery Trucks	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
Porto-Let Truck	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
Off-Site Worker Commute Car	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Off-Site PV Panel Trucks	120.0	120.0	120.0	120.0	0.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
Off-Site Inverters	1.5	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	0.0	0.0
Off-Site Tracker Trucks	4.6	0.0	0.0	0.0	0.0	4.6	4.6	4.6	4.6	4.6	0.0	0.0
Off-Site Cabling Trucks	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0
Off-Site Fuel & Lube	1.7	1.7	1.7	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Off-site Concrete Truck	2.5	2.5	2.5	2.5	0.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Off-Site Electrical Truck	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Low Bed Delivery Trucks	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Porto-Let Truck	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-Site Worker Commuter Bus, Small	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-Site Worker Commute Car	3.7	3.7	3.7	3.7	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**156.9**	**150.3**	**150.3**	**151.6**	**17.1**	**158.2**	**156.9**	**141.1**	**156.9**	**156.9**	**150.3**	**150.3**

Table 17-h
Monthly Off-Site Motor Vehicle Exhaus

	Exhaust PM2.5 Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	11.8	11.8	11.8	11.8	11.8	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	1.6	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0
Off-Site PV Panel Trucks	120.0	0.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	0.0
Off-Site Inverters	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0
Off-Site Tracker Trucks	0.0	0.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0
Off-Site Cabling Trucks	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Off-Site Fuel & Lube	1.7	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
Off-site Concrete Truck	2.5	0.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0
Off-Site Electrical Truck	1.6	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0
Low Bed Delivery Trucks	1.6	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.0
Porto-Let Truck	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
Off-Site Worker Commuter Bus, Small	0.9	0.0	1.3	1.7	2.1	2.6	3.0	3.4	3.9	4.3	0.0
Off-Site Worker Commute Car	3.7	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Off-Site Fuel & Lube	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Off-Site Worker Commute Car	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
TOTAL (lb/month)	**151.6**	**17.1**	**158.6**	**157.8**	**158.2**	**142.8**	**143.3**	**143.7**	**145.7**	**146.1**	**1.6**

Table 17-i
Monthly Off-Site Motor Vehicle Fugitive PM10 Emissions

Vehicle Type	Emission Factor (lb/mi)	Fugitive PM10 Emissions (lb/month)												
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	5.06E-04	1.1	1.1	1.1	0.0	1.1	1.1	1.1	0.0	1.1	1.1	1.1	0.0	1.1
Off-Site Water Trucks	5.06E-04	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	6.04E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3
Off-Site Fencing Trucks	5.06E-04	1.1	1.1	1.1	0.0	1.1	1.1	1.1	0.0	1.1	1.1	1.1	0.0	1.1
Off-site Concrete Truck	5.06E-04	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Porto-Let Truck	6.04E-04	1.3	1.3	1.3	0.0	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.0	1.3
Off-Site Worker Commuter Bus, Small	6.04E-04	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.0	0.7
Off-Site Worker Commute Car	3.89E-04	18.8	18.8	18.8	0.0	18.8	18.8	18.8	0.0	18.8	18.8	18.8	0.0	18.8
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	5.06E-04	0.0	0.0	0.0	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	0.0
Off-Site Water Trucks	5.06E-04	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0
Low Bed Delivery Trucks	5.06E-04	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
Porto-Let Truck	6.04E-04	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Off-Site Worker Commute Car	3.89E-04	0.0	0.0	0.0	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Off-Site PV Panel Trucks	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.3
Off-Site Inverters	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Off-Site Tracker Trucks	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Off-Site Cabling Trucks	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Off-Site Fuel & Lube	6.04E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
Off-site Concrete Truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
Off-Site Electrical Truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Low Bed Delivery Trucks	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Porto-Let Truck	6.04E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Off-Site Worker Commuter Bus, Small	6.04E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Off-Site Worker Commute Car	3.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	153.6
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	3.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	6.04E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	5.06E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	3.89E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**24.8**	**24.9**	**24.9**	**41.9**	**64.7**	**64.7**	**64.7**	**41.9**	**64.7**	**64.7**	**64.7**	**41.9**	**299.6**

Table 17-i
Monthly Off-Site Motor Vehicle Fugitive

	Fugitive PM10 Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	18.8	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	0.0	10.3	10.3
Off-Site Water Trucks	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2
Low Bed Delivery Trucks	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6
Porto-Let Truck	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0
Off-Site Worker Commute Car	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	0.0	27.8	27.8
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4
Off-Site PV Panel Trucks	104.3	104.3	104.3	104.3	104.3	104.3	104.3	0.0	104.3	104.3	104.3	104.3
Off-Site Inverters	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3
Off-Site Tracker Trucks	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	4.0
Off-Site Cabling Trucks	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
Off-Site Fuel & Lube	2.7	2.7	2.7	2.7	2.7	2.7	2.7	0.0	2.7	2.7	2.7	2.7
Off-site Concrete Truck	2.8	2.8	2.8	2.8	2.8	2.8	2.8	0.0	2.8	2.8	2.8	2.8
Off-Site Electrical Truck	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4
Low Bed Delivery Trucks	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4
Porto-Let Truck	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3
Off-Site Worker Commuter Bus, Small	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3
Off-Site Worker Commute Car	153.6	153.6	153.6	153.6	153.6	153.6	153.6	0.0	153.6	153.6	153.6	153.6
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	19.2	19.2	19.2	19.2	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	43.1	43.1	43.1	0.0	0.0	0.0
TOTAL (lb/month)	**341.5**	**341.5**	**317.9**	**317.9**	**317.9**	**337.9**	**381.4**	**105.3**	**381.4**	**276.1**	**317.9**	**317.9**

Table 17-i
Monthly Off-Site Motor Vehicle Fugitive

	Fugitive PM10 Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	10.3	10.3	10.3	10.3	10.3	10.3	10.3	0.0	10.3	10.3	10.3	10.3
Off-Site Water Trucks	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2	2.2	2.2
Low Bed Delivery Trucks	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6
Porto-Let Truck	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0
Off-Site Worker Commute Car	27.8	27.8	27.8	27.8	27.8	27.8	27.8	0.0	27.8	27.8	27.8	27.8
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Off-Site PV Panel Trucks	104.3	104.3	104.3	104.3	0.0	104.3	104.3	104.3	104.3	104.3	104.3	104.3
Off-Site Inverters	1.3	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	0.0	0.0
Off-Site Tracker Trucks	4.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0
Off-Site Cabling Trucks	0.6	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.0	0.0
Off-Site Fuel & Lube	2.7	2.7	2.7	2.7	0.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Off-site Concrete Truck	2.8	2.8	2.8	2.8	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Off-Site Electrical Truck	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Low Bed Delivery Trucks	1.4	1.4	1.4	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Porto-Let Truck	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Off-Site Worker Commuter Bus, Small	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Off-Site Worker Commute Car	153.6	153.6	153.6	153.6	0.0	153.6	153.6	153.6	153.6	153.6	153.6	153.6
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	43.1	43.1	43.1	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**317.9**	**312.0**	**312.0**	**355.5**	**85.3**	**361.4**	**317.9**	**276.1**	**317.9**	**317.9**	**312.0**	**312.0**

Table 17-i
Monthly Off-Site Motor Vehicle Fugitive

	Fugitive PM10 Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	10.3	10.3	10.3	10.3	10.3	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	2.2	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	27.8	27.8	27.8	27.8	27.8	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
Off-Site PV Panel Trucks	104.3	0.0	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	0.0
Off-Site Inverters	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0
Off-Site Tracker Trucks	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0
Off-Site Cabling Trucks	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
Off-Site Fuel & Lube	2.7	0.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	0.0
Off-site Concrete Truck	2.8	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	0.0
Off-Site Electrical Truck	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
Low Bed Delivery Trucks	1.4	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.0
Porto-Let Truck	1.3	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0
Off-Site Worker Commuter Bus, Small	1.3	0.0	2.0	2.7	3.3	4.0	4.7	5.3	6.0	6.6	0.0
Off-Site Worker Commute Car	153.6	0.0	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Off-Site Fuel & Lube	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3
Off-Site Worker Commute Car	43.1	43.1	43.1	0.0	0.0	0.0	0.0	0.0	43.1	43.1	43.1
TOTAL (lb/month)	**355.5**	**85.3**	**362.0**	**319.3**	**319.9**	**278.7**	**279.4**	**280.0**	**324.4**	**325.1**	**43.7**

Table 17-j
Monthly Off-Site Motor Vehicle Fugitive PM2.5 Emissions

Vehicle Type	Emission Factor (lb/mi)	Fugitive PM2.5 Emissions (lb/month)												
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	1.57E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3
Off-Site Water Trucks	1.57E-04	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	2.08E-04	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Off-Site Fencing Trucks	1.57E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3
Off-site Concrete Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	2.08E-04	0.5	0.5	0.5	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.5
Off-Site Worker Commuter Bus, Small	2.08E-04	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Off-Site Worker Commute Car	1.18E-04	5.7	5.7	5.7	0.0	5.7	5.7	5.7	0.0	5.7	5.7	5.7	0.0	5.7
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	1.57E-04	0.0	0.0	0.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0.0
Off-Site Water Trucks	1.57E-04	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Low Bed Delivery Trucks	1.57E-04	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Porto-Let Truck	2.08E-04	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Off-Site Worker Commute Car	1.18E-04	0.0	0.0	0.0	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Off-Site PV Panel Trucks	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.3
Off-Site Inverters	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Off-Site Tracker Trucks	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Off-Site Cabling Trucks	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Off-Site Fuel & Lube	2.08E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Off-site Concrete Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Off-Site Electrical Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Low Bed Delivery Trucks	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Porto-Let Truck	2.08E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Off-Site Worker Commuter Bus, Small	2.08E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Off-Site Worker Commute Car	1.18E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.4
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.18E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	2.08E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	1.57E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.18E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**7.6**	**7.7**	**7.7**	**12.8**	**19.8**	**19.8**	**19.8**	**12.8**	**19.8**	**19.8**	**19.8**	**12.8**	**91.7**

Table 17-j
Monthly Off-Site Motor Vehicle Fugitive

	Fugitive PM2.5 Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	5.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0.0	3.2	3.2
Off-Site Water Trucks	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7
Low Bed Delivery Trucks	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
Porto-Let Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
Off-Site Worker Commute Car	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	0.0	8.4	8.4
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Off-Site PV Panel Trucks	32.3	32.3	32.3	32.3	32.3	32.3	32.3	0.0	32.3	32.3	32.3	32.3
Off-Site Inverters	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Off-Site Tracker Trucks	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	1.2	1.2	1.2	1.2
Off-Site Cabling Trucks	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Off-Site Fuel & Lube	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Off-site Concrete Truck	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9
Off-Site Electrical Truck	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Low Bed Delivery Trucks	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
Porto-Let Truck	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
Off-Site Worker Commuter Bus, Small	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
Off-Site Worker Commute Car	46.4	46.4	46.4	46.4	46.4	46.4	46.4	0.0	46.4	46.4	46.4	46.4
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	5.8	5.8	5.8	5.8	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	13.0	13.0	13.0	0.0	0.0	0.0
TOTAL (lb/month)	**104.5**	**104.5**	**97.3**	**97.3**	**97.3**	**103.3**	**116.5**	**32.0**	**116.5**	**84.5**	**97.3**	**97.3**

Table 17-j
Monthly Off-Site Motor Vehicle Fugitive

	Fugitive PM2.5 Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0.0	3.2	3.2	3.2	3.2
Off-Site Water Trucks	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Low Bed Delivery Trucks	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Porto-Let Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Off-Site Worker Commute Car	8.4	8.4	8.4	8.4	8.4	8.4	8.4	0.0	8.4	8.4	8.4	8.4
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Off-Site PV Panel Trucks	32.3	32.3	32.3	32.3	0.0	32.3	32.3	32.3	32.3	32.3	32.3	32.3
Off-Site Inverters	0.4	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0
Off-Site Tracker Trucks	1.2	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2	0.0	0.0
Off-Site Cabling Trucks	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.0
Off-Site Fuel & Lube	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-site Concrete Truck	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-Site Electrical Truck	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Low Bed Delivery Trucks	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Porto-Let Truck	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Off-Site Worker Commuter Bus, Small	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Off-Site Worker Commute Car	46.4	46.4	46.4	46.4	0.0	46.4	46.4	46.4	46.4	46.4	46.4	46.4
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	13.0	13.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**97.3**	**95.5**	**95.5**	**108.6**	**25.9**	**110.4**	**97.3**	**84.5**	**97.3**	**97.3**	**95.5**	**95.5**

Table 17-j
Monthly Off-Site Motor Vehicle Fugitive

	Fugitive PM2.5 Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	3.2	3.2	3.2	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	8.4	8.4	8.4	8.4	8.4	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Off-Site PV Panel Trucks	32.3	0.0	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	0.0
Off-Site Inverters	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Off-Site Tracker Trucks	0.0	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
Off-Site Cabling Trucks	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Off-Site Fuel & Lube	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
Off-site Concrete Truck	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
Off-Site Electrical Truck	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Low Bed Delivery Trucks	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
Porto-Let Truck	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Off-Site Worker Commuter Bus, Small	0.5	0.0	0.7	0.9	1.1	1.4	1.6	1.8	2.1	2.3	0.0
Off-Site Worker Commute Car	46.4	0.0	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Off-Site Worker Commute Car	13.0	13.0	13.0	0.0	0.0	0.0	0.0	0.0	13.0	13.0	13.0
TOTAL (lb/month)	**108.6**	**25.9**	**110.6**	**97.7**	**98.0**	**85.4**	**85.6**	**85.9**	**99.3**	**99.5**	**13.2**

Table 17-k
Monthly Off-Site Motor Vehicle CO2 Emissions

Vehicle Type	Emission Factor (lb/mi)	CO2 Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	3.65E+00	8,024.7	8,024.7	8,024.7	0.0	8,024.7	8,024.7	8,024.7	0.0	8,024.7	8,024.7	8,024.7	0.0	8,024.7
Off-Site Water Trucks	3.67E+00	10,096.4	10,096.4	10,096.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	2.34E+00	1,284.4	1,284.4	1,284.4	0.0	1,284.4	1,284.4	1,284.4	0.0	1,284.4	1,284.4	1,284.4	0.0	1,284.4
Off-Site Fencing Trucks	3.65E+00	8,024.7	8,024.7	8,024.7	0.0	8,024.7	8,024.7	8,024.7	0.0	8,024.7	8,024.7	8,024.7	0.0	8,024.7
Off-site Concrete Truck	3.67E+00	0.0	1,009.6	1,009.6	0.0	1,009.6	1,009.6	1,009.6	0.0	1,009.6	1,009.6	1,009.6	0.0	1,009.6
Porto-Let Truck	2.34E+00	5,137.8	5,137.8	5,137.8	0.0	2,568.9	2,568.9	2,568.9	0.0	2,568.9	2,568.9	2,568.9	0.0	5,137.8
Off-Site Worker Commuter Bus, Small	2.37E+00	2,606.5	2,606.5	2,606.5	0.0	2,606.5	2,606.5	2,606.5	0.0	2,606.5	2,606.5	2,606.5	0.0	2,606.5
Off-Site Worker Commute Car	7.91E-01	38,267.7	38,267.7	38,267.7	0.0	38,267.7	38,267.7	38,267.7	0.0	38,267.7	38,267.7	38,267.7	0.0	38,267.7
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	3.65E+00	0.0	0.0	0.0	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	0.0
Off-Site Water Trucks	3.67E+00	0.0	0.0	0.0	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	0.0
Low Bed Delivery Trucks	3.65E+00	0.0	0.0	0.0	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	0.0
Porto-Let Truck	2.34E+00	0.0	0.0	0.0	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	0.0
Off-Site Worker Commute Car	7.91E-01	0.0	0.0	0.0	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,030.8
Off-Site PV Panel Trucks	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,624,067.2
Off-Site Inverters	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9,629.6
Off-Site Tracker Trucks	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28,888.8
Off-Site Cabling Trucks	3.67E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,038.6
Off-Site Fuel & Lube	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,275.6
Off-site Concrete Truck	3.67E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,192.9
Off-Site Electrical Truck	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,030.8
Low Bed Delivery Trucks	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,030.8
Porto-Let Truck	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,137.8
Off-Site Worker Commuter Bus, Small	2.37E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,212.9
Off-Site Worker Commute Car	7.91E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	312,229.3
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	7.91E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	3.65E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	2.34E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	3.67E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	7.91E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**73,442.1**	**74,451.8**	**74,451.8**	**154,779.9**	**216,566.4**	**216,566.4**	**216,566.4**	**154,779.9**	**216,566.4**	**216,566.4**	**216,566.4**	**154,779.9**	**3,114,120.4**

Note: Emissions for Off-Site PV Panel Trucks are for total round-trip distance to Port of Los Angeles (estimated 436 miles)

Table 17-k
Monthly Off-Site Motor Vehicle CO2 En

	CO2 Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	8,024.7	8,024.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	1,284.4	1,284.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	8,024.7	8,024.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	1,009.6	1,009.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	5,137.8	5,137.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	2,606.5	2,606.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	38,267.7	38,267.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	0.0	74,228.2	74,228.2
Off-Site Water Trucks	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	0.0	16,154.3	16,154.3
Low Bed Delivery Trucks	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	0.0	4,012.3	4,012.3
Porto-Let Truck	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	0.0	3,853.3	3,853.3
Off-Site Worker Commute Car	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	0.0	56,531.8	56,531.8
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8
Off-Site PV Panel Trucks	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	0.0	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2
Off-Site Inverters	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	0.0	9,629.6	9,629.6	9,629.6	9,629.6
Off-Site Tracker Trucks	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	0.0	28,888.8	28,888.8	28,888.8	28,888.8
Off-Site Cabling Trucks	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	0.0	4,038.6	4,038.6	4,038.6	4,038.6
Off-Site Fuel & Lube	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	0.0	10,275.6	10,275.6	10,275.6	10,275.6
Off-site Concrete Truck	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	0.0	20,192.9	20,192.9	20,192.9	20,192.9
Off-Site Electrical Truck	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8
Low Bed Delivery Trucks	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8
Porto-Let Truck	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	0.0	5,137.8	5,137.8	5,137.8	5,137.8
Off-Site Worker Commuter Bus, Small	5,212.9	5,212.9	5,212.9	5,212.9	5,212.9	5,212.9	5,212.9	0.0	5,212.9	5,212.9	5,212.9	5,212.9
Off-Site Worker Commute Car	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	0.0	312,229.3	312,229.3	312,229.3	312,229.3
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	38,963.4	38,963.4	38,963.4	38,963.4	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	642.2	642.2	642.2	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	87,667.7	87,667.7	87,667.7	0.0	0.0	0.0
TOTAL (lb/month)	**3,268,900.3**	**3,268,900.3**	**3,204,545.0**	**3,204,545.0**	**3,204,545.0**	**3,249,527.0**	**3,338,840.0**	**289,074.9**	**3,338,840.0**	**3,049,765.1**	**3,204,545.0**	**3,204,545.0**

Note: Emissions for Off-Site PV Panel Tru

Table 17-k
Monthly Off-Site Motor Vehicle CO2 En

Vehicle Type	CO2 Emissions (lb/month) Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	0.0	74,228.2	74,228.2	74,228.2	74,228.2
Off-Site Water Trucks	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	0.0	16,154.3	16,154.3	16,154.3	16,154.3
Low Bed Delivery Trucks	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	0.0	4,012.3	4,012.3	4,012.3	4,012.3
Porto-Let Truck	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	0.0	3,853.3	3,853.3	3,853.3	3,853.3
Off-Site Worker Commute Car	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	0.0	56,531.8	56,531.8	56,531.8	56,531.8
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	10,030.8	10,030.8	10,030.8	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8
Off-Site PV Panel Trucks	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	0.0	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2
Off-Site Inverters	9,629.6	0.0	0.0	0.0	0.0	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	0.0	0.0
Off-Site Tracker Trucks	28,888.8	0.0	0.0	0.0	0.0	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	0.0	0.0
Off-Site Cabling Trucks	4,038.6	0.0	0.0	0.0	0.0	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	0.0	0.0
Off-Site Fuel & Lube	10,275.6	10,275.6	10,275.6	10,275.6	0.0	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6
Off-site Concrete Truck	20,192.9	20,192.9	20,192.9	20,192.9	0.0	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9
Off-Site Electrical Truck	10,030.8	10,030.8	10,030.8	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8
Low Bed Delivery Trucks	10,030.8	10,030.8	10,030.8	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8
Porto-Let Truck	5,137.8	5,137.8	5,137.8	5,137.8	0.0	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8
Off-Site Worker Commuter Bus, Small	5,212.9	5,212.9	5,212.9	5,212.9	0.0	5,212.9	5,212.9	5,212.9	5,212.9	5,212.9	5,212.9	5,212.9
Off-Site Worker Commute Car	312,229.3	312,229.3	312,229.3	312,229.3	0.0	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	642.2	642.2	642.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	87,667.7	87,667.7	87,667.7	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**3,204,545.0**	**3,161,988.0**	**3,161,988.0**	**3,251,301.1**	**244,093.0**	**3,293,858.1**	**3,204,545.0**	**3,049,765.1**	**3,204,545.0**	**3,204,545.0**	**3,161,988.0**	**3,161,988.0**

Note: Emissions for Off-Site PV Panel Tru

Table 17-k
Monthly Off-Site Motor Vehicle CO2 En

Vehicle Type	CO2 Emissions (lb/month) Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	74,228.2	74,228.2	74,228.2	74,228.2	74,228.2	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	16,154.3	16,154.3	16,154.3	16,154.3	16,154.3	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	4,012.3	4,012.3	4,012.3	4,012.3	4,012.3	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	3,853.3	3,853.3	3,853.3	3,853.3	3,853.3	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	56,531.8	56,531.8	56,531.8	56,531.8	56,531.8	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	0.0
Off-Site PV Panel Trucks	2,624,067.2	0.0	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	2,624,067.2	0.0
Off-Site Inverters	0.0	0.0	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	9,629.6	0.0
Off-Site Tracker Trucks	0.0	0.0	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	28,888.8	0.0
Off-Site Cabling Trucks	0.0	0.0	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	4,038.6	0.0
Off-Site Fuel & Lube	10,275.6	0.0	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	10,275.6	0.0
Off-site Concrete Truck	20,192.9	0.0	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	20,192.9	0.0
Off-Site Electrical Truck	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	0.0
Low Bed Delivery Trucks	10,030.8	0.0	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	10,030.8	0.0
Porto-Let Truck	5,137.8	0.0	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	5,137.8	0.0
Off-Site Worker Commuter Bus, Small	5,212.9	0.0	7,819.4	10,425.8	13,032.3	15,638.7	18,245.2	20,851.7	23,458.1	26,064.6	0.0
Off-Site Worker Commute Car	312,229.3	0.0	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	312,229.3	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	1,003.1	1,003.1	1,003.1	0.0	0.0	0.0	0.0	0.0	1,003.1	1,003.1	1,003.1
Off-Site Fuel & Lube	642.2	642.2	642.2	0.0	0.0	0.0	0.0	0.0	642.2	642.2	642.2
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,019.3	2,019.3	2,019.3
Off-Site Worker Commute Car	87,667.7	87,667.7	87,667.7	0.0	0.0	0.0	0.0	0.0	87,667.7	87,667.7	87,667.7
TOTAL (lb/month)	**3,251,301.1**	**244,093.0**	**3,296,464.5**	**3,209,757.9**	**3,212,364.4**	**3,060,190.9**	**3,062,797.4**	**3,065,403.8**	**3,159,342.6**	**3,161,949.1**	**91,332.3**

Note: Emissions for Off-Site PV Panel Tru

Table 17-l
Monthly Off-Site Motor Vehicle CH4 Emissions

Vehicle Type	Emission Factor (lb/mi)	CH4 Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	3.89E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Off-Site Water Trucks	3.30E-05	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	3.89E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Off-site Concrete Truck	3.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	2.46E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	6.41E-05	3.1	3.1	3.1	0.0	3.1	3.1	3.1	0.0	3.1	3.1	3.1	0.0	3.1
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	3.89E-05	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0
Off-Site Water Trucks	3.30E-05	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Low Bed Delivery Trucks	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	6.41E-05	0.0	0.0	0.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Site PV Panel Trucks	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0
Off-Site Inverters	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Site Tracker Trucks	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Off-Site Cabling Trucks	3.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-site Concrete Truck	3.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Off-Site Electrical Truck	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Low Bed Delivery Trucks	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Porto-Let Truck	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	2.46E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Site Worker Commute Car	6.41E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.3
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	6.41E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	3.89E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	1.92E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	3.30E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	6.41E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**3.4**	**3.5**	**3.5**	**5.6**	**8.9**	**8.9**	**8.9**	**5.6**	**8.9**	**8.9**	**8.9**	**5.6**	**57.8**

Note: Emissions for Off-Site PV Panel Trucks are for total round-trip distance to Port of Los Angeles (estimated 436 miles)

Table 17-I
Monthly Off-Site Motor Vehicle CH4 Em

	CH4 Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8
Off-Site Water Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Low Bed Delivery Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0	4.6	4.6
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site PV Panel Trucks	28.0	28.0	28.0	28.0	28.0	28.0	28.0	0.0	28.0	28.0	28.0	28.0
Off-Site Inverters	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site Tracker Trucks	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Off-Site Cabling Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-site Concrete Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Off-Site Electrical Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Low Bed Delivery Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site Worker Commute Car	25.3	25.3	25.3	25.3	25.3	25.3	25.3	0.0	25.3	25.3	25.3	25.3
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	3.2	3.2	3.2	3.2	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	0.0	0.0	0.0
TOTAL (lb/month)	**63.4**	**63.4**	**60.0**	**60.0**	**60.0**	**63.2**	**70.4**	**15.9**	**70.4**	**54.4**	**60.0**	**60.0**

Note: Emissions for Off-Site PV Panel Tru

Table 17-I
Monthly Off-Site Motor Vehicle CH4 Em

	CH4 Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
Off-Site Water Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Low Bed Delivery Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0	4.6	4.6	4.6	4.6
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Off-Site PV Panel Trucks	28.0	28.0	28.0	28.0	0.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
Off-Site Inverters	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Off-Site Tracker Trucks	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0
Off-Site Cabling Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Off-site Concrete Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Off-Site Electrical Truck	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Low Bed Delivery Trucks	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Off-Site Worker Commute Car	25.3	25.3	25.3	25.3	0.0	25.3	25.3	25.3	25.3	25.3	25.3	25.3
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	7.1	7.1	7.1	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**60.0**	**59.6**	**59.6**	**66.7**	**12.7**	**67.1**	**60.0**	**54.4**	**60.0**	**60.0**	**59.6**	**59.6**

Note: Emissions for Off-Site PV Panel Tru

Table 17-I
Monthly Off-Site Motor Vehicle CH4 Em

	CH4 Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	4.6	4.6	4.6	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-Site PV Panel Trucks	28.0	0.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	0.0
Off-Site Inverters	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-Site Tracker Trucks	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Off-Site Cabling Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-site Concrete Truck	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Off-Site Electrical Truck	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Low Bed Delivery Trucks	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.0
Off-Site Worker Commute Car	25.3	0.0	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	7.1	7.1	7.1	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1
TOTAL (lb/month)	**66.7**	**12.7**	**67.2**	**60.1**	**60.1**	**54.5**	**54.6**	**54.6**	**61.7**	**61.8**	**7.1**

Note: Emissions for Off-Site PV Panel Tru

Table 17-m
Monthly Off-Site Motor Vehicle N2O Emissions

Vehicle Type	Emission Factor (lb/mi)	N2O Emissions (lb/month) Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
FENCE - MOBILIZATION														
Off-Site Flat Bed Trucks	1.22E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3
Off-Site Water Trucks	1.23E-04	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	1.22E-04	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3
Off-site Concrete Truck	1.23E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	7.80E-05	0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.2
Off-Site Worker Commuter Bus, Small	7.91E-05	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
Off-Site Worker Commute Car	3.41E-05	1.7	1.7	1.7	0.0	1.7	1.7	1.7	0.0	1.7	1.7	1.7	0.0	1.7
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK														
Off-Site Gravel Rock/AC trucks	1.22E-04	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0
Off-Site Water Trucks	1.23E-04	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Low Bed Delivery Trucks	1.22E-04	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Porto-Let Truck	7.80E-05	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-Site Worker Commute Car	3.41E-05	0.0	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0
PV PANEL CONSTRUCTION														
Off-Site Flat Bed Trucks	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Off-Site PV Panel Trucks	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.6
Off-Site Inverters	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Off-Site Tracker Trucks	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Off-Site Cabling Trucks	1.23E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Off-Site Fuel & Lube	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Off-site Concrete Truck	1.23E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Off-Site Electrical Truck	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Low Bed Delivery Trucks	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Porto-Let Truck	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Off-Site Worker Commuter Bus, Small	7.91E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Off-Site Worker Commute Car	3.41E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5
SUBSTATION-BLDG-WATER TANK CONSTRUCTION														
Off-site Insulation Truck	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	3.41E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning														
Off-Site Flat Bed Trucks	1.22E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	7.80E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	1.23E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	3.41E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)		**2.8**	**2.9**	**2.9**	**5.7**	**8.2**	**8.2**	**8.2**	**5.7**	**8.2**	**8.2**	**8.2**	**5.7**	**107.4**

Note: Emissions for Off-Site PV Panel Trucks are for total round-trip distance to Port of Los Angeles (estimated 436 miles)

Table 17-m
Monthly Off-Site Motor Vehicle N2O En

	N2O Emissions (lb/month)											
Vehicle Type	**Month 14**	**Month 15**	**Month 16**	**Month 17**	**Month 18**	**Month 19**	**Month 20**	**Month 21**	**Month 22**	**Month 23**	**Month 24**	**Month 25**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0	2.5	2.5
Off-Site Water Trucks	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
Low Bed Delivery Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Porto-Let Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Off-Site Worker Commute Car	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0	2.4	2.4
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Off-Site PV Panel Trucks	87.6	87.6	87.6	87.6	87.6	87.6	87.6	0.0	87.6	87.6	87.6	87.6
Off-Site Inverters	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Off-Site Tracker Trucks	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0
Off-Site Cabling Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site Fuel & Lube	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Off-site Concrete Truck	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7
Off-Site Electrical Truck	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Low Bed Delivery Trucks	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
Porto-Let Truck	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Off-Site Worker Commuter Bus, Small	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
Off-Site Worker Commute Car	13.5	13.5	13.5	13.5	13.5	13.5	13.5	0.0	13.5	13.5	13.5	13.5
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.7	1.7	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	3.8	3.8	3.8	0.0	0.0	0.0
TOTAL (lb/month)	**113.2**	**113.2**	**110.6**	**110.6**	**110.6**	**112.5**	**116.3**	**11.4**	**116.3**	**104.9**	**110.6**	**110.6**

Note: Emissions for Off-Site PV Panel Tru

Table 17-m
Monthly Off-Site Motor Vehicle N2O En

	N2O Emissions (lb/month)											
Vehicle Type	**Month 26**	**Month 27**	**Month 28**	**Month 29**	**Month 30**	**Month 31**	**Month 32**	**Month 33**	**Month 34**	**Month 35**	**Month 36**	**Month 37**
FENCE - MOBILIZATION												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO												
Off-Site Gravel Rock/AC trucks	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0	2.5	2.5	2.5	2.5
Off-Site Water Trucks	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5
Low Bed Delivery Trucks	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Porto-Let Truck	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Off-Site Worker Commute Car	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0	2.4	2.4	2.4	2.4
PV PANEL CONSTRUCTION												
Off-Site Flat Bed Trucks	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Off-Site PV Panel Trucks	87.6	87.6	87.6	87.6	0.0	87.6	87.6	87.6	87.6	87.6	87.6	87.6
Off-Site Inverters	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0
Off-Site Tracker Trucks	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Off-Site Cabling Trucks	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Off-Site Fuel & Lube	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Off-site Concrete Truck	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Off-Site Electrical Truck	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Low Bed Delivery Trucks	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Porto-Let Truck	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Off-Site Worker Commuter Bus, Small	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Off-Site Worker Commute Car	13.5	13.5	13.5	13.5	0.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5
SUBSTATION-BLDG-WATER TANK CO												
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning												
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	3.8	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (lb/month)	**110.6**	**109.2**	**109.2**	**113.0**	**9.6**	**114.5**	**110.6**	**104.9**	**110.6**	**110.6**	**109.2**	**109.2**

Note: Emissions for Off-Site PV Panel Tru

Table 17-m
Monthly Off-Site Motor Vehicle N2O En

	N2O Emissions (lb/month)										
Vehicle Type	**Month 38**	**Month 39**	**Month 40**	**Month 41**	**Month 42**	**Month 43**	**Month 44**	**Month 45**	**Month 46**	**Month 47**	**Month 48**
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fencing Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commuter Bus, Small	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIVIL IMPROVEMENTS - GRADING/RO											
Off-Site Gravel Rock/AC trucks	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Water Trucks	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Low Bed Delivery Trucks	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Porto-Let Truck	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	2.4	2.4	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Off-Site PV Panel Trucks	87.6	0.0	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	0.0
Off-Site Inverters	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Off-Site Tracker Trucks	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Off-Site Cabling Trucks	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Off-Site Fuel & Lube	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Off-site Concrete Truck	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0
Off-Site Electrical Truck	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Low Bed Delivery Trucks	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Porto-Let Truck	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Off-Site Worker Commuter Bus, Small	0.2	0.0	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.0
Off-Site Worker Commute Car	13.5	0.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	0.0
SUBSTATION-BLDG-WATER TANK CO											
Off-site Insulation Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Roof truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Wall Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Structural Steel truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Mechanical Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Architechtural Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Worker Commute Car	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Testing & Commissioning											
Off-Site Flat Bed Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-Site Fuel & Lube	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-site Concrete Truck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Off-Site Worker Commute Car	3.8	3.8	3.8	0.0	0.0	0.0	0.0	0.0	3.8	3.8	3.8
TOTAL (lb/month)	**113.0**	**9.6**	**114.6**	**110.8**	**110.9**	**105.3**	**105.3**	**105.4**	**109.4**	**109.5**	**3.9**

Note: Emissions for Off-Site PV Panel Tru

Table 18-a
Off-Site Construction CO Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	5.4	7.7	10.3	12.9	15.2	17.2	19.2	21.5	24.4	24.9	27.7	29.3	31.6
12-Month Total (ton/year)	**5.4**	**7.7**	**10.3**	**12.9**	**15.2**	**17.2**	**19.2**	**21.5**	**24.4**	**24.9**	**27.7**	**29.3**	**31.6**
Maximum 12-Month Total (ton/year)	**31.7**												
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	469.4	470.3	470.3	747.1	1,206.4	1,206.4	1,206.4	747.1	1,206.4	1,206.4	1,206.4	747.1	4,957.3
Monthly Total (lb/month)	**469.4**	**470.3**	**470.3**	**747.1**	**1,206.4**	**1,206.4**	**1,206.4**	**747.1**	**1,206.4**	**1,206.4**	**1,206.4**	**747.1**	**4,957.3**
Maximum Monthly Emissions (lb/month)	**6,692.9**												
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	21.3	21.4	21.4	34.0	54.8	54.8	54.8	34.0	54.8	54.8	54.8	34.0	225.3
Daily Total (lb/day)	**21.3**	**21.4**	**21.4**	**34.0**	**54.8**	**54.8**	**54.8**	**34.0**	**54.8**	**54.8**	**54.8**	**34.0**	**225.3**
Maximum Daily Emissions (lb/day)	**304.2**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

Source	Daily (lb/day)	Annual (ton/year)
Motor Vehicle Exhaust	304.22	31.70
Maximum Off-Site Total	**304.22**	**31.70**
Peak Month	**20**	**14**

Table 18-a
Off-Site Construction CO Emissions Summa

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	31.7	31.5	31.2	31.2	31.7	29.9	30.2	29.5	30.6	29.9	30.3	30.2	30.2
12-Month Total (ton/year)	**31.7**	**31.5**	**31.2**	**31.2**	**31.7**	**29.9**	**30.2**	**29.5**	**30.6**	**29.9**	**30.3**	**30.2**	**30.2**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	5,704.4	5,704.4	5,243.0	5,243.0	5,243.0	5,693.2	6,692.9	2,196.9	6,692.9	4,496.0	5,243.0	5,243.0	5,243.0
Monthly Total (lb/month)	**5,704.4**	**5,704.4**	**5,243.0**	**5,243.0**	**5,243.0**	**5,693.2**	**6,692.9**	**2,196.9**	**6,692.9**	**4,496.0**	**5,243.0**	**5,243.0**	**5,243.0**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	259.3	259.3	238.3	238.3	238.3	258.8	304.2	99.9	304.2	204.4	238.3	238.3	238.3
Daily Total (lb/day)	**259.3**	**259.3**	**238.3**	**238.3**	**238.3**	**258.8**	**304.2**	**99.9**	**304.2**	**204.4**	**238.3**	**238.3**	**238.3**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-a
Off-Site Construction CO Emissions Summa

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	30.7	29.0	29.5	29.0	30.8	29.9	29.5	29.5	29.7	29.8	27.7	25.1	22.0
12-Month Total (ton/year)	**30.7**	**29.0**	**29.5**	**29.0**	**30.8**	**29.9**	**29.5**	**29.5**	**29.7**	**29.8**	**27.7**	**25.1**	**22.0**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	5,197.0	5,197.0	6,196.7	1,746.7	6,242.7	5,243.0	4,496.0	5,243.0	5,243.0	5,197.0	5,197.0	6,196.7	1,746.7
Monthly Total (lb/month)	**5,197.0**	**5,197.0**	**6,196.7**	**1,746.7**	**6,242.7**	**5,243.0**	**4,496.0**	**5,243.0**	**5,243.0**	**5,197.0**	**5,197.0**	**6,196.7**	**1,746.7**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	236.2	236.2	281.7	79.4	283.8	238.3	204.4	238.3	238.3	236.2	236.2	281.7	79.4
Daily Total (lb/day)	**236.2**	**236.2**	**281.7**	**79.4**	**283.8**	**238.3**	**204.4**	**238.3**	**238.3**	**236.2**	**236.2**	**281.7**	**79.4**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-a
Off-Site Construction CO Emissions Summa

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Off-Site Motor Vehicle Exhaust	21.1	18.0	15.4	12.8	10.5	8.3	6.0	3.3	0.5
12-Month Total (ton/year)	**21.1**	**18.0**	**15.4**	**12.8**	**10.5**	**8.3**	**6.0**	**3.3**	**0.5**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Off-Site Motor Vehicle Exhaust	6,244.7	5,247.2	5,249.3	4,504.3	4,506.4	4,508.4	5,511.9	5,514.0	1,001.4
Monthly Total (lb/month)	**6,244.7**	**5,247.2**	**5,249.3**	**4,504.3**	**4,506.4**	**4,508.4**	**5,511.9**	**5,514.0**	**1,001.4**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Off-Site Motor Vehicle Exhaust	283.9	238.5	238.6	204.7	204.8	204.9	250.5	250.6	45.5
Daily Total (lb/day)	**283.9**	**238.5**	**238.6**	**204.7**	**204.8**	**204.9**	**250.5**	**250.6**	**45.5**
Maximum Daily Emissions (lb/day)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-b
Off-Site Construction ROG Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.7	1.0	1.4	1.7	2.0	2.3	2.6	2.9	3.3	3.4	3.7	3.9	4.3
12-Month Total (ton/year)	**0.7**	**1.0**	**1.4**	**1.7**	**2.0**	**2.3**	**2.6**	**2.9**	**3.3**	**3.4**	**3.7**	**3.9**	**4.3**
Maximum 12-Month Total (ton/year)	**4.3**												
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	58.9	59.1	59.1	97.9	154.6	154.6	154.6	97.9	154.6	154.6	154.6	97.9	674.8
Monthly Total (lb/month)	**58.9**	**59.1**	**59.1**	**97.9**	**154.6**	**154.6**	**154.6**	**97.9**	**154.6**	**154.6**	**154.6**	**97.9**	**674.8**
Maximum Monthly Emissions (lb/month)	**887.9**												
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	2.7	2.7	2.7	4.5	7.0	7.0	7.0	4.5	7.0	7.0	7.0	4.5	30.7
Daily Total (lb/day)	**2.7**	**2.7**	**2.7**	**4.5**	**7.0**	**7.0**	**7.0**	**4.5**	**7.0**	**7.0**	**7.0**	**4.5**	**30.7**
Maximum Daily Emissions (lb/day)	**40.4**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

Source	Daily (lb/day)	Annual (ton/year)
Motor Vehicle Exhaust	40.36	4.28
Maximum Off-Site Total	**40.36**	**4.28**
Peak Month	**20**	**14**

Table 18-b
Off-Site Construction ROG Emissions Sum

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	4.3	4.2	4.2	4.2	4.3	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1
12-Month Total (ton/year)	**4.3**	**4.2**	**4.2**	**4.2**	**4.3**	**4.0**	**4.0**	**4.0**	**4.1**	**4.1**	**4.1**	**4.1**	**4.1**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	772.8	772.8	715.6	715.6	715.6	769.5	887.9	270.3	887.9	617.7	715.6	715.6	715.6
Monthly Total (lb/month)	**772.8**	**772.8**	**715.6**	**715.6**	**715.6**	**769.5**	**887.9**	**270.3**	**887.9**	**617.7**	**715.6**	**715.6**	**715.6**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	35.1	35.1	32.5	32.5	32.5	35.0	40.4	12.3	40.4	28.1	32.5	32.5	32.5
Daily Total (lb/day)	**35.1**	**35.1**	**32.5**	**32.5**	**32.5**	**35.0**	**40.4**	**12.3**	**40.4**	**28.1**	**32.5**	**32.5**	**32.5**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-b
Off-Site Construction ROG Emissions Sumı

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	4.1	3.9	4.0	3.9	4.2	4.1	4.0	4.0	4.0	4.0	3.7	3.4	3.0
12-Month Total (ton/year)	**4.1**	**3.9**	**4.0**	**3.9**	**4.2**	**4.1**	**4.0**	**4.0**	**4.0**	**4.0**	**3.7**	**3.4**	**3.0**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	706.0	706.0	824.4	216.4	834.1	715.6	617.7	715.6	715.6	706.0	706.0	824.4	216.4
Monthly Total (lb/month)	**706.0**	**706.0**	**824.4**	**216.4**	**834.1**	**715.6**	**617.7**	**715.6**	**715.6**	**706.0**	**706.0**	**824.4**	**216.4**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	32.1	32.1	37.5	9.8	37.9	32.5	28.1	32.5	32.5	32.1	32.1	37.5	9.8
Daily Total (lb/day)	**32.1**	**32.1**	**37.5**	**9.8**	**37.9**	**32.5**	**28.1**	**32.5**	**32.5**	**32.1**	**32.1**	**37.5**	**9.8**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-b
Off-Site Construction ROG Emissions Sum

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Off-Site Motor Vehicle Exhaust	2.9	2.4	2.1	1.7	1.4	1.1	0.8	0.4	0.1
12-Month Total (ton/year)	**2.9**	**2.4**	**2.1**	**1.7**	**1.4**	**1.1**	**0.8**	**0.4**	**0.1**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Off-Site Motor Vehicle Exhaust	834.6	716.8	717.3	620.0	620.6	621.2	740.6	741.2	118.8
Monthly Total (lb/month)	**834.6**	**716.8**	**717.3**	**620.0**	**620.6**	**621.2**	**740.6**	**741.2**	**118.8**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Off-Site Motor Vehicle Exhaust	37.9	32.6	32.6	28.2	28.2	28.2	33.7	33.7	5.4
Daily Total (lb/day)	**37.9**	**32.6**	**32.6**	**28.2**	**28.2**	**28.2**	**33.7**	**33.7**	**5.4**
Maximum Daily Emissions (lb/day)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-c
Off-Site Construction NOx Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	4.3	7.5	11.0	14.5	17.7	20.8	23.9	27.1	30.3	30.3	33.5	36.3	39.5
12-Month Total (ton/year)	**4.3**	**7.5**	**11.0**	**14.5**	**17.7**	**20.8**	**23.9**	**27.1**	**30.3**	**30.3**	**33.5**	**36.3**	**39.5**
Maximum 12-Month Total (ton/year)	**39.7**												
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	266.9	273.7	273.7	736.7	931.4	931.4	931.4	736.7	931.4	931.4	931.4	736.7	6,595.1
Monthly Total (lb/month)	**266.9**	**273.7**	**273.7**	**736.7**	**931.4**	**931.4**	**931.4**	**736.7**	**931.4**	**931.4**	**931.4**	**736.7**	**6,595.1**
Maximum Monthly Emissions (lb/month)	**7,331.9**												
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	12.1	12.4	12.4	33.5	42.3	42.3	42.3	33.5	42.3	42.3	42.3	33.5	299.8
Daily Total (lb/day)	**12.1**	**12.4**	**12.4**	**33.5**	**42.3**	**42.3**	**42.3**	**33.5**	**42.3**	**42.3**	**42.3**	**33.5**	**299.8**
Maximum Daily Emissions (lb/day)	**333.3**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

Source	Daily (lb/day)	Annual (ton/year)
Motor Vehicle Exhaust	333.27	39.72
Maximum Off-Site Total	**333.27**	**39.72**
Peak Month	**14**	**14**

Table 18-c
Off-Site Construction NOx Emissions Summ

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	39.7	39.6	39.4	39.2	39.1	36.0	36.0	35.9	38.6	38.5	38.9	38.7	38.6
12-Month Total (ton/year)	**39.7**	**39.6**	**39.4**	**39.2**	**39.1**	**36.0**	**36.0**	**35.9**	**38.6**	**38.5**	**38.9**	**38.7**	**38.6**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	7,331.9	7,331.9	7,126.4	7,126.4	7,126.4	7,209.3	7,310.1	920.4	7,310.1	6,389.6	7,126.4	7,126.4	7,126.4
Monthly Total (lb/month)	**7,331.9**	**7,331.9**	**7,126.4**	**7,126.4**	**7,126.4**	**7,209.3**	**7,310.1**	**920.4**	**7,310.1**	**6,389.6**	**7,126.4**	**7,126.4**	**7,126.4**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	333.3	333.3	323.9	323.9	323.9	327.7	332.3	41.8	332.3	290.4	323.9	323.9	323.9
Daily Total (lb/day)	**333.3**	**333.3**	**323.9**	**323.9**	**323.9**	**327.7**	**332.3**	**41.8**	**332.3**	**290.4**	**323.9**	**323.9**	**323.9**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-c
Off-Site Construction NOx Emissions Summ

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	38.5	35.5	35.7	35.8	39.0	38.6	38.3	38.4	38.1	37.9	34.5	31.1	27.6
12-Month Total (ton/year)	**38.5**	**35.5**	**35.7**	**35.8**	**39.0**	**38.6**	**38.3**	**38.4**	**38.1**	**37.9**	**34.5**	**31.1**	**27.6**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	6,827.0	6,827.0	6,927.7	837.5	7,227.1	7,126.4	6,389.6	7,126.4	7,126.4	6,827.0	6,827.0	6,927.7	837.5
Monthly Total (lb/month)	**6,827.0**	**6,827.0**	**6,927.7**	**837.5**	**7,227.1**	**7,126.4**	**6,389.6**	**7,126.4**	**7,126.4**	**6,827.0**	**6,827.0**	**6,927.7**	**837.5**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	310.3	310.3	314.9	38.1	328.5	323.9	290.4	323.9	323.9	310.3	310.3	314.9	38.1
Daily Total (lb/day)	**310.3**	**310.3**	**314.9**	**38.1**	**328.5**	**323.9**	**290.4**	**323.9**	**323.9**	**310.3**	**310.3**	**314.9**	**38.1**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-c
Off-Site Construction NOx Emissions Summ

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Off-Site Motor Vehicle Exhaust	27.2	23.6	20.0	16.4	13.2	10.0	6.7	3.4	0.1
12-Month Total (ton/year)	**27.2**	**23.6**	**20.0**	**16.4**	**13.2**	**10.0**	**6.7**	**3.4**	**0.1**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Off-Site Motor Vehicle Exhaust	7,245.8	7,163.6	7,182.2	6,464.1	6,482.7	6,501.3	6,634.3	6,652.9	114.4
Monthly Total (lb/month)	**7,245.8**	**7,163.6**	**7,182.2**	**6,464.1**	**6,482.7**	**6,501.3**	**6,634.3**	**6,652.9**	**114.4**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Off-Site Motor Vehicle Exhaust	329.4	325.6	326.5	293.8	294.7	295.5	301.6	302.4	5.2
Daily Total (lb/day)	**329.4**	**325.6**	**326.5**	**293.8**	**294.7**	**295.5**	**301.6**	**302.4**	**5.2**
Maximum Daily Emissions (lb/day)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

Table 18-d
Off-Site Construction SOx Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
12-Month Total (ton/year)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Maximum 12-Month Total (ton/year)	**0.1**												
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	0.8	0.8	0.8	1.6	2.3	2.3	2.3	1.6	2.3	2.3	2.3	1.6	12.6
Monthly Total (lb/month)	**0.8**	**0.8**	**0.8**	**1.6**	**2.3**	**2.3**	**2.3**	**1.6**	**2.3**	**2.3**	**2.3**	**1.6**	**12.6**
Maximum Monthly Emissions (lb/month)	**15.0**												
Daily Emissions (lb/day)[b]													
On-Site Motor Vehicle Exhaust	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6
Daily Total (lb/day)	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.6**
Maximum Daily Emissions (lb/day)	**0.7**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

Source[a]	Daily (lb/day)	Annual (ton/year)
Motor Vehicle Exhaust	0.68	0.08
Maximum Off-Site Total	**0.68**	**0.08**
Peak Month	**20**	**14**

[a] Emissions from source during period with maximum on-site total emissions

Table 18-d
Off-Site Construction SOx Emissions Summ

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12-Month Total (ton/year)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	14.2	14.2	13.5	13.5	13.5	14.0	15.0	3.1	15.0	11.9	13.5	13.5	13.5
Monthly Total (lb/month)	**14.2**	**14.2**	**13.5**	**13.5**	**13.5**	**14.0**	**15.0**	**3.1**	**15.0**	**11.9**	**13.5**	**13.5**	**13.5**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
On-Site Motor Vehicle Exhaust	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.1	0.7	0.5	0.6	0.6	0.6
Daily Total (lb/day)	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.7**	**0.1**	**0.7**	**0.5**	**0.6**	**0.6**	**0.6**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source[a]
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 18-d
Off-Site Construction SOx Emissions Sumn

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12-Month Total (ton/year)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	13.1	13.1	14.1	2.6	14.5	13.5	11.9	13.5	13.5	13.1	13.1	14.1	2.6
Monthly Total (lb/month)	**13.1**	**13.1**	**14.1**	**2.6**	**14.5**	**13.5**	**11.9**	**13.5**	**13.5**	**13.1**	**13.1**	**14.1**	**2.6**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
On-Site Motor Vehicle Exhaust	0.6	0.6	0.6	0.1	0.7	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.1
Daily Total (lb/day)	**0.6**	**0.6**	**0.6**	**0.1**	**0.7**	**0.6**	**0.5**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.1**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source[a]
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 18-d
Off-Site Construction SOx Emissions Sumn

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Off-Site Motor Vehicle Exhaust	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Month Total (ton/year)	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Off-Site Motor Vehicle Exhaust	14.6	13.6	13.6	12.0	12.1	12.1	13.1	13.2	1.0
Monthly Total (lb/month)	**14.6**	**13.6**	**13.6**	**12.0**	**12.1**	**12.1**	**13.1**	**13.2**	**1.0**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
On-Site Motor Vehicle Exhaust	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.0
Daily Total (lb/day)	**0.7**	**0.6**	**0.6**	**0.5**	**0.5**	**0.5**	**0.6**	**0.6**	**0.0**
Maximum Daily Emissions (lb/day)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 worl

Source[a]
Motor Vehicle Exhaust
Maximum Off-Site Total
Peak Month

[a] Emissions from source during period with ma

Table 18-e
Off-Site Construction PM10 Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9
Off-Site Motor Vehicle Fugitive	0.3	0.4	0.6	0.7	0.9	1.0	1.1	1.3	1.4	1.5	1.6	1.7	1.9
12-Month Total (ton/year)	**0.4**	**0.6**	**0.9**	**1.1**	**1.3**	**1.5**	**1.7**	**1.9**	**2.2**	**2.2**	**2.4**	**2.6**	**2.8**
Maximum 12-Month Total (ton/year)	**2.8**												
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	6.3	6.4	6.4	17.2	21.7	21.7	21.7	17.2	21.7	21.7	21.7	17.2	158.5
Off-Site Motor Vehicle Fugitive	24.8	24.9	24.9	41.9	64.7	64.7	64.7	41.9	64.7	64.7	64.7	41.9	299.6
Monthly Total (lb/month)	**31.0**	**31.3**	**31.3**	**59.0**	**86.5**	**86.5**	**86.5**	**59.0**	**86.5**	**86.5**	**86.5**	**59.0**	**458.0**
Maximum Monthly Emissions (lb/month)	**554.9**												
Daily Emissions (lb/day)[b]													
On-Site Motor Vehicle Exhaust	0.3	0.3	0.3	0.8	1.0	1.0	1.0	0.8	1.0	1.0	1.0	0.8	7.2
Off-Site Motor Vehicle Fugitive	1.1	1.1	1.1	1.9	2.9	2.9	2.9	1.9	2.9	2.9	2.9	1.9	13.6
Daily Total (lb/day)	**1.4**	**1.4**	**1.4**	**2.7**	**3.9**	**3.9**	**3.9**	**2.7**	**3.9**	**3.9**	**3.9**	**2.7**	**20.8**
Maximum Daily Emissions (lb/day)	**25.2**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

Source	Daily (lb/day)	Annual (ton/year)
Motor Vehicle Exhaust	7.89	0.95
Off-Site Motor Vehicle Fugitive	17.34	1.88
Maximum Off-Site Total	**25.22**	**2.83**
Peak Month	**20**	**14**

Table 18-e
Off-Site Construction PM10 Emissions Sum

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Off-Site Motor Vehicle Fugitive	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8
12-Month Total (ton/year)	**2.8**	**2.8**	**2.8**	**2.8**	**2.8**	**2.6**	**2.6**	**2.6**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	175.6	175.6	170.6	170.6	170.6	172.1	173.6	20.1	173.6	153.4	170.6	170.6	170.6
Off-Site Motor Vehicle Fugitive	341.5	341.5	317.9	317.9	317.9	337.9	381.4	105.3	381.4	276.1	317.9	317.9	317.9
Monthly Total (lb/month)	**517.1**	**517.1**	**488.5**	**488.5**	**488.5**	**510.1**	**554.9**	**125.4**	**554.9**	**429.5**	**488.5**	**488.5**	**488.5**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
On-Site Motor Vehicle Exhaust	8.0	8.0	7.8	7.8	7.8	7.8	7.9	0.9	7.9	7.0	7.8	7.8	7.8
Off-Site Motor Vehicle Fugitive	15.5	15.5	14.5	14.5	14.5	15.4	17.3	4.8	17.3	12.5	14.5	14.5	14.5
Daily Total (lb/day)	**23.5**	**23.5**	**22.2**	**22.2**	**22.2**	**23.2**	**25.2**	**5.7**	**25.2**	**19.5**	**22.2**	**22.2**	**22.2**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

Source
Motor Vehicle Exhaust
Off-Site Motor Vehicle Fugitive
Maximum Off-Site Total
Peak Month

Table 18-e
Off-Site Construction PM10 Emissions Sum

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.7	0.7
Off-Site Motor Vehicle Fugitive	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.6	1.5	1.3
12-Month Total (ton/year)	**2.7**	**2.6**	**2.6**	**2.6**	**2.8**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	**2.5**	**2.2**	**2.0**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	163.4	163.4	164.8	18.6	172.0	170.6	153.4	170.6	170.6	163.4	163.4	164.8	18.6
Off-Site Motor Vehicle Fugitive	312.0	312.0	355.5	85.3	361.4	317.9	276.1	317.9	317.9	312.0	312.0	355.5	85.3
Monthly Total (lb/month)	**475.4**	**475.4**	**520.3**	**103.9**	**533.4**	**488.5**	**429.5**	**488.5**	**488.5**	**475.4**	**475.4**	**520.3**	**103.9**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
On-Site Motor Vehicle Exhaust	7.4	7.4	7.5	0.8	7.8	7.8	7.0	7.8	7.8	7.4	7.4	7.5	0.8
Off-Site Motor Vehicle Fugitive	14.2	14.2	16.2	3.9	16.4	14.5	12.5	14.5	14.5	14.2	14.2	16.2	3.9
Daily Total (lb/day)	**21.6**	**21.6**	**23.6**	**4.7**	**24.2**	**22.2**	**19.5**	**22.2**	**22.2**	**21.6**	**21.6**	**23.6**	**4.7**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

Source
Motor Vehicle Exhaust
Off-Site Motor Vehicle Fugitive
Maximum Off-Site Total
Peak Month

Table 18-e
Off-Site Construction PM10 Emissions Sum

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Off-Site Motor Vehicle Exhaust	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.0
Off-Site Motor Vehicle Fugitive	1.3	1.1	0.9	0.8	0.6	0.5	0.3	0.2	0.0
12-Month Total (ton/year)	**1.9**	**1.7**	**1.4**	**1.2**	**0.9**	**0.7**	**0.5**	**0.3**	**0.0**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Off-Site Motor Vehicle Exhaust	172.5	171.5	172.0	155.3	155.7	156.2	158.4	158.8	1.7
Off-Site Motor Vehicle Fugitive	362.0	319.3	319.9	278.7	279.4	280.0	324.4	325.1	43.7
Monthly Total (lb/month)	**534.5**	**490.8**	**491.9**	**434.0**	**435.1**	**436.3**	**482.8**	**483.9**	**45.4**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
On-Site Motor Vehicle Exhaust	7.8	7.8	7.8	7.1	7.1	7.1	7.2	7.2	0.1
Off-Site Motor Vehicle Fugitive	16.5	14.5	14.5	12.7	12.7	12.7	14.7	14.8	2.0
Daily Total (lb/day)	**24.3**	**22.3**	**22.4**	**19.7**	**19.8**	**19.8**	**21.9**	**22.0**	**2.1**
Maximum Daily Emissions (lb/day)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

Source
Motor Vehicle Exhaust
Off-Site Motor Vehicle Fugitive
Maximum Off-Site Total
Peak Month

Table 18-f
Off-Site Construction PM2.5 Emissions Summary

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.8	0.9
Off-Site Motor Vehicle Fugitive	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6
12-Month Total (ton/year)	**0.2**	**0.3**	**0.4**	**0.5**	**0.7**	**0.8**	**0.9**	**1.0**	**1.1**	**1.1**	**1.2**	**1.3**	**1.4**
Maximum 12-Month Total (ton/year)	**1.4**												
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	5.8	5.9	5.9	15.8	20.0	20.0	20.0	15.8	20.0	20.0	20.0	15.8	145.8
Off-Site Motor Vehicle Fugitive	7.6	7.7	7.7	12.8	19.8	19.8	19.8	12.8	19.8	19.8	19.8	12.8	91.7
Monthly Total (lb/month)	**13.4**	**13.5**	**13.5**	**28.6**	**39.8**	**39.8**	**39.8**	**28.6**	**39.8**	**39.8**	**39.8**	**28.6**	**237.5**
Maximum Monthly Emissions (lb/month)	**276.1**												
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	0.3	0.3	0.3	0.7	0.9	0.9	0.9	0.7	0.9	0.9	0.9	0.7	6.6
Off-Site Motor Vehicle Fugitive	0.3	0.3	0.3	0.6	0.9	0.9	0.9	0.6	0.9	0.9	0.9	0.6	4.2
Daily Total (lb/day)	**0.6**	**0.6**	**0.6**	**1.3**	**1.8**	**1.8**	**1.8**	**1.3**	**1.8**	**1.8**	**1.8**	**1.3**	**10.8**
Maximum Daily Emissions (lb/day)	**12.5**												

[a] The value for each month is the total for that month and the next 11 months

[b] Daily emissions = Monthly emissions / 21 working days/month

Source[a]	Daily (lb/day)	Annual (ton/year)
Motor Vehicle Exhaust	7.26	0.87
Off-Site Motor Vehicle Fugitive	5.29	0.57
Maximum Off-Site Total	**12.55**	**1.45**
Peak Month	**20**	**14**

Table 18-f
Off-Site Construction PM2.5 Emissions Sun

	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.8
Off-Site Motor Vehicle Fugitive	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6
12-Month Total (ton/year)	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.3**	**1.3**	**1.3**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	161.5	161.5	156.9	156.9	156.9	158.3	159.6	18.5	159.6	141.1	156.9	156.9	156.9
Off-Site Motor Vehicle Fugitive	104.5	104.5	97.3	97.3	97.3	103.3	116.5	32.0	116.5	84.5	97.3	97.3	97.3
Monthly Total (lb/month)	**266.0**	**266.0**	**254.2**	**254.2**	**254.2**	**261.7**	**276.1**	**50.5**	**276.1**	**225.6**	**254.2**	**254.2**	**254.2**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	7.3	7.3	7.1	7.1	7.1	7.2	7.3	0.8	7.3	6.4	7.1	7.1	7.1
Off-Site Motor Vehicle Fugitive	4.8	4.8	4.4	4.4	4.4	4.7	5.3	1.5	5.3	3.8	4.4	4.4	4.4
Daily Total (lb/day)	**12.1**	**12.1**	**11.6**	**11.6**	**11.6**	**11.9**	**12.5**	**2.3**	**12.5**	**10.3**	**11.6**	**11.6**	**11.6**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

Source[a]
Motor Vehicle Exhaust
Off-Site Motor Vehicle Fugitive
Maximum Off-Site Total
Peak Month

Table 18-f
Off-Site Construction PM2.5 Emissions Sun

	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39
12-Month Running Emissions (ton/year)[a]													
Off-Site Motor Vehicle Exhaust	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6
Off-Site Motor Vehicle Fugitive	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
12-Month Total (ton/year)	**1.4**	**1.3**	**1.3**	**1.3**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.4**	**1.3**	**1.1**	**1.0**
Maximum 12-Month Total (ton/year)													
Monthly Emissions (lb/month)													
Off-Site Motor Vehicle Exhaust	150.3	150.3	151.6	17.1	158.2	156.9	141.1	156.9	156.9	150.3	150.3	151.6	17.1
Off-Site Motor Vehicle Fugitive	95.5	95.5	108.6	25.9	110.4	97.3	84.5	97.3	97.3	95.5	95.5	108.6	25.9
Monthly Total (lb/month)	**245.7**	**245.7**	**260.2**	**43.0**	**268.6**	**254.2**	**225.6**	**254.2**	**254.2**	**245.7**	**245.7**	**260.2**	**43.0**
Maximum Monthly Emissions (lb/month)													
Daily Emissions (lb/day)[b]													
Off-Site Motor Vehicle Exhaust	6.8	6.8	6.9	0.8	7.2	7.1	6.4	7.1	7.1	6.8	6.8	6.9	0.8
Off-Site Motor Vehicle Fugitive	4.3	4.3	4.9	1.2	5.0	4.4	3.8	4.4	4.4	4.3	4.3	4.9	1.2
Daily Total (lb/day)	**11.2**	**11.2**	**11.8**	**2.0**	**12.2**	**11.6**	**10.3**	**11.6**	**11.6**	**11.2**	**11.2**	**11.8**	**2.0**
Maximum Daily Emissions (lb/day)													

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

Source[a]
Motor Vehicle Exhaust
Off-Site Motor Vehicle Fugitive
Maximum Off-Site Total
Peak Month

Table 18-f
Off-Site Construction PM2.5 Emissions Sun

	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
12-Month Running Emissions (ton/year)[a]									
Off-Site Motor Vehicle Exhaust	0.6	0.5	0.4	0.4	0.3	0.2	0.1	0.1	0.0
Off-Site Motor Vehicle Fugitive	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.0
12-Month Total (ton/year)	**1.0**	**0.9**	**0.7**	**0.6**	**0.5**	**0.4**	**0.3**	**0.1**	**0.0**
Maximum 12-Month Total (ton/year)									
Monthly Emissions (lb/month)									
Off-Site Motor Vehicle Exhaust	158.6	157.8	158.2	142.8	143.3	143.7	145.7	146.1	1.6
Off-Site Motor Vehicle Fugitive	110.6	97.7	98.0	85.4	85.6	85.9	99.3	99.5	13.2
Monthly Total (lb/month)	**269.3**	**255.5**	**256.2**	**228.2**	**228.9**	**229.6**	**245.0**	**245.6**	**14.8**
Maximum Monthly Emissions (lb/month)									
Daily Emissions (lb/day)[b]									
Off-Site Motor Vehicle Exhaust	7.2	7.2	7.2	6.5	6.5	6.5	6.6	6.6	0.1
Off-Site Motor Vehicle Fugitive	5.0	4.4	4.5	3.9	3.9	3.9	4.5	4.5	0.6
Daily Total (lb/day)	**12.2**	**11.6**	**11.6**	**10.4**	**10.4**	**10.4**	**11.1**	**11.2**	**0.7**
Maximum Daily Emissions (lb/day)									

[a] The value for each month is the total for that m

[b] Daily emissions = Monthly emissions / 21 work

Source[a]
Motor Vehicle Exhaust
Off-Site Motor Vehicle Fugitive
Maximum Off-Site Total
Peak Month

Table 19-a
Maximum Daily Off-Site Criteria Pollutant Emissions Summary

Pollutant	Maximum Daily Emissions (lb/day)
CO	304.2
ROG	40.4
NOx	333.3
SOx	0.7
Exhaust PM10	7.9
Fugitive PM10	17.3
Total PM10	25.2
Exhaust PM2.5	7.3
Fugitive PM2.5	5.3
Total PM2.5	12.5

Table 19-b
Maximum Annual Off-Site Criteria Pollutant Emissions Summary

Pollutant	Maximum Daily Emissions (lb/day)
CO	31.7
ROG	4.3
NOx	39.7
SOx	0.1
Exhaust PM10	0.9
Fugitive PM10	1.9
Total PM10	2.8
Exhaust PM2.5	0.9
Fugitive PM2.5	0.6
Total PM2.5	1.4

Table 20
Construction Greenhouse Gas Emissions Summary

Source	Total Emissions (ton)			CO2e (MT)[a]
	CO2	CH4	N2O	
Construction Equipment	6,284.5	0.4	0.2	5,755.7
On-Site Motor Vehicles	739.8	0.0	0.0	678.2
Off-Site Motor Vehicles	52,523.5	1.0	1.8	48,181.2
TOTAL	**59,547.8**	**1.5**	**2.0**	**54,615.2**
TOTAL Amortized over 30 years (MT CO2e/year)				**1,820.5**

[a] CO2e [MT] = (CO2 [ton] + 21 x CH4 [ton] + 310 x N2O [ton]) x 2000 [lb/ton] x 453.6 [g/lb] / 1,000,000 [g/MT]

Table 21
On-Site Construction DPM Emissions Summary

Source	Total DPM Emissions (lb)
FENCE - MOBILIZATION	
Construction Equipment	105.9
On-Site Motor Vehicles	41.7
Total	**147.6**
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK	
Construction Equipment	2,239.0
On-Site Motor Vehicles	110.3
Total	**2,349.4**
PV PANEL CONSTRUCTION	
Construction Equipment	945.1
On-Site Motor Vehicles	76.7
Total	**1,021.9**
SUBSTATION-BLDG-WATER TANK CONSTRUCTION	
Construction Equipment	29.2
On-Site Motor Vehicles	1.3
Total	**30.5**
Testing & Commissioning	
Construction Equipment	66.9
On-Site Motor Vehicles	7.9
Total	**74.7**
On-Site Total	**3,624.0**

Operations and Maintenance Emissions

Table 1
Off-Road Equipment Emission Factors

Equipment	Fuel	HP	Model Year[a]	OFFROAD Model Category	Emissions Factors (lb/hr)[b]								
					CO	ROG	NOx	SO2	PM10	PM2.5	CO2	CH4	N2O
Portable Generator Lights	Diesel	35	2008	Generator Sets	1.82E-01	1.26E-02	2.57E-01	3.96E-04	8.11E-03	7.46E-03	3.06E+01	1.14E-03	7.98E-04

[a] Earliest model year required to meet at least Tier 3 emission standards

[b] All except N2O calculated by dividing California statewide daily emissions by daily operating hours from OFFROAD2007 for calendar year 2014

N_2O calculated from 0.26 g/gal from Table 13.7 of 2013 Climate Action Registry Default Emission Factors, downloaded from

http://www.theclimateregistry.org/downloads/2013/01/2013-Climate-Registry-Default-Emissions-Factors.pdf

Fuel use for N2O calculation calculated by dividing California statewide daily fuel consumption by daily operating hours from OFFROAD2007 for calendar year 2014.

CARB released the OFFROAD 2011 off-road equipment emissions model in September 2011. The OFFROAD 2011 model was developed primarily to support CARB regulatory activities to reduce emissions from in-use off-road equipment. The OFFROAD 2011 model does not include emissions and emission factors for all of the types of construction equipment that are anticipated to be used for construction activities for the Modified Project. It also does not include emissions of greenhouse gases. Because of the limitations in the OFFROAD 2011 model, it was not used for these analyses. Emission factors calculated using the OFFROAD 2011 model are generally lower than emission factors calculated using the OFFROAD 2007 model. Therefore, use of the emission factors calculated using the OFFROAD 2007 model provides a conservative estimate of emissions.

Table 2
EMFAC2011 Motor Vehicle Emission Factors, Riverside County, 2018 CY, 2018 Model Year

Vehicle Class	Fuel	Fuel Use (mpg)[a]	TOG (lb/mi)[a]	CO (lb/mi)[a]	ROG (lb/mi)[a]	NOx (lb/mi)[a]	SO2 (lb/mi)[a]	PM10 Exh. (lb/mi)[a]	PM2.5 Exh. (lb/mi)[a]	CO2 (lb/mi)[a]	CH4 (lb/mi)[b]	N2O (lb/mi)[b]	PM10 Tire Wear (lb/mi)[a]	PM10 Brake Wear (lb/mi)[a]	PM2.5 Tire Wear (lb/mi)[a]	PM2.5 Brake Wear (lb/mi)[a]
LDA	GAS	2.47E+01	5.44E-05	9.06E-04	4.34E-05	8.60E-05	7.59E-06	5.41E-06	5.02E-06	4.66E-01	2.20E-05	3.58E-06	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDA	DSL	2.85E+01	1.16E-05	7.53E-05	1.02E-05	3.13E-04	7.44E-06	6.58E-06	6.06E-06	4.79E-01	4.75E-07	2.56E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT1	GAS	2.12E+01	5.07E-05	9.00E-04	3.97E-05	8.61E-05	8.83E-06	5.38E-06	4.99E-06	5.42E-01	4.70E-05	3.58E-06	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT1	DSL	2.85E+01	1.39E-05	8.86E-05	1.22E-05	3.75E-04	7.44E-06	6.58E-06	6.06E-06	4.79E-01	5.66E-07	2.56E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT2	GAS	1.82E+01	4.94E-05	9.94E-04	3.68E-05	9.83E-05	1.03E-05	5.40E-06	5.01E-06	7.22E-01	3.00E-05	4.09E-06	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT2	DSL	2.87E+01	1.37E-05	8.84E-05	1.20E-05	3.72E-04	7.39E-06	6.50E-06	5.98E-06	5.42E-01	5.58E-07	2.55E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD1	GAS	1.42E+01	1.56E-04	2.34E-03	1.39E-04	8.67E-04	1.32E-05	3.67E-07	3.41E-07	1.24E+00	4.40E-05	3.61E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD1	DSL	1.93E+01	6.49E-05	4.52E-04	5.70E-05	1.63E-03	1.10E-05	1.04E-05	9.61E-06	1.07E+00	2.65E-06	3.78E-05	2.65E-05	1.69E-04	6.61E-06	7.22E-05
LHD2	GAS	1.42E+01	1.51E-04	2.25E-03	1.34E-04	8.42E-04	1.32E-05	3.62E-07	3.36E-07	1.23E+00	3.57E-05	3.50E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD2	DSL	1.93E+01	6.49E-05	4.48E-04	5.70E-05	1.61E-03	1.10E-05	1.04E-05	9.58E-06	1.07E+00	2.65E-06	3.78E-05	2.65E-05	1.97E-04	6.61E-06	8.43E-05
MCY	GAS	3.88E+01	7.79E-03	5.43E-02	7.20E-03	2.68E-03	4.84E-06	7.78E-07	6.76E-07	3.54E-01	4.56E-04	1.12E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MDV	GAS	1.42E+01	5.29E-05	1.06E-03	3.99E-05	9.81E-05	1.32E-05	5.48E-06	5.08E-06	9.28E-01	5.08E-05	4.08E-06	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MDV	DSL	2.87E+01	1.14E-05	7.45E-05	1.00E-05	3.09E-04	7.38E-06	6.45E-06	5.93E-06	5.42E-01	4.64E-07	2.54E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MH	GAS	1.46E+01	3.63E-05	4.46E-04	2.23E-05	3.53E-04	1.28E-05	2.38E-07	2.21E-07	1.20E+00	3.61E-05	1.47E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MH	DSL	9.26E+00	1.39E-04	7.32E-04	1.22E-04	5.94E-03	2.29E-05	6.69E-05	6.15E-05	2.24E+00	5.66E-06	7.89E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
Motor Coach	DSL	5.99E+00	4.20E-04	2.34E-03	3.69E-04	2.80E-03	3.54E-05	1.24E-04	1.14E-04	3.47E+00	1.71E-05	1.22E-04	2.65E-05	2.87E-04	6.61E-06	1.23E-04
OBUS	GAS	1.33E+01	5.25E-04	7.65E-03	4.82E-04	1.24E-03	1.41E-05	5.32E-07	4.94E-07	1.31E+00	1.11E-04	5.17E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
PTO	DSL	4.76E+00	5.21E-04	1.41E-03	4.58E-04	2.89E-03	4.45E-05	6.83E-05	6.29E-05	4.36E+00	2.13E-05	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SBUS	GAS	1.11E+01	3.36E-04	3.72E-03	2.91E-04	5.25E-04	1.69E-05	6.31E-07	5.86E-07	1.57E+00	1.54E-04	2.18E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
SBUS	DSL	7.47E+00	3.21E-04	1.35E-03	2.82E-04	2.52E-03	2.84E-05	4.77E-05	4.39E-05	2.78E+00	1.31E-05	9.79E-05	2.65E-05	1.64E-03	6.61E-06	7.04E-04
T6 Ag	DSL	9.54E+00	1.20E-04	7.02E-04	1.06E-04	1.25E-03	2.22E-05	7.72E-05	7.10E-05	2.18E+00	4.91E-06	7.66E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 Public	DSL	9.31E+00	1.38E-04	8.31E-04	1.22E-04	1.40E-03	2.28E-05	6.66E-05	6.13E-05	2.23E+00	5.64E-06	7.85E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 CAIRP heavy	DSL	9.53E+00	1.22E-04	7.00E-04	1.07E-04	1.24E-03	2.23E-05	7.54E-05	6.93E-05	2.18E+00	4.97E-06	7.67E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 CAIRP small	DSL	9.53E+00	1.22E-04	7.00E-04	1.07E-04	1.24E-03	2.23E-05	7.54E-05	6.93E-05	2.18E+00	4.97E-06	7.67E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 OOS heavy	DSL	9.53E+00	1.22E-04	7.00E-04	1.07E-04	1.24E-03	2.23E-05	7.54E-05	6.93E-05	2.18E+00	4.97E-06	7.67E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 OOS small	DSL	9.53E+00	1.22E-04	7.00E-04	1.07E-04	1.24E-03	2.23E-05	7.54E-05	6.93E-05	2.18E+00	4.97E-06	7.67E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate construction heavy	DSL	9.53E+00	1.25E-04	6.86E-04	1.10E-04	1.24E-03	2.23E-05	7.15E-05	6.58E-05	2.18E+00	5.12E-06	7.67E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate construction small	DSL	9.53E+00	1.25E-04	6.86E-04	1.10E-04	1.24E-03	2.23E-05	7.15E-05	6.58E-05	2.18E+00	5.12E-06	7.67E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate heavy	DSL	9.52E+00	1.28E-04	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate small	DSL	9.52E+00	1.28E-04	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 utility	DSL	9.31E+00	1.38E-04	8.24E-04	1.21E-04	1.39E-03	2.28E-05	6.51E-05	5.99E-05	2.23E+00	5.64E-06	7.85E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6TS	GAS	1.41E+01	3.24E-04	4.94E-03	2.93E-04	8.00E-04	1.33E-05	4.15E-07	3.85E-07	1.24E+00	8.76E-05	3.33E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
T7 Ag	DSL	6.10E+00	3.19E-04	1.94E-03	2.80E-04	2.32E-03	3.48E-05	1.28E-04	1.18E-04	3.41E+00	1.30E-05	1.20E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 CAIRP	DSL	5.88E+00	4.90E-04	2.84E-03	4.31E-04	3.29E-03	3.61E-05	1.45E-04	1.33E-04	3.53E+00	2.00E-05	1.24E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 CAIRP construction	DSL	5.88E+00	5.03E-04	2.77E-03	4.41E-04	3.27E-03	3.60E-05	1.32E-04	1.22E-04	3.53E+00	2.05E-05	1.24E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 NNOOS	DSL	5.80E+00	5.49E-04	3.13E-03	4.82E-04	3.55E-03	3.65E-05	1.46E-04	1.34E-04	3.58E+00	2.24E-05	1.26E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 NOOS	DSL	5.80E+00	5.49E-04	3.13E-03	4.82E-04	3.55E-03	3.65E-05	1.46E-04	1.34E-04	3.58E+00	2.24E-05	1.26E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 Public	DSL	5.14E+00	1.13E-03	5.83E-03	9.91E-04	5.81E-03	4.12E-05	1.20E-04	1.10E-04	4.04E+00	4.60E-05	1.42E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 Single	DSL	6.06E+00	3.58E-04	2.00E-03	3.14E-04	2.38E-03	3.50E-05	1.14E-04	1.05E-04	3.43E+00	1.46E-05	1.21E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 single construction	DSL	6.06E+00	3.53E-04	2.03E-03	3.10E-04	2.38E-03	3.50E-05	1.18E-04	1.09E-04	3.43E+00	1.44E-05	1.21E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 SWCV	DSL	5.63E+00	6.85E-04	3.61E-03	6.02E-04	3.81E-03	3.76E-05	1.13E-04	1.04E-04	3.69E+00	2.80E-05	1.30E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 tractor	DSL	6.13E+00	3.12E-04	1.82E-03	2.74E-04	2.31E-03	3.46E-05	1.24E-04	1.14E-04	3.39E+00	1.27E-05	1.19E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 tractor construction	DSL	6.06E+00	3.67E-04	2.07E-03	3.23E-04	2.55E-03	3.50E-05	1.22E-04	1.13E-04	3.43E+00	1.50E-05	1.21E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 utility	DSL	5.14E+00	1.13E-03	5.82E-03	9.91E-04	5.79E-03	4.12E-05	1.18E-04	1.08E-04	4.04E+00	4.60E-05	1.42E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7IS	GAS	1.36E+01	5.10E-04	4.40E-02	3.58E-04	7.81E-03	1.38E-05	2.89E-07	2.68E-07	1.23E+00	2.08E-05	3.25E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
UBUS	GAS	1.14E+01	1.37E-04	1.65E-03	1.03E-04	4.57E-04	1.65E-05	5.55E-07	5.15E-07	1.54E+00	2.50E-04	1.90E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
UBUS	DSL	4.69E+00	7.62E-05	2.19E-03	6.69E-05	1.29E-03	4.53E-05	8.09E-05	7.44E-05	4.43E+00	1.67E-04	1.56E-04	1.76E-05	1.86E-03	4.41E-06	7.95E-04
All Other Buses	DSL	9.53E+00	1.29E-04	6.97E-04	1.14E-04	1.30E-03	2.22E-05	7.40E-05	6.81E-05	2.18E+00	5.28E-06	7.67E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
All Other Buses	DSL	9.24E+00	6.02E-04	1.89E-03	5.29E-04	1.69E-02	2.30E-05	4.24E-04	3.90E-04	2.37E+00	2.46E-05	7.91E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04

[a] Calculated by dividing total emissions in Riverside County in 2014 by total VMT in Riverside County from EMFAC2011 web based access (http://www.arb.ca.gov/emfac/)

[b] Gasoline CH4 calculated by dividing total CH4 emissions in Riverside County by total VMT in Riverside County from EMFAC2011-LDV (http://www.arb.ca.gov/msei/emfac2011_ldv.htm)
Diesel CH4 calculated as 0.0408 x TOG; gasoline N2O calculated as 0.0416 x NOx; diesel N2O calculated as 0.3316 [g/gal] / fuel consumption [mi/gal] / 453.6 [g/lb]
(http://www.arb.ca.gov/msei/emfac2011-faq.htm#emfac2011_web_db_qstn07)

Table 3
EMFAC2011 Motor Vehicle Emission Factors, Riverside County, 2018 CY, All Model Years

Vehicle Class	Fuel	Fuel Use (mpg)[a]	TOG (lb/mi)[a]	CO (lb/mi)[a]	ROG (lb/mi)[a]	NOx (lb/mi)[a]	SO2 (lb/mi)[a]	PM10 Exh. (lb/mi)[a]	PM2.5 Exh. (lb/mi)[a]	CO2 (lb/mi)[a]	CH4 (lb/mi)[b]	N2O (lb/mi)[b]	PM10 Tire Wear (lb/mi)[a]	PM10 Brake Wear (lb/mi)[a]	PM2.5 Tire Wear (lb/mi)[a]	PM2.5 Brake Wear (lb/mi)[a]
LDA	GAS	2.44E+01	2.60E-04	2.36E-03	2.36E-04	2.03E-04	7.68E-06	4.26E-06	3.94E-06	5.68E-01	2.20E-05	8.45E-06	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDA	DSL	2.85E+01	5.11E-05	2.81E-04	4.49E-05	8.82E-04	7.45E-06	3.11E-05	2.86E-05	5.80E-01	2.08E-06	2.57E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT1	GAS	2.11E+01	7.95E-04	5.79E-03	7.44E-04	5.41E-04	8.91E-06	7.90E-06	7.31E-06	6.79E-01	4.70E-05	2.25E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT1	DSL	2.82E+01	9.77E-05	4.16E-04	8.58E-05	1.06E-03	7.52E-06	6.85E-05	6.30E-05	5.77E-01	3.99E-06	2.59E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT2	GAS	1.80E+01	3.69E-04	3.25E-03	3.37E-04	3.51E-04	1.04E-05	4.34E-06	4.02E-06	8.30E-01	3.00E-05	1.46E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LDT2	DSL	2.87E+01	5.65E-05	2.99E-04	4.96E-05	9.58E-04	7.39E-06	3.33E-05	3.06E-05	5.99E-01	2.31E-06	2.55E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD1	GAS	1.39E+01	1.35E-03	7.06E-03	1.30E-03	2.29E-03	1.35E-05	2.55E-06	2.35E-06	1.26E+00	4.40E-05	9.54E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD1	DSL	1.92E+01	2.46E-04	1.38E-03	2.16E-04	8.79E-03	1.10E-05	4.87E-05	4.48E-05	1.08E+00	1.00E-05	3.81E-05	2.65E-05	1.69E-04	6.61E-06	7.22E-05
LHD2	GAS	1.39E+01	1.06E-03	5.35E-03	1.01E-03	2.10E-03	1.35E-05	1.99E-06	1.84E-06	1.26E+00	3.57E-05	8.72E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
LHD2	DSL	1.92E+01	2.39E-04	1.35E-03	2.10E-04	8.69E-03	1.10E-05	4.83E-05	4.44E-05	1.08E+00	9.77E-06	3.81E-05	2.65E-05	1.97E-04	6.61E-06	8.43E-05
MCY	GAS	3.81E+01	9.40E-03	6.25E-02	8.77E-03	2.83E-03	4.93E-06	1.41E-06	1.17E-06	3.49E-01	4.56E-04	1.18E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MDV	GAS	1.40E+01	6.30E-04	5.27E-03	5.75E-04	6.38E-04	1.34E-05	5.05E-06	4.67E-06	1.10E+00	5.08E-05	2.65E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MDV	DSL	2.85E+01	5.38E-05	2.67E-04	4.72E-05	7.45E-04	7.43E-06	3.65E-05	3.36E-05	6.33E-01	2.19E-06	2.56E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MH	GAS	1.46E+01	2.40E-04	5.27E-03	2.01E-04	1.42E-03	1.28E-05	1.91E-06	1.76E-06	1.19E+00	3.61E-05	5.90E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
MH	DSL	9.38E+00	2.91E-04	1.12E-03	2.55E-04	1.30E-02	2.26E-05	3.89E-04	3.58E-04	2.22E+00	1.19E-05	7.80E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
Motor Coach	DSL	5.86E+00	5.36E-04	2.97E-03	4.71E-04	1.13E-02	3.62E-05	2.14E-04	1.97E-04	3.55E+00	2.19E-05	1.25E-04	2.65E-05	2.87E-04	6.61E-06	1.23E-04
OBUS	GAS	1.27E+01	2.66E-03	2.95E-02	2.50E-03	5.85E-03	1.48E-05	2.80E-06	2.51E-06	1.33E+00	1.11E-04	2.44E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
PTO	DSL	4.69E+00	5.89E-04	1.73E-03	5.17E-04	1.81E-02	4.52E-05	1.29E-04	1.18E-04	4.43E+00	2.40E-05	1.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SBUS	GAS	1.10E+01	1.44E-03	1.56E-02	1.32E-03	2.08E-03	1.71E-05	4.64E-06	4.22E-06	1.57E+00	1.54E-04	8.63E-05	1.76E-05	8.10E-05	4.41E-06	3.47E-05
SBUS	DSL	7.20E+00	4.30E-04	1.43E-03	3.78E-04	2.35E-02	2.94E-05	1.44E-04	1.32E-04	2.88E+00	1.76E-05	1.01E-04	2.65E-05	1.64E-03	6.61E-06	7.04E-04
T6 Ag	DSL	9.32E+00	4.82E-04	1.91E-03	4.23E-04	8.80E-03	2.28E-05	3.73E-04	3.43E-04	2.23E+00	1.97E-05	7.85E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 Public	DSL	9.06E+00	1.37E-04	6.93E-04	1.20E-04	1.21E-02	2.34E-05	9.34E-05	8.60E-05	2.29E+00	5.58E-06	8.07E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 CAIRP heavy	DSL	9.43E+00	1.70E-04	9.09E-04	1.49E-04	5.68E-03	2.25E-05	1.20E-04	1.11E-04	2.20E+00	6.92E-06	7.76E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 CAIRP small	DSL	9.49E+00	2.00E-04	1.07E-03	1.75E-04	3.12E-03	2.23E-05	1.68E-04	1.54E-04	2.19E+00	8.15E-06	7.71E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 OOS heavy	DSL	9.43E+00	1.70E-04	9.09E-04	1.49E-04	5.68E-03	2.25E-05	1.20E-04	1.11E-04	2.20E+00	6.92E-06	7.76E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 OOS small	DSL	9.49E+00	2.00E-04	1.07E-03	1.75E-04	3.12E-03	2.23E-05	1.68E-04	1.54E-04	2.19E+00	8.15E-06	7.71E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate construction heavy	DSL	9.32E+00	1.91E-04	8.91E-04	1.68E-04	1.15E-02	2.28E-05	1.35E-04	1.24E-04	2.23E+00	7.79E-06	7.85E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate construction small	DSL	9.44E+00	2.99E-04	1.41E-03	2.62E-04	5.49E-03	2.25E-05	2.77E-04	2.55E-04	2.20E+00	1.22E-05	7.74E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate heavy	DSL	9.34E+00	1.88E-04	8.94E-04	1.66E-04	9.62E-03	2.27E-05	1.26E-04	1.16E-04	2.22E+00	7.69E-06	7.83E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 instate small	DSL	9.45E+00	2.71E-04	1.28E-03	2.38E-04	4.73E-03	2.24E-05	2.33E-04	2.14E-04	2.20E+00	1.11E-05	7.73E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6 utility	DSL	9.17E+00	1.42E-04	8.17E-04	1.24E-04	5.74E-03	2.31E-05	8.24E-05	7.58E-05	2.27E+00	5.78E-06	7.97E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04
T6TS	GAS	1.35E+01	1.87E-03	2.06E-02	1.76E-03	3.69E-03	1.39E-05	2.91E-06	2.59E-06	1.26E+00	8.76E-05	1.54E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
T7 Ag	DSL	5.94E+00	8.36E-04	3.95E-03	7.35E-04	1.71E-02	3.57E-05	5.12E-04	4.71E-04	3.50E+00	3.41E-05	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 CAIRP	DSL	5.78E+00	6.93E-04	4.03E-03	6.08E-04	8.06E-03	3.67E-05	2.63E-04	2.42E-04	3.60E+00	2.83E-05	1.27E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 CAIRP construction	DSL	5.78E+00	7.10E-04	3.92E-03	6.24E-04	8.23E-03	3.67E-05	2.40E-04	2.21E-04	3.59E+00	2.90E-05	1.26E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 NNOOS	DSL	5.73E+00	6.78E-04	3.89E-03	5.96E-04	5.55E-03	3.70E-05	2.08E-04	1.91E-04	3.63E+00	2.77E-05	1.28E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 NOOS	DSL	5.69E+00	7.63E-04	4.37E-03	6.70E-04	8.42E-03	3.73E-05	2.64E-04	2.43E-04	3.65E+00	3.11E-05	1.29E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 POLA	DSL	5.77E+00	1.07E-03	6.13E-03	9.41E-04	1.60E-02	3.67E-05	3.37E-04	3.10E-04	3.60E+00	4.37E-05	1.27E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 Public	DSL	5.01E+00	6.39E-04	2.96E-03	5.62E-04	3.33E-02	4.23E-05	1.80E-04	1.65E-04	4.15E+00	2.61E-05	1.46E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 Single	DSL	5.95E+00	3.87E-04	2.02E-03	3.40E-04	1.53E-02	3.56E-05	1.69E-04	1.55E-04	3.49E+00	1.58E-05	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 single construction	DSL	5.95E+00	3.79E-04	1.99E-03	3.33E-04	1.63E-02	3.56E-05	1.76E-04	1.62E-04	3.49E+00	1.55E-05	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 SWCV	DSL	5.50E+00	5.29E-04	2.53E-03	4.65E-04	2.56E-02	3.86E-05	1.88E-04	1.73E-04	3.78E+00	2.16E-05	1.33E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 tractor	DSL	6.04E+00	4.81E-04	2.68E-03	4.22E-04	1.44E-02	3.51E-05	2.51E-04	2.31E-04	3.44E+00	1.96E-05	1.21E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 tractor construction	DSL	5.94E+00	5.34E-04	2.87E-03	4.69E-04	1.66E-02	3.57E-05	2.49E-04	2.29E-04	3.50E+00	2.50E-04	1.23E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7 utility	DSL	5.08E+00	8.58E-04	4.39E-03	7.54E-04	1.84E-02	4.18E-05	1.39E-04	1.28E-04	4.09E+00	1.67E-04	1.44E-04	7.94E-05	1.36E-04	1.98E-05	5.83E-05
T7IS	GAS	1.30E+01	1.87E-03	8.24E-02	1.61E-03	1.27E-02	1.44E-05	1.13E-06	9.87E-07	1.22E+00	7.63E-05	5.27E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
UBUS	GAS	1.09E+01	3.73E-03	3.81E-02	3.48E-03	8.07E-03	1.72E-05	5.95E-06	5.16E-06	1.54E+00	1.52E-04	3.36E-04	1.76E-05	8.10E-05	4.41E-06	3.47E-05
UBUS	DSL	4.05E+00	1.25E-03	5.62E-03	1.10E-03	2.72E-02	5.24E-05	4.63E-04	4.26E-04	5.13E+00	5.10E-05	1.81E-04	1.76E-05	1.86E-03	4.41E-06	7.95E-04
All Other Buses	DSL	9.36E+00	2.07E-04	9.84E-04	1.81E-04	9.87E-03	2.27E-05	1.39E-04	1.28E-04	2.22E+00	8.43E-06	7.81E-05	2.65E-05	2.87E-04	6.61E-06	1.23E-04

[a] Calculated by dividing total emissions in Riverside County in 2014 by total VMT in Riverside County from EMFAC2011 web based access (http://www.arb.ca.gov/emfac/)

[b] Gasoline CH4 calculated by dividing total CH4 emissions in Riverside County by total VMT in Riverside County from EMFAC2011-LDV (http://www.arb.ca.gov/msei/emfac2011_ldv.htm)
Diesel CH4 calculated as 0.0408 x TOG; gasoline N2O calculated as 0.0416 x NOx; diesel N2O calculated as 0.3316 [g/gal] / fuel consumption [mi/gal] / 453.6 [g/lb]
(http://www.arb.ca.gov/msei/emfac2011-faq.htm#emfac2011_web_db_qstn07)

Table 4
Motor Vehicle Exhaust Emission Factors

Vehicle	Fuel	GVWR (lb)	EMFAC2011 Category	Emissions Factors (lb/mi)								
				CO	ROG	NOx	SO2	PM10	PM2.5	CO2	CH4	N2O
On-Site[a]												
F-150 Pickup Trucks	DSL	21,000	T6 instate small	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05
Utility/Service Vehicles	DSL	21,000	T6 instate small	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05
2200 gal Water Truck	DSL	31,000	T6 instate heavy	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05
Off-Site[b]												
Off-Site Worker Commute Car	GAS	N/A	LDT1	5.79E-03	7.44E-04	5.41E-04	8.91E-06	7.90E-06	7.31E-06	6.79E-01	4.70E-05	2.25E-05
Off-Site Carpenter Service Vehicle	DSL	21,000	T6 instate small	1.28E-03	2.38E-04	4.73E-03	2.24E-05	2.33E-04	2.14E-04	2.20E+00	1.11E-05	7.73E-05
Off-Site Electricial Service Vehicle	DSL	21,000	T6 instate small	1.28E-03	2.38E-04	4.73E-03	2.24E-05	2.33E-04	2.14E-04	2.20E+00	1.11E-05	7.73E-05
Off-Site Equipment/Material Delivery Truck	DSL	80,000	T7 tractor	2.68E-03	4.22E-04	1.44E-02	3.51E-05	2.51E-04	2.31E-04	3.44E+00	1.96E-05	1.21E-04

[a] Emission factors for on-site vehicles are for 2018 model-year vehicles in Riverside County in 2018

[a] Emission factors for off-site vehicles are Riverside County fleet average in 2018

Table 5
Emission Factors for Fugitive Particulate Matter Emissions from On-Site Motor Vehicles on Unpaved Surfaces

					PM10						PM2.5					
Vehicle Type	Weight (tons)	Silt Content (%)[a]	Fuel	EMFAC2011 Category	Uncontrolled Entrained Road Dust (lb/mi)[b]	Control Efficiency (%)[c]	Controlled Entrained Road Dust (lb/mi)	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)	Uncontrolled Entrained Road Dust (lb/mi)[d]	Control Efficiency (%)[c]	Controlled Entrained Road Dust (lb/mi)	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)
F-150 Pickup Trucks	10.5	18.03	DSL	T6 instate small	3.80E+00	80%	7.60E-01	2.65E-05	2.87E-04	7.61E-01	3.80E-01	80%	7.60E-02	6.61E-06	1.23E-04	7.62E-02
Utility/Service Vehicles	10.5	18.03	DSL	T6 instate small	3.80E+00	80%	7.60E-01	2.65E-05	2.87E-04	7.61E-01	3.80E-01	80%	7.60E-02	6.61E-06	1.23E-04	7.62E-02
2200 gal Water Truck	15.5	18.03	DSL	T6 instate heavy	4.53E+00	80%	9.06E-01	2.65E-05	2.87E-04	9.06E-01	4.53E-01	80%	9.06E-02	6.61E-06	1.23E-04	9.07E-02

[a] From Blythe AFC Geotechnical Report (Appendix B)

[b] Emission factor [lb/mi] = 1.5 x (silt content [%] / 12)$^{0.9}$ x (weight [tons] / 3)$^{0.45}$
from AP-42 Section 13.2.2, Unpaved Roads, 11/06

[c] Assumes soils stabilizers contribute a control efficiency of 80%
watering twice per day (55% from SCAQMD CEQA mitigation measures, Table XI-D) downloaded from http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM_fugitive.html

[d] Emission factor [lb/mi] = 0.15 x (silt content [%] / 12)$^{0.9}$ x (weight [tons] / 3)$^{0.45}$
from AP-42 Section 13.2.2, Unpaved Roads, 11/06

Table 6
Emission Factors for Fugitive Particulate Matter Emissions from Off-Site Motor Vehicles on Paved Roads

Vehicle Type	Weight (tons)[a]	Road Type	Silt Loading (g/m^2)[a]	Fuel	EMFAC2011 Category	PM10				PM2.5			
						Entrained Road Dust (lb/mi)[b]	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)	Entrained Road Dust (lb/mi)[c]	Tire Wear (lb/mi)	Brake Wear (lb/mi)	Total Fugitive (lb/mi)
Off-Site Worker Commute Car	3	Collector	0.035	GAS	LDT1	2.90E-04	1.76E-05	8.10E-05	3.89E-04	7.84E-05	4.41E-06	3.47E-05	1.18E-04
Off-Site Carpenter Service Vehicle	3	Collector	0.035	DSL	T6 instate small	2.90E-04	2.65E-05	2.87E-04	6.04E-04	7.84E-05	6.61E-06	1.23E-04	2.08E-04
Off-Site Electricial Service Vehicle	3	Collector	0.035	DSL	T6 instate small	2.90E-04	2.65E-05	2.87E-04	6.04E-04	7.84E-05	6.61E-06	1.23E-04	2.08E-04
Off-Site Equipment/Material Delivery Truck	3	Collector	0.035	DSL	T7 tractor	2.90E-04	7.94E-05	1.36E-04	5.06E-04	7.84E-05	1.98E-05	5.83E-05	1.57E-04

[a] From ARB Emission Inventory Methodology 7.9, Entrained Paved Road Dust (1997)

[b] Emission factor [lb/mi] = 0.0022 x (silt loading [g/m^2]$^{0.91}$ x (weight [tons])$^{1.02}$
from AP-42 Section 13.2.1, Paved Roads, 01/11

[c] Emission factor [lb/mi] = 0.00054 x (silt loading [g/m^2]$^{0.91}$ x (weight [tons])$^{1.02}$
from AP-42 Section 13.2.1, Paved Roads, 01/11

Table 7-a
Off-Road Equipment Use and Emission Factors

Equipment	Hr/Day	Number	Days/ Year	Emission Factors (lb/hr)								
				CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
Portable Generator Lights	2	2	104	1.82E-01	1.26E-02	2.57E-01	3.96E-04	8.11E-03	7.46E-03	3.06E+01	1.14E-03	7.98E-04

Table 7-b
Daily Off-Road Equipment Emissions

Equipment	Emissions (lb/day)								
	CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
Portable Generator Lights	0.7	0.1	1.0	0.0	0.0	0.0	122.4	0.0	0.0
Total	**0.7**	**0.1**	**1.0**	**0.0**	**0.0**	**0.0**	**122.4**	**0.0**	**0.0**

Table 7-c
Annual Off-Road Equipment Emissions

Equipment	Emissions (lb/year)								
	CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
Portable Generator Lights	75.5	5.2	106.9	0.2	3.4	3.1	12,727.4	0.5	0.3
Total	**75.5**	**5.2**	**106.9**	**0.2**	**3.4**	**3.1**	**12,727.4**	**0.5**	**0.3**

Table 8-a
On-Site Motor Vehicle Use and Exhaust Emission Factors

Vehicle	Mi/Day	Number	Days/ Year	Emission Factors (lb/mi)								
				CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
F-150 Pickup Trucks	10	2	365	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05
Utility/Service Vehicles	10	2	365	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05
2200 gal Water Truck	10	2	122	6.78E-04	1.12E-04	1.24E-03	2.23E-05	6.91E-05	6.35E-05	2.18E+00	5.21E-06	7.68E-05

Table 8-b
Daily On-Site Motor Vehicle Exhaust Emissions

Vehicle	Emissions (lb/day)								
	CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
F-150 Pickup Trucks	0.01	0.00	0.02	0.00	0.00	0.00	43.65	0.00	0.00
Utility/Service Vehicles	0.01	0.00	0.02	0.00	0.00	0.00	43.65	0.00	0.00
2200 gal Water Truck	0.01	0.00	0.02	0.00	0.00	0.00	43.65	0.00	0.00
Total	**0.04**	**0.01**	**0.07**	**0.00**	**0.00**	**0.00**	**130.94**	**0.00**	**0.00**

Table 8-c
Annual On-Site Motor Vehicle Exhaust Emissions

Vehicle	Emissions (lb/year)								
	CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
F-150 Pickup Trucks	5.0	0.8	9.0	0.2	0.5	0.5	15,930.5	0.0	0.6
Utility/Service Vehicles	5.0	0.8	9.0	0.2	0.5	0.5	15,930.5	0.0	0.6
2200 gal Water Truck	1.7	0.3	3.0	0.1	0.2	0.2	5,324.7	0.0	0.2
Total	**11.6**	**1.9**	**21.1**	**0.4**	**1.2**	**1.1**	**37,185.7**	**0.1**	**1.3**

Table 9-a
On-Site Motor Vehicle Use and Fugitive PM Emission Factors

Vehicle	Mi/Day	Number	Days/ Year	Emission Factors (lb/mi)	
				PM10	PM2.5
F-150 Pickup Trucks	10	2	365	7.61E-01	7.62E-02
Utility/Service Vehicles	10	2	365	7.61E-01	7.62E-02
2200 gal Water Truck	10	2	122	9.06E-01	9.07E-02

Table 9-b
Daily On-Site Motor Vehicle Fugitive PM Emissions

Vehicle	Emissions (lb/day)	
	PM10	PM2.5
F-150 Pickup Trucks	15.22	1.52
Utility/Service Vehicles	15.22	1.52
2200 gal Water Truck	18.13	1.81
Total	**48.56**	**4.86**

Table 9-c
Annual On-Site Motor Vehicle Fugitive PM Emissions

Vehicle	Emissions (lb/year)	
	PM10	PM2.5
F-150 Pickup Trucks	5,553.8	556.1
Utility/Service Vehicles	5,553.8	556.1
2200 gal Water Truck	2,211.8	221.4
Total	**13,319.3**	**1,333.6**

Table 10-a
On-Site Daily Criteria Pollutant Emissions Summary

Source	Emissions (lb/day)					
	CO	ROG	NOx	SOx	PM10	PM2.5
Off-Road Equipment	0.73	0.05	1.03	0.00	0.03	0.03
On-Site Motor Vehicle Exhaust	0.04	0.01	0.07	0.00	0.00	0.00
On-Site Motor Vehicle Fugitive PM	--	--	--	--	48.56	4.86
Total	**0.77**	**0.06**	**1.10**	**0.00**	**48.60**	**4.90**

Table 10-b
On-Site Annual Criteria Pollutant Emissions Summary

Source	Emissions (ton/year)					
	CO	ROG	NOx	SOx	PM10	PM2.5
Off-Road Equipment	0.04	0.00	0.05	0.00	0.00	0.00
On-Site Motor Vehicle Exhaust	0.01	0.00	0.01	0.00	0.00	0.00
On-Site Motor Vehicle Fugitive PM	--	--	--	--	6.66	0.67
Total	**0.04**	**0.00**	**0.06**	**0.00**	**6.66**	**0.67**

Table 11-a
Off-Site Motor Vehicle Use and Exhaust Emission Factors

Vehicle	Mi/Day	Number	Days/ Year[a]	Emission Factors (lb/mi)								
				CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
Off-Site Worker Commute Car	40	29	256	5.79E-03	7.44E-04	5.41E-04	8.91E-06	7.90E-06	7.31E-06	6.79E-01	4.70E-05	2.25E-05
Off-Site Carpenter Service Vehicle	40	1	104	1.28E-03	2.38E-04	4.73E-03	2.24E-05	2.33E-04	2.14E-04	2.20E+00	1.11E-05	7.73E-05
Off-Site Electricial Service Vehicle	40	1	104	1.28E-03	2.38E-04	4.73E-03	2.24E-05	2.33E-04	2.14E-04	2.20E+00	1.11E-05	7.73E-05
Off-Site Equipment/Material Delivery Truck	40	2	12	2.68E-03	4.22E-04	1.44E-02	3.51E-05	2.51E-04	2.31E-04	3.44E+00	1.96E-05	1.21E-04

[a] Average number of worker commute cars is 20 per year, which is equivalent to the peak of 29 per day for 256 days per year

Table 11-b
Daily Off-Site Motor Vehicle Exhaust Emissions

Vehicle	Emissions (lb/day)								
	CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
Off-Site Worker Commute Car	6.72	0.86	0.63	0.01	0.01	0.01	787.47	0.05	0.03
Off-Site Carpenter Service Vehicle	0.05	0.01	0.19	0.00	0.01	0.01	87.93	0.00	0.00
Off-Site Electricial Service Vehicle	0.05	0.01	0.19	0.00	0.01	0.01	87.93	0.00	0.00
Off-Site Equipment/Material Delivery Truck	0.21	0.03	1.16	0.00	0.02	0.02	275.22	0.00	0.01
Total	**7.04**	**0.92**	**2.16**	**0.01**	**0.05**	**0.04**	**1,238.54**	**0.06**	**0.04**

Table 11-b
Annual Off-Site Motor Vehicle Exhaust Emissions

Vehicle	Emissions (lb/year)								
	CO	ROG	NOx	SOx	PM10	PM2.5	CO2	CH4	N2O
Off-Site Worker Commute Car	1,720.3	221.0	160.6	2.6	2.3	2.2	201,592.0	14.0	6.7
Off-Site Carpenter Service Vehicle	5.3	1.0	19.7	0.1	1.0	0.9	9,144.5	0.0	0.3
Off-Site Electricial Service Vehicle	5.3	1.0	19.7	0.1	1.0	0.9	9,144.5	0.0	0.3
Off-Site Equipment/Material Delivery Truck	2.6	0.4	13.9	0.0	0.2	0.2	3,302.6	0.0	0.1
Total	**1,733.6**	**223.4**	**213.8**	**2.9**	**4.5**	**4.2**	**223,183.5**	**14.1**	**7.4**

Table 12-a
Off-Site Motor Vehicle Use and Fugitive PM Emission Factors

Vehicle	Mi/Day	Number	Days/ Year[a]	Emission Factors (lb/mi)	
				PM10	PM2.5
Off-Site Worker Commute Car	40	29	256	3.89E-04	1.18E-04
Off-Site Carpenter Service Vehicle	40	1	104	6.04E-04	2.08E-04
Off-Site Electricial Service Vehicle	40	1	104	6.04E-04	2.08E-04
Off-Site Equipment/Material Delivery Truck	40	2	12	5.06E-04	1.57E-04

[a] Average number of worker commute cars is 20 per year, which is equivalent to the peak of 29 per day for 256 days per year

Table 12-b
Daily Off-Site Motor Vehicle Fugitive PM Emissions

Vehicle	Emissions (lb/day)	
	PM10	PM2.5
Off-Site Worker Commute Car	0.45	0.14
Off-Site Carpenter Service Vehicle	0.02	0.01
Off-Site Electricial Service Vehicle	0.02	0.01
Off-Site Equipment/Material Delivery Truck	0.04	0.01
Total	**0.54**	**0.17**

Table 12-c
Annual Off-Site Motor Vehicle Fugitive PM Emissions

Vehicle	Emissions (lb/year)	
	PM10	PM2.5
Off-Site Worker Commute Car	115.5	34.9
Off-Site Carpenter Service Vehicle	2.5	0.9
Off-Site Electricial Service Vehicle	2.5	0.9
Off-Site Equipment/Material Delivery Truck	0.5	0.2
Total	**121.0**	**36.8**

Table 13-a
Off-Site Daily Criteria Pollutant Emissions Summary

Source	Emissions (lb/day)					
	CO	ROG	NOx	SOx	PM10	PM2.5
Off-Site Motor Vehicle Exhaust	7.04	0.92	2.16	0.01	0.05	0.04
Off-Site Motor Vehicle Fugitive PM	--	--	--	--	0.54	0.17
Total	**7.04**	**0.92**	**2.16**	**0.01**	**0.59**	**0.21**

Table 13-b
Off-Site Annual Criteria Pollutant Emissions Summary

Source	Emissions (ton/year)					
	CO	ROG	NOx	SOx	PM10	PM2.5
Off-Site Motor Vehicle Exhaust	0.87	0.11	0.11	0.00	0.00	0.00
Off-Site Motor Vehicle Fugitive PM	--	--	--	--	0.06	0.02
Total	**0.87**	**0.11**	**0.11**	**0.00**	**0.06**	**0.02**

Table 14
Operations Greenhouse Gas Emissions Summary

Source	Annual Emissions (ton/year)			CO2e (MT/yr)[a]
	CO2	CH4	N2O	
Off-Road Equipment	6.4	0.0	0.0	5.8
On-Site Motor Vehicles	18.6	0.0	0.0	17.1
Off-Site Worker Commute Vehicles	100.8	0.0	0.0	92.5
Other Off-Site Vehicles	10.8	0.0	0.0	9.9
TOTAL	**136.5**	**0.0**	**0.0**	**125.3**

[a] CO2e [MT/yr] = (CO2 [ton/yr] + 21 x CH4 [ton/yr] + 310 x N2O [ton/yr]) x 2000 [lb/ton] x 453.6 [g/lb] / 1,000,000 [g/MT]

Screening Health Risk Assessment Results

Cancer Risk for Resident Child up to 2 Years Old
ONSITE Emissions ONLY

Parameter	Value	Units	
Daily Breathing Rate (DBR)	581	[L/kg-day]	
Exposure Frequency (EF)	312	[days/year]	(6 days/wk, 52 wks/yr)
Exposure Duration (ED)	2	[years]	
Conversion Factor (CF)	0.001	[m3/L]	
Averaging Time (AT)	25550	[days]	
Age Sensitivity Factor (ASF)	10	[unitless]	

PM Emissions from Diesel Equipment

Construction Length	4	Years
Previous Analysis (average tons/year * 6.25 years) of PM10	21.5	[tons]
Updated Analysis (average tons/year * 4 years) of DPM	1.81	[tons]
Fraction of Emissions (Updated/Previous)	0.084	
Previous Analysis (Model Impact at MIR)	0.036	[ug/m^3]
Previous Analysis (Model Impact at Residential Receptor)	0.001	[ug/m^3]
Scaled Impact at MIR Based on Updated Emissions	3.03E-03	[ug/m^3]
Scaled Impact at Residential Receptor Based on Updated Emissions	5.89E-05	[ug/m^3]

MIR	**DPM**
Ci at MIR = Annual Average Air Concentration for Chemical (µg/m3)	3.03E-03
Ci at Resident = Ann Average Air Concentration for Chemical (µg/m3)	5.89E-05
CF = Conversion Factor (mg/µg)	0.001
CPF = Cancer Potency Factor (mg chemical/kg body weight-day)-1	1.1
IFinh = (DBR * EF * ED * CF)/AT	0.014
Risk(inh) at MIR = Ci x CF x IFinh x CPF x ASF	4.73E-07
Risk(inh) at Resident = Ci x CF x IFinh x CPF x ASF	9.20E-09

Sum of Cancer Risk at MIR Over 4 year Period	0.61
Threshold	10.00
Above Threshold?	**NO**

Sum of Cancer Risk at Resident Over 4 year Period	0.0120
Threshold	10.00
Above Threshold?	**NO**

Ref: OEHHA, Air Toxics Hot Spots Program Risk Assessment Guidelines, June 2012.
Ref: CARB/OEHHA Consolidated Risk Value Table, May 2012.

Cancer Risk for Resident Child 2 to 15 Years Old

ONSITE Emissions ONLY

Parameter	Value	Units	
Daily Breathing Rate (DBR)	581	[L/kg-day]	
Exposure Frequency (EF)	312	[days/year]	(6 days/week, 52 weeks/year)
Exposure Duration (ED)	2	[years]	
Conversion Factor (CF)	0.001	[m3/L]	
Averaging Time (AT)	25550	[days]	
Age Sensitivity Factor (ASF)	3	[unitless]	

PM Emissions from Diesel Equipment

Construction Length	4	Years
Previous Analysis (average tons/year * 6.25 years) of PM10	21.5	[tons]
Updated Analysis (average tons/year * 4 years) of DPM	1.81	[tons]
Fraction of Emissions (Updated/Previous)	0.084	
Previous Analysis (Model Impact at MIR)	0.036	[ug/m^3]
Previous Analysis (Model Impact at Residential Receptor)	0.001	[ug/m^3]
Scaled Impact at MIR Based on Updated Emissions	3.03E-03	[ug/m^3]
Scaled Impact at Residential Receptor Based on Updated Emissions	5.89E-05	[ug/m^3]

MIR	**DPM**
Ci at MIR = Annual Average Air Concentration for Chemical (µg/m3)	3.03E-03
Ci at Resident = Ann Average Air Concentration for Chemical (µg/m3)	5.89E-05
CF = Conversion Factor (mg/µg)	0.001
CPF = Cancer Potency Factor (mg chemical/kg body weight-day)-1	1.1
IFinh = (DBR * EF * ED * CF)/AT	0.014
Risk(inh) at MIR = Ci x CF x IFinh x CPF x ASF	1.42E-07
Risk(inh) at Resident = Ci x CF x IFinh x CPF x ASF	2.76E-09

Total Chronic HI

ONSITE ONLY

PM Emissions from Diesel Equipment	MIR	Resident
Ci = Annual Average Air Concentration for Chemical (µg/m3)	0.003	0.000
REL	5	5
HQi = Ci / RELi	6.06E-04	1.18E-05
Threshold	1	1
Above Threshold?	**NO**	**NO**

Construction Schedule and Equipment Use Information

Activity	Month 1 Jun-14	Month 2 Jul-14	Month 3 Aug-14	Month 4 Sep-14	Month 5 Oct-14	Month 6 Nov-14	Month 7 Dec-14	Month 8 Jan-15
Mobilization	X	X	X		X	X	X	
Construct well field and water supply pipelines	X	X	X					
Delineate and mark the boundaries of the construction zone	X				X			
Install Perimeter Fencing/Gates	X				X			
Stabilize construction entrance/exit and roadway; install tire wash		X	X					
Establish parking and staging areas		X						
Establish laydown area for materials storage/staging			X					
Establish concrete washout area			X					
Install BMPs	X					X		
Clear and grub; strip topsoil	X	X	X		X	X	X	
Grading - Cut/Fill, Construct Trenches				X	X	X	X	X
Access Road Construction					X	X	X	
Interior Road Construction								
Construct reinforced concrete foundations								
Assemble and erect PV panels								
Field electrical - DC Cables/Tie-ins								
Construct O&M Buildings/Substation								
Construct Water Storage Tank								
Finish Parking Area/Roadways								
Commissioning and testing								

4,139 total disturbed acres
485 MW Total Project, Four Phases (3X125MW and 1X110MW)
48 Month Construction Schedule
9 month schedule for grading per unit
508,374 cy cut across site
390,973 cy fill across site
Cut/Fill averages across entire PV field site - balanced site

Start Construction June 2014
Increased grading during months 4-12 for excavation/trer
Grading: peak = 26,100 cy cut/fill; Typical month = 21,900
Access Roads, Power Block/O&M Grading & Building Cons
Assume 8 Months total for PV unit construction per Unit
Production Rates are based on 8-12 hour working day/5 d
48-month continuous construction sequencing

REV: D
3/27/2013
By: M Santangelo

Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23
Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16
X	X	X		X	X	X								
X				X										
X				X										
								X						
X	X	X		X	X	X								
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
					X	X							X	X
				X	X	X	X	X	X	X	X		X	X
					X	X	X	X	X	X	X	X	X	X
					X	X	X	X	X	X	X	X	X	X
										X	X	X	X	
										X	X			
										X	X			
											X	X	X	

ıching/finish grading/building construction/common area construction
cy cut/fill
ɜtruction in Phase 1

lay week schedule

Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37	Month 38
May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17
					X									
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
						X	X							
X	X	X	X	X	X		X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
					X	X	X							X

Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	Month 48
Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18
		X							
X	X	X	X						
	X	X	X	X	X	X	X	X	
	X	X	X	X	X	X	X	X	
	X	X	X	X	X	X	X	X	
								X	X
X	X						X	X	X

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15
Total personnel - average per day	43	43	43	65	108	108	108	65

Average Peak Vehicle Trips	9326	per month	424	per day based on 22 days per month
Average Vehicle Trips	5156	per month	234	per day based on 22 days per month
Peak Round Trip Truck Trips	13323	per month	606	per day based on 22 days per month
Average Workforce Onsite	335	Per day		Overall average

Notes :
Schedule based on 22 working day month
30% Carpooling rate

Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20
Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
108	108	108	65	402	467	467	424	424	424	606	480

Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32
Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
247	606	359	424	424	424	424	424	550	191	550	424

Month 33	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44
Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18
359	424	424	424	424	550	191	550	424	424	359	359

Month 45	Month 46	Month 47	Month 48
Feb-18	Mar-18	Apr-18	May-18
359	485	485	126

Mobilization Construction Phase	
Mobilization	
Site Preparation	
Clear & Grub	
Water Supply Construction	
Survey & Project Delineation	
Construct Parking & Staging Areas	
Set-up Temp Office & Utility Services	
Construct Concrete Wash-Out	
Post/Fencing/Gate Installation	
Soil Stabilization	

				Site Preparation, Clear & Grub, Water Supply, Boundaries, Staging Area, BMPs, Fencing											
				Phase I			Phase II			Phase III			Phase IV		
Equipment Type	**HP**	**Fuel**	**Hours/Day per Piece of Equipment**	Number of equipment operated each day of the month											
				Month 1	**Month 2**	**Month 3**	**Month 5**	**Month 6**	**Month 7**	**Month 9**	**Month 10**	**Month 11**	**Month 13**	**Month 14**	**Month 15**
				Jun-14	**Jul-14**	**Aug-14**	**Oct-14**	**Nov-14**	**Dec-14**	**Feb-15**	**Mar-15**	**Apr-15**	**Jun-15**	**Jul-15**	**Aug-15**
Generator	30	Diesel	6	1	1	1	1	1	1	1	1	1	1	1	1
Skip Loader	78	Diesel	4	1	1	1	1	1	1	1	1	1	1	1	1
Track Trencher	115	Diesel	8	1	1	1	1	1	1	1	1	1	1	1	1

					Site Preparation, Clear & Grub, Water Supply, Boundaries, Staging Area, BMPs, Fencing											
					Phase I			Phase II			Phase III			Phase IV		
On-site Vehicle Type	**HP**	**Type**	**Miles/Day/ vehicle**	**Miles/ Hour/ vehicle**	Number of vehicles operated each day of the month											
					Month 1	**Month 2**	**Month 3**	**Month 5**	**Month 6**	**Month 7**	**Month 9**	**Month 10**	**Month 11**	**Month 13**	**Month 14**	**Month 15**
					Jun-14	**Jul-14**	**Aug-14**	**Oct-14**	**Nov-14**	**Dec-14**	**Feb-15**	**Mar-15**	**Apr-15**	**Jun-15**	**Jul-15**	**Aug-15**
On-Site Pick Up Truck	185	Diesel	20	8	3	3	3	3	3	3	3	3	3	3	3	3
5000 gal Water Truck	240	Diesel	10	8	5	5	5	0	0	0	0	0	0	0	1	1
On-Site ServiceTruck	210	Diesel	20	4	1	1	1	1	1	1	1	1	1	1	1	1
On-Site Flatbed Delivery Truck	280	HHD	20	10	2	2	2	2	2	2	2	2	2	2	2	2
On-Site Lube/Fuel Truck	210	HHD	10	10	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
On-Site Dump Truck	280	HHD	20	10	1	1	0	1	1	0	1	1	0	1	1	0

					Site Preparation, Clear & Grub, Water Supply, Boundaries, Staging Area, BMPs, Fencing											
					Phase I			Phase II			Phase III			Phase IV		
Off-site Vehicle Type	**HP**	**Type**	**Miles/Day**	**Miles/ Hour**	Number of vehicles operated each day of the month											
					Month 1	**Month 2**	**Month 3**	**Month 5**	**Month 6**	**Month 7**	**Month 9**	**Month 10**	**Month 11**	**Month 13**	**Month 14**	**Month 15**
					Jun-14	**Jul-14**	**Aug-14**	**Oct-14**	**Nov-14**	**Dec-14**	**Feb-15**	**Mar-15**	**Apr-15**	**Jun-15**	**Jul-15**	**Aug-15**
Off-Site Worker Commuter Bus, Small	220	HHD	50	55	1	1	1	1	1	1	1	1	1	1	1	1
Off-Site Worker Commute Car	140	HHD	50	55	43	43	43	43	43	43	43	43	43	43	43	43
Off-Site Water Delivery Truck	435	HHD	50	55	5	5	5	0	0	0	0	0	0	0	0	0
Off-Site Concrete Truck	300	HHD	50	55	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Off-Site Equipment/Material Delivery Truck	235	HHD	50	55	2	2	2	2	2	2	2	2	2	2	2	2

Earthwork		Phase I			Phase II			Phase III			Phase IV		
Activity	**Units**	Quantity per Month											
		Month 1	**Month 2**	**Month 3**	**Month 5**	**Month 6**	**Month 7**	**Month 9**	**Month 10**	**Month 11**	**Month 13**	**Month 14**	**Month 15**
		Jun-14	**Jul-14**	**Aug-14**	**Oct-14**	**Nov-14**	**Dec-14**	**Feb-15**	**Mar-15**	**Apr-15**	**Jun-15**	**Jul-15**	**Aug-15**
Quantity of Soil Cut	eryday of the month	0	0	5	5	5	5	5	5	5	5	5	5
Quantity of Soil Fill	eryday of the month	0	0	5	5	5	5	5	5	5	5	5	5
Storage Pile Exposed Area	eryday of the month	5	5	5	5	5	5	5	5	5	5	5	5
Quantity of Acres Paved	ryday of the month	0	0	0	0.2	0.2	0.2	0	0	0	0	0	0
Quantity of area disturbed	disturbe d per	2	2	2	2	2	2	2	2	2	2	2	2

Civil Improvements Construction Phase
Initial Access Road Improvement
Excavation
Grading - Construct Trenches
Grading - Cut & Fill
Improve Access Road
Construct Perimeter and Interior Roads
Soil Stabilization

					Phase I									Phase II					Initial Access
Equipment Type	HP	Fuel	Hours/Day per Piece of Equipment																Numb
				Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20
				Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
Dozer Cat D6R	185	Diesel	8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Generator	30	Diesel	6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Scraper Cat 623	365	Diesel	8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Deere 210LE Skip Loader	78	Diesel	6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Cat 140H Grader	185	Diesel	8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Roller Vibrator/compactor/other	350	Diesel	6	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Cat BG600D Paver	173	Diesel	6	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1

																		Ini
					Phase I									Phase II				
On-site Vehicle Type	HP	Type	Miles/Day/ Vehicle	Miles/ Hour/ Vehicle														
					Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19
					Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
5000 gal Water Truck	240	Diesel	10	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
On-Site Heavy Duty Pick Up Truck	235	HHD	20	10	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
On-Site Flatbed Delivery Truck	280	HHD	20	10	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
On-Site ServiceTruck	210	HHD	10	10	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
On-Site Lube/Fuel Truck	210	HHD	10	10	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
On-Site Dump Truck	280	HHD	20	10	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75

																		Ini
					Phase I									Phase II				
Off-site Vehicle Type	HP	Type	Miles/Day	Miles/ Hour														
					Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19
					Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Off-Site Worker Commute Car	140	HHD	50	55	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Off-Site Water Delivery Truck	435	HHD	50	55	7	7	7	0	0	0	0	0	0	0	0	0	0	0	0
Off-Site Equipment/Material Delivery Truck	235	HHD	50	55	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Earthwork		Phase I									Phase II							
Activity	Units																	Initial Access Roads, Exca
		Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21
		Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
Quantity of Soil Cut	Cu. Yd. every day of the month	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582
Quantity of Soil Fill	Cu. Yd. every day of the month	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445
Storage Pile Exposed Area	Cu. Yd. every day of the month	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Quantity of Acres Paved	Acres every day of the month	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0
Quantity of acres disturbed	Acres disturbed per day/graded	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Roads, Excavation, Grading, Interior & Perimeter Roads

	Phase III										Phase IV								
ıer of equipment operated each day of the month																			
Month 21	Month 22	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42
Feb-16	Mar-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
0	0	1	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0

tial Access Roads, Excavation, Grading, Interior & Perimeter Roads

	Phase III											Phase IV								
Number of equipment operated each day of the month																				
Month 20	Month 21	Month 22	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42
Jan-16	Feb-16	Mar-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75

tial Access Roads, Excavation, Grading, Interior & Perimeter Roads

	Phase III											Phase IV								
Number of equipment operated each day of the month																				
Month 20	Month 21	Month 22	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42
Jan-16	Feb-16	Mar-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

	Phase III									Phase IV								
ıvation, Grading, Interior & Perimeter Roads																		
Month 22	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 34	Month 35	Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42
Mar-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582
445	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Photovoltaic Field Construction Phase			
Underground work (AC/DC/Fiber trenching)		200	
Foundation work (PCS Vaults and Transformer Pa		200	
System Installation (Tilt Brackets, Tables, Wire Ha		520	
System Installation (PV Panels)		520	
System Instatllation (PVCS, PCS Shelters, Transformers and Inverters)			
Soil Stabilization		15	

				Underground utilities, Foundations, PV Field & System Installation																					
				Phase I								Phase II								Phase III				
Equipment Type	HP	Fuel	Hours/Day per Piece of Equipment	Number of equipment operated each day of the month																				
				Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36
				Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17
Generator	30	Diesel	8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Air Compressor	25	Diesel	8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Dozer Cat D6R	185	Diesel	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Deere 210LE Skip Loader	78	Diesel	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Telehandler	99	Diesel	8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Track Trencher	115	Diesel	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cat 583T Pipelayer	310	Diesel	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

					Underground utilities, Foundations, PV Field & System Installation																				
					Phase I								Phase II								Phase III				
On-site Vehicle Type	HP	Type	Miles/Day/ Vehicle	Miles/ Hour/ Vehicle	Number of vehicles operated each day of the month																				
					Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 31	Month 32	Month 33	Month 34	Month 35
					Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
On-Site Pick Up Truck	210	Diesel	20	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
On-Site Heavy Duty Pick Up Truck	235	HHD	20	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
On-Site Flatbed Delivery Truck	280	HHD	20	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
On-Site ServiceTruck	210	HHD	10	10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
On-Site Lube/Fuel Truck	210	HHD	10	10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
On-Site Dump Truck	280	HHD	20	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

					Underground utilities, Foundations, PV Field & System Installation																				
					Phase I								Phase II								Phase III				
Off-site Vehicle Type	HP	Type	Miles/Day	Miles/ Hour	Number of vehicles operated each day of the month																				
					Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 31	Month 32	Month 33	Month 34	Month 35
					Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Off-Site Worker Commuter Bus, Small	220	HHD	50	55	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Off-Site Worker Commute Car	140	HHD	50	55	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359
Off-Site Concrete Truck	300	HHD	50	55	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Off-Site Equipment/Material Delivery Truck	235	HHD	50	55	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Off-Site Equipment/Material Delivery Truck	235	HHD	100	55	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Earthwork				Phase I								Phase II								Phase III				
Activity	Units			Underground utilities, Foundations, PV Field & System Installation																				
				Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Month 37
				Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17
Quantity of Soil Cut	ryday of the month		80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Quantity of Soil Fill	ryday of the month		65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Storage Pile Exposed Area	ryday of the month		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Quantity of area disturbed	bed per day/graded		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

	Phase IV								
Month 37	Month 38	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47
Jun-17	Jul-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
2	2	2	2	2	2	2	2	2	2
2	2	2	2	2	2	2	2	2	2
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

	Phase IV									
Month 36	Month 37	Month 38	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47
May-17	Jun-17	Jul-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
3	3	3	3	3	3	3	3	3	3	3
1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1
3	3	3	3	3	3	3	3	3	3	3
2	2	2	2	2	2	2	2	2	2	2
1	1	1	1	1	1	1	1	1	1	1

	Phase IV									
Month 36	Month 37	Month 38	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47
May-17	Jun-17	Jul-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
2	2	2	3	4	5	6	7	8	9	10
359	359	359	359	359	359	359	359	359	359	359
10	10	10	10	10	10	10	10	10	10	10
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6

	Phase IV								
Month 38	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47
Jul-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
80	80	80	80	80	80	80	80	80
65	65	65	65	65	65	65	65	65
10	10	10	10	10	10	10	10	10
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Building Construction Phase
Underground work (AC/DC/Fiber trenching)
Construct Interconnection Facilities
Construct Operations and Maintenance Building
Construct Water Storage/Treatment Facilities
Commissioning/pre-functional and functional testing
Soil Stabilization

				Construct Switchyard, Water Tanks, O&M Buildings			
				Phase I - IV/Ops Buildings			
Equipment Type	**HP**	**Fuel**	**Hours/Day per Piece of Equipment**	**Number of equipment operated each day of the month**			
				Month 19	**Month 20**	**Month 21**	**Month 22**
				Dec-15	**Jan-16**	**Feb-16**	**Mar-16**
Generator	30	Diesel	6	1	1	1	1
Air Compressor	25	Diesel	6	1	1	1	1
Skip Loader	78	Diesel	6	1	1	1	1
Crane - Boom Truck	250	Diesel	6	1	1	1	1

					Construct Switchyard, Water Tanks, O&M Buildings			
					Phase I - IV/Ops Buildings			
On-site Vehicle Type	**HP**	**Type**	**Miles/Day/ Vehicle**	**Miles/ Hour/ Vehicle**	**Number of equipment operated each day of the month**			
					Month 19	**Month 20**	**Month 21**	**Month 22**
					Dec-15	**Jan-16**	**Feb-16**	**Mar-16**
On-Site Heavy Duty Pick Up Truck	235	HHD	20	10	1	1	1	1
On-Site Flatbed Delivery Truck	280	HHD	20	10	1	1	1	1
On-Site Dump Truck	280	HHD	20	10	0.25	0.25	0.25	0.25

					Construct Switchyard, Water Tanks, O&M Buildings			
					Phase I - IV/Ops Buildings			
Off-site Vehicle Type	**HP**	**Type**	**Miles/Day**	**Miles/ Hour**	**Number of equipment operated each day of the month**			
					Month 19	**Month 20**	**Month 21**	**Month 22**
					Dec-15	**Jan-16**	**Feb-16**	**Mar-16**
Off-Site Worker Commute Car	140	HHD	40	20	56	56	56	56
Off-Site Concrete Truck	300	HHD	40	20	2	2	2	2
Off-Site Equipment/Material Delivery Truck	235	HHD	40	20	0.5	0.5	0.5	0.5

Earthwork		Construct Switchyard, Water Tanks, O&M Buildings			
Activity	**Units**	Phase I - IV/Ops Buildings			
		Month 19	**Month 20**	**Month 21**	**Month 22**
		Dec-15	**Jan-16**	**Feb-16**	**Mar-16**
Quantity of Soil Cut	eryday of the month	30	30	30	30
Quantity of Soil Fill	eryday of the month	30	30	30	30
Storage Pile Exposed Area	Cu. Yd. everyday of the month	5	5	5	5
Quantity of area disturbed	isturbed per day	0.25	0.25	0.25	0.25

Offsite Construction Phase
Site Preparation, Initial Access Roads, and Grading
Survey
Post Installation
High Voltage Transmission Line Installation
Interconnection
Commissioning/pre-functional and functional testing

			Transmission Line Installation								
Equipment Type	**HP**	**Fuel**	**Hours/Day per Piece of**								
Dozer Cat D6R	185	Diesel	8								
Generator	30	Diesel	6								
Cat 140H Grader	185	Diesel	8								
Roller Vibrator/compactor/other	350	Diesel	6								

				Transmission Line Installation								
Off-site Vehicle Type	**HP**	**Type**	**Miles/Day**	**Miles/ Hour**	**Number of**							
Off-Site Worker Commute Car	140	HHD	40	55								
4000 gal Water Truck	240	Diesel	10	8								
Off-Site Water Delivery Truck	435	HHD	40	20								
Off-Site Concrete Truck	300	HHD	40	20								
On-Site ServiceTruck	210	HHD	10	10								
Off-Site Equipment/Material Delivery Truck	235	HHD	40	20								
Off-Site Equipment/Material Delivery Truck	235	HHD	160	55								

Earthwork									
Activity	**Units**	**Transmission Line Installation**							
Quantity of Soil Cut	ryday of the month								
Quantity of Soil Fill	ryday of the month								
Storage Pile Exposed Area	ryday of the month								
Quantity of Acres Paved	yday of the month								
Quantity of are disturbed	sturbed per day								

Operations Phase
Maintenance
Cleaning
Operations activities

On-Site Equipment Type	HP	Fuel	Hours/Day per Piece of	Miles Driven per Day/Speed	Operat					
					Number of equipment opera					
					Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
					Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
F-150 Pickup Trucks	235	Diesel	4	10/15	1.5	1.5	1.5	1.5	1.5	1.5
Utility/Service Vehicles	210	Diesel	2	10/15	2	2	2	2	2	2
2200 gal Water Truck	240	Diesel	2	10/15	2	0	0	2	0	0
Portable Generator Lights	35	Diesel	2	-	2	2	2	2	2	2

Off-site Vehicle Type	HP	Type	Miles/Day	Miles/ Hour	Operat					
					Number of equipment opera					
					Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
					Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
Off-Site Worker Commute Car	140	HHD	40	55	29	16	16	29	16	16
Carpenter Service Vehicle	210	HHD	40	55	0.5	0.5	0.5	0.5	0.5	0.5
Electricial Service Vehicle	210	HHD	40	55	0.5	0.5	0.5	0.5	0.5	0.5
Off-Site Equipment/Material Delivery Truck	235	HHD	40	55	2 per month	2 per month	2 per month	2 per month	2 per month	2 per month

tions

ted each day of the month

Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
1.5	1.5	1.5	1.5	1.5	1.5
2	2	2	2	2	2
0	2	0	0	0	2
2	2	2	2	2	2

tions

ted each day of the month

Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
16	29	16	16	16	29
0.5	0.5	0.5	0.5	0.5	0.5
0.5	0.5	0.5	0.5	0.5	0.5
2 per month	2 per month	2 per month	2 per month	2 per month	2 per month

Equipment/Vehicle Type	Description	HP	Hours/Day/Vehicle	Miles/Day/vehicle Round Trip	Miles/Hour/Vehicle	Weight	1	2	3	4	5	6	7	8	9
On-Site Construction Equip							Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
FENCE - MOBILIZATION															
Generator	Multiquip WshpWatt	30	6	0	0	1,000	1	1	1	0	1	1	1	0	1
On-Site Pick Up Truck	Ford F150	235	8	25	15	21,000	3	3	3	0	3	3	3	0	3
On-Site Flatbed Delivery Truck	One-Ton	28	6	25	25	30,000	2	2	2	0	2	2	2	0	2
Skip Loader	Deere 210LE	78	4	10	5	14,000	1	1	1	0	1	1	1	0	1
5000 gal Water Truck	FrtLiner 4000 gal	240	8	20	10	34,000	1	1	1	0	1	1	1	0	1
On-Site ServiceTruck	Ford F150	235	4	25	15	21,000	1	1	1	0	1	1	1	0	1
On-Site Lube/Fuel Trucks	Ford F-150	235	6	25	15	21,000	8	8	8	0	8	8	8	0	8
Track Trencher	HT115	115	8	10	5	12,000	1	1	1	0	1	1	1	0	1
On-Site Dump Truck	One Ton	280	6	20	15	30,000	1	1	1	0	1	1	1	0	1
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK															
Dozer Cat D6R	Cat D6	185	8	10	5	42,000	0	0	0	1	1	1	1	1	1
Generator	Multiquip WshpWatt	30	8	0	0	1,000	0	0	0	2	2	2	2	2	2
Scraper Cat 623	Cat-623	365	8	10	5	83,000	0	0	0	1.5	1.5	1.5	1.5	1.5	1.5
Deere 210LE Skip Loader	Case 586G	78	8	10	5	14,000	0	0	0	1	1	1	1	1	1
Cat 140H Grader	Cat 14G	185	8	10	5	33,000	0	0	0	2	2	2	2	2	2
5000 gal Water Truck	FrtLiner 4000 gal	240	8	20	10	34,000	0	0	0	3	3	3	3	3	3
Roller Vibrator/compactor/other	Cat 826H	350	6	5	10	30,000	0	0	0	1	1	1	1	1	1
Cat BG600D Paver	AC Paver	173	6	5	10	64,000	0	0	0	0	1	1	1	1	0
On-Site Heavy Duty Pick Up Truck	Ford F150	235	6	20	10	21,000	0	0	0	1.5	1.5	1.5	1.5	1.5	1.5
On-Site Flatbed Delivery Truck	One-Ton	280	6	20	10	30,000	0	0	0	1	1	1	1	1	1
On-Site Lube/Fuel Trucks	Ford F-150	235	6	25	15	21,000	0	0	0	6	0	0	0	6	6
On-Site Service Truck	One-Ton	280	6	25	15	21,000	0	0	0	6	0	0	0	0	0
On-Site Dump Truck	One Ton	280	6	20	15	30,000	0	0	0	10	10	10	10	10	4
PV PANEL CONSTRUCTION															
Generator	Multiquip WshpWatt	30	8	0	0	1,000	0	0	0	0	0	0	0	0	0
Air Compressor	Ingersol Rand - 250 CFM	25	8	0	0	500	0	0	0	0	0	0	0	0	0
Dozer Cat D6R	Cat D6R	185	4	10	5	42,000	0	0	0	0	0	0	0	0	0
Deere 210LE Skip Loader	Deere 210LE	78	8	10	5	14,000	0	0	0	0	0	0	0	0	0
Telehandler	Cat TL943	99	8	10	5	21,000	0	0	0	0	0	0	0	0	0
Track Trencher	HT115	115	8	10	5	12,000	0	0	0	0	0	0	0	0	0
Cat 583T Pipelayer	Cat 583T	310	6	10	5	45,000	0	0	0	0	0	0	0	0	0
On-Site Pick Up Truck	Ford F-150	235	6	25	25	21,000	0	0	0	0	0	0	0	0	0
On-Site Heavy Duty Pick Up Truck	Ford F150	235	6	20	10	21,000	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	One-Ton	280	6	25	25	30,000	0	0	0	0	0	0	0	0	0
On-Site ServiceTruck	Ford F-150	235	6	25	15	21,000	0	0	0	0	0	0	0	0	0
On-Site Dump Truck	One Ton		6	20	15	30,000	0	0	0	0	0	0	0	0	0
On-Site Lube/Fuel Trucks	Ford F-150	235	6	25	15	21,000	0	0	0	0	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION															
On-Site Heavy Duty Pick Up Truck	Ford F150	235	6	20	10	21,000	0	0	0	0	0	0	0	0	0
On-Site Flatbed Delivery Truck	One-Ton	280	6	20	10	30,000	0	0	0	0	0	0	0	0	0
Generator	Multiquip WshpWatt	30	6	0	0	1,000	0	0	0	0	0	0	0	0	0
Air Compressor	Ingersol Rand - 250 CFM	25	6	0	0	500	0	0	0	0	0	0	0	0	0
Skip Loader	Deere 210LE	78	6	10	5	30,000	0	0	0	0	0	0	0	0	0
Crane - Boom Truck	Grove 25ton Rough Terrain	250	6	10	5	21,000	0	0	0	0	0	0	0	0	0
Testing & Commissioning															
On-Site Heavy Duty Pick Up Truck	Ford F150	235	6	20	10	21,000	0	0	0	0	0	0	0	0	0
On-Site ServiceTruck	Ford F-150	235	6	25	15	21,000	0	0	0	0	0	0	0	0	0
Cat BG600D Paver	AC Paver	173	6	5	10	64,000	0	0	0	0	0	0	0	0	0
Roller Vibrator/compactor/other	Cat 826H	350	6	5	10	30,000	0	0	0	0	0	0	0	0	0
Subtotal							**19**	**19**	**19**	**36**	**44**	**44**	**44**	**31**	**43**

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-17	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16
															Daily Count					
1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	0	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	8	0	8	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															Daily Count					
1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
2	2	2	0	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2
3	3	3	0	3	3	3	3	3	3	3	3	3	0	3	3	3	3	3	3	3
1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	15	1.5	1.5	1.5	1.5	1.5	1.5
1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
6	6	6	0	0	0	6	6	6	6	6	6	6	0	6	6	6	6	6	6	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	4	4	0	4	4	4	4	4	4	4	4	4	0	4	4	4	4	4	4	4
															Daily Count					
0	0	0	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
0	0	0	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
0	0	0	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
0	0	0	3	3	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3	0
0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
0	0	0	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
0	0	0	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															Daily Count					
0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
															Daily Count					
0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2	2
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
43	**43**	**24**	**38**	**54**	**54**	**41**	**41**	**41**	**46**	**49**	**32**	**51**	**19**	**54.5**	**41**	**41**	**41**	**41**	**44**	**26**

31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	0	0	0	0	0
1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
2	2	0	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0
3	3	0	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0
1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	0	0	0	0	0
1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
6	6	0	6	6	6	6	6	6	6	6	6	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	4	0	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0
2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
3	3	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3	0
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	0
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0
0	0	0	0	0	0	8	8	0	8	8	8	8	8	8	8	8	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	1	1
2	0	0	0	0	0	0	2	2	2	0	0	0	0	0	2	2	2
1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
45	**41**	**19**	**42**	**42**	**42**	**50**	**53**	**27**	**54**	**50**	**50**	**27**	**27**	**27**	**30**	**32**	**5**

Construction Equipment and Motor Vehicle Numbers											
Equipment/Vehicle Type	Description	HP	Hours/Day/Vehicle	Miles/Day/vehicle Round Trip	Miles/Hour/Vehicle	Gross Weight (lbs)	1	2	3	4	5
							Jun-14	Jul-14	Aug-14	Sep-14	Oct-14
FENCE - MOBILIZATION											
Off-Site Flat Bed Trucks	N/A	235	50	25	55	80,000	4	4	4	0	4
Off-Site Water Trucks	gal	240	50	25	55	55,000	5	5	5	0	0
Off-Site Fuel & Lube	N/A	235	50	25	55	21,000	1	1	1	0	1
Off-Site Fencing Trucks	N/A	235	50	25	55	80,000	4	4	4	0	4
Off-site Concrete Truck	12 CY Mixer	300	50	25	55	55,000	0	0.5	0.5	0	0.5
Porto-Let Truck	N/A	235	50	25	55	24,000	4	4	4	0	2
CIVIL IMPROVEMENTS - GRADING/ROADS/EARTHWORK											
Off-Site Gravel Rock/AC trucks	N/A	280	50	25	55	80,000	0	0	0	37	37
Off-Site Water Trucks	FrtLiner 4000 gal	240	50	25	55	55,000	0	0	0	8	8
Low Bed Delivery Trucks	N/A	235	50	25	55	80,000	0	0	0	1.5	1.5
Porto-Let Truck	N/A	235	50	25	55	24,000	0	0	0	3	3
PV PANEL CONSTRUCTION											
Off-Site Flat Bed Trucks	N/A	235	50	25	55	80,000	0	0	0	0	0
Off-Site PV Panel Trucks	N/A	280	150	436	55	80,000	0	0	0	0	0
Off-Site Inverters	N/A	280	150	30	55	80,000	0	0	0	0	0
Off-Site Tracker Trucks	N/A	280	150	30	55	80,000	0	0	0	0	0
Off-Site Cabling Trucks	N/A	235	150	25	55	80,000	0	0	0	0	0
Off-Site Fuel & Lube	N/A	235	50	25	55	21,000	0	0	0	0	0
Off-site Concrete Truck	12 CY Mixer	300	50	25	55	55,000	0	0	0	0	0
Off-Site Electrical Truck	N/A	235	50	25	55	55,000	0	0	0	0	0
Low Bed Delivery Trucks	N/A	235	50	25	55	80,000	0	0	0	0	0
Porto-Let Truck	N/A	235	50	25	55	24,000	0	0	0	0	0
SUBSTATION-BLDG-WATER TANK CONSTRUCTION											
Off-site Insulation Truck	N/A	235	50	25	55	55,000	0	0	0	0	0
Off-site Roof truck	N/A	280	50	25	55	55,000	0	0	0	0	0
Off-site Wall Truck	N/A	280	50	25	55	55,000	0	0	0	0	0
Off-Site Structural Steel truck	N/A	280	150	25	55	55,000	0	0	0	0	0
Off-Site Mechanical Truck	N/A	235	50	25	55	55,000	0	0	0	0	0
Off-Site Architechtural Truck	N/A	235	50	25	55	55,000	0	0	0	0	0
Testing & Commissioning											
Off-Site Flat Bed Trucks	N/A	235	50	25	55	80,000	0	0	0	0	0
Off-Site Fuel & Lube	N/A	235	50	25	55	21,000	0	0	0	0	0
Off-site Concrete Truck	12 CY Mixer	300	50	25	55	55,000	0	0	0	0	0
Subtotal							**18**	**18.5**	**18.5**	**49.5**	**61**

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
4	4	0	4	4	4	0	4	4	4	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	1	1	0	1	1	1	0	0	0	0	0
4	4	0	4	4	4	0	4	4	4	0	0	0	0	0
0.5	0.5	0	0.5	0.5	0.5	0	0.5	0.5	0.5	0	0	0	0	0
2	2	0	2	2	2	0	4	4	4	0	0	0	0	0
37	37	37	37	37	37	37	0	37	37	37	37	37	37	37
8	8	8	8	8	8	8	0	8	8	8	8	8	8	8
1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
3	3	3	3	3	3	3	0	3	3	3	3	3	3	3
0	0	0	0	0	0	0	5	5	5	5	5	5	5	5
0	0	0	0	0	0	0	75	75	75	75	75	75	75	75
0	0	0	0	0	0	0	4	4	4	4	4	4	4	4
0	0	0	0	0	0	0	12	12	12	12	12	12	12	12
0	0	0	0	0	0	0	2	2	2	2	2	2	2	2
0	0	0	0	0	0	0	8	8	8	8	8	8	8	8
0	0	0	0	0	0	0	10	10	10	10	10	10	10	10
0	0	0	0	0	0	0	5	5	5	5	5	5	5	5
0	0	0	0	0	0	0	5	5	5	5	5	5	5	5
0	0	0	0	0	0	0	4	4	4	4	4	4	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	**61**	**49.5**	**61**	**61**	**61**	**49.5**	**143.5**	**193**	**193**	**179.5**	**179.5**	**179.5**	**182.5**	**183.5**

21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**
Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
				Count										
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Count										
37	37	0	37	37	37	37	37	37	37	37	37	0	37	37
8	8	0	8	8	8	8	8	8	8	8	8	0	8	8
1.5	1.5	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	1.5	1.5
3	3	0	3	3	3	3	3	3	3	3	3	0	3	3
				Count										
0	5	5	5	5	5	5	5	5	0	5	5	5	5	5
0	75	75	75	75	75	75	75	75	0	75	75	75	75	75
0	4	4	4	4	4	0	0	0	0	4	4	4	4	4
0	12	12	12	12	12	0	0	0	0	12	12	12	12	12
0	2	2	2	2	2	0	0	0	0	2	2	2	2	2
0	8	8	8	8	8	8	8	8	0	8	8	8	8	8
0	10	10	10	10	10	10	10	10	0	10	10	10	10	10
0	5	5	5	5	5	5	5	5	0	5	5	5	5	5
0	5	5	5	5	5	5	5	5	0	5	5	5	5	5
0	4	4	4	4	4	4	4	4	0	4	4	4	4	4
				Count										
0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
				Count										
0.5	0.5	0	0	0	0	0	0	0.5	0.5	0.5	0	0	0	0
0.5	0.5	0	0	0	0	0	0	0.5	0.5	0.5	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.5	**183.5**	**130**	**179.5**	**179.5**	**179.5**	**161.5**	**161.5**	**162.5**	**50.5**	**180.5**	**179.5**	**130**	**179.5**	**179.5**

36	37	38	39	40	41	42	43	44	45	46	47	48
May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
37	37	37	37	37	37	37	0	0	0	0	0	0
8	8	8	8	8	8	8	0	0	0	0	0	0
1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	0	0	0	0	0
3	3	3	3	3	3	3	0	0	0	0	0	0
5	5	5	0	5	5	5	5	5	5	5	5	0
75	75	75	0	75	75	75	75	75	75	75	75	0
0	0	0	0	4	4	4	4	4	4	4	4	0
0	0	0	0	12	12	12	12	12	12	12	12	0
0	0	0	0	2	2	2	2	2	2	2	2	0
8	8	8	0	8	8	8	8	8	8	8	8	0
10	10	10	0	10	10	10	10	10	10	10	10	0
5	5	5	0	5	5	5	5	5	5	5	5	0
5	5	5	0	5	5	5	5	5	5	5	5	0
4	4	4	0	4	4	4	4	4	4	4	4	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0.5	0.5	0.5	0	0	0	0	0	0.5	0.5	0.5
0	0	0.5	0.5	0.5	0	0	0	0	0	0.5	0.5	0.5
0	0	0	0	0	0	0	0	0	0	1	1	1
161.5	**161.5**	**162.5**	**50.5**	**180.5**	**179.5**	**179.5**	**130**	**130**	**130**	**132**	**132**	**2**

Paved Roads = 405,108 Sw Ft or 9.3 acres
Unpaved Roads = 8,581,320 Sq Ft or 197 acres
O&M Building = 3000 Sq Ft
Switch Yards = 150410 Sq Ft x 2 or 6.9 acs
Inverter Pads= 605,484 Sq Ft or 13.9 acres
Transformer Pkgs= 121,968 Sq Ft or 2.8 acres
Water Treatment Area (ponds and fenced area)= 596,772 or 13.7 acres
485 MG
4,139 acre site
48 month construction schedule
Mon-Fri ops personnel schedule, 8 to 12 hour per day

4 phases, 3 at 125 MW each, 1 at 110 MW; each

Private Parcel within Site = 159.2 acres

Road
A preliminary

Assumptions:
Blythe
Blythe
We are keeping
The following
a) Stripping
b)
c) Scarify
d) There is

Blythe Solar Power Project
Earthwork Quantities Estimate
REV C

By: J. Dahlgren
2/18/2013

Checked: J. Bravo
2/20/2013

Region	Area (SF)	Area (Ac)	Cut Volume (CF)	Fill Volume (CF)
PCS Area	607,620	13.9	759,525	607,620
Unit Step-up Transformers	120,704	2.8	150,880	120,704
Switchyard	300,000	6.9	375,000	300,000
O&M building	3,000	0.1	3,750	3,000
Water treatment area	5,557	0.1	6,946	5,557
Evaporation Ponds	595,980	13.7	1,142,837	489,672
Onsite paved roads	38,613	0.9	48,266	38,613
Main access road	368,987	8.5	461,234	368,987
Unpaved roads	8,622,125	197.9	10,777,656	8,622,125
				GRAND TOTAL

	Unit 1		Unit 2	
Region	**Cut Volume (CY)**	**Fill Volume (CY)**	**Cut Volume (CY)**	**Fill Volume (CY)**
PCS Area	7,175	5,740	7,175	5,740
Unit Step-up Transformers	1,397	1,118	1,397	1,118
Switchyard	13,889	11,111	-	-
O&M building	139	111	-	-
Water treatment area	257	206	-	-
Evaporation Ponds	42,327	18,136	-	-
Onsite paved roads	1,788	1,430	-	-

Main access road	17,083	13,666	-	-
Unpaved roads	97,318	77,855	105,112	84,090
Unit Total	**181,374**	**129,373**	**113,684**	**90,948**

1 acre= 43,560 Sq Ft

6.138888889

Civil Grading	221.10
36 months/22 days per month	0.28

PV construction grading	24
24 months/22 days per month	0.045

Cut Volume (CY)	Fill Volume (CY)
28,131	22,504
5,588	4,471
13,889	11,111
139	111
257	206
42,327	18,136
1,788	1,430
17,083	13,666
399,172	319,338
508,374	**390,973**

Unit 3		Unit 4	
Cut Volume (CY)	Fill Volume (CY)	Cut Volume (CY)	Fill Volume (CY)
7,175	5,740	6,605	5,284
1,397	1,118	1,397	1,118
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

-	-	-	-
105,402	84,321	91,340	73,072
113,974	**91,179**	**99,342**	**79,474**

Total Acres	460,627	Total CY Cut	352,776	Total CY Fill
acres per day	582	CY cut per day	445	CY fll per day

Total Acres	47,746	Total CY Cut	38,197	Total CY Fill
acres per day	90	CY cut per day	72	CY Fill per day

Total Grading Impact

14,785	Max cut/month	12,399	Average cut/month (use total number of months of grading construction)
11,391	Max fill/month	9,536	Average fill/month (use total number of months of grading construction)
26,176	**Total max cut/fill**	**21,935**	**Total average max cut/fill**

		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Phase: Mobilization (1)	Acres disturbed per day/clear & grub - no grading	2	2	2	0	2	2
Phase: Civil Improvements (2)	Acres disturbed per day/grading	0	0	0	6.1	6.1	6.1
Phase: PV Construction (3)	Acres disturbed per day/grading	0	0	0	0	0	0
Phase: Building Construction (4)	Acres disturbed per day/clear & grub - no grading	0	0	0	0	0	0
Phase: Offsite (5)	Acres disturbed per day/grading						
Phase: Testing/Commissioning (6)	Acres disturbed per day/grading	0	0	0	0	0	0

Total Disturbed Non-graded Acreage	2	2	2	0	2	2
Total Disturbed Graded Acreage	0	0	0	6.1	6.1	6.1

Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19
2	0	2	2	2	0	2	2	2	0	0	0	0
6.1	6.1	6.1	6.1	6.1	6.1	0	6.1	6.1	6.1	6.1	6.1	6.1
0	0	0	0	0	0	10	10	10	10	10	10	10
0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0

2	0	2	2	2	0	2	2	2	0	0	0	0
6.1	6.1	6.1	6.1	6.1	6.1	10	16.1	16.1	16.1	16.1	16.1	18.1

Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.1	6.1	6.1	0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	0	6.1	6.1
10	0	10	10	10	10	10	10	10	10	0	10	10	10	10	10
2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.1	8.1	18.1	10	16.1	16.1	16.1	16.1	16.1	16.1	6.1	16.1	16.1	10	16.1	16.1

Month 36	Month 37	Month 38	Month 39	Month 40	Month 41	Month 42	Month 43	Month 44	Month 45	Month 46	Month 47	
0	0	0	0	0	0	0	0	0	0	0	0	
6.1	6.1	6.1	6.1	6.1	6.1	6.1	0	0	0	0	0	
10	10	10	0	10	10	10	10	10	10	10	10	
0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	>1/8	>1/8	(Paving)

0 0 0 0 0 0 0 0 0 0 >1/8 >1/8

16.1 16.1 16.1 6.1 16.1 16.1 16.1 10 10 10 10 10

Waste Streams	Hazardous	Total Weight (lbs)	Annual Weight	Non-Hazardous
Construction	150 cy + 2800 gallons	20,200	4,040	2880 cy + 75500 gallons
Operations	0	0	0	52 cy/year + 20000 gallons

Hauling	Hazardous	Vehicle	Schedule	Non-Hazardous
Construction	15,200 lbs	F650, 40,000, 300HP	6 mos = 4,000 lbs	587,328 lbs
Operations	0	N/A	N/A	145,616 lbs

Notes:

1. calculated at 4#/cubic foot; 7#/gallon
2. annual estimate
3. weight calculated on overall construction,48 impacted months total (4 years)
4. Schedule indicates frequency and weight at each offhaul

Total Weight (lbs)	Annual Weight Offhaul	Notes:
839,540	209,885	1, 3
145,616	145,616	1, 2

Vehicle	Schedule	Notes:
F650, 40,000, 300HP	90 days = 42,000 lbs	4
F650, 40,000, 300HP	Annually = 145, 616 lbs	2, 4

Equipment/Vehicle Type	Description	HP	Gross Weight (lbs)
Generator	Multiquip WshpWatt	30	1,000
Pick Up Truck	Ford F150	235	21,000
Flatbed Delivery Truck	One-Ton	280	30,000
Skip Loader	Deere 210LE	78	14,000
ServiceTruck	Ford F150	235	21,000
Lube/Fuel Trucks	Ford F-150	235	21,000
Track Trencher	HT115	115	12,000
Dozer Cat D6R	Cat D6	185	42,000
Scraper Cat 623	Cat-623	365	83,000
Deere 210LE Skip Loader	Case 586G	78	14,000
Cat 140H Grader	Cat 14G	185	33,000
5000 gal Water Truck	FrtLiner 5000 gal	240	34,000
Roller Vibrator/compactor/other	Cat 826H	350	30,000
Cat BG600D Paver	AC Paver	173	64,000
Dump Truck	One Ton	280	30,000
Air Compressor	Ingersol Rand - 250 CFM	25	500
Telehandler	Cat TL943	99	21,000
Cat 583T Pipelayer	Cat 583T	310	45,000
Heavy Duty Pick Up Truck	Ford F150	235	21,000
Crane - Boom Truck	Grove 25ton Rough Terrain	250	21,000

APPENDIX F SUMMER/FALL PLANT REPORT

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2012
Special-Status Summer Annual Plant Survey Report

Blythe Solar Power Project
Riverside County, CA

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NextEra Blythe Solar Energy Center, LLC

March 2013

EXECUTIVE SUMMARY

NextEra Blythe Solar Energy Center, LLC (NextEra Blythe), a wholly-owned subsidiary of NextEra Energy Resources, LLC, proposes to construct, operate, maintain, and decommission a photovoltaic (PV) solar energy generating facility, the Blythe Solar Power Project (BSPP or Project), on Bureau of Land Management (BLM)-administered land in unincorporated Riverside County, California. The BSPP was fully permitted as a solar thermal facility in September 2010 by Solar Trust of America (STA); NextEra Blythe acquired the BSPP permits and Right-of-Way (ROW) Grant in July 2012. The Project includes the 7,162-acre solar plant site, plus linear facilities (generation-tie line [gen-tie], access road, primary and secondary telecommunication lines, and distribution line), for a total Project Area of 7,345 acres.

Surveys were conducted in August and September 2012 to determine the presence, distribution, and approximate abundance of special-status summer annual plants (plants that germinate in late summer or early fall in response to summer rains). Although the Project was fully approved and permitted in 2010 and began construction in 2011, these surveys were conducted because there was insufficient rainfall to trigger germination at the time STA conducted plant surveys in Fall 2010 to comply with California Energy Commission's (CEC) Condition of Certification (COC) BIO-19. The surveys documented in this report supplement the comprehensive surveys for all special-status biological resources and their habitats that were conducted of the Project and surrounding area in 2009 and 2010 by STA's biological consultants (see EDAW AECOM 2009 and AECOM 2010).

At the time the surveys documented in this report were conducted, NextEra Blythe was still in the process of refining/reducing the Project footprint. To ensure that all potential areas within the Project footprint would be captured, the entire STA project footprint (for the 1,000-MW thermal solar project) was surveyed.

Surveyors did not find any federally or state-threatened, endangered, or candidate plant species during surveys. However, surveyors did observe two special-status plants within the Survey Area:

- Abrams' spurge (*Euphorbia* (=*Chamaesyce*) *abramsiana)* California Natural Diversity Database [CNDDB] G4/S2S3; California Native Plant Society [CNPS] Rare Plant Rank 2.2.
- Desert unicorn plant (*Proboscidea althaeifolia):* CNDDB G5/S3.3; CNPS Rare Plant Rank 4.

More than 2,270 Abrams' spurge plants were observed in the northwest quarter of the solar plant site. These plants are part of a population that extends north for at least two miles beyond the Project. An extensive population of 85+ individuals was observed south of Interstate 10 (I-10) along the linear facilities. Outside of the Project Area, over 14,000 plants were observed along the north side of Black Rock Road, north of I-10. This species' rarity ranking is most likely a product of undersampling and survey observations indicate that this species is more widespread and common than originally thought.

Surveyors observed 1,687 desert unicorn plants within the Survey Area, primarily in runnels and swales that held water for a short time. This species was common and evenly distributed throughout the Project Area with the exception of the far west portion of the solar plant site and sand dunes and sheets south of I-10. Observations were considered part of the same

population that extends north and east where plants can be found in suitable habitat. As a CNPS Rare Plant Rank 4, it requires California Environmental Quality Act (CEQA) consideration only if the population has local or regional significance (California Department of Fish and Game [CDFG] 2009). Based on the abundance and distribution within the BSPP and nearby areas, the BSPP population is not considered locally or regionally significant.

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1.0 INTRODUCTION

NextEra Blythe Solar Energy Center, LLC (NextEra Blythe), a wholly-owned subsidiary of NextEra Energy Resources, LLC, proposes to construct and operate the Blythe Solar Power Project (BSPP or Project), a photovoltaic (PV) solar energy generating facility on Bureau of Land Management (BLM)-administered land in unincorporated Riverside County, California. The BSPP was fully permitted as a solar thermal facility in September 2010 by Solar Trust of America (STA); NextEra Blythe acquired the BSPP permits and Right-of-Way (ROW) Grant in July 2012. The Project included a 7,162-acre solar plant site plus linear facilities (generation-tie line [gen-tie], access road, primary and secondary telecommunication lines, and distribution line), for a total Project Area of 7,345 acres.

This report presents the result of surveys conducted in August 2012 to determine the presence, distribution, and approximate abundance of special-status summer annual plants (plants that germinate in late summer or early fall in response to summer rains). These surveys supplement the comprehensive surveys for spring special-status plants and other biological resources and their habitats that were conducted of the Project Area and surrounding area in 2009 and 2010 by STA's biological consultants (see EDAW AECOM 2009 and AECOM 2010). Although the Project was fully approved and permitted in 2010 and began construction in 2011, these surveys were conducted to comply with the California Energy Commission's (CEC) Condition of Certification (COC) BIO-19 because, due to negligible precipitation in 2010, AECOM was unable to conduct a full survey for fall-growing herbaceous species (Graham 2010).

2.0 PROJECT LOCATION AND ENVIRONMENTAL SETTING

A detailed description of site characteristics with photographs can be found in the earlier biological resources technical reports (EDAW AECOM 2009; AECOM 2010). However, the following provides a brief summary of the salient features of the Project's habitats (both natural and altered) and vegetation communities.

The Project is located in the Sonoran Desert approximately eight miles northwest of the City of Blythe, California (Figure 1). Surrounding mountain ranges include the McCoy Mountains to the west, the Little Maria Mountains to the north, and the Big Maria Mountains to the northeast. McCoy Wash, a broad wash system flowing into Palo Verde Valley, is located northeast of the Project. Elevations range from 400 to 700 feet above mean sea level.

North of I-10, the Project Area lies along the bajada sloping out of the eastern side of the McCoy Mountains. The western portion of the solar plant site is dominated by gently undulating terrain, with many scattered, often broad, patches of largely unvegetated gravel desert pavement. The eastern part of the solar plant site is relatively flat and characterized by generally finer soils than to the west, although some patches of fine gravel- and coarse gravel-desert pavement are present. Both shrubby and arboreal washes cross the site, with sheet flow areas in the east.

The dominant plant community on the Project Area is characterized by associations (i.e., subsets) of the Creosote Bush-White Burr Sage (*Larrea tridentata-Ambrosia dumosa)* Scrub Alliance (after Sawyer, Keeler-Wolf and Evens [2009]). Dominant species include creosote bush, white burr sage (more commonly known as white bursage or burrobush), brittlebush (*Encelia farinosa*), and white rhatany (*Krameria bicolor*). However, even upland vegetation is most well developed in the drainages, undoubtedly because most of the available water is in the

drainages due to the low regional rainfall and substrate and soil quality. The shallow runnels and washes are dominated by these upland species, generally with big galleta grass (*Hilaria rigida*) and sometimes with wash-dependent shrub vegetation (desert lavender [*Hyptis emoryi*], catclaw acacia [*Senegalia* (= *Acacia*) *greggii*], Anderson boxthorn (*Lycium andersonii*), chuckwalla bush [*Bebbia juncea*], and white and/or little-leaf rhatany [*Krameria erecta*]) in those carrying more water. Blue Palo Verde-Ironwood (*Parkinsonia florida-Olneya tesota*) Woodland Alliance is present in the larger, ephemeral washes that cross the solar plant site, as well as along the linear facilities. Along the linear facilities south of I-10, soils are generally both fine and sandy; shallow sand sheets and dunes, interspersed with small, exposed basins, characterize the east-west segment of this part of the linear route.

With the exception of the initial construction on BSPP in 2011 (a 250-acre area near the center of the solar plant site and the access road north of Interstate 10 [I-10]), there is little disturbance of the Project Area. Adjacent to the solar plant site is a fallow field and an actively farmed citrus orchard. The Project is also located immediately south of the proposed McCoy Solar Energy Project (MSEP). The linear facilities cross I-10 and existing utilities adjacent to the freeway. An alternate linear route west of the BSPP circumvents a small World War II-era water catchment.

3.0 SURVEY METHODS

Prior to field surveys, a target list of special-status species that might be affected by the Project was developed (Table 1) based largely on a review of available literature and databases, especially the California Native Plant Society (CNPS), California Natural Diversity Data Base (CNDDB); Consortium of California Herbaria, and the results of regional surveys. Consultations with the resource agencies (Tetra Tech and Karl 2010) and local experts, as well as the inclusion of BLM Sensitive species from the Northern and Eastern Colorado (NECO) Plan (U.S. BLM and California Department of Fish and Game[1] [CDFG] 2002) also augmented the special species search list. All species were included in the target list if there was any chance that they might grow in the Project vicinity, even if they had never been observed at this elevation or in this area, or if the BSPP would represent a range extension. Herbaceous perennials that also grow in the spring and were surveyed in prior surveys (e.g., Utah cynanchum [*Funastrum utahense*]), as well as the woody and succulent perennials in Table 1 that are available for surveying at any time of year are not included in this report.

The Survey Area is defined as all areas that were surveyed in August/September 2012 for summer annual and herbaceous perennial plants, which include STA's 1,000-MW thermal solar plant site and linear facilities plus an alternate gen-tie route west of the proposed linear route (Figure 2). The linear routes ranged from 200 to 264 ft (60 to 80 m) wide. At the time the surveys were conducted, NextEra Blythe was still in the process of refining/reducing the Project footprint. To ensure that all potential areas within the Project footprint were captured, the entire STA project footprint (for the 1,000-MW thermal solar project) was surveyed.

[1] The California Department of Fish and Game changed its name to the California Department of Fish and Wildlife as of January 1, 2013. This document uses CDFG since it refers to documents and guidance prepared or provided by the agency prior to 2013.

Table 1. Special-status summer annual plants potentially occurring within the Blythe Solar Power Project

Species		Status[1]				Habitat	Blooming Time	Likelihood of Occurrence on the Project Site[2]
		Federal	State	CNDDB Rank	CNPS/ Other			
Abronia villosa var.*aurita*	Chaparral Sand Verbena	---	---	G5T3T4/S2	1B.1	Loose to aeolian sands; chaparral and coastal sage scrub; below 2,000 feet	January-September	Highly unlikely; not observed
Chamaesyce parryi	Parry's Spurge	---	---	G5/S1	2.3	Dunes an Aeolian soils in Mojavean Desert Scrub; in California, known only from Kelso; 1,300-2,400 feet	May-November	Highly unlikely due to limited range and not observed
Chamaesyce platysperma	Flat-seeded Spurge	BLM Sensitive	---	G3/S1	1B.2	Sandy flats and dunes in Sonoran Desert Scrub; below 350 feet	February-September	Unlikely - not observed
Cuscuta californica var. *apiculata*	Pointed Dodder	---	---	G5T3?/S2S3	3	Sonoran and Mojavean Desert Scrubs in San Bernardino County (one record in western Riverside County), to Nevada and Baja, California; 0 – 1,650 feet	February-September	Possible; not observed
Digitaria californica	Arizona Cottontop	---	---	G5T5?/S2	2.3	Rocky Sonoran and Mojavean Desert Scrubs; three consortium records in California; 950 to 4,900 feet	July-November	Highly unlikely due to rocky association; not observed
Ditaxis claryana	Glandular Ditaxis	---	---	G4G5/S1	2.2	Sandy flats in Mojavean and Sonoran Creosote Bush Scrubs in Imperial, San Bernardino, and Riverside counties; below 1,500 feet	Mostly December to May, rarely August-October	Possible; not observed
Ditaxis serrata var. *californica*	California Ditaxis	---	---	G5T2T3/S2	3.2	Sonoran Creosote Bush Scrub from 100 to 3,000 feet	All year	Possible; not observed
Euphorbia (=Chamaesyce) abramsiana	Abrams' Spurge	---	---	G4/S2/3[3]	2.2	Sandy sites in Mojavean and Sonoran Desert scrubs in eastern California; 0 to 3,000 feet	September-November	Observed on and off site in 2012 and on adjacent MSEP in 2011
Funastrum utahense	Utah vine milkweed	---	---	G4/S3.2	4.2	Sandy and gravelly areas in Mojavean and Sonoran Creosote Bush Scrub; 490 – 4,700 feet	Spring, Fall	Observed during 2012 surveys, but not recorded due to extensive mapping during previous surveys
Helianthus niveus tephrodes	Algodones Dunes Sunflower	---	E	G4T2/S2	1B.2	Desert dunes, especially Algodones Dunes	March-May, October-January	Highly unlikely; not observed
Horsfordia alata	Pink Velvet Mallow	---	---	G4/S3.3	4.3	Rocky areas in Sonoran Desert Scrub, 328-1,640 feet	December-April, although Consortium records are from January to December	Highly unlikely; not observed
Horsfordia newberryi	Newberry's Velvet-mallow	---	---	G4/S3.3	4.3	Mostly rocky canyons and toeslopes in Sonoran Desert Scrub; 10 – 2,650 feet	March-April and November-December	Possible - most Consortium records are spring; not observed
Hymenoxys odorata	Bitter Hymenoxys	---	---	G5/S2	2	Riparian scrub and Sonoran Desert Scrub,	February-May and	Unlikely because of species

Table 1. Special-status summer annual plants potentially occurring within the Blythe Solar Power Project

Species		Status[1]				Habitat	Blooming Time	Likelihood of Occurrence on the Project Site[2]
		Federal	State	CNDDB Rank	CNPS/ Other			
						sandy flats near Colorado River, known only from the Colorado River alluvial plain, 150- 495 feet	October-November	association with the Colorado River floodplain; not observed
Imperata brevifolia	California Satintail	---	---	G2/S2.1	2.1	Wet springs, meadows, and flood plains in Chaparral, Coastal Scrub, Mojavean Desert Scrub; 0 – 1,650 feet	September-May, but Consortium records are for entire year	Not present. No habitat and not observed
Physalis lobata	Lobed Ground Cherry	---	---	G5/S1.3?	2.3	Mojave Desert Scrub, playas, granitic soils, 1,640-2,625 feet	April-November	Not present – not observed. Also, all known locations well to north of Project and at higher elevations.
Portulaca halimoides	Desert Portulaca	---	---	G5/S3	4.2	Sandy areas and flats in Joshua tree woodland and desert mountains; 3,280-3,937 feet	April, August-October	Highly unlikely due to lack of habitat and elevational constraints; not observed
Proboscidea althaeifolia	Desert Unicorn Plant	---	---	G5/S3.3	4.3	Sandy areas in Sonoran Desert Scrub throughout southeastern California, below 3,300 feet.	(April-) May-August	Observed during 2012 surveys
Selaginella eremophila	Desert Spike Moss	---	---	G4/S2.2?	2.2	Shaded rocky habitats in the Sonoran Desert, to Arizona and northern Mexico; below 3,600 feet	December-April, July-October	Unlikely due to lack of habitat; not observed
Teucrium cubense depressum	Dwarf Germander	---	---	G4G5T3T4/S2	2.2	Sandy soils, washes, fields; below 1,300 feet	March-May, and September-November	Possible; not observed
Wislizenia refracta palmeri	Palmer's Jackass Clover	---	---	G5T2T4/S2?	2.2	Sandy washes and dunes in Sonoran Desert Scrub, to northwestern Mexico; potentially Mojave Desert (unverified); <430 feet.	March-November	Possible; not observed
Wislizenia refracta var. *refracta*	Jackass Clover	—	—	G5T5?/S1.2?	2.2	Sandy washes, roadsides, flats; 1,900 to 2,700 feet	April-December	Unlikely due to elevational constraints; not observed

Note: Other special-status species that grow only in late winter or spring, and woody species, were not included because they were surveyed in 2009 and 2010 (see EDAW AECOM 2009 and AECOM 2010).
Sources: Unless noted, information is from *The Jepson Manual* (Baldwin et al. 2002), California Native Plant Society (CNPS) Online Inventory (CNPS 2012), and the Jepson eFlora Project (http://ucjeps.berkeley.edu/IJM.html)

[1] Status:

BLM Sensitive: Species under review, rare, with limited geographic range or habitat associations, or declining. BLM policy is to provide the same level of protection as FWS candidate species

CNDDB 2012: CDFG Special Vascular Plants, Bryophytes, and Lichens List, October 2012 (www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf).

Global Rank:
- G1 = Critically Imperiled
- G2 = Imperiled
- G3 = Vulnerable

State Rank:
- S1 = Critically Imperiled
- S2 = Imperiled
- S3 = Vulnerable

Subspecies or Variety Rank and Other Symbols
- T1-T5: same definition as global and state ranks, except that rank only applies to the particular variety or subspecies.
- X: species is considered extirpated

Table 1. Special-status summer annual plants potentially occurring within the Blythe Solar Power Project

G4 = Apparently Secure S4 = Apparently Secure
G5 = Secure S5 = Secure

California Rare Plant Rank (CNPS 2012):

Rank 1A - Plants presumed extinct in California
Rank 1B - Plants rare and endangered in California and elsewhere
Rank 2 - Plants rare and endangered in California but more common elsewhere
Rank 3 -Plants about which CNPS needs more information
Rank 4 -Plants of limited distribution (Watch List)
(Note: California Rare Plant Rank 1 and 2 require CEQA consideration. List 3 and 4 plants that must be surveyed per the Northern and Eastern Colorado Desert Management Plan (BLM and CDFG 2002) were also included for surveying)

Threat Ranks:

0.1-Seriously threatened in California (high degree/immediacy of threat)
0.2-Fairly threatened in California (moderate degree/immediacy of threat)
0.3-Not very threatened in California (low degree/immediacy of threats or no current threats known)

[2] Because of the excellent germination and growth conditions for summer annual species in August/September 2012, larger species that were not observed were determined to be highly unlikely to be present if not observed. Small herbaceous species that were not observed could have been overlooked and therefore were not excluded from possibly being on the site.

[3] R. Bittmann (CNDDB), 06 December 2012 e-mail to E. Mix (TetraTech, Inc.).

Surveys were conducted according to COC BIO-19, and closely followed protocols that were reviewed and approved by the BLM, CDFG and the U.S. Fish and Wildlife Service (FWS) in 2010 for the MSEP (Tetra Tech and Karl 2010), located directly north of the BSPP. These protocols are consistent with the CDFG *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009). They are also consistent with BLM's *Survey Protocols Required for NEPA and ESA Compliance for BLM Special Status Plant Species* (BLM 2009) for an intuitive controlled survey, wherein a full survey is completed (i.e., 100 percent visual examination) in habitats with the highest potential for rare plants, with sampling in the remaining areas. To this end, surveys focused on swales, washes, runnels, rocky outcrops, and dunes because of the affinity of the herbaceous species in Table 1 for those habitats and because areas where rainfall collects have the greatest potential for germination of most species. To achieve this focus and optimize sampling, the Survey Area was divided into smaller sampling units and into the following survey categories:

- Full coverage (transects spaced no farther than 10 meters apart, covering 100 percent of the possible habitat) in the areas where the interdigitating mosaic of washes and runnels was too complex to survey less than 100 percent. This comprised approximately 75 percent of the solar plant site and 100 percent of the linear routes. Transects were pre-programmed into Global Positioning System (GPS) units to ensure accurate and complete site coverage. Survey teams were generally limited to three people to minimize the searching and focus inefficiencies that are common with larger teams.

- In the west, where intermittent drainages crossed broad sparse areas, full coverage in all vegetated drainages, from small runnels to larger washes, with sampling in the interfluves.

Surveys were conducted when plants were in optimum condition for identification (with flowers and/or fruits, leaves, and actively growing). The Blythe Airport weather station reported above-average precipitation for July and considerable rainfall for August 2012 (Table 2). The storms in July included a series of storms from July 12 to 15 that rained more than an inch and an intense monsoon on July 30-31 that recorded 0.38 inches of rain at Blythe Airport (National Oceanic and Atmospheric Administration [NOAA] 2012). The July and August rain events resulted in widespread germination and growth of summer species. The biological lead timed surveys to capture germination resulting from the several July storms, after assessing plant vigor and phenology in the field. Surveys were then further chronologically prioritized in the Survey Area to insure that the areas/habitats that could host special-status plants were surveyed at the appropriate phenological time, when those species were available for identification. Surveys were conducted from August 23 through September 2, 2012. A qualified botanical team, with substantial experience in the area (Appendix A), conducted the surveys.

Table 2. 2012 Monthly precipitation data (in inches), Blythe, CA airport (Source: Western Regional Climate Center 2012)

YEAR	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual
2012	0.00	0.01	0.19	0.14	0.00	0.00	1.88	1.05	0.07	0.27*	TBD	TBD	TBD
Average 1948-2012	0.48	0.44	0.35	0.15	0.02	0.02	0.28	0.60	0.34	0.26	0.19	0.41	3.55

TBD: To Be Determined – Data not currently available for these months

* 7 days missing from total

Surveyors targeted every special-status plant that could be reasonably expected to occur, but employed a comprehensive floristic survey approach, identifying all plants observed to ensure that unexpected special-status plants were also found. Surveyors were very experienced with plant species in the arid southwest, but were also equipped with plant descriptions, keys to identify plants to the subspecies level, and pictures of each special-status plant species with the potential to occur within the Survey Area. All species observed were identified microscopically using relevant publications (e.g., Baldwin et al. 2002, Felger 2000, Jepson eFlora 2012); special-status species were photographed and vouchered. Surveyors described and mapped all populations of special-status plant species (except as noted above). Populations were recorded using GPS units, and population size, associated biotic and abiotic features, phenology, plant size (vigor), and threats to the population were noted.

Prior to conducting surveys, surveyors reviewed the target species (descriptions, photographs of live or herbarium specimens, microhabitat associations) to enhance search images of plants and microhabitats and determine distinctions among similar genera. Reference populations of Abrams' spurge (*Euphorbia* (=*Chamaesyce*) *abramsiana*) were visited to refresh search images and because known populations were close. For the other fall-growing species, either no reference populations were reasonably close and/or the species were highly unlikely due to lack of habitat or geographic range. However, the surveyors were already very familiar with many from studying them elsewhere and/or reviewing distant reference populations for the MSEP survey the year prior.

Surveyors were also instructed to record any recent desert tortoise (*Gopherus agassizii;* state and federally listed as Threatened) sign - individuals, scat, and tracks – as well as observations of other special-status wildlife.

4.0 SURVEY RESULTS AND DISCUSSION

Surveyors did not find any federally or state-threatened, endangered, or candidate plant species during surveys. However, surveyors did observe populations of two CNDDB Ranked and CNPS California Rare Plant Ranked species within the Survey Area: Abrams' spurge and desert unicorn plant (*Proboscidea althaeifolia).* Observations are presented as CNDDB Occurrences on Figures 3A and 3B with an estimation of the extent of the population to a mile from the Project. Population extents were estimated based on habitat (e.g., drainages and drainage patterns), as well as available data from previous surveys in the surrounding areas (AECOM 2010, Tetra Tech and Karl 2011b). A comprehensive table of observations with corresponding figures is presented in Appendix B. A comprehensive list of plants observed during surveys is in Appendix C. Copies of the completed and submitted CNDDB forms for each species are in Appendix D.

4.1 Abrams' Spurge (CNPS California Rare Plant Rank 2.2; CNDDB G4/S2S3)

This member of the Euphorbiaceae family is an annual herb native to California, Arizona, and Mexico at elevations ranging between sea level and 915 feet; it has been documented in Imperial, Riverside, San Bernardino, and San Diego Counties (CNPS 2012). This species blooms in response to warm summer rains and, while it is reported to be found in creosote bush scrub in sandy soils (CNPS 2012), it was consistently found in fine, often compacted, soils with low sand composition that hold moisture.

Abrams' spurge (photo A. Karl)

Abrams' spurge was found within and outside of the Survey Area during the August/September 2012 surveys. There were 2,270+ plants within the Survey Area; 2,185+ plants in the northwest quarter of the solar plant site and 85+ plants along the linear facilities south of I-10. The plants in the solar plant site are part of a population that extends north beyond the Project boundary for at least two miles (Tetra Tech and Karl 2011b). An additional 14,000+ plants were found outside the Project directly north of Black Rock Road, an existing graveled road that fronts I-10 and provides access to the Project. Plants were found almost exclusively in shallow depressions and runnels.

Although widespread in southern Arizona and northwestern Sonora, Mexico (Felger 2000), few locations for Abrams' spurge had been documented in California prior to the Fall 2011. Large-scale surveys on several solar projects in 2011 and 2012 (e.g., MSEP, BSPP, Rio Mesa Solar Electric Generating Facility), plus a California range-wide search in 2011 and 2012 supported by McCoy Solar, LLC, demonstrated that this species is far more common than earlier believed. With increased sampling in both 2011 and 2012, the number of publicly documented occurrences of *C. abramsiana* increased from 16 to 74. The results from these extensive and intensive surveys during two years of high germination and growth strongly suggest that this species has been undersampled in California in the past. This discussion, as well as further analyses of Abrams' spurge, can be found in Karl (2013).

4.2 Desert Unicorn Plant (CNPS California Rare Plant Rank 4.3; CNDDB G5/S3.3)

This perennial herb in the family Martyniaceae grows on alluvial sands in Sonoran Desert scrub habitat at elevations below 3,300 feet (Baldwin et al. 2002). Desert unicorn plant has a fleshy root system that can remain dormant in dry years. Although it typically grows and flowers between July and September after substantial summer rains, a few individuals have aboveground growth in spring. Fruits (seed pods) from the previous year are large and moderately visible throughout the year.

This species was common throughout the Survey Area except in the far western portion of the solar plant site and the loose sandy areas south of I-10. Surveyors observed 1,687 plants within the Survey Area, primarily in runnels and swales that held water for a short time. The

observations are likely part of one population within the same watershed that extends to the north for at least two miles (Tetra Tech and Karl 2011b); plants are expected to occur in suitable habitat in the vicinity of the Project (Figure 3A and 3B). The consistency of plants in appropriate swales was also observed elsewhere in the region, including the Genesis Solar Energy Project (Tetra Tech and Karl 2010) and McCoy Solar Energy Project (Tetra Tech and Karl 2011a, 2011b).

Desert unicorn plant in flower (Photo E. Mix)

As a CNPS Rare Plant Rank 4, desert unicorn plant requires CEQA consideration if the population has local or regional significance (CDFG 2009). Based on the abundance and distribution within the BSPP and nearby project areas, the BSPP population is not considered locally or regionally significant.

4.3 Incidental Wildlife

No recent desert tortoise sign or special-status species was observed during surveys.

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FIGURES

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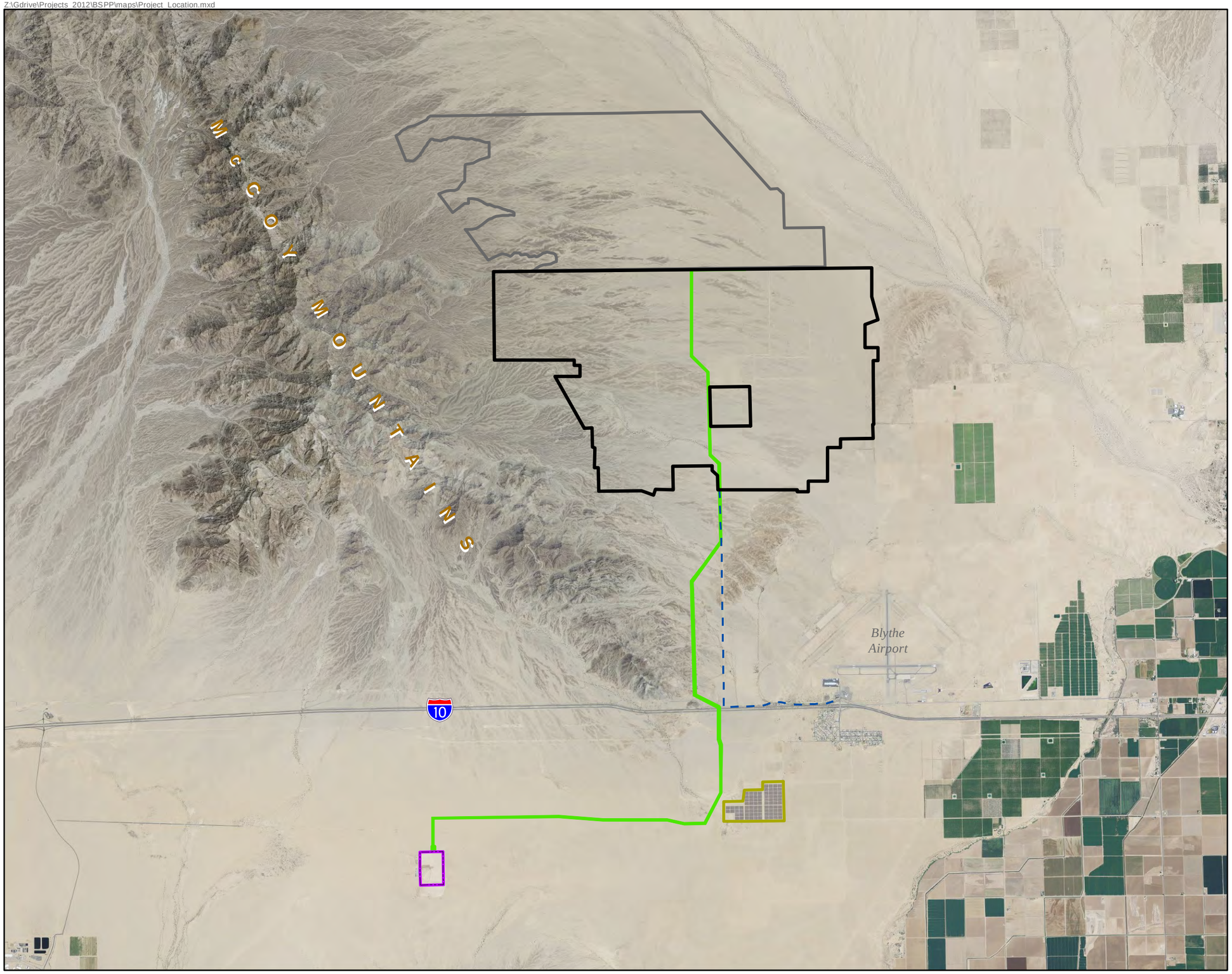
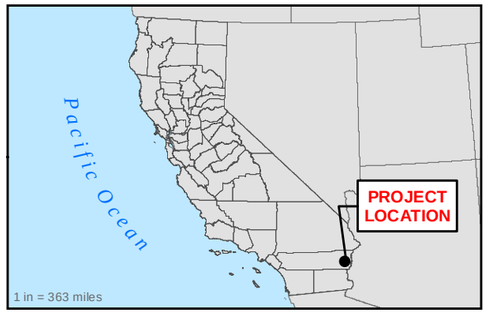


BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA



Legend

- Blythe Solar Power Project Requested ROW (STA's 1,000-MW Footprint)
- MSEP Solar Plant Site
- PV Solar Facility
- Linear Corridor
- Access Road Shared with Other Solar Projects
- SCE Colorado River Substation

0 2,500 5,000 10,000

Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: ESRI, USGS, TTEC

FIGURE 1
PROJECT LOCATION

TETRA TECH

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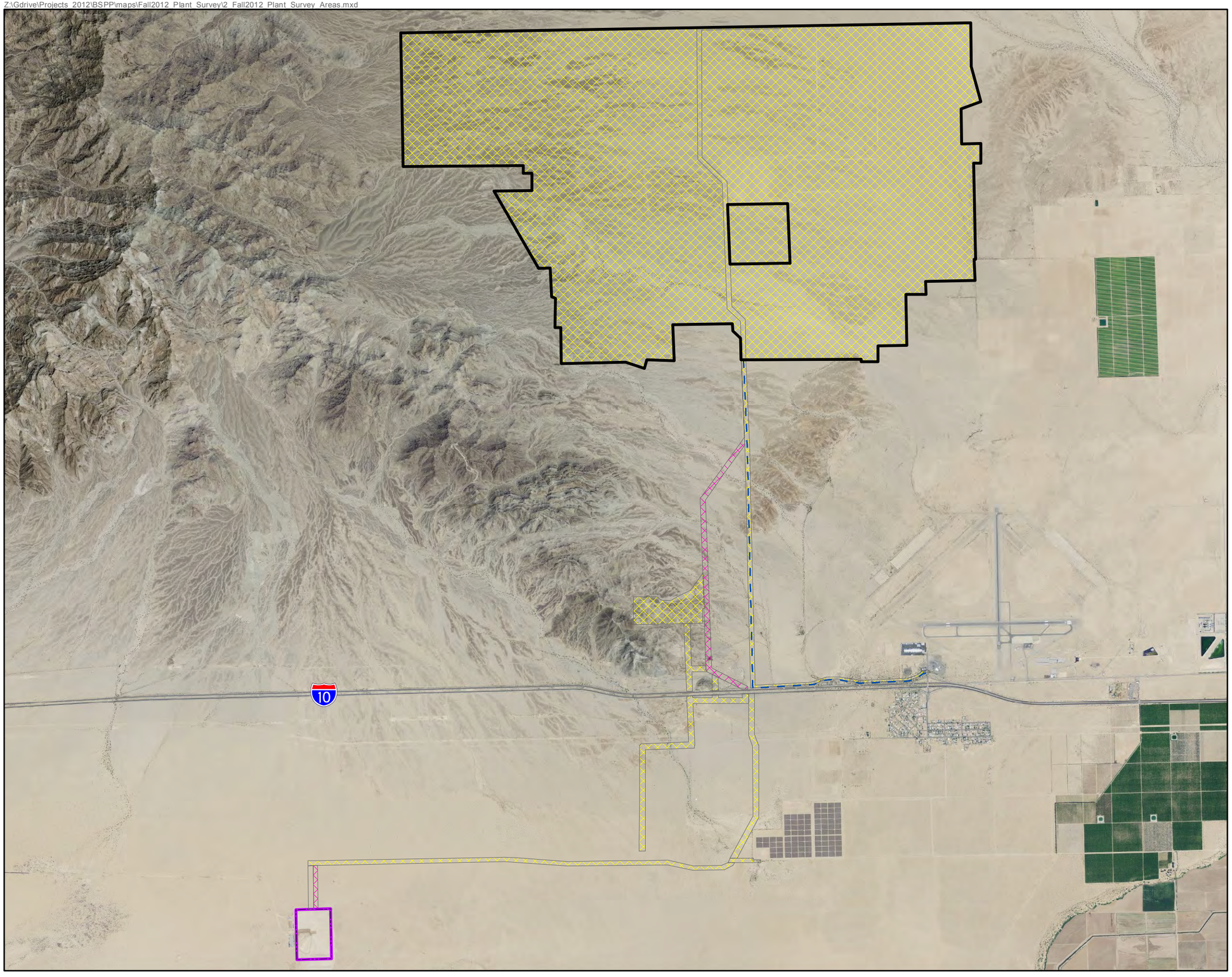

BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA

Legend

- Blythe Solar Power Project ROW Boundary (STA's 1,000-MW Footprint)
- Linear Corridor
- Access Road Shared with Other Solar Projects
- SCE Colorado River Substation
- Linear Corridor Survey Area
- Linear Corridor Survey Area in Fall 2011 for MSEP

N

0 2,500 5,000 10,000
Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, TTEC

FIGURE 2
SPECIAL-STATUS
SUMMER ANNUAL PLANT SURVEY AREA
AUGUST/SEPTEMBER 2012

TETRA TECH

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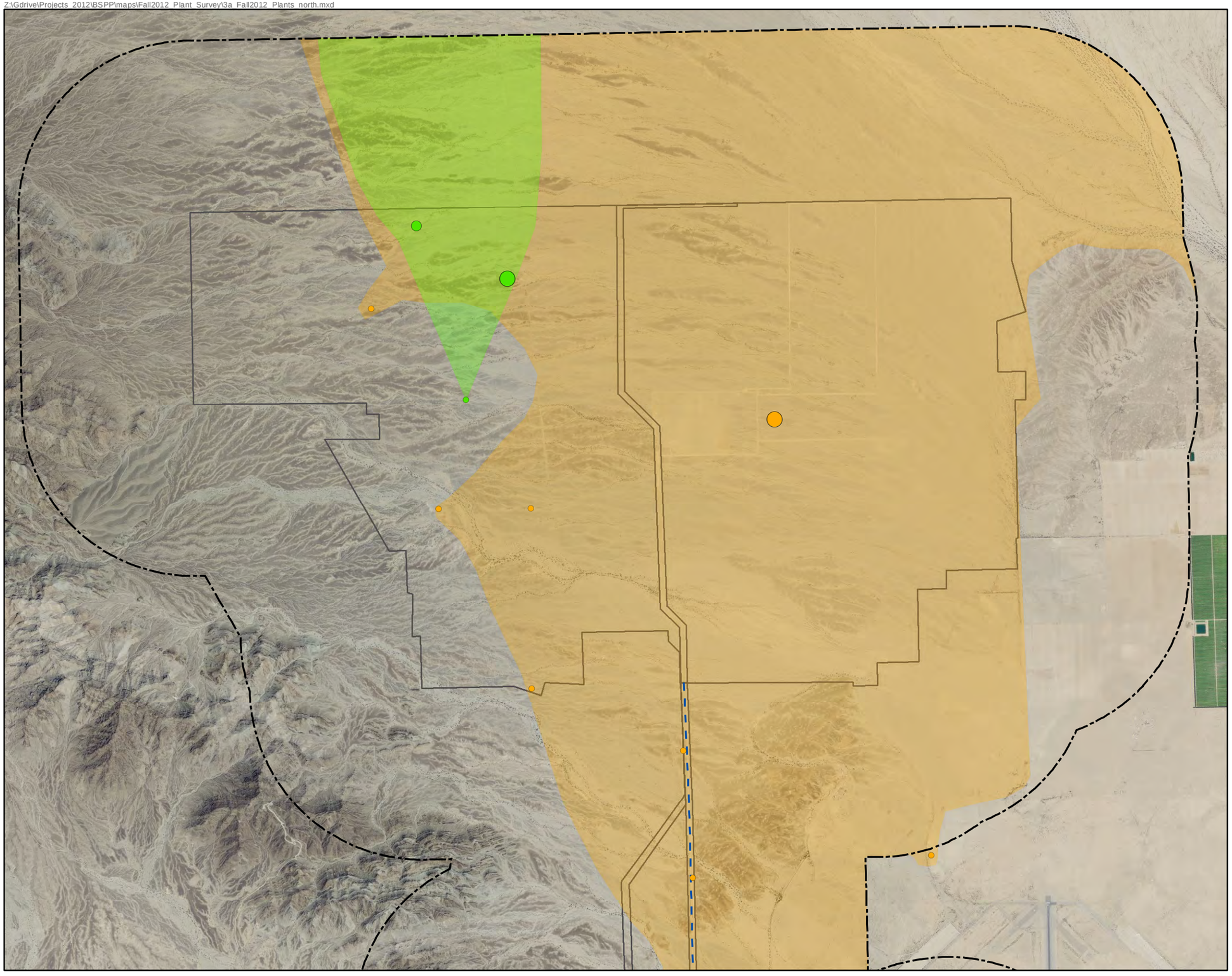

BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA

Legend

- Survey Area
- Survey Area 1-mile Buffer
- Access Road Shared with Other Solar Projects

Plant Species

- Abrams' Spurge
- Desert Unicorn Plant

Occurrence (as defined by CNDDB) Size

- <25 Plants
- 25-100 Plants
- 101-500 Plants
- 501-1,000 Plants
- >1,000 Plants

Extent of Recorded Observations and Estimated Populations

- Abrams' Spurge
- Desert Unicorn Plant

N

0 1,250 2,500 5,000

Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, Tetra Tech, A. Karl 2011

FIGURE 3A
CNDDB OCCURRENCES
AUGUST/SEPTEMBER 2012

TETRA TECH

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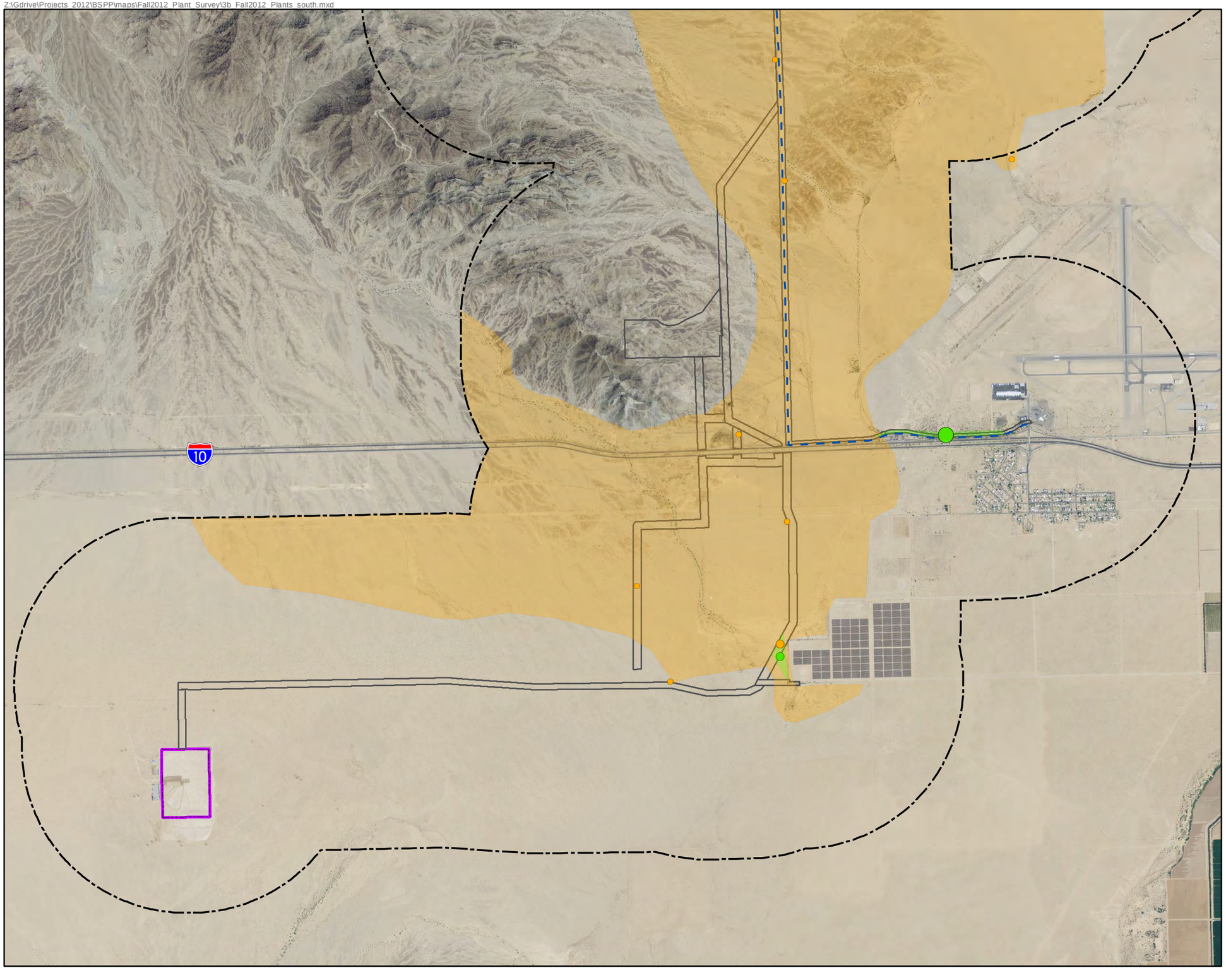

BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA

Legend

- Survey Area
- Survey Area 1-mile Buffer
- Access Road Shared with Other Solar Projects
- SCE Colorado River Substation

Plant Species

- Abrams' Spurge
- Desert Unicorn Plant

Occurrence (as defined by CNDDB) Size

- <25 Plants
- 25-100 Plants
- 101-500 Plants
- 501-1,000 Plants
- >1,000 Plants

Extent of Recorded Observations and Estimated Populations

- Abrams' Spurge
- Desert Unicorn Plant

N

0 1,250 2,500 5,000

Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, Tetra Tech, A. Karl 2011

FIGURE 3B
CNDDB OCCURRENCES
AUGUST/SEPTEMBER 2012,
LINEAR FACILITIES

TETRA TECH

APPENDIX A
August-September 2012 Survey Crew

Field Biologists
Marc Baker, Ph.D.
Kyle Christie
Michelle Cloud Hughes
Paul Frank
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Adam Hamburg
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Suzanne Rhodes
Glenn Rink
Gina Robinson
Kanan Routson
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*Report Preparers

APPENDIX B
Comprehensive August 2012 Special-status Plant Survey Results

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
2	705543	3729819	*Euphorbia (=Chamaesyce)*	Abrams' spurge	33	300
4	705682	3729844	*Euphorbia (=Chamaesyce)*	Abrams' spurge	10	189
5	705707	3729671	*Euphorbia (=Chamaesyce)*	Abrams' spurge	19	10
7	705899	3729866	*Euphorbia (=Chamaesyce)*	Abrams' spurge	10	100
10	706025	3729917	*Euphorbia (=Chamaesyce)*	Abrams' spurge	42	550
14	706201	3729957	*Euphorbia (=Chamaesyce)*	Abrams' spurge	4	5
16	706337	3728184	*Euphorbia (=Chamaesyce)*	Abrams' spurge	2	1
22	706648	3729335	*Euphorbia (=Chamaesyce)*	Abrams' spurge	> 2000	170 (linear)
24	706802	3729312	*Euphorbia (=Chamaesyce)*	Abrams' spurge	65	80 (linear)
105	708331	3719063	*Euphorbia (=Chamaesyce)*	Abrams' spurge	> 50	70
118	708447	3719276	*Euphorbia (=Chamaesyce)*	Abrams' spurge	> 35	200
129	708501	3718801	*Euphorbia (=Chamaesyce)*	Abrams' spurge	1	1
231	709351	3721199	*Euphorbia (=Chamaesyce)*	Abrams' spurge	430	250
246	709510	3721238	*Euphorbia (=Chamaesyce)*	Abrams' spurge	35	80
265	709695	3721251	*Euphorbia (=Chamaesyce)*	Abrams' spurge	> 1500	2.5 ha
284	709885	3721200	*Euphorbia (=Chamaesyce)*	Abrams' spurge	> 5,000	
341	710342	3721222	*Euphorbia (=Chamaesyce)*	Abrams' spurge	> 3,000	
364	710617	3721241	*Euphorbia (=Chamaesyce)*	Abrams' spurge	> 4,000	
1	705335	3729007	*Proboscidea althaeifolia*	desert unicorn plant	1	1
3	705598	3729068	*Proboscidea althaeifolia*	desert unicorn plant	1	1
6	705744	3729687	*Proboscidea althaeifolia*	desert unicorn plant	3	70
8	705946	3729753	*Proboscidea althaeifolia*	desert unicorn plant	4	90
9	705995	3729883	*Proboscidea althaeifolia*	desert unicorn plant	6	145

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
11	706067	3729968	*Proboscidea althaeifolia*	desert unicorn plant	3	15
12	706078	3727161	*Proboscidea althaeifolia*	desert unicorn plant	1	1
13	706162	3729827	*Proboscidea althaeifolia*	desert unicorn plant	2	25
15	706222	3729845	*Proboscidea althaeifolia*	desert unicorn plant	3	4
17	706388	3729784	*Proboscidea althaeifolia*	desert unicorn plant	4	70
18	706453	3729850	*Proboscidea althaeifolia*	desert unicorn plant	2	4
19	706566	3729321	*Proboscidea althaeifolia*	desert unicorn plant	3	5
20	706634	3729018	*Proboscidea althaeifolia*	desert unicorn plant	4	75
21	706640	3729898	*Proboscidea althaeifolia*	desert unicorn plant	1	1
23	706734	3729869	*Proboscidea althaeifolia*	desert unicorn plant	1	1
25	706832	3729053	*Proboscidea althaeifolia*	desert unicorn plant	3	60
26	706849	3729844	*Proboscidea althaeifolia*	desert unicorn plant	2	20
27	706861	3729629	*Proboscidea althaeifolia*	desert unicorn plant	2	10
28	706881	3729268	*Proboscidea althaeifolia*	desert unicorn plant	4	30
29	706923	3729471	*Proboscidea althaeifolia*	desert unicorn plant	3	10
30	706942	3727168	*Proboscidea althaeifolia*	desert unicorn plant	6	50 (linear)
31	706952	3725477	*Proboscidea althaeifolia*	desert unicorn plant	1	1
32	706980	3728583	*Proboscidea althaeifolia*	desert unicorn plant	1	1
33	706983	3728117	*Proboscidea althaeifolia*	desert unicorn plant	1	1
34	706991	3719870	*Proboscidea althaeifolia*	desert unicorn plant	4	60
35	707000	3719393	*Proboscidea althaeifolia*	desert unicorn plant	2	5
36	707037	3719598	*Proboscidea althaeifolia*	desert unicorn plant	2	10
37	707043	3720226	*Proboscidea althaeifolia*	desert unicorn plant	1	1

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
38	707067	3729868	*Proboscidea althaeifolia*	desert unicorn plant	2	1
39	707071	3728885	*Proboscidea althaeifolia*	desert unicorn plant	1	1
40	707212	3729500	*Proboscidea althaeifolia*	desert unicorn plant	1	1
41	707217	3728920	*Proboscidea althaeifolia*	desert unicorn plant	6	500
42	707223	3729056	*Proboscidea althaeifolia*	desert unicorn plant	1	1
43	707273	3728120	*Proboscidea althaeifolia*	desert unicorn plant	1	1
44	707282	3726485	*Proboscidea althaeifolia*	desert unicorn plant	1	1
45	707297	3729613	*Proboscidea althaeifolia*	desert unicorn plant	1	1
46	707338	3718791	*Proboscidea althaeifolia*	desert unicorn plant	5	10
47	707410	3726291	*Proboscidea althaeifolia*	desert unicorn plant	1	1
48	707415	3727715	*Proboscidea althaeifolia*	desert unicorn plant	1	1
49	707432	3729509	*Proboscidea althaeifolia*	desert unicorn plant	2	1
50	707451	3727133	*Proboscidea althaeifolia*	desert unicorn plant	1	1
51	707527	3729872	*Proboscidea althaeifolia*	desert unicorn plant	4	1
52	707538	3729020	*Proboscidea althaeifolia*	desert unicorn plant	3	5
53	707538	3728756	*Proboscidea althaeifolia*	desert unicorn plant	3	20
54	707562	3727328	*Proboscidea althaeifolia*	desert unicorn plant	28	210
55	707575	3727977	*Proboscidea althaeifolia*	desert unicorn plant	2	80
56	707611	3730009	*Proboscidea althaeifolia*	desert unicorn plant	1	1
57	707617	3729516	*Proboscidea althaeifolia*	desert unicorn plant	1	1
58	707631	3728687	*Proboscidea althaeifolia*	desert unicorn plant	1	1
59	707651	3728346	*Proboscidea althaeifolia*	desert unicorn plant	1	1
60	707653	3728970	*Proboscidea althaeifolia*	desert unicorn plant	6	70 (linear)

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
61	707729	3726125	*Proboscidea althaeifolia*	desert unicorn plant	1	1
62	707747	3727890	*Proboscidea althaeifolia*	desert unicorn plant	2	2
63	707795	3728788	*Proboscidea althaeifolia*	desert unicorn plant	12	200
64	707803	3729350	*Proboscidea althaeifolia*	desert unicorn plant	3	75
65	707828	3728983	*Proboscidea althaeifolia*	desert unicorn plant	1	1
66	707829	3729502	*Proboscidea althaeifolia*	desert unicorn plant	1	1
67	707838	3727905	*Proboscidea althaeifolia*	desert unicorn plant	1	1
68	707865	3726757	*Proboscidea althaeifolia*	desert unicorn plant	1	1
69	707873	3729131	*Proboscidea althaeifolia*	desert unicorn plant	5	20
70	707892	3726097	*Proboscidea althaeifolia*	desert unicorn plant	4	10
71	707920	3729445	*Proboscidea althaeifolia*	desert unicorn plant	1	1
72	707933	3728737	*Proboscidea althaeifolia*	desert unicorn plant	1	1
73	707939	3728834	*Proboscidea althaeifolia*	desert unicorn plant	1	1
74	707943	3727406	*Proboscidea althaeifolia*	desert unicorn plant	53	290
75	707971	3727603	*Proboscidea althaeifolia*	desert unicorn plant	5	10
76	707990	3727627	*Proboscidea althaeifolia*	desert unicorn plant	1	1
77	708013	3721159	*Proboscidea althaeifolia*	desert unicorn plant	16	175
78	708013	3721269	*Proboscidea althaeifolia*	desert unicorn plant	1	1
79	708042	3726722	*Proboscidea althaeifolia*	desert unicorn plant	13	not noted
80	708044	3727885	*Proboscidea althaeifolia*	desert unicorn plant	2	30
81	708048	3726086	*Proboscidea althaeifolia*	desert unicorn plant	9	85
82	708049	3728232	*Proboscidea althaeifolia*	desert unicorn plant	1	1
83	708055	3728038	*Proboscidea althaeifolia*	desert unicorn plant	2	15

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
84	708083	3728959	*Proboscidea althaeifolia*	desert unicorn plant	2	30
85	708097	3729405	*Proboscidea althaeifolia*	desert unicorn plant	2	50
86	708099	3729267	*Proboscidea althaeifolia*	desert unicorn plant	1	1
87	708099	3726848	*Proboscidea althaeifolia*	desert unicorn plant	17	90 (linear)
88	708116	3727996	*Proboscidea althaeifolia*	desert unicorn plant	3	60
89	708133	3728800	*Proboscidea althaeifolia*	desert unicorn plant	2	35
90	708167	3727515	*Proboscidea althaeifolia*	desert unicorn plant	2	1
91	708172	3727736	*Proboscidea althaeifolia*	desert unicorn plant	12	320
92	708174	3727322	*Proboscidea althaeifolia*	desert unicorn plant	20	100
93	708182	3728336	*Proboscidea althaeifolia*	desert unicorn plant	1	1
94	708197	3726902	*Proboscidea althaeifolia*	desert unicorn plant	20	134 (linear)
95	708219	3726263	*Proboscidea althaeifolia*	desert unicorn plant	1	1
96	708222	3726365	*Proboscidea althaeifolia*	desert unicorn plant	1	1
97	708226	3729437	*Proboscidea althaeifolia*	desert unicorn plant	1	1
98	708256	3726775	*Proboscidea althaeifolia*	desert unicorn plant	4	86
99	708270	3727826	*Proboscidea althaeifolia*	desert unicorn plant	16	174
100	708288	3729844	*Proboscidea althaeifolia*	desert unicorn plant	3	1
101	708291	3726992	*Proboscidea althaeifolia*	desert unicorn plant	7	100
102	708312	3728454	*Proboscidea althaeifolia*	desert unicorn plant	1	1
103	708314	3726720	*Proboscidea althaeifolia*	desert unicorn plant	4	50 (linear)
104	708320	3718961	*Proboscidea althaeifolia*	desert unicorn plant	13	50
106	708342	3729496	*Proboscidea althaeifolia*	desert unicorn plant	1	1
107	708348	3729311	*Proboscidea althaeifolia*	desert unicorn plant	1	1

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
108	708350	3719051	*Proboscidea althaeifolia*	desert unicorn plant	1	1
109	708358	3727470	*Proboscidea althaeifolia*	desert unicorn plant	8	250 x100
110	708370	3724897	*Proboscidea althaeifolia*	desert unicorn plant	1	1
111	708381	3727231	*Proboscidea althaeifolia*	desert unicorn plant	3	5
112	708396	3726912	*Proboscidea althaeifolia*	desert unicorn plant	4	150 (linear)
113	708437	3729033	*Proboscidea althaeifolia*	desert unicorn plant	4	100
114	708442	3719158	*Proboscidea althaeifolia*	desert unicorn plant	1	1
115	708445	3728498	*Proboscidea althaeifolia*	desert unicorn plant	12	130 (linear)
116	708447	3723930	*Proboscidea althaeifolia*	desert unicorn plant	1	1
117	708447	3727902	*Proboscidea althaeifolia*	desert unicorn plant	5	120
119	708451	3723541	*Proboscidea althaeifolia*	desert unicorn plant	5	91
120	708456	3728709	*Proboscidea althaeifolia*	desert unicorn plant	1	1
121	708457	3729568	*Proboscidea althaeifolia*	desert unicorn plant	1	1
122	708461	3723707	*Proboscidea althaeifolia*	desert unicorn plant	2	65
123	708476	3729296	*Proboscidea althaeifolia*	desert unicorn plant	4	1
124	708476	3727070	*Proboscidea althaeifolia*	desert unicorn plant	1	1
125	708486	3720364	*Proboscidea althaeifolia*	desert unicorn plant	1	1
126	708490	3726976	*Proboscidea althaeifolia*	desert unicorn plant	6	3 x 8
127	708494	3727767	*Proboscidea althaeifolia*	desert unicorn plant	15	150
128	708499	3718815	*Proboscidea althaeifolia*	desert unicorn plant	22	25
130	708510	3719509	*Proboscidea althaeifolia*	desert unicorn plant	5	50
131	708517	3726861	*Proboscidea althaeifolia*	desert unicorn plant	18	130 (linear)
132	708527	3727392	*Proboscidea althaeifolia*	desert unicorn plant	4	10

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
133	708536	3726109	*Proboscidea althaeifolia*	desert unicorn plant	1	1
134	708540	3726305	*Proboscidea althaeifolia*	desert unicorn plant	2	100
135	708555	3727253	*Proboscidea althaeifolia*	desert unicorn plant	14	50
136	708556	3729479	*Proboscidea althaeifolia*	desert unicorn plant	2	5
137	708557	3729513	*Proboscidea althaeifolia*	desert unicorn plant	1	1
138	708564	3726734	*Proboscidea althaeifolia*	desert unicorn plant	5	100 (linear)
139	708565	3725768	*Proboscidea althaeifolia*	desert unicorn plant	1	1
140	708592	3729740	*Proboscidea althaeifolia*	desert unicorn plant	6	18
141	708597	3729506	*Proboscidea althaeifolia*	desert unicorn plant	15	65
142	708598	3729388	*Proboscidea althaeifolia*	desert unicorn plant	2	55
143	708599	3728849	*Proboscidea althaeifolia*	desert unicorn plant	7	25
144	708605	3727496	*Proboscidea althaeifolia*	desert unicorn plant	4	20 x 300
145	708621	3725838	*Proboscidea althaeifolia*	desert unicorn plant	1	1
146	708629	3728564	*Proboscidea althaeifolia*	desert unicorn plant	4	100
147	708631	3727040	*Proboscidea althaeifolia*	desert unicorn plant	1	1
148	708636	3727859	*Proboscidea althaeifolia*	desert unicorn plant	3	80
149	708641	3729313	*Proboscidea althaeifolia*	desert unicorn plant	5	60
150	708641	3726791	*Proboscidea althaeifolia*	desert unicorn plant	6	140 (linear)
151	708644	3727514	*Proboscidea althaeifolia*	desert unicorn plant	6	137 x 115
152	708661	3728939	*Proboscidea althaeifolia*	desert unicorn plant	6	90
153	708676	3728274	*Proboscidea althaeifolia*	desert unicorn plant	5	2
154	708682	3729787	*Proboscidea althaeifolia*	desert unicorn plant	8	100
155	708720	3728768	*Proboscidea althaeifolia*	desert unicorn plant	2	13

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
156	708730	3725820	*Proboscidea althaeifolia*	desert unicorn plant	1	1
157	708733	3726079	*Proboscidea althaeifolia*	desert unicorn plant	1	1
158	708751	3729406	*Proboscidea althaeifolia*	desert unicorn plant	3	4
159	708753	3727197	*Proboscidea althaeifolia*	desert unicorn plant	38	70
160	708756	3729076	*Proboscidea althaeifolia*	desert unicorn plant	1	1
161	708762	3729458	*Proboscidea althaeifolia*	desert unicorn plant	10	67
162	708763	3728241	*Proboscidea althaeifolia*	desert unicorn plant	5	1
163	708765	3727303	*Proboscidea althaeifolia*	desert unicorn plant	11	130 x 100
164	708772	3729678	*Proboscidea althaeifolia*	desert unicorn plant	7	32
165	708798	3727748	*Proboscidea althaeifolia*	desert unicorn plant	20	170
166	708800	3728382	*Proboscidea althaeifolia*	desert unicorn plant	1	1
167	708800	3725936	*Proboscidea althaeifolia*	desert unicorn plant	2	125
168	708816	3728892	*Proboscidea althaeifolia*	desert unicorn plant	12	500
169	708822	3727596	*Proboscidea althaeifolia*	desert unicorn plant	3	30
170	708832	3726614	*Proboscidea althaeifolia*	desert unicorn plant	3	12
171	708846	3729831	*Proboscidea althaeifolia*	desert unicorn plant	2	2
172	708852	3728086	*Proboscidea althaeifolia*	desert unicorn plant	3	1
173	708856	3728479	*Proboscidea althaeifolia*	desert unicorn plant	3	1
174	708866	3729610	*Proboscidea althaeifolia*	desert unicorn plant	2	10
175	708871	3728211	*Proboscidea althaeifolia*	desert unicorn plant	2	2
176	708891	3727834	*Proboscidea althaeifolia*	desert unicorn plant	2	100
177	708905	3727741	*Proboscidea althaeifolia*	desert unicorn plant	2	20
178	708905	3727041	*Proboscidea althaeifolia*	desert unicorn plant	2	25

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
179	708906	3726224	*Proboscidea althaeifolia*	desert unicorn plant	4	60
180	708909	3726378	*Proboscidea althaeifolia*	desert unicorn plant	1	1
181	708913	3729681	*Proboscidea althaeifolia*	desert unicorn plant	1	1
182	708916	3728297	*Proboscidea althaeifolia*	desert unicorn plant	2	57
183	708922	3729691	*Proboscidea althaeifolia*	desert unicorn plant	3	60
184	708932	3728609	*Proboscidea althaeifolia*	desert unicorn plant	11	90
185	708933	3729264	*Proboscidea althaeifolia*	desert unicorn plant	1	5
186	708940	3726740	*Proboscidea althaeifolia*	desert unicorn plant	1	1
187	708944	3728704	*Proboscidea althaeifolia*	desert unicorn plant	6	70
188	708953	3726653	*Proboscidea althaeifolia*	desert unicorn plant	1	1
189	708963	3729008	*Proboscidea althaeifolia*	desert unicorn plant	1	1
190	708964	3729583	*Proboscidea althaeifolia*	desert unicorn plant	2	2
191	708970	3727271	*Proboscidea althaeifolia*	desert unicorn plant	6	215
192	708972	3725618	*Proboscidea althaeifolia*	desert unicorn plant	2	120
193	708980	3728176	*Proboscidea althaeifolia*	desert unicorn plant	1	1
194	709001	3727493	*Proboscidea althaeifolia*	desert unicorn plant	5	180
195	709007	3728315	*Proboscidea althaeifolia*	desert unicorn plant	5	100
196	709032	3728444	*Proboscidea althaeifolia*	desert unicorn plant	2	61
197	709036	3726979	*Proboscidea althaeifolia*	desert unicorn plant	6	136 (linear)
198	709060	3728870	*Proboscidea althaeifolia*	desert unicorn plant	10	100
199	709104	3727192	*Proboscidea althaeifolia*	desert unicorn plant	3	144
200	709106	3729565	*Proboscidea althaeifolia*	desert unicorn plant	5	60
201	709112	3726148	*Proboscidea althaeifolia*	desert unicorn plant	3	76

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
202	709114	3728395	*Proboscidea althaeifolia*	desert unicorn plant	6	4
203	709123	3728524	*Proboscidea althaeifolia*	desert unicorn plant	2	95
204	709130	3729805	*Proboscidea althaeifolia*	desert unicorn plant	2	1.5
205	709131	3729023	*Proboscidea althaeifolia*	desert unicorn plant	1	1
206	709138	3729347	*Proboscidea althaeifolia*	desert unicorn plant	4	20
207	709140	3729160	*Proboscidea althaeifolia*	desert unicorn plant	1	1
208	709146	3728642	*Proboscidea althaeifolia*	desert unicorn plant	5	70
209	709178	3729669	*Proboscidea althaeifolia*	desert unicorn plant	3	18
210	709180	3728211	*Proboscidea althaeifolia*	desert unicorn plant	4	110
211	709180	3726396	*Proboscidea althaeifolia*	desert unicorn plant	3	20 (linear)
212	709188	3728740	*Proboscidea althaeifolia*	desert unicorn plant	7	90 (linear)
213	709194	3728851	*Proboscidea althaeifolia*	desert unicorn plant	2	25
214	709205	3725943	*Proboscidea althaeifolia*	desert unicorn plant	1	1
215	709211	3727881	*Proboscidea althaeifolia*	desert unicorn plant	3	3
216	709213	3726870	*Proboscidea althaeifolia*	desert unicorn plant	2	130 (linear)
217	709215	3726743	*Proboscidea althaeifolia*	desert unicorn plant	4	14
218	709218	3729519	*Proboscidea althaeifolia*	desert unicorn plant	10	46
219	709220	3725619	*Proboscidea althaeifolia*	desert unicorn plant	1	1
220	709225	3727744	*Proboscidea althaeifolia*	desert unicorn plant	2	60
221	709237	3729200	*Proboscidea althaeifolia*	desert unicorn plant	8	80
222	709241	3728433	*Proboscidea althaeifolia*	desert unicorn plant	5	77
223	709251	3726240	*Proboscidea althaeifolia*	desert unicorn plant	3	60
224	709283	3728798	*Proboscidea althaeifolia*	desert unicorn plant	1	1

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
225	709294	3727425	*Proboscidea althaeifolia*	desert unicorn plant	8	120 x 77
226	709320	3728128	*Proboscidea althaeifolia*	desert unicorn plant	2	75
227	709321	3727933	*Proboscidea althaeifolia*	desert unicorn plant	9	8
228	709322	3726015	*Proboscidea althaeifolia*	desert unicorn plant	1	1
229	709326	3729119	*Proboscidea althaeifolia*	desert unicorn plant	10	70
230	709328	3728572	*Proboscidea althaeifolia*	desert unicorn plant	3	70
232	709381	3729038	*Proboscidea althaeifolia*	desert unicorn plant	3	5
233	709402	3726273	*Proboscidea althaeifolia*	desert unicorn plant	4	115 x 90
234	709404	3729598	*Proboscidea althaeifolia*	desert unicorn plant	1	1
235	709406	3727864	*Proboscidea althaeifolia*	desert unicorn plant	3	30
236	709413	3729017	*Proboscidea althaeifolia*	desert unicorn plant	11	120
237	709413	3725837	*Proboscidea althaeifolia*	desert unicorn plant	1	1
238	709424	3726133	*Proboscidea althaeifolia*	desert unicorn plant	1	1
239	709440	3727329	*Proboscidea althaeifolia*	desert unicorn plant	3	10
240	709461	3727094	*Proboscidea althaeifolia*	desert unicorn plant	3	30
241	709467	3727501	*Proboscidea althaeifolia*	desert unicorn plant	1	1
242	709473	3727918	*Proboscidea althaeifolia*	desert unicorn plant	2	30
243	709501	3729535	*Proboscidea althaeifolia*	desert unicorn plant	2	1
244	709507	3727717	*Proboscidea althaeifolia*	desert unicorn plant	1	1
245	709508	3728342	*Proboscidea althaeifolia*	desert unicorn plant	1	1
247	709541	3726128	*Proboscidea althaeifolia*	desert unicorn plant	6	100
248	709544	3728100	*Proboscidea althaeifolia*	desert unicorn plant	5	120
249	709546	3727034	*Proboscidea althaeifolia*	desert unicorn plant	2	92

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
250	709559	3729413	*Proboscidea althaeifolia*	desert unicorn plant	3	8
251	709570	3727361	*Proboscidea althaeifolia*	desert unicorn plant	4	50
252	709574	3728904	*Proboscidea althaeifolia*	desert unicorn plant	4	80
253	709589	3726446	*Proboscidea althaeifolia*	desert unicorn plant	2	-
254	709594	3727621	*Proboscidea althaeifolia*	desert unicorn plant	11	125 (linear)
255	709605	3726603	*Proboscidea althaeifolia*	desert unicorn plant	3	100
256	709606	3729207	*Proboscidea althaeifolia*	desert unicorn plant	2	60
257	709621	3725693	*Proboscidea althaeifolia*	desert unicorn plant	1	1
258	709625	3726838	*Proboscidea althaeifolia*	desert unicorn plant	3	40
259	709633	3726016	*Proboscidea althaeifolia*	desert unicorn plant	3	100
260	709634	3727844	*Proboscidea althaeifolia*	desert unicorn plant	5	200
261	709643	3728134	*Proboscidea althaeifolia*	desert unicorn plant	14	120
262	709645	3726302	*Proboscidea althaeifolia*	desert unicorn plant	2	2
263	709646	3727259	*Proboscidea althaeifolia*	desert unicorn plant	3	100
264	709653	3729395	*Proboscidea althaeifolia*	desert unicorn plant	2	45
266	709716	3726752	*Proboscidea althaeifolia*	desert unicorn plant	1	1
267	709719	3727010	*Proboscidea althaeifolia*	desert unicorn plant	3	107
268	709736	3725680	*Proboscidea althaeifolia*	desert unicorn plant	1	1
269	709742	3727763	*Proboscidea althaeifolia*	desert unicorn plant	2	1
270	709753	3729182	*Proboscidea althaeifolia*	desert unicorn plant	11	70
271	709758	3725885	*Proboscidea althaeifolia*	desert unicorn plant	1	1
272	709759	3729257	*Proboscidea althaeifolia*	desert unicorn plant	1	1
273	709765	3730027	*Proboscidea althaeifolia*	desert unicorn plant	2	20

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
274	709772	3727220	*Proboscidea althaeifolia*	desert unicorn plant	12	160 (linear)
275	709783	3728531	*Proboscidea althaeifolia*	desert unicorn plant	8	80
276	709797	3728344	*Proboscidea althaeifolia*	desert unicorn plant	10-Aug	120 (linear)
277	709797	3727329	*Proboscidea althaeifolia*	desert unicorn plant	1	1
278	709812	3725998	*Proboscidea althaeifolia*	desert unicorn plant	11	100
279	709827	3729575	*Proboscidea althaeifolia*	desert unicorn plant	1	1
280	709841	3726310	*Proboscidea althaeifolia*	desert unicorn plant	2	2
281	709849	3727575	*Proboscidea althaeifolia*	desert unicorn plant	5	120 (linear)
282	709865	3728680	*Proboscidea althaeifolia*	desert unicorn plant	1	1
283	709880	3725859	*Proboscidea althaeifolia*	desert unicorn plant	2	5
285	709887	3726686	*Proboscidea althaeifolia*	desert unicorn plant	9	127
286	709890	3729942	*Proboscidea althaeifolia*	desert unicorn plant	6	16
287	709890	3729307	*Proboscidea althaeifolia*	desert unicorn plant	4	1
288	709898	3727959	*Proboscidea althaeifolia*	desert unicorn plant	4	75
289	709909	3727039	*Proboscidea althaeifolia*	desert unicorn plant	1	1
290	709918	3728869	*Proboscidea althaeifolia*	desert unicorn plant	8	10
291	709923	3726456	*Proboscidea althaeifolia*	desert unicorn plant	1	1
292	709932	3729135	*Proboscidea althaeifolia*	desert unicorn plant	1	1
293	709953	3728348	*Proboscidea althaeifolia*	desert unicorn plant	6	10 (linear)
294	709956	3727052	*Proboscidea althaeifolia*	desert unicorn plant	3	10
295	709967	3729069	*Proboscidea althaeifolia*	desert unicorn plant	3	1
296	709977	3725586	*Proboscidea althaeifolia*	desert unicorn plant	1	1
297	709985	3728790	*Proboscidea althaeifolia*	desert unicorn plant	2	10

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
298	709990	3729179	*Proboscidea althaeifolia*	desert unicorn plant	2	4
299	709999	3728293	*Proboscidea althaeifolia*	desert unicorn plant	5	10 (linear)
300	710005	3729872	*Proboscidea althaeifolia*	desert unicorn plant	2	40
301	710008	3728630	*Proboscidea althaeifolia*	desert unicorn plant	1	1
302	710024	3726434	*Proboscidea althaeifolia*	desert unicorn plant	8	60
303	710030	3727222	*Proboscidea althaeifolia*	desert unicorn plant	6	50
304	710035	3726557	*Proboscidea althaeifolia*	desert unicorn plant	13	200
305	710037	3728015	*Proboscidea althaeifolia*	desert unicorn plant	3	160
306	710047	3726876	*Proboscidea althaeifolia*	desert unicorn plant	8	223
307	710049	3727492	*Proboscidea althaeifolia*	desert unicorn plant	8	100
308	710079	3726233	*Proboscidea althaeifolia*	desert unicorn plant	1	1
309	710079	3725832	*Proboscidea althaeifolia*	desert unicorn plant	17	150
310	710097	3727030	*Proboscidea althaeifolia*	desert unicorn plant	5	50
311	710113	3729221	*Proboscidea althaeifolia*	desert unicorn plant	1	1
312	710117	3728270	*Proboscidea althaeifolia*	desert unicorn plant	1	1
313	710118	3727642	*Proboscidea althaeifolia*	desert unicorn plant	2	70
314	710123	3729004	*Proboscidea althaeifolia*	desert unicorn plant	1	1
315	710137	3726375	*Proboscidea althaeifolia*	desert unicorn plant	8	50
316	710139	3727748	*Proboscidea althaeifolia*	desert unicorn plant	1	1
317	710154	3727837	*Proboscidea althaeifolia*	desert unicorn plant	4	200
318	710167	3729237	*Proboscidea althaeifolia*	desert unicorn plant	3	71
319	710170	3729940	*Proboscidea althaeifolia*	desert unicorn plant	1	1
320	710171	3728391	*Proboscidea althaeifolia*	desert unicorn plant	6	50 (linear)

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
321	710173	3726655	*Proboscidea althaeifolia*	desert unicorn plant	2	40
322	710190	3727420	*Proboscidea althaeifolia*	desert unicorn plant	6	80
323	710191	3726495	*Proboscidea althaeifolia*	desert unicorn plant	9	1000
324	710199	3725743	*Proboscidea althaeifolia*	desert unicorn plant	5	30
325	710204	3726299	*Proboscidea althaeifolia*	desert unicorn plant	7	80
326	710215	3727274	*Proboscidea althaeifolia*	desert unicorn plant	1	1
327	710227	3728215	*Proboscidea althaeifolia*	desert unicorn plant	1	1
328	710235	3726142	*Proboscidea althaeifolia*	desert unicorn plant	3	70
329	710238	3726342	*Proboscidea althaeifolia*	desert unicorn plant	1	1
330	710252	3727461	*Proboscidea althaeifolia*	desert unicorn plant	4	75 (linear)
331	710254	3727040	*Proboscidea althaeifolia*	desert unicorn plant	1	1
332	710258	3726441	*Proboscidea althaeifolia*	desert unicorn plant	2	15
333	710264	3726049	*Proboscidea althaeifolia*	desert unicorn plant	1	1
334	710274	3726335	*Proboscidea althaeifolia*	desert unicorn plant	8	20
335	710275	3730005	*Proboscidea althaeifolia*	desert unicorn plant	2	1
336	710275	3726799	*Proboscidea althaeifolia*	desert unicorn plant	4	50
337	710280	3727227	*Proboscidea althaeifolia*	desert unicorn plant	1	1
338	710295	3725832	*Proboscidea althaeifolia*	desert unicorn plant	1	1
339	710306	3726650	*Proboscidea althaeifolia*	desert unicorn plant	2	-
340	710312	3726411	*Proboscidea althaeifolia*	desert unicorn plant	1	1
342	710355	3728862	*Proboscidea althaeifolia*	desert unicorn plant	1	1
343	710360	3726343	*Proboscidea althaeifolia*	desert unicorn plant	9	80
344	710365	3726109	*Proboscidea althaeifolia*	desert unicorn plant	3	80

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
345	710376	3727593	*Proboscidea althaeifolia*	desert unicorn plant	5	116 (linear)
346	710379	3727314	*Proboscidea althaeifolia*	desert unicorn plant	1	1
347	710392	3727688	*Proboscidea althaeifolia*	desert unicorn plant	10	60
348	710436	3726734	*Proboscidea althaeifolia*	desert unicorn plant	4	100
349	710447	3727214	*Proboscidea althaeifolia*	desert unicorn plant	4	75
350	710460	3726952	*Proboscidea althaeifolia*	desert unicorn plant	1	1
351	710486	3727558	*Proboscidea althaeifolia*	desert unicorn plant	2	75 (linear)
352	710493	3726063	*Proboscidea althaeifolia*	desert unicorn plant	4	40
353	710504	3728021	*Proboscidea althaeifolia*	desert unicorn plant	1	1
354	710510	3726205	*Proboscidea althaeifolia*	desert unicorn plant	1	1
355	710518	3728519	*Proboscidea althaeifolia*	desert unicorn plant	2	1
356	710529	3728928	*Proboscidea althaeifolia*	desert unicorn plant	1	1
357	710533	3727391	*Proboscidea althaeifolia*	desert unicorn plant	5	124 (linear)
358	710539	3727264	*Proboscidea althaeifolia*	desert unicorn plant	1	1
359	710541	3726415	*Proboscidea althaeifolia*	desert unicorn plant	6	30
360	710552	3728900	*Proboscidea althaeifolia*	desert unicorn plant	3	47
361	710555	3728161	*Proboscidea althaeifolia*	desert unicorn plant	4	3
362	710565	3727016	*Proboscidea althaeifolia*	desert unicorn plant	1	1
363	710568	3725974	*Proboscidea althaeifolia*	desert unicorn plant	2	-
365	710622	3728043	*Proboscidea althaeifolia*	desert unicorn plant	4	150
366	710630	3727546	*Proboscidea althaeifolia*	desert unicorn plant	2	80 (linear)
367	710664	3727811	*Proboscidea althaeifolia*	desert unicorn plant	6	100
368	710691	3723916	*Proboscidea althaeifolia*	desert unicorn plant	1	1

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
369	710704	3729535	*Proboscidea althaeifolia*	desert unicorn plant	6	40 (linear)
370	710710	3726673	*Proboscidea althaeifolia*	desert unicorn plant	4	122
371	710727	3727221	*Proboscidea althaeifolia*	desert unicorn plant	9	100
372	710734	3727454	*Proboscidea althaeifolia*	desert unicorn plant	1	1
373	710741	3727301	*Proboscidea althaeifolia*	desert unicorn plant	3	65
374	710790	3727585	*Proboscidea althaeifolia*	desert unicorn plant	7	100 (linear)
375	710800	3726541	*Proboscidea althaeifolia*	desert unicorn plant	5	180
376	710804	3728818	*Proboscidea althaeifolia*	desert unicorn plant	2	30 (linear)
377	710806	3728716	*Proboscidea althaeifolia*	desert unicorn plant	1	1
378	710811	3727702	*Proboscidea althaeifolia*	desert unicorn plant	5	30
379	710829	3727906	*Proboscidea althaeifolia*	desert unicorn plant	1	1
380	710832	3727676	*Proboscidea althaeifolia*	desert unicorn plant	1	1
381	710871	3728344	*Proboscidea althaeifolia*	desert unicorn plant	3	20 (linear)
382	710893	3729300	*Proboscidea althaeifolia*	desert unicorn plant	2	100
383	710895	3729202	*Proboscidea althaeifolia*	desert unicorn plant	2	50
384	710899	3727666	*Proboscidea althaeifolia*	desert unicorn plant	3	92 (linear)
385	710906	3729417	*Proboscidea althaeifolia*	desert unicorn plant	2	50
386	710912	3727289	*Proboscidea althaeifolia*	desert unicorn plant	2	1
387	710949	3728928	*Proboscidea althaeifolia*	desert unicorn plant	2	80
388	710955	3726776	*Proboscidea althaeifolia*	desert unicorn plant	1	1
389	710974	3729054	*Proboscidea althaeifolia*	desert unicorn plant	1	1
390	710980	3728313	*Proboscidea althaeifolia*	desert unicorn plant	1	1
391	710999	3727230	*Proboscidea althaeifolia*	desert unicorn plant	2	100

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
392	711000	3727682	*Proboscidea althaeifolia*	desert unicorn plant	1	1
393	711013	3729661	*Proboscidea althaeifolia*	desert unicorn plant	1	1
394	711027	3730038	*Proboscidea althaeifolia*	desert unicorn plant	1	1
395	711034	3727088	*Proboscidea althaeifolia*	desert unicorn plant	2	2
396	711050	3727055	*Proboscidea althaeifolia*	desert unicorn plant	1	1
397	711059	3729765	*Proboscidea althaeifolia*	desert unicorn plant	1	1
398	711071	3727415	*Proboscidea althaeifolia*	desert unicorn plant	2	10
399	711072	3728208	*Proboscidea althaeifolia*	desert unicorn plant	7	1
400	711078	3729860	*Proboscidea althaeifolia*	desert unicorn plant	1	1
401	711092	3728885	*Proboscidea althaeifolia*	desert unicorn plant	1	1
402	711114	3726732	*Proboscidea althaeifolia*	desert unicorn plant	1	1
403	711119	3726982	*Proboscidea althaeifolia*	desert unicorn plant	1	1
404	711120	3728624	*Proboscidea althaeifolia*	desert unicorn plant	2	40 (linear)
405	711133	3728502	*Proboscidea althaeifolia*	desert unicorn plant	2	1
406	711141	3728106	*Proboscidea althaeifolia*	desert unicorn plant	1	112
407	711145	3728994	*Proboscidea althaeifolia*	desert unicorn plant	1	1
408	711165	3728406	*Proboscidea althaeifolia*	desert unicorn plant	1	1
409	711189	3727409	*Proboscidea althaeifolia*	desert unicorn plant	2	60 (linear)
410	711196	3728213	*Proboscidea althaeifolia*	desert unicorn plant	1	1
411	711204	3727571	*Proboscidea althaeifolia*	desert unicorn plant	6	85 (linear)
412	711232	3727976	*Proboscidea althaeifolia*	desert unicorn plant	2	100 (linear)
413	711235	3726689	*Proboscidea althaeifolia*	desert unicorn plant	2	40
414	711242	3729742	*Proboscidea althaeifolia*	desert unicorn plant	1	1

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
415	711252	3727155	*Proboscidea althaeifolia*	desert unicorn plant	1	1
416	711262	3727867	*Proboscidea althaeifolia*	desert unicorn plant	8	150 (linear)
417	711283	3727703	*Proboscidea althaeifolia*	desert unicorn plant	1	1
418	711293	3726808	*Proboscidea althaeifolia*	desert unicorn plant	5	150
419	711316	3727901	*Proboscidea althaeifolia*	desert unicorn plant	4	20
420	711321	3727406	*Proboscidea althaeifolia*	desert unicorn plant	9	90
421	711322	3728168	*Proboscidea althaeifolia*	desert unicorn plant	1	1
422	711334	3729159	*Proboscidea althaeifolia*	desert unicorn plant	1	1
423	711339	3727045	*Proboscidea althaeifolia*	desert unicorn plant	3	1
424	711343	3727278	*Proboscidea althaeifolia*	desert unicorn plant	6	100 (linear)
425	711346	3728136	*Proboscidea althaeifolia*	desert unicorn plant	3	80
426	711374	3728051	*Proboscidea althaeifolia*	desert unicorn plant	2	10 (linear)
427	711374	3727135	*Proboscidea althaeifolia*	desert unicorn plant	5	90
428	711377	3727560	*Proboscidea althaeifolia*	desert unicorn plant	10	100
429	711384	3727771	*Proboscidea althaeifolia*	desert unicorn plant	5	100 (linear)
430	711393	3726668	*Proboscidea althaeifolia*	desert unicorn plant	2	42
431	711421	3727869	*Proboscidea althaeifolia*	desert unicorn plant	8	85
432	711429	3727695	*Proboscidea althaeifolia*	desert unicorn plant	1	1
433	711440	3727951	*Proboscidea althaeifolia*	desert unicorn plant	2	40
434	711454	3727646	*Proboscidea althaeifolia*	desert unicorn plant	3	55 (linear)
435	711468	3727037	*Proboscidea althaeifolia*	desert unicorn plant	17	134
436	711476	3727379	*Proboscidea althaeifolia*	desert unicorn plant	7	170
437	711477	3726867	*Proboscidea althaeifolia*	desert unicorn plant	9	202 (linear)

Number Corresponds to Appendix B Figures	UTM (NAD 83)		Species		Population Size (Number of Plants or Abundance)	Area (square meters)
	Easting	Northing				
438	711488	3726635	*Proboscidea althaeifolia*	desert unicorn plant	8	21

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BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA

Legend

- Survey Area

Plant Species

- Abrams' Spurge
- Desert unicorn plant

Number of Plants Observed

- <25 Plants
- 25-100 Plants
- 101-500 Plants
- 501-1,000 Plants
- >1,000 Plants

Observation numbers correspond to Table 1 in Appendix B.

0 1,250 2,500 5,000

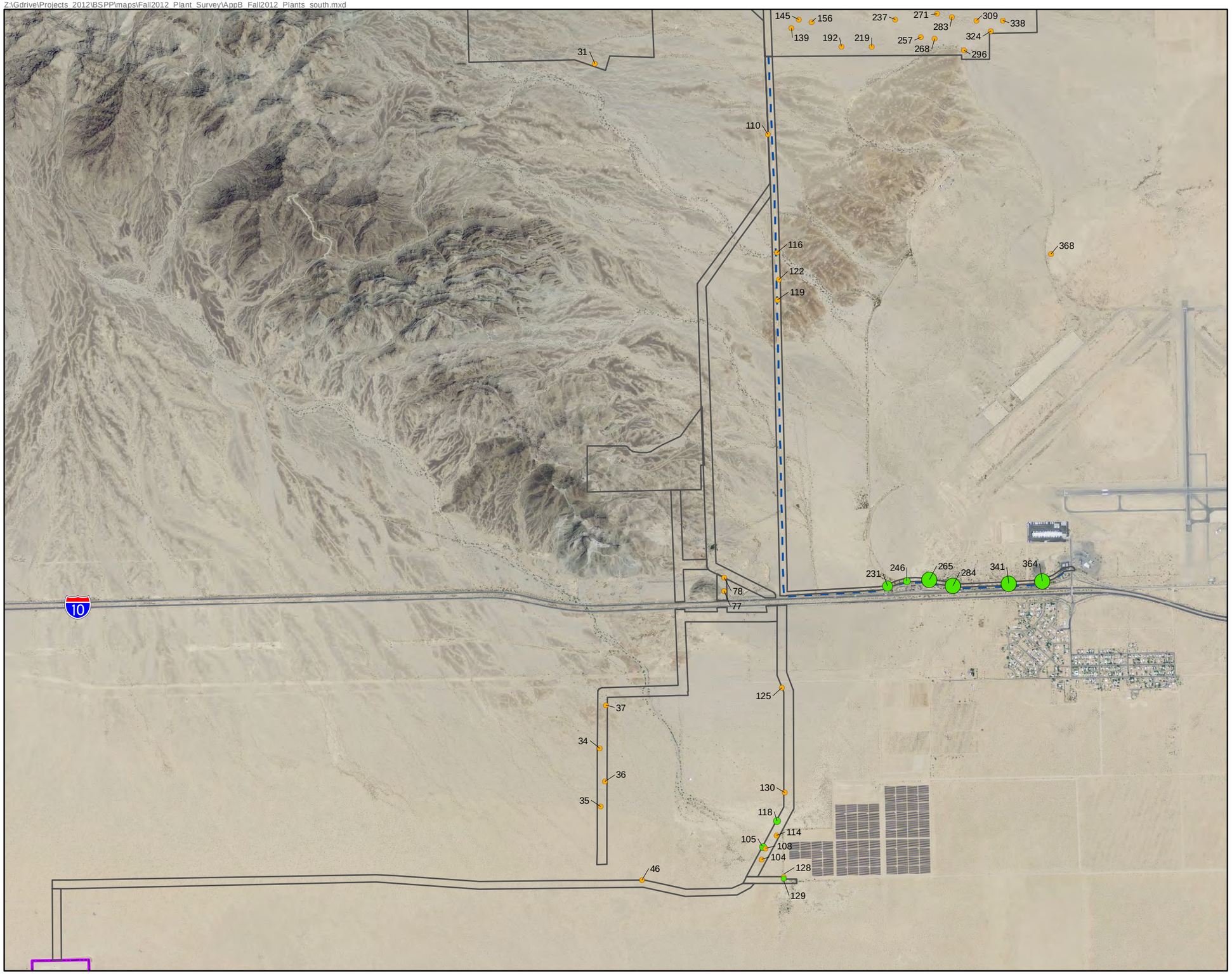
Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, TTEC

APPENDIX B
SPECIAL-STATUS PLANTS OBSERVED
AUGUST/SEPTEMBER 2012,
PROJECT ROW

TETRA TECH

Z:\Gdrive\Projects_2012\BSPP\maps\Fall2012_Plant_Survey\AppB_Fall2012_Plants_south.mxd



BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA

Legend

- Survey Area
- Access Road Shared with Other Solar Projects
- SCE Colorado River Substation

Plant Species

- Abrams' Spurge
- Desert unicorn plant

Number of Plants Observed

- <25 Plants
- 25-100 Plants
- 101-500 Plants
- 501-1,000 Plants
- >1,000 Plants

Observation numbers correspond to Table 1 in Appendix B.

0 1,250 2,500 5,000

Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, TTEC

APPENDIX B
SPECIAL-STATUS PLANTS OBSERVED
AUGUST/SEPTEMBER 2012,
LINEAR FACILITIES

TETRA TECH

APPENDIX C

Comprehensive List of All Plant Species Observed during August/September 2012 Field Surveys

Plant Species Observed at the Blythe Solar Power Project during August/September 2012 Plant Surveys	
Adenophyllum porophylloides	adenophyllum
Allionia incarnata	windmills
Ambrosia dumosa	white bursage
A. (=Hymenoclea) salsola	cheesebush
Aristida adscencionis	three-awn
A. californica	three-awn
A. purpurea	purple three-awn
A. subulata	rush milkweed
Baileya pauciradiata	desert marigold
Bebbia juncea	chuckwalla bush
Boerhavia coulteri	spiderling
B. wrightii	spiderling
Bouteloua aristidoides	needle grama
B. barbata	six-weeks grama
Brandegea bigelovii	desert starvine
**Brassica tournefortii*	Sahara mustard
**Bromus madritensis* var. *rubescens*	red brome
Camissonia boothii ssp. *condensata*	bottlebrush primrose
C. boothii ssp. *desertorum*	bottlebrush primrose
Cercidium floridum (=Parkinsonia florida)	blue paloverde
C. micromera	spurge
C. polycarpa	spurge
C. setiloba	spurge
C. rigida	rigid spinyherb
Colubrina californica	Las Animas colubrina
Cryptantha angustifolia	narrow-leaved forget-me-not
Cylindroputia (=Opuntia) echinocarpa	silver cholla
C. (=Opuntia) ramosissima	pencil cholla
Dalea mollis	silk dalea
D. mollissima	silk dalea
Dasyochloa(=Erioneuron) pulchella	tluff grass
Datura wrightii	jimsonweed
Dicoria canescens	desert dicoria
Ditaxis lanceolata	lance-leafed ditaxis
D. neomexicana	ditaxis
Echinocactus polycephalus	cottontop cactus
Encelia farinosa	brittlebush
Eriogonum deflexum	skeleton-weed
E. inflatum	desert trumpet
E. trichopes	little trumpet
Euphorbia (= *Chamaaesyce*) abramsiana	Abrams' spurge
Euphorbia eriantha	beetle spurge
Fagonia laevis	California fagonbush
Ferocactus cylindraceus	barrel cactus
Funastrum (=*Sarcostemma*) *hirtellum*	hairy milkweed
F. (=S.) *cyanchoides*	climbing milkweed
F. (= *Cynanchum*) *utahense*	Utah cynanchum
Fouquieria splendens	ocotillo
Hesperocallis undulata	desert lily
Hibiscus denudatus	rock hibiscus
Hilaria (=*Pleuraphis*) *rigida*	big galleta grass
Hoffmannseggia glauca	hognut

Plant Species Observed at the Blythe Solar Power Project during August/September 2012 Plant Surveys	
Hyptis emoryi	desert lavender
Kallstroemia californica	kallstroemia
Krameria erecta	little-leaf rhatany
K. bicolor	white rhatany
Larrea tridentata	creosote bush
Lotus strigosus	hairy lotus
Lycium andersonii	Anderson boxthorn
Lycium pallidum var. *oligospermum*	boxthorn
Mammillaria tetrancistra	fish-hook cactus
Marina parryi	parry dalea
M. laevis	four-o'clock
Oenothera deltoides	dune primrose
Olneya tesota	ironwood
Opuntia basilaris	beavertail cactus
Palafoxia arida (= linearis)	Spanish needle
**Panicum antidotale*	blue panicgrass
Pectis papposa	chinchweed
Perityle emoryi	Emory rock daisy
Peucephyllum schottii	desert fir
Phoradendron californicum	mistletoe
Plantago ovata	plantain
Porophyllum gracile	odora
Proboscidea althaeifolia	desert unicorn plant
Prosopis glandulosa	honey mesquite
Prunus fasciculata	desert almond
Psorothamnus emoryi	Emory dalea
P. spinosus	smoke tree
**Salsola tragus*	Russian thistle, tumbleweed
**Schismus arabicus*	Mediterranean grass
Senegalia (=Acacia) greggii	catclaw acacia
Sphaeralcea ambigua	globe mallow
S. emoryi	Emory globe mallow
Stephanomeria pauciflora	wire-lettuce
Tidestromia oblongifolia	Arizona honeysweet
Tiquilia plicata	plicate coldenia
**Tribulus terrestris*	caltrops, puncture vine
Trianthema portulacastrum	horse purslane
Ziziphus obtusifolia var. *canescens*	graythorn

APPENDIX D

Completed and Submitted CNDDB Forms

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/01/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Chamaesyce abramsiana*

Common Name: Abrams' spurge

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 118 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Alice Karl
Address: P.O. Box 74006
Davis, CA 95617
E-mail Address: heliophile@mindspring.com
Phone: (530) 304-4121

Plant Information

Phenology: _____% vegetative _____% flowering 100 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of McCoy Mountains; west of Blythe

County: Riverside Landowner / Mgr.: BLM

Quad Name: _____ Elevation: 578 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy approx 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: 0705707 3729671 (19 plants); 0705543 3729819 (33 plants); 0705682 3729844 (10 plants); 0705899 3729866 (10 plants); 0706025 3729917 (42 plants); 706201 3729957 (4 plants)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Within shallow runnels within a braided ephemeral wash. Soils were mostly fine, sandy silt. Shrub/grass associates include Encelia farinosa, Hilaria rigida, Bouteloua barbata, Ambrosia dumosa, Larrea tridentata, Acacia greggii, Lycium andersonii, Parkinsonia florida, Krameria erecta. Herbaceous associates include Pectis papposa, Boerhavia wrightii, Chamaesyce polycarpa, C. micromera, Ditaxis neomexicana.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: Not well used

Visible disturbances: Old two-tracks: ~ 0.75 mi west of old gas line road (Black Creek Rd.)

Threats: Brassica tournefortii present but uncommon

Comments:

Determination: *(check one or more, and fill in blanks)*

☑ Keyed (cite reference): Jepson Manual (Note: originally delveloped search image using
☐ Compared with specimen housed at: reference population. Honed search image and
☐ Compared with photo / drawing in: microhabitats by finding many plants elsewhere
☐ By another person (name): and comparing to other congeners.)
☐ Other: Marc Baker, Tim Thomas, Suzanne Rhodes, Wendy McBride, Art Schaub

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 08/31/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Chamaesyce abramsiana*

Common Name: Abrams' spurge

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 2 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Alice Karl
Address: P.O. Box 74006
Davis, CA 95617
E-mail Address: heliophile@mindspring.com
Phone: (530) 304-4121

Plant Information

Phenology: _____% vegetative 100 % flowering _____% fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of McCoy Mountains; west of Blythe

County: Riverside Landowner / Mgr.: BLM

Quad Name: _____ Elevation: 550 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model Garmin

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐

Horizontal Accuracy approx 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: 706337 E 3728184 N

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Within a sandy, silty runnel bank surrounded by thick Boerhavia wrightii. Flat area in mid-bajada with many braided runnels. Shrub/grass associates include Hilaria rigida, Olneya tesota, Ambrosia dumosa. Herbaceous associates in addition to B. wrightii include Pectis papposa, Chamaesyce polycarpa, Kallstroemia californica.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: Not well used

Visible disturbances: Old two-tracks; 0.4 mi west of old gas line road (Black Creek Rd.)

Threats: No immediate threats

Comments:

Determination: *(check one or more, and fill in blanks)*

☑ Keyed (cite reference): Jepson Manual (Note: originally delveloped search image using reference population. Honed search image and microhabitats by finding many plants elsewhere and comparing to other cogeners.)
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: Michael Honer

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

DFG/BDB/1747 Rev. 6/16/09

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/01/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Chamaesyce abramsiana*

Common Name: Abrams' spurge

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 2,065+ Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Alice Karl
Address: P.O. Box 74006
Davis, CA 95617
E-mail Address: heliophile@mindspring.com
Phone: (530) 304-4121

Plant Information

Phenology: _____% vegetative 10 % flowering 90 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

East of McCoy Mountains; west of Blythe

County: Riverside Landowner / Mgr.: BLM

Quad Name: _____ Elevation: 540 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model Garmin

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐

Horizontal Accuracy approx 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: 706648 E 3729335 N (2,000+ plants within 170 square meters); 706802 3729312 (65 plants within 80 square meters)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

2000+ plants located within a swale; remaining 65 plants located within a shallow runnel. Soils were mostly fine, sandy silt. Shrub/grass associates include Encelia farinosa, Hilaria rigida, Bouteloua barbata, Ambrosia dumosa, Larrea tridentata, Acacia greggii, Lycium andersonii, Parkinsonia florida, Krameria erecta. Herbaceous associates include Pectis papposa, Boerhavia wrightii, Chamaesyce polycarpa, C. micromera, Ditaxis neomexicana.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: Not well used

Visible disturbances: Old two-tracks; 80-230 m west of old gas line road (Black Creek Rd.)

Threats: No immediate threats

Comments: Most plants fruiting; some in flower.

Determination: *(check one or more, and fill in blanks)*

☑ Keyed (cite reference): Jepson Manual (Note: originally delveloped search image using reference population. Honed search image and microhabitats by finding many plants elsewhere and comparing to other congeners.)
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): Neal Kramer; Michelle Cloud-Hughes; Tasya Herskovits
☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☑
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/02/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

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California Native Species Field Survey Form

Send Form

Scientific Name: *Chamaesyce abramsiana*

Common Name: Abrams' spurge

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals ~14,000+ Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Alice Karl
Address: P.O. Box 74006
Davis, CA 95617
E-mail Address: heliophile@mindspring.com
Phone: (530) 304-4121

Plant Information

Phenology: _____% vegetative _____% flowering 100 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

***Location Description* (please attach map *AND/OR* fill out your choice of coordinates, below)**

East of McCoy Mountains; west of Blythe. East/West stretch just north of Black Rock Road from the Valero gas station and the Blythe Solar Power Project graded access road.

County: Riverside Landowner / Mgr.: BLM

Quad Name: _____ Elevation: 400 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy approx 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: 0709510 3721238 (35 plants); 0709351 3721199 (430 plants); 0709695 3721251 (1500+ plants); 0709885 3721200 (5,000 + plants); 0710342 3721222 (3000+ plants); 0710617 3721241 (4000+ plants)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Within silty depressions and runnels north of Black Rock Road. Soils were mostly silty loam. Shrub/grass associates include Encelia farinosa, Hilaria rigida, Bouteloua barbata, Ambrosia dumosa, Larrea tridentata, Olneya tesota, Parkinsonia florida. Herbaceous associates include Pectis papposa, Boerhavia wrightii, B. coulteri, Chamaesyce polycarpa, C. micromera.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: Adjacent to Black Rock Rd.

Visible disturbances: I-10; Valero gas station, Black Rock Rd., Black Creek Rd.

Threats: Vehicle traffic

Comments: All plants were observed along a 1.3 mi stretch immediately north of Black Rock Rd. between the Valero gas station and the Blythe Solar Power Project graded access road.

Determination: *(check one or more, and fill in blanks)*

☑ Keyed (cite reference): Jepson Manual (Note: originally delveloped search image using
☐ Compared with specimen housed at: reference population. Honed search image and
☐ Compared with photo / drawing in: microhabitats by finding many plants elsewhere
☐ By another person (name): and comparing to other cogeners.)
☐ Other: Neal Kramer, Suzanne Rhodes

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

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Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/01/2012

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California Native Species Field Survey Form

Send Form

Scientific Name: *Chamaesyce abramsiana*

Common Name: Abrams' spurge

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 86+ Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Alice Karl
Address: P.O. Box 74006
Davis, CA 95617
E-mail Address: heliophile@mindspring.com
Phone: (530) 304-4121

Plant Information

Phenology: _____% vegetative _____% flowering 100% fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

South if I-10; east of Blythe near existing PV solar plant

County: Riverside Landowner / Mgr.: BLM

Quad Name: _____ Elevation: 578 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy approx 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: 708447E 3719276N (35+ plants); 708331 3719063 (50+ plants); 708501 3718801 (1 plant)

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Within a shallow runnels and swales. Soils were mostly fine silt. Shrub/grass associates include Hilaria rigida, Bouteloua barbata, Ambrosia dumosa, Larrea tridentata, Parkinsonia florida, Olneya tesota. Herbaceous associates include Pectis papposa, Kallstroemia californica, Chamaesyce micromera.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☑ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: OHV

Visible disturbances: PV solar plant; I-10; NavAid station; two-track dirt road

Threats: Brassica tournefortii present

Comments: Plants were dried and difficult to count. Population size is likely underestimated.

Determination: *(check one or more, and fill in blanks)*

- ☑ Keyed (cite reference): Jepson Manual (Note: originally delveloped search image using
- ☐ Compared with specimen housed at: reference population. Honed search image and
- ☐ Compared with photo / drawing in: microhabitats by finding many plants elsewhere
- ☐ By another person (name): and comparing to other cogeners.)
- ☐ Other: Art Schaub; Michelle-Cloud Hughes; Tasva Herskovits; Suzanne Rhodes

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

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1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 08/23/2012

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California Native Species Field Survey Form

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Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1603 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 50 % flowering 50 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: Riverside Landowner / Mgr.: BLM

Quad Name: McCoy Peak Elevation: Approx. 500 ft

T____ R____ Sec ____, ____ ¼ of ____¼, Meridian: H☐ M☐ S☐

T____ R____ Sec ____, ____ ¼ of ____¼, Meridian: H☐ M☐ S☐

Source of Coordinates (GPS, topo. map & type): GPS

GPS Make & Model Garmin, various models

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐

Horizontal Accuracy Approximately 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: See attached list

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Larrea tridentata, Parkinsonia florida, Senegalia greggii, Hilaria rigida, Encelia farinosa, Ambrosia dumosa, Krameria erecta, K. grayi, Boerhavia wrightii, Chamaesyce polycarpa, Marina parryi, and Ditaxis neomexicana. This species was common and widespread. Individuals were observed primarily in silty sand of runnels and swales that collected water for a short period. Observations were made from 8/23 to 9/2/2012.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: some off-road vehicle use, agriculture, gas line/dirt road

Visible disturbances: Off-road tire tracks

Threats: solar development

Comments: Site would be good/excellent except for threat of proposed solar development. Population extends farther east of these locations in suitable habitat.

Determination: *(check one or more, and fill in blanks)*

- ☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: Alice E. Karl and Associates

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

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Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 08/25/2012

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Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

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California Native Species Field Survey Form

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Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative _____ % flowering _____ % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

***Location Description* (please attach map *AND/OR* fill out your choice of coordinates, below)**

County: Riverside Landowner / Mgr.: BLM
Quad Name: McCoy Peak Elevation: Approx. 450 ft
T____ R____ Sec ____, ____ ¼ of ____ ¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of ____ ¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 710691 3723916

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Larrea tridentata, Ambrosia dumosa, Boerhavia wrightii, Chamaesyce polycarpa, and Pectis papposa. In silty sand.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor
Immediate AND surrounding land use: some off-road vehicle use, agriculture, gas line/dirt road
Visible disturbances: none
Threats: solar development
Comments: Site would be good/excellent except for threat of proposed solar development.

Determination: *(check one or more, and fill in blanks)*
☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: M. Honer, G. Robinson, E. Mix

Photographs: *(check one or more)* Slide Print Digital
Plant / animal ☐ ☐ ☐
Habitat ☐ ☐ ☑
Diagnostic feature ☐ ☐ ☐

May we obtain duplicates at our expense? yes ☑ no ☐

Mail to:
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Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/01/2012

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California Native Species Field Survey Form

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Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 100 % flowering _____ % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Riverside Landowner / Mgr.: BLM
Quad Name: McCoy Peak Elevation: Approx. 470 ft
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 708370 3724897

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Larrea tridentata, Krameria grayi, Bouteloua barbata, Chamaesyce polycarpa, C. micromera, and Pectis papposa. In sandy loam.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☐ Fair ☑ Poor
Immediate AND surrounding land use: some off-road vehicle use, agriculture, BSPP access road
Visible disturbances: BSPP access road
Threats: continued use of BSPP access road
Comments: Observed in middle of bladed Blythe Solar Power Project (BSPP) access road in tire tracks. Indicates tolerance of significant disturbance.

Determination: *(check one or more, and fill in blanks)*
☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: Michael Honer, Kanan Routson

Photographs: *(check one or more)* Slide Print Digital
Plant / animal ☐ ☐ ☐
Habitat ☐ ☐ ☑
Diagnostic feature ☐ ☐ ☐
May we obtain duplicates at our expense? yes ☑ no ☐

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Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 08/31/2012

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Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

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California Native Species Field Survey Form

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Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 100 % flowering _____ % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: Riverside Landowner / Mgr.: BLM
Quad Name: McCoy Peak Elevation: Approx. 470 ft
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 706952 3725477

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Larrea tridentata, Ambrosia dumosa, Krameria grayi, Chamaesyce polycarpa, C. micromera. In shallow runnel with silty sand.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor
Immediate AND surrounding land use: BSPP Access road
Visible disturbances: none
Threats: solar development
Comments: Site would be good/excellent except for threat of proposed solar development

Determination: *(check one or more, and fill in blanks)*
☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: Kanan Routson

Photographs: *(check one or more)* Slide Print Digital
Plant / animal ☐ ☐ ☐
Habitat ☐ ☐ ☑
Diagnostic feature ☐ ☐ ☐

May we obtain duplicates at our expense? yes ☑ no ☐

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Date of Field Work (mm/dd/yyyy): 09/01/2012

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

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California Native Species Field Survey Form

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Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 8 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 30 % flowering _____ % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Riverside Landowner / Mgr.: BLM
Quad Name: McCoy Peak Elevation: Approx. 470 ft
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 708451 3723541, 708461 3723707, 708447 3723930

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Larrea tridentata, Allonia incarnata, Pectis papposa, Boerhavia wrightii. In silty sand.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☐ Fair ☑ Poor
Immediate AND surrounding land use: BSPP Access road
Visible disturbances: BSPP Access road
Threats: Continued use of BSPP Access road
Comments: In the middle of the graded BSPP Access road

Determination: *(check one or more, and fill in blanks)*
☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: Kanan Routson, Michael Honer

Photographs: *(check one or more)* Slide Print Digital
Plant / animal ☐ ☐ ☐
Habitat ☐ ☐ ☑
Diagnostic feature ☐ ☐ ☐

May we obtain duplicates at our expense? yes ☑ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/02/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative _____ % flowering _____ % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: Riverside Landowner / Mgr.: BLM
Quad Name: Roosevelt Mine Elevation: Approx. 400 ft
T____ R____ Sec ____, ____ ¼ of ____ ¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of ____ ¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 708486 3720364

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Larrea tridentata, Chamaesyce polycarpa, C. micromera. In a flat area in a slight depression. Silty sand.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor
Immediate AND surrounding land use: gas line and distribution line
Visible disturbances: Existing utilities - gas line and distribution line
Threats: proposed solar development transmission line, utilities
Comments:

Determination: *(check one or more, and fill in blanks)*
☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: Art Schaub, Alice Karl, Michelle Cloud-Hughes, Tasya Herskovits

Photographs: *(check one or more)* Slide Print Digital
Plant / animal ☐ ☐ ☐
Habitat ☐ ☐ ☑
Diagnostic feature ☐ ☐ ☐

May we obtain duplicates at our expense? yes ☑ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 08/31/2012

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Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 100 % flowering _____ % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Riverside Landowner / Mgr.: BLM
Quad Name: McCoy Peak Elevation: Approx. 570 ft
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐
Source of Coordinates (GPS, topo. map & type): GPS
GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐
Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 706078 3727161

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Larrea tridentata, Hilaria rigida, Encelia farinosa, Chamaesyce polycarpa, C. micromera, Boerhavia wrightii, Bouteloua barbata, and Pectis papposa. In a runnel adjacent to desert pavement. Fine sand and gravel.

Please fill out separate form for other rare taxa seen at this site.

Site Information

Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: none

Visible disturbances: none

Threats: solar development

Comments: Site would be good/excellent except for possible solar development

Determination: *(check one or more, and fill in blanks)*

☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: Glenn Rink

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 08/31/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 17 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 100 % flowering 50 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: Riverside Landowner / Mgr.: BLM
Quad Name: Roosevelt Mine Elevation: Approx. 425 ft
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 708031 3721159, 708031 3721269

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Larrea tridentata, Ambrosia dumosa, Encelia farinosa, Bouteloua barbata, B. aristidoides, Chamaesyce micromera, and Kallstroemia californica. Within swale along roadside. Silt and sand.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: OHV

Visible disturbances: Black Rock Road

Threats: Off road travel

Comments: Area of past disturbance

Determination: *(check one or more, and fill in blanks)*

- ☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: Kyle Christie, Marc Baker, Adam Hamburg, Wendy McBride

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

DFG/BDB/1747 Rev. 6/16/09

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/02/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 42 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 100 % flowering 100 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: Riverside Landowner / Mgr.: BLM

Quad Name: Roosevelt Mine Elevation: Approx. 400 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: 708510 3719509, 708350 3719051, 708320 3718961, 708442 3719158, 708499 3718815

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Larrea tridentata, Ambrosia dumosa, Cylindropuntia echinocarpa, Bouteloua barbata, Pectis papposa, Chamaesyce micromera, and Kallstroemia californica. Silt and sand.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: existing PV solar facility

Visible disturbances: two track roads, existing PV solar facility

Threats: proposed solar project transmission facilities

Comments:

Determination: *(check one or more, and fill in blanks)*

- ☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: Art Schaub, Alice Karl, Michelle Cloud-Hughes, Tasya Herskovits

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

DFG/BDB/1747 Rev. 6/16/09

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/02/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 9 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 100 % flowering 100 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: Riverside Landowner / Mgr.: BLM
Quad Name: Roosevelt Mine Elevation: Approx. 400 ft
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 706991 3719870, 707000 3719393, 707037 3719598, 707043 3720226

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Larrea tridentata, Pleuraphis rigida, Ambrosia dumosa, Ditaxis neomexicana, Bouteloua aristidoides, Pectis papposa, Chamaesyce micromera, C. polycarpa, Brassica tournefourtii, and Kallstroemia californica. In and on edge of sandy wash in silt and sand.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: I-10

Visible disturbances:

Threats: proposed solar project transmission facilities

Comments: Site would be good except for proposed solar project transmission facilities

Determination: *(check one or more, and fill in blanks)*

- ☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: Kyle Christie, Marc Baker, Wendy McBride, Adam Hamburg

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

DFG/BDB/1747 Rev. 6/16/09

Mail to:
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Sacramento, CA 95811
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Date of Field Work (mm/dd/yyyy): 09/02/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 2 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative _____ % flowering _____ % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

County: Riverside Landowner / Mgr.: BLM

Quad Name: McCoy Peak Elevation: Approx. 600 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin

DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐

Coordinates: 705335 3729007, 705598 3729068

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Larrea tridentata, Pleuraphis rigida, Encelia farinosa, Krameria erecta, Cylindropuntia echinocarpa, Ditaxis neomexicana, Pectis papposa. Runnel within small braided wash; mostly silty soil.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: none

Visible disturbances: none

Threats: proposed solar project

Comments: Site would be good/excellent except for proposed solar project

Determination: *(check one or more, and fill in blanks)*

- ☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA.
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: Tim Thomas, Marc Baker

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 09/02/2012

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Proboscidea althaeifolia*

Common Name: desert unicorn plant

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 5 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tetra Tech and Alice E. Karl and Associates
Address: 143 Union Blvd., Ste 1010
Lakewood, CO 80228
E-mail Address: emily.mix@tetratech.com
Phone: (303) 980-3509

Plant Information

Phenology: 100 % vegetative 100 % flowering 100 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Riverside Landowner / Mgr.: BLM
Quad Name: _____ Elevation: Approx. 425 ft
T____ R____ Sec____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GPS
T____ R____ Sec____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model Garmin
DATUM: NAD27 ☐ NAD83 ☑ WGS84 ☐ Horizontal Accuracy Approximately 10 m meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☑ *OR* Geographic (Latitude & Longitude) ☐
Coordinates: 707338 3718791

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Larrea tridentata, Ambrosia dumosa, Pleuraphis rigida, Chamaesyce polycarpa, C. micromera, Brassica tournefortii. Sand/sand dunes.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor
Immediate AND surrounding land use: none
Visible disturbances: none
Threats: proposed solar project transmission line
Comments: Site would be good except for proposed solar project transmission line

Determination: *(check one or more, and fill in blanks)*
☑ Keyed (cite reference): The Jepson Desert Manual: Vascular Plants of Southeastern CA
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: Alice Karl, Suzanne Rhodes, Michelle Coud-Hughes

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐

APPENDIX G USACE JURISDICTIONAL DETERMINATION

This page intentionally left blank.

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
PRADO DAM FIELD OFFICE
2493 POMONA-RINCON ROAD
CORONA, CALIFORNIA 92880

August 2, 2010

REPLY TO
ATTENTION OF
Office of the Chief
Regulatory Division

EDAW, Inc.
Attn: Joshua Zinn
1420 Kettner Blvd., Suite 500
San Diego , CA 92101

Solar Millennium LLC
Attn: Elizabeth Ingram
1111 Broadway, 5th Floor
Oakland, CA 94607

SUBJECT: Approved Jurisdictional Determination regarding presence/absence of geographic jurisdiction for the Blythe Solar Power Project, Riverside County, California

Dear Mr. Zinn:

Reference is made to your request (File No. SPL-2010-00098-JEM) dated October 23, 2009, for an approved Department of the Army jurisdictional determination (JD) for the Blythe Solar Power Project (Solar Millennium LLC, Chevron Energy Solutions), near Blythe, centered approximately at Latitude 33.64263 Longitude -114.76868, in Riverside County, California.

As you may know, the Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, then a permit is required. The first test determines whether or not the proposed project is located in a water of the United States (i.e., it is within the Corps' geographic jurisdiction). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the River and Harbor Act or Section 404 of the Clean Water Act. As part of the evaluation process, pertaining to the first test only, we have made the jurisdictional determination below.

Based on available information, we have determined there are no waters of the United States on the project site. The aquatic resources identified are intrastate isolated waters with no apparent interstate or foreign commerce connection. As such, these waters are not currently regulated by the Corps of Engineers. This disclaimer of jurisdiction is only for Section 404 of the Clean Water Act. Other Federal, State, and local laws may apply to your activities. In particular, you may need authorization from the California State Water Resources Control Board and/or the U.S. Fish and Wildlife Service.

This letter contains an approved jurisdictional determination for the Blythe Solar Power Project project site. If you object to this decision, you may request an administrative appeal

under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet (Appendix A) and Request for Appeal (RFA) form. If you request to appeal this decision you must submit a completed RFA form to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh
Administrative Appeal Review Officer,
U.S. Army Corps of Engineers
South Pacific Division, CESPD-PDS-O, 2042B
1455 Market Street, San Francisco, California 94103-1399

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. Part 331.5, and that it has been received by the Division Office within 60 days of the date on the NAP. Should you decide to submit an RFA form, it must be received at the above address by October 2, 2010. It is not necessary to submit an RFA form to the Division office if you do not object to the decision in this letter.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. If you wish to submit new information regarding the approved jurisdictional determination for this site, please submit this information to James Mace at the letterhead address by October 2, 2010. The Corps will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. A revised or reissued jurisdictional determination can be appealed as described above.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular Project site identified in your request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

If you have any questions, please me at 951.898.6163 or via e-mail at James.E.Mace@usace.army.mil. Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at: http://per2.nwp.usace.army.mil/survey.html.

Sincerely,

James E. Mace
Senior Project Manager
South Coast Branch
Regulatory Division

APPENDIX H WASTE DISCHARGE REQUIREMENTS

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SOIL AND WATER
APPENDIX H-1

Waste Discharge Requirement
Facts for Waste Discharge

SOIL AND WATER RESOURCES – APPENDIX H-1

FACTS FOR WASTE DISCHARGE~~—Palo Verde Solar I~~ NextEra Blythe Solar Energy Center, LLC, Owner/Operator, Blythe Solar Power Project, Riverside County

1. **NextEra Blythe Solar Energy Center, LLC** ~~Solar Millennium, LLC~~, (the Discharger) is proposing to construct, own and operate a ~~concentrated solar power (CSP)~~ **photovoltaic (PV)** electric generating facility **with** evaporation ponds~~ and a land treatment unit (LTU)~~on land owned by the Bureau of Land Management (BLM). ~~The solar power project is proposed by Palo Verde Solar I, LLC (PVSI).~~ The project is located on the Palo Verde Mesa along the Interstate 10 (I-10) corridor, northwest of the City of Blythe. The facility is referred to as the Blythe Solar Power Project (BSPP). A site map (**Figure 1**), **i**~~a~~s incorporated herein**,** and made a part of these requirements for waste discharge (Waste Discharge Requirements, or WDRs). The address for **the Discharger is**~~, Solar Millennium, LLC 1625 Shattuck Ave. Ste 270, Berkeley, Ca 94709-1161.~~ **NextEra Blythe Solar Energy Center, LLC, 700 Universe Blvd., JES/JB, Juno Beach, Florida 33408.**

2. These WDRs regulate the Facility's ~~eight~~ **two** evaporation ponds~~ and two LTUs~~. The evaporation ponds are designated as Class II Surface Impoundments Waste Management Units (WMU) and must meet the requirements of the California Code of Regulations (CCRs), Title 27, CCR §20200 et seq. The boundaries of the Blythe Solar Power Project are shown on **(Figure 2**), as incorporated herein and made a part of these WDRs.

3. ~~The Discharger submitted two~~ **A** Report~~s~~ of Waste Discharge (ROWD) **was submitted by the previous owner on**~~, January 6, 2010 for the LTU and~~ May 14, 20~~0~~1**0** for the **previously proposed** evaporation ponds for the Blythe Solar Power Project.

4. Definition of terms used in these WDRs:

   a. **Facility** – The entire parcel of property where the proposed Blythe Solar Power Project industrial operation or related solar industrial activities are conducted.

   b. **Waste Management Units (WMUs)** – The area of land, or the portions of the Facility where wastes are discharged. The ~~LTU and the~~ evaporation ponds are WMUs.

   c. **Discharger** – The term Discharger means any person who discharges waste that could affect the quality of the waters of the State, and includes any person who owns the land, WMU or who is responsible for the operation of a WMU. Specifically, the terms "discharger" or "dischargers" in these WDRs means **NextEra Blythe Solar Energy Center, LLC**~~Palo Verde Solar I, LLC~~.

d. Approved Project – the prior solar thermal project proposed for this property that was approved by the BLM, CEC and other agencies.

Facility Location

5. The Project site is located approximately two miles mile north of I-10 and northwest of the City of Blythe, in an unincorporated area of eastern Riverside County, California. The area inside the Project's security fence, the footprint within which all Project facilities will be located, will occupy approximately ~~5,950~~**4,138** acres of Federal land managed by the BLM.

Surrounding Land Use

6. The Facility site is vacant undeveloped desert located approximately one mile north of the Blythe Airport, two miles north of I-10, and eight miles west of the City of Blythe. The small rural community of Mesaville lies to the east of the Project site on the Palo Verde Mesa. North and west of the Project site are vacant desert lands. South of I-10 is undeveloped public and private desert land. Undeveloped and irrigated desert is located east of the site where several large and small parcels are actively farmed. The nearest residence is located in the southeast one-quarter of section 14, outside of the BLM- administered property and outside the ~~7,043~~**4,350** acre disturbance area within the overall ROW that will be disturbed by Project construction and operation. Another residential structure is located off-site between the southern boundary of the Project site, north of the Blythe Airport. No other residences are known to exist within the one-mile radius of the Project site.

7. The Project site is not located in a designated wilderness area; however, it is located near lands that are designated as wilderness lands or ACEC (NECO Maps 2-38 and 2-4). The nearest Federal wilderness areas are located on mountainous land to the northwest and south of the Project site and are referred to as the Palen/McCoy Wilderness Area, and the Chuckwalla Mountains Wilderness Area, respectively. Riverside County land uses in the study area include Open Space-Rural, Agricultural and Public Facility.

8. The Project site is vegetated with desert scrub throughout. Based on information in the NECO Plan, the Project site has not been leased for grazing by BLM.

Facility Description

9. The Project will have a nominal electrical output of **approximately** ~~1,000~~**485** megawatts (MW), ~~consisting of~~ **from four photovoltaic (PV) units**~~four adjacent, identical and independent 250-MW plants, Unit #1 through Unit #4~~**, the first three units would each generate 125 MW nominal alternating current (AC) and the fourth unit would generate approximately 110 MW AC** (**Figure 2**). **Construction of the first unit is tentatively scheduled for mid-2014, with the other units following in a phased approach. The entire project is projected to be completed within 48 months of the start of construction of the first unit.** ~~Commercial operation of Unit #1 is expected to begin in mid-2013, with commercial~~

~~operation of Unit #4 following by the second quarter of 2016, subject to timing of regulatory approvals and PVSI achievement of project equipment procurement and construction milestones. The solar thermal technology will provide 100 percent of the power generated by the Project; no supplementary energy source (e.g., natural gas to generate electricity at night) is proposed to be used for electric energy production. The Project will utilize an auxiliary boiler fueled by propane to reduce startup time and for HTF freeze protection. A second heater will be used on a limited basis for the HTF freeze protection heat exchanger during nighttime hours to keep the HTF in a liquid state when ambient temperatures are not sufficient to keep the temperature of the HTF above its relatively high freezing point (54 degrees Fahrenheit [°F]). The Project will also have one electric and one backup diesel-fueled fire water pump for fire protection.~~

10. ~~The Project proposes to use dry cooling condenser for power plant cooling.~~ Water for ~~cooling tower makeup, process water makeup, and other~~ industrial uses such as ~~mirror~~ **PV panel** washing will be supplied by up to ~~ten~~ **three** onsite wells. This source will also be used to supply water for employee use (e.g., drinking, showers, sinks, and toilets). Water received from the on-site wells will be pumped directly to a reverse osmosis (RO) treatment unit to meet the requirements of the California Department of Health Services for potable water supplies. ~~Power cycle makeup,~~ **PV panel** ~~mirror~~ washing water~~, and cooling of ancillary equipment~~ will require on-site treatment for reduction of dissolved solids, and this treatment varies according to the quality required for ~~each of~~ **this** ~~these~~ use~~s~~.

~~11. The power generation cycle will not produce cooling tower blow down because the plant will be dry cooled. A small auxiliary cooling tower will generate a small amount of blow down, which will be reused on site. No off-site backup cooling water supply is planned at this time.~~

11. ~~12.~~ The main waste stream at the site consists of industrial wastewater generated in the **RO process.**~~various processes associated with power generation. Industrial wastewater is treated via a high pH reverse osmosis at each of the four Power Units. At each Unit, the treated water is recycled to the 1,000,000-gallon Service/Fire Water tank for reuse in the process.~~ The concentrate from the RO system is discharged to lined evaporation ponds (two ~~per Unit~~ **located near the water treatment plant**). The BSPP Facility therefore includes ~~eight~~ **two** proposed evaporation ponds for waste**water** storage and disposal. Sanitary wastewater generated at **the Facility** ~~each Unit~~ is disposed of via septic systems.

12. ~~13.~~ The project will include evaporation ponds for the evaporation of brine waste from the RO plant~~ and other industrial wastes~~. There will be ~~eight~~ **two** ponds, **a total of up to 12 acres in size at the BSPP facility**~~four acres in size and, two within each power block~~. The evaporation ponds will be designed in accordance with Colorado River Basin Regional Water Quality Control Board (Regional Board) requirements.

~~14. The Project will include an LTU to treat soil contaminated with HTF. Based on the release history from the NextEra LLC Kramer Junction Facility, which is parabolic~~

~~trough solar power plant that employs HTF in the same fashion as proposed for the BSPP and also has a LTU for treatment of HTF-contaminated soil, the LTU has been designed in accordance with CCR Title 27 requirements and designed to receive about 3,332 cubic yards of impacted soil on an annual basis. There are two LTUs proposed for the Project Figure 2). The LTU will use indigenous bacteria and amendments to the soil to bioremediate HTF-affected soils to levels acceptable for reuse on the site. Characterization of the hazardous characteristics of HTF-affected soil will be established by the Department of Toxic Substances Control (DTSC) prior to operation and LTU use for soil remediation. Soils in excess of the criterion established by the DTSC will be removed from the site and transported to an appropriate treatment storage and disposal facility. Soil with HTF at concentrations below this criterion will be managed in the LTU and remediated to acceptable levels for reuse as fill on site. The unit will be designed in accordance with Colorado River Basin Regional Water Quality Control Board (Regional Board) requirements.~~

13. ~~15.~~ The estimated project life for the Project is 30 years. **In accordance with United States Department of Labor, Occupational Safety and Health Administration safety regulations, at least two qualified personnel would be present during all energized electrical maintenance activities at the facility. Site security systems would be monitored regularly by on-site personnel and an off-site 24-hour Remote Operations Center.**~~Personnel will staff the Project 24 hours per day/seven days per week. Even when the solar power plant is not operating, personnel will be present as necessary for maintenance, to prepare the Project for startup, and/or for site security.~~

14. ~~16.~~ A sanitary septic system and on-site leach field will be used to dispose of sanitary wastewater ~~within each power block~~.

Climate

15. ~~17.~~ The Project is located in an arid desert climate; therefore, there are extreme daily temperature changes, low annual precipitation, strong seasonal winds and mostly clear skies. Evaporation rates are higher than precipitation rates. Based on 60 years of data from Blythe Airport, the mean maximum temperatures in June to September exceed 100°F. Winter months are more moderate with mean maximum temperatures of high 60's to low 70's °F and minimum temperatures in the low to mid 40's °F. Although there are no average minimal temperatures below freezing point (32°F), the temperature has historically dropped below freezing point between November and March.

16. ~~18.~~ Average annual evaporation in the Facility area, based on published data at the Indio Fire Station 70 miles west of the Project site, is 105 inches, of which 87 percent of that evaporation occurs between March and October. Average annual precipitation in the Project area, based on the gauging station at Blythe Airport, is 3.55 inches, with August recording the highest monthly average of 0.63 inches and June recording the lowest monthly average of 0.02 inches. Per the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 for the Southern

California area, 3.51 inches of rainfall shall fall in the 100 year, 24 hour storm event.

17. ~~19.~~ Winds in the Project area are generally south to southwest with a less frequent component of northerly winds (north through northwest). Calm conditions occur approximately 16.43% of the time, with the annual average wind speed being approximately 7.62 miles per hour (mph) (3.41 m/s).

Regional Topography and Drainage

18. ~~20.~~ The Project site is located on the alluvial fan sediments derived from the McCoy Mountains, located due west of the Project site. The topography slopes gently to the east-southeast at grades of less than one percent over most of the site. Existing topographic conditions show an average slope of about one foot in 80 feet (1.25 percent) toward the east on the west side of the BSPP, and about one foot in 200 feet (0.50 percent) toward the southeast on the east side of the site. ~~Steeper grades of 10 to 15 percent are present along the western side of the unnamed mound in Sections 5, 6 and 7, T6S R22E. A steeper grade of 50 percent was measured along the southwestern side of an unnamed knob on the northeast side of the McCoy Wash in Section 4, T6S R22E.~~ The McCoy Wash occurs about ~~2~~**4**,000 feet from the northeastern corner of the Project site trending northwest to southeast and runs between the mound and knob features described above.

19. ~~21.~~ The vast majority of the time, the Facility site is dry and devoid of any surface flow. When surface flow does occur, it is in response to precipitation. The Facility site is characterized by numerous dry washes originating on the flanks of the McCoy Mountains that lie to the west of the site. These washes enter the site where they ~~either combine (southwest corner of the site) or~~ disperse as they enter the sandier alluvial plain (northern end of the site). The conveyance capacity of the washes is limited and runoff during moderate to large events will break out of these features and be conveyed across the terrain as shallow sheet flow. In general, the drainages appear to be stable and not experiencing significant down cutting or lateral migration. Surface water flow tends to drain to the southeast towards the Colorado River.

20. ~~22.~~ The largest of these features is the McCoy Wash, which occurs about ~~2,000~~ **4,000** feet from the northeastern corner of the Facility site ~~and trends across the Facility site from northwest to southeast~~. Flow in the McCoy Wash can be as high as 4,000 cubic feet per second, as measured in 1976 during historic flooding in the watershed.

21. ~~23.~~ There are no permanent bodies of water located on the Facility site. There are no perennial streams in the McCoy Mountain watershed which impact the Facility site. No springs are listed in the area of the Palo Verde Mesa Groundwater Basin where the Facility is located, according to the NWIS database of Water Resources of the United States that is maintained by the USGS.

Flood Hazard

22. ~~24.~~ According to FEMA, no flood insurance rate maps have been created for the Project site and adjacent areas. Reviews of flood zone maps generated by the Riverside County Flood Control District also did not identify any flood zone maps for this area of Riverside County.

Regional Geology

23. ~~25.~~ The Facility is located in the northwestern Colorado Desert, in the alluvial-filled basin of the Palo Verde Mesa, which is part of the greater Colorado Desert Geomorphic Province. The basin is bound by the McCoy Mountains to the west, the Little Maria Mountains to the northwest, and the Big Maria Mountains to the northeast. This area has a generally low relief until near the surrounding mountains. In the region, the Palo Verde Valley is roughly equivalent to the recent historic floodplain of the Colorado River. Surficial deposits of late Miocene to Holocene age form most of the land surface in the area. Most of these deposits are composed of Quaternary Alluvium, underlain by the Pliocene Bouse Formation, which is in turn unconformably underlain by the Miocene Fanglomerate. These deposits are all underlain by bedrock consisting of metamorphic and igneous intrusive rocks of pre-Tertiary age, including Proterozoic schist and gneiss, Paleozoic sedimentary rocks, and Mesozoic sedimentary and metavolcanic rock sequences.

Site Specific Geology

24. ~~26.~~ The Facility is sited on the uppermost of two terraces that comprise the Palo Verde Mesa. Topography at the Facility site slopes gently away from the McCoy Mountains from the west to the southeast. Ground surface elevations at the Facility site range from ~~830~~ **580** feet above mean sea level (msl) in the west to 410 feet msl in the east.

Seismicity

25. ~~27.~~ The Project site is located in seismically active Southern California, a region that has experienced numerous earthquakes in the past. A review of the Alquist Priolo (AP) Earthquake Fault Maps and the Riverside County AP Earthquake Hazard Zone Map indicate that there are no AP fault zones present within the Project boundaries (California Division of Mines and Geology 2000, California Geological Survey 2003, 2007).

26. ~~28.~~ According to the ~~recent~~ **submitted** geotechnical investigation of the site (Kleinfelder 2009), several inferred faults have been mapped by several authors trending northwest-southeast through the area. These faults are speculative and based on geophysical data (Rostein et al., 1976). The Blythe Graben is mapped approximately six miles northeast of the site (Stone, 2006). The Blythe Graben offsets Quaternary alluvium dated between 6 to 31 thousand years old. The tectonic significance of the Blythe Graben is unknown. The location and elevation

of alluvial deposits of the McCoy wash area that have been incised by the McCoy Wash and other drainages suggest that tectonic uplift may have affected this area since the Pliocene epoch (within the last 5 million years). This uplift could be related to faulting, or regional uplift associated with the basin and range extension. Because the speculated faults in the area are not considered active, and there is no direct evidence of active faulting on the site, the risk associated with surface rupture from active faults at the site is considered very low. Regardless of whether there are faults across the site, because the Project is located in a seismically active area, all Project structures must be designed to comply with the California Building Code (CBC) and Universal Building Code (UBC) Zone 3 requirements. The CBC and UBC are considered to be standard safeguards against major structural failures and loss of life. The goals of the codes are to provide structures that will:

a. Resist minor earthquakes without damage;

b. Resist moderate earthquakes without structural damage but with some non-structural damage; and

c. Resist major earthquakes without collapse but with some structural and non-structural damage.

27. ~~29.~~ The CBC and UBC base seismic design on minimum lateral seismic forces ("ground shaking"). The CBC and UBC requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes.

Ground Rupture

28. ~~30.~~ The Project site is not located within a State of California Earthquake Fault Zone designated by the Alquist-Priolo Special Studies Zone Act of 1972 (formerly known as a Special Studies Zone), an area where the potential for fault rupture is considered probable (Riverside County, 2008). In addition, no Quaternary, Sufficiently Active, or Well Defined Faults are located under or near the Site. Based on this information and engineering judgment, earthquake-induced ground rupture is not considered to be a significant hazard at the Site.

Slope Stability

29. ~~31.~~ The Site is not considered to be an area with the potential for permanent ground displacement due to earthquake-induced landslides because surface topography at and near the site is relatively flat (Riverside County, 2008). A review of the Riverside County General Plan, Safety Element, did indicate areas considered susceptible to earthquake induced landslides and rock falls in the McCoy Mountains; however, these areas are several miles from the Site and are not expected to impact the Project. Based on this information and engineering judgment, slope instability is not considered to be a significant hazard at the Site.

Erosion

30. ~~32.~~ Erosion is the displacement of solids (soil, mud, rock, and other particles) by wind, water, or ice and by downward or down-slope movement in response to gravity. Due to generally flat terrain, the Project site is not prone to significant mass wasting (gravity-driven erosion and non-fluvial sediment transport) at present. The Riverside County General Plan, Safety Element (Riverside County, 2008), indicates the Site is in an area with moderate potential for wind erosion, the off-site linears are in areas with moderate to high potential for wind erosion. Soil characteristics at the Project site allow for the potential for wind and water erosion, and significant sediment transport currently occurs across the valley axial drainage that crosses the majority of the proposed plant site. As indicated above, these valley axial deposits are characterized by subdued bar and swale topography and ongoing deposition from sheet floods. Limited sand and aeolian erosion also occurs between depositional episodes.

31. ~~33.~~ To address the management of sediment transport, erosion and sedimentation during operation, the project design ~~will~~ **may** incorporate **minor** diversion berms **and**~~,~~ channels~~, and dispersion structures~~. The final design for these features will be developed during detailed design, and will include industry-standard calculations and modeling to reduce the potential for erosion or sedimentation, and to reduce the need for ongoing maintenance. Dirt roads and exposed surfaces will be periodically treated with dust palliatives as needed to reduce wind erosion. Construction and maintenance of the proposed drainage and sediment management system at the Site is expected to reduce water and wind erosion at and downstream of the Site to less than significant levels.

Liquefaction

32. ~~34.~~ Liquefaction is a soil condition in which seismically induced ground motion causes an increase in soil water pressure in saturated, loose, uniformly-graded sands, resulting in loss of soil shear strength. As a result, the effects of liquefaction can include loss of bearing strength, differential settlement, ground oscillations, lateral spreading, and flow failures or slumping. Liquefaction occurs primarily in areas where the groundwater table is within approximately 50 feet of the surface (Riverside County, 2008). The depth to water beneath the Site is estimated to be approximately 195 feet bgs. In addition, the sandy soils encountered in the upper 100 feet beneath the Project site during geotechnical drilling are generally dense and well graded. Dense, well-graded sands are not generally considered susceptible to liquefaction. Based on this information and engineering judgment, the potential for liquefaction hazard at the Project site is considered to be low. The potential for liquefaction will be further evaluated as part of the Final Geotechnical Investigation for the Project, and if necessary, design parameters to address identified conditions will be incorporated into the detailed project design.

Differential Settlement

33. ~~35.~~ Seismically induced settlement can occur during moderate and large earthquakes in soft or loose, natural or fill soils that are located above the ground water table, resulting in differential settlement. The settlement can cause damage to surface and near-surface structures. The most susceptible soils are clean loose granular soils. Due to the expected dense to very dense nature of the near surface soils, the potential for damage due to seismically induced settlement is considered to be low at the Project site. The potential for seismically-induced settlement will be further evaluated as part of the Final Geotechnical Investigation for the Project, and if necessary, design parameters to address identified conditions will be incorporated into the detailed project design.

Collapsible Soil Conditions

34. ~~36.~~ Alluvial soils in arid and semi-arid environments can have characteristics that make them prone to collapse with increase in moisture content and without increase in external loads. Soils that are especially susceptible to collapse or hydrocompaction in a desert environment are loose dry sands and silts, and soils that contain a significant fraction of water soluble salts. Overall soil gradation observed at the Facility site trended from coarser- to finer-grained alluvial deposits as distance from the McCoy Mountains increased. The ground surface in the western portion of the Project site is dominated by areas of desert pavement with layers of flat-lying gravel overlying finer-grained sandy materials. East toward Black Creek road, the surface becomes less dominated by desert pavement and becomes sandier. Soils observed at the Facility site have a low permeability and high runoff potential. Based on this data and engineering judgment, the site soils do not have a significant potential for hydrocompaction or collapse. The potential for hydrocompaction and soil collapse will be further evaluated as part of the Final Geotechnical Investigation for the Project, and if necessary, design parameters to address identified conditions will be incorporated into the detailed project design.

Expansive Soil

35. ~~37.~~ Expansive soil is predominantly fine grained and contains clay minerals capable of absorbing water in their crystal structure. It is often found in areas that were historically a flood plain or lake area, but can also be associated with some types of shale, volcanic ash or other deposits, and can occur in hillside areas also. Expansive soil is subject to swelling and shrinkage, varying in proportion to the amount of moisture present in the soil. As water is initially introduced into the soil (by rainfall or watering) expansion takes place. If dried out, the soil will contract, often leaving small fissures or cracks. Excessive drying and wetting of the soil can progressively deteriorate structures that are not designed to resist this effect, and can lead to differential settlement under buildings and other improvements. The surficial soils at the site generally consist of predominantly granular soils that do not contain much clay and are not subject to significant expansion hazards. The potential for expansive soils will be further evaluated as part of the Final

Geotechnical Investigation for the Project, and if necessary, design parameters to address identified conditions will be incorporated into the detailed project design.

36. ~~38.~~ Based on the above information, the cut and fill slope dimensions and earthwork requirements will be adequate to address the stability of the evaporation ponds ~~and LTU~~ for the life of the project and no further analysis is warranted.

Regional Hydrogeology

37. ~~39.~~ The Project is located in the alluvial-filled basin of the Palo Verde Mesa. Regionally, this valley formed as a structural depression or a pull-apart basin and is composed of two broad geologic units, consolidated rocks and unconsolidated alluvium (Metzger et al 1973). The consolidated rocks consist of pre-Tertiary age igneous and metamorphic rocks, which form the basement complex, and in some locations, Tertiary-age volcanic rocks that overlie the basement complex. The consolidated rocks are nearly impermeable except for areas where fracturing or weathering has occurred. It is uncertain the extent that these rocks yield water to the alluvium. The flux of groundwater into and out of the bedrock is unknown and has not been described in the literature reviewed for this project.

Hydrostratigraphy

38. ~~40.~~ The geologic units that are important in an evaluation of the water resources in the Palo Verde Mesa area are thought to be the Miocene-age Fanglomerate, the Pliocene-age Bouse Formation, and the fluvial deposits of the Colorado River. According to Metzger et al (1973), the Miocene-age Fanglomerate is made up chiefly of cemented gravel composed of poorly-sorted pebbles and some fine-grained material with a provenance from a nearby source. The Fanglomerate represents composite alluvial fans deposits that built up from local mountains as the fans prograded toward the valley. Because the Fanglomerate was deposited on an irregular surface having considerable local relief, it varies widely in thickness. Locally, the Fanglomerate may be absent, but at some places (e.g., Milpitas Wash area), it is at least 2,100 feet thick. Near Parker, Arizona, wells with specific capacities as much as 15 gallons per minute per foot of drawdown (gpm/ft) have been reported in the Fanglomerate (Metzger et al 1973). The Fanglomerate was not encountered during the drilling of test well TW-1, which was installed to a depth of 405 feet below ground surface (bgs) as part of the assessment of site conditions for the Application for Certification (AFC) **that was developed for the prior solar thermal project**.

39. ~~41.~~ The Bouse Formation is of Pliocene age and is composed of tufa and basal limestone overlain by interbedded clay, silt, and sand (Metzger et al 1973). These sediments were deposited in an embayment of the Gulf of California. According to Metzger et al (1973), the Bouse Formation rests unconformably on the Miocene Fanglomerate and the contact between the two formations is sharp. Near Blythe, the Bouse is overlain by younger alluvium and occurs at a depth of about 600 feet beneath unit B of the alluvium. The thickness of the formation is relatively uniform

throughout the area. Near the town of Parker, Arizona (about 60 miles northeast of the BSPP site), the Bouse Formation was measured at a thickness of 767 feet in well LCRP-27 that was drilled by the United States Geological Survey (USGS). In the Palo Verde Valley at well LCRP-22, the basal limestone is 5-feet thick whereas south of Cibola, Arizona, the limestone is about 100- feet thick. The interbedded sequence of clays, silt, and sand that overlie the basal limestone is by far the thickest unit in the Bouse Formation, occurring in sequences over 700 feet in the Parker-Blythe-Cibola area, according to Metzger et al (1973). With respect to water-bearing characteristics, the Bouse Formation can be divided into two zones: an upper and a lower zone (Metzger et al 1973). The upper zone is an aquifer whereas the lower zone is an aquitard. The results of pumping tests, as reported by Metzger et al (1973), indicate that specific capacities as high as 15 gpm/ft of drawdown may be obtained from the upper zone. In contrast, the best that may be expected from the lower zone is 1 to 2 gpm/ft Sediments of the Bouse Formation were not encountered during the drilling of test well TW-1 during the hydrolgeologic investigation conducted as part of the AFC.

40. ~~42.~~ The contact between the Bouse Formation and the overlying deposits of the Colorado River is erosional irregular surface. The alluviums of the Colorado River are the result of several broad periods of sediment deposition (aggradation) and erosion (degradation) by the Colorado River.

41. ~~43.~~ The fluvial deposits of the Colorado River are divided into older and younger alluvium (Metzger et al 1973). They defined the younger alluvium as the sediment deposit representing only the youngest aggradation by the Colorado River, whereas older alluviums are the deposits of several degradations and aggradations. In well 6S/23E-32E1, located approximately 7.5 miles east of the BSPP site, the bottom of the Colorado River fluvial deposits reportedly occurs to a depth of about 506 feet bgs.

42. ~~44.~~ The older alluvium is comprised of a basal-cemented gravel overlain by inter-layered sequences of sand and pebbly sand, with lenses of cobble gravels and silt and clay. The gravels consist of quartzite, limestone, and chert clasts derived from local mountain sources. In the Blythe area, this sequence has been measured as much as 600 feet thick. The lenses of cobble-gravel beds yield copious amounts of water according to Metzger et al (1973). The contact between the older and younger alluvium is between the present floodplain of the Colorado River and the bordering terraces, alluvial slopes, or bedrock.

43. ~~45.~~ The younger alluvium is composed of a basal gravel overlain by sand. The younger alluvium is generally from 90 to 125 feet thick above its basal gravel (Metzger et al 1973). The basal gravel may be absent locally in the Palo Verde Mesa, but the alluvium is continuous throughout the flood plain

On-site Drainage

44. ~~46.~~ On-site storm water management for the completed facility will be provided through the use of source control techniques, site design and treatment control.

~~The storm flows from the solar collector arrays will be treated through the use of swales, and ditches.~~

~~47. Locations within the power block for the potential of chemical or oil releases will be fully contained. Rainfall within the containment areas will be allowed to evaporate or will be drained through an oil water separator. Locations within the power block where "contact" storm water may occur will be contained within a system of curbs or trenches. Drains from these curbed areas or containment trenches will be directed to an oil water separator. The oil separated and captured within the oil water separator will be trucked off-site to a licensed disposal/recycling facility. Clean water discharged from the oil water separator will be used on Project site by discharging it to the cooling tower or to the raw water storage tank. The water discharge from the oil water separator will not be discharged to the storm water system.~~

Facility Operational Water

47. ~~48. The Project will be dry cooled.~~ The Project's various water uses include water for ~~solar collector mirror~~ **PV panel** washing, ~~makeup for the SSG feed water~~, dust control, ~~water for cooling plant auxiliary equipment,~~ potable water and fire protection. Water needs for the Project will be met by use of groundwater pumped from wells on the Project site. The estimated water supply need for the Project operation is approximately ~~600~~ **30 to 40** acre-feet per year.

Evaporation Ponds (Design and Installation Sequence)

48. ~~49.~~ The containment strategy for the evaporation ponds is summarized as follows:

    a. Meet or exceed regulatory requirements for containment of waste fluids;

    b. Select materials that are compatible with the physical, chemical and thermal characteristics of the water and contaminated soils being contained;

    c. Protect against physical damage to the containment layers by including protective layers into the designs of each containment facility;

    d. Allow for occasional removal of contained media without otherwise damaging the integrity of the containment systems; and

    e. Include the ability to monitor the integrity of the containment system, to transfer fluids out of permeable layers on a continuous basis, and to transfer fluids from one evaporation pond to another.

49. ~~50. Each 4.0 acre~~ **The two** evaporation pond**s will cover up to 12-acres and have** ~~has~~ a proposed design depth of ~~five~~ **eight** feet which incorporates:

    a. ~~Rotating pond use every 4 months over the life of the project~~ **Cleaning out each pond every 8 to 10 years over the 30 year life of the project;**

b. **3**~~2~~ feet of operational depth;

c. ~~1 foot of sludge build up over 30 years~~ **Up to 3 feet of sludge build up between each clean out cycle**; and

d. 2 feet of freeboard.

50. ~~51.~~ The containment design for the evaporation ponds, from the surface of the evaporation ponds downwards, consists of the following:

a. A hard surface / protective layer;

b. A primary 60 mil high density polyethylene (HDPE) liner;

c. An interstitial leak detection system (LDS) comprising a drainage layer and piping;

d. A secondary 40 mil HDPE liner; and

e. A 2 foot thick compacted silty-sand base.

51. ~~52.~~ The hard surface / protective layer provides protection against accidental damage to the HDPE liners which could be caused by burrowing animals, falling objects, varying climatic conditions and worker activities. Second, the hard surface / protective layer will allow for occasional removal of the precipitated solids within the evaporation ponds. Various hard surface media such as reinforced concrete, roller compacted concrete, revetments, or combinations of these media will be assessed prior to the selection of the preferred option.

52. ~~53.~~ High density polyethylene (HDPE) was selected as the preferred fabric for the primary and secondary liners for the following reasons:

a. It is chemically resistant to potentially high concentrations of dissolved salts;

b. It is very durable during installation;

c. It is strong and possesses desirable stress-strain characteristics; and

d. It is the most common synthetic liner material and as such there is a broad base of practical experience associated with the installation of HDPE amongst construction contractors.

53. ~~54.~~ A 60 mil upper liner was selected to provide appropriate balance between strength and ductility characteristics, which is very important during liner installation. A non-woven geotextile will be installed on top of the 60 mil liner to act primarily as a protective layer. A 40 mil lower liner was selected for the lower and secondary liner to provide slightly better ductility and handling

characteristics during installation, as strength is of lesser importance for the secondary liner. HDPE possesses large thermal expansion and contraction characteristics, and exhibits stress when liner temperature exceeds 122 ^{O}F. ~~The temperature of the blowdown water is not expected to exceed 122°F.~~

54. ~~55.~~ A 2 foot thick basal layer of compacted silty sand is included in the design profile to protect the underlying groundwater in the unlikely event that both synthetic liner materials are punctured during construction or operation of the evaporation ponds. This base layer also serves to provide a smooth, competent surface to support the overlying synthetic liners and leak detection system layers.

Leak Detection System

55. ~~56.~~ A drainage layer is included in the design profile for the evaporation ponds which consists of a granular drainage layer with perforated piping to collect and convey fluids to an extraction riser in a leak detection sump (LDS). Geocomposite drainage materials, consisting of HDPE geonet and nonwoven geotextiles heat bonded to one or both sides, may be used in conjunction with or as a substitute for the granular drainage layer on slopes.

56. ~~57.~~ The water collected in the LDS will drain by gravity to a unique monitoring well that is constructed for each of the leak collection layer. Automated pneumatic, solar-powered pumping systems are included in the design of each of these monitoring wells to automatically return water to that pond, which in turn minimizes the hydraulic pressures across the secondary liners and therefore the risk of impact to groundwater quality.

57. ~~58.~~ The base of the evaporation pond leak detection and collection layer will slope at a minimum inclination of 1 percent to a leak collection trench. The trench will contain screened sand (with no fines) and a perforated pipe that will slope at a minimum inclination of 3/4 percent towards a leak detection and collection sump, located at the lowest point in the pond. The water in the collection sump will drain by gravity to a monitoring well that is constructed for each evaporation pond (one well per pond). Automated pneumatic pumping systems in the monitoring wells will automatically return water collected in the sump to that evaporation pond, which in turn minimizes the hydraulic pressures across the secondary liners and, therefore, minimizes the risk of leakage through the secondary liner. Leakage rates will be measured using a flow totalizer.

58. ~~59.~~ The collection sump, pipe, and monitoring well, will include prefabricated and field-fabricated HDPE components with water tight, extrusion welded and wedge-welded seams and penetrations. The liner system will be installed in accordance with current practices. Destructive and non-destructive testing procedures will be used to verify sump and penetration tightness and continuity.

59. ~~60.~~ This design is consistent with CCR Title 27, Section 20340, which requires an LDRS between the liners for the evaporation ponds.

60. ~~61.~~ The side slopes around the evaporation ponds will contain the same liner system as the base of the ponds, except that leak collection pipes will not be located on the pond side slopes.

61. ~~62.~~ The berms shall be covered with a minimum 6-inch thick road base or approved equivalent. The top of the berms will be a minimum of 2 feet above the surrounding grade to prevent potential inflow of stormwater.

62. ~~63.~~ The wastewater will come into contact with the hard surface/protective layer. The media for this layer will either be roller-compacted concrete or an approved equivalent alternate. All final media selection will be compatible with the wastewater by using quality concrete with maximum chemical resistance (specifications will be provided to the concrete manufacturer to ensure proper mix selection).

63. ~~64.~~ If there is leakage in the evaporation pond, the wastewater will come into contact with the primary/secondary liner. HDPE is chemically resistant to saline solutions and long-term contact between the wastewater in the evaporation ponds and the HDPE liner system will not compromise liner integrity.

64. ~~65.~~ The hard surface/protective layers, liner system, and base layer will have the ability to withstand the dissolved solids content of the water without degradation. These systems will not fail due to pressure gradients from physical contact with the wastewater and residue or undergo chemical reactions or degradation.

65. ~~66.~~ The containment construction process will follow these general steps:

    a. Prior to construction, the topsoil and subsoil covering the area will be stripped and stockpiled.

    b. Placement and compaction of the silty sand base material;

    c. Installation of the carrier pipe for the moisture detection (neutron probe) system beneath the base of the ponds;

    d. Construction of finish grading to sub grade, as needed, and excavation of the leak collection trench and detection/collection sumps.

    e. Scarification, moisture conditioning, compaction, proof rolling and testing of sub~~-~~grade materials;

    f. Installation of secondary HDPE liner;

    g. Installation of leak detection layer, sump, and leak extraction risers;

    h. Installation of primary HDPE liner;

    i. Installation of the non-woven geomembrane liner;

j. Installation of granular fill;

k. Installation of liner protection layers; and

l. Hard surface placement.

Waste Classification

66. ~~67.~~ Wastewater from ~~several processes~~ **the water treatment units (e.g. reverse osmosis)** within the Facility will be piped to **the** two ~~4.0-acre~~ evaporation ponds ~~per Unit~~ (total combined area of **12**~~8~~ acres ~~per Unit~~) for disposal. The pond area provides sufficient evaporative capacity to dispose of the anticipated wastewater stream, and allows for one pond to be taken out of service for up to approximately **ten**~~three~~ years for cleaning, potential future maintenance, and repair without impacting the operation of the plant. Raw water for the Facility is supplied from groundwater wells. ~~Discharge into the evaporation ponds are from two sources:~~

~~a. High pH RO (Reverse Osmosis Concentrate; and~~

~~b. Stormwater runoff from the proposed bioremediation and land farm units used to treat soil affected spills by Heat Transfer Fluid (HTF).~~

Wastewater Discharge

67. ~~68.~~ The estimated concentrations of chemical constituents in the wastewater discharge to the evaporation ponds **based on the approved solar thermal project** are provided in the **Table 1**, Raw Water Quality and Estimated Chemistry of Wastewater Flows. The total concentrations of chemical constituents estimated in the evaporation pond residue that will accumulate in the ponds during operation **of the previously proposed project** are provided in **Table 2**. **These values were calculated for the Approved Project and will be the same or lower for this Modified Project.**

68. ~~69.~~ Classification of wastewater and evaporation pond residue is summarized in the Classification of Wastewater and Evaporation Pond Residue **Table 3** below.

69. ~~70.~~ Testing of this material will be conducted as part of the facility monitoring program to verify this characterization. The evaporation pond residue accumulated in the ponds is non hazardous; however, it does contain pollutants which could exceed water quality objectives if released, or that could be expected to affect the beneficial uses of waters of the state. Therefore, the evaporation pond residue is classified as a “designated waste.”

Evaporation Residue

70. ~~71.~~ During the 30-year operating life of the Project, it is estimated that up to ~~1~~**3** foot of residue may accumulate in the bottoms of the evaporation ponds that consists of

precipitated solids from the evaporated wastewater. The total amount of accumulated residue **was** ~~is~~ estimated to be approximately 23,000 tons **for the Approved Project, and will be less for the Modified Project**. The predicted chemical makeup of the residue, based on information about the raw water chemistry and knowledge of the water use and treatment processes at the Project, is summarized in **Table 3**, Estimated Chemistry of Evaporation Pond Residue.

~~**Land Treatment Unit**~~

~~72. In compliance with Table 2.1 in CCR Title 27, Chapter 3, Subchapter 2, Article 2, Section 20210, solid designated wastes will be managed in full containment in a Class II LTU with a single liner system. The LTU will be constructed to be above the level of a 100-year storm event and designed to meet seismic hazard criteria. In addition, the base of the LTU will have a greater than 5-foot separation between it and the underlying groundwater.~~

~~73. The LTU will not incorporate a liner containment system or leak detection and removal system, but will be constructed with a prepared base consisting of two feet of compacted, low permeability, lime-treated material. This base will serve as a competent platform for land treatment activities, and will serve to slow the rate of surface water infiltration in the treatment area. The compacted lime-treated and native soil beneath the LTU is designated as a "treatment zone" to a depth of five feet. Although the LTU will be taking vehicle traffic, no hard surface will be required, as there is no liner system to protect. A staging area is allocated in the LTU for storage of HTF-impacted soils while they are being characterized. Soil characterized as hazardous will be removed from the site; therefore, no additional liner system is required in the LTU to cater for the hazardous waste.~~

~~74. The LTU will be surrounded on all sides by a 2-foot high compacted earthen berm with side slopes of approximately 3:1 (horizontal: vertical). These berms will control and prevent potential inflow (run on) of surface storm water into the LTU or runoff of storm water from the unit.~~

~~a. The Project LTU is sized based on data from an existing solar farm that uses an LTU to bioremediate HTFimpacted soil. The basis is summarized below:~~

~~b. HTF-impacted soil is generated at a rate consistent with existing solar farm experience. Kramer Junction is a 150 MW facility that generates an average of 500 cubic yards (cyd) of HTF-impacted soil per year (DTSC correspondence, 1995). This rate is ~ 3.3 cyd/year/MW~~

~~c. Applying the Kramer Junction experience to the 1000 MW Blythe facility, the Blythe facility is estimated to generate ~3,332 cyd/year of HTF-impacted soil.~~

~~d. HTF-impacted soil is treated in 6-inches thicknesses, so, on average, 180,000 square feet or 4.1 acres is needed for HTF-impacted generated per year~~

e. The LTU will be used for either placement of HTF-impacted soil or treatment of HTF-impacted soil. That is at any one time the LTU is used to place material to be treated as it is generated or being used for soil treatment. HTF-impacted soil treatment is estimate to take 1 to 4 months to complete bio remediation; however the design of the LTU will allow soil placed at the beginning of the year to have up to twelve months to complete bioremediation and removal.

75. To address above average spill events, Kramer Junction has additional capacity in the LTU or a factor of safety for HTF-impacted soil treatment. Kramer Junction has a capacity to treat 1,944 cyd/year and generates an average of 500 cyd/year of HTF-impacted soil, so the facility has ~ a 3.9 factor of safety. Applying this factor of safety to Blythe, the total area estimated for LTU is ~700,000 square feet or 16 acres.

76. Treatment of HTF-impacted soil in the LTU will involve moisture conditioning and may involve addition of nitrogen and phosphorous nutrients (i.e., fertilizers) as needed to stimulate consumption of HTF by the indigenous bacteria. The HTF-impacted soil will be moisture conditioned and turned periodically as needed to enhance aeration, promote breakdown of HTF by the indigenous bacteria and/or to control dust emissions. Permanent or portable irrigation sprinklers will supply water to the area for dust control and to assist in treatment.

77. Treatment piles may be covered by plastic sheeting as needed to enhance temperature and moisture retention characteristics, and as needed to control storm water contact, odors and dust emissions.

78. The base layer construction process will follow these general steps:

a. Prior to construction, the LTU will be stripped, grubbed and cleared of topsoil;

b. General excavation and grading to sub grade will take place as needed;

c. Scarification and moisture conditioning of sub grade materials will take place; and

d. Placement, moisture conditioning, lime treatment, and compaction of native clayey silt material to form the base and perimeter berms will be completed before proof rolling after finish grading.

79. The LTU pad and berm construction will use standard cut and fill techniques. Native clayey silt material will be used to construct the pad and berms. The clayey silt material will be moisture conditioned and treated with at least 2 percent quicklime to achieve an R-Value of at least 40 to 50. Treatment and compaction of the material will be conducted using standard commercial lime treatment methods and equipment and compacted in lifts using a sheeps foot roller. The lime treated layer will be compacted to a minimum of 95 percent of the maximum dry density as determined by American Standard for Testing and Materials (ASTM) D1557. Field testing of the density of the soil will be performed at regular intervals. Compaction

results will be recorded. After finish grading, the surface of the LTU pad and berms will be proof rolled.

Waste Classification

80. The HTF-affected soils will be characterized as hazardous or non hazardous waste prior to determination of whether the material can be treated at the LTU or must be removed for off-site disposal. Therefore, HTF affected soils will be relocated to a temporary staging area in the LTU and characterized consistent with U.S. Environmental Protection Agency (EPA) protocols. Soil sample of excavated HTF-affected soil will be collected in accordance with the EPA's current version of the manual "Test Methods for Evaluating Solid Waste" (SW-846) and the waste material will be characterized in accordance with State and Federal requirements. Soil samples will be analyzed for HTF constituents (Biphenyl and Diphenyl Ether) using modified EPA Method Modified 8015.

81. Prior to operation of the LTU and initiation of any on-site remediation of HTF, the waste stream will be characterized and a waste classification determination rendered by the DTSC. Initially, in addition to sampling for HTF, soil samples will also be analyzed for ignitability and toxicity using appropriate State and Federal methods to characterize the waste as hazardous or non-hazardous. Once a sufficient data set has been accumulated to allow characterization of the material as hazardous or non-hazardous waste based on HTF content and generator knowledge, the DTSC will be petitioned for a determination of waste classification for HTF-affected soils generated at the facility. Following this determination, subsequent samples will only be analyzed for HTF to determine disposition of the waste either for remediation or for transportation and disposal off site. If the soil is characterized as a hazardous waste, the impacted soils will be transported from the site by a licensed hazardous waste hauler for disposal at a licensed hazardous waste landfill or treatment storage and disposal facility (TSDF).

82. Based on the classification practice and management of similar waste stream at the Kramer Junction Solar Electric Generating System (SEGS) facility in Kern County, it is anticipated that soil containing 10,000 mg/kg HTF or more will be managed as hazardous waste, and that soil containing less than 10,000 mg/kg HTF will be non-hazardous waste and can be managed at the site. At the Kramer Junction facility, the DTSC issued a letter dated April 4, 1995, stating that soil contaminated with HTF "poses an insignificant hazard" and classifies the waste as non-hazardous for soils with a concentration of less than 10,000 mg/kg HTF pursuant to CCR Title 22, Section 66260.200(f). Given that the formulation of HTF has not changed significantly since this determination, it is anticipated that future waste characterization at BSPP will yield a similar result although the DTSC has indicated that this decision will be made on a project specific basis and the Kramer Junction classification does not necessarily ensure the same classification for the BSPP.

83. All HTF-affected soil classified as a hazardous waste will be removed for the site for proper off-site disposal; therefore the material in the LTU will be managed as a

~~non-hazardous "designated waste" as defined in CCR Title 23, Chapter 15, Section 2522. Based on waste discharge requirements for similar sites, soil containing HTF in concentrations less than 100 mg/kg will not be regulated as a waste and could be reused as fill on site.~~

~~Waste Management~~

~~84. The LTU will be used to treat HTF-affected soil at various concentrations. Spills of HTF will be cleaned up within 48 hours and affected soil will be moved to a temporary staging area in the LTU where it will be placed on 60-mil plastic and covered with plastic sheeting pending receipt of analytical results and characterization of the waste material. As possible, free liquids will be removed using a vacuum truck. The liquids will be filtered and reused to the extent possible and reintroduced into the process. Filtrate that cannot be reused will be characterized, as appropriate (though will likely be managed as hazardous waste, as the concentration in the filtrate will likely be more than 10,000 mg/kg HTF).~~

~~85. No HTF-affected soils characterized as hazardous waste will be disposed or treated on site. As stated previously, it is anticipated that soil containing 10,000 mg/kg HTF or more will be managed as hazardous waste, and that soil containing less than 10,000 mg/kg HTF will be managed at the site as non-hazardous waste. If the soil is characterized as a non-hazardous waste, it will be spread in the LTU for bioremediation treatment. In general, within the LTU, more highly contaminated soil will be covered with plastic sheeting to prevent contact with storm water and to control potential odors and emissions, as well as for moisture and temperature retention. Once the soil has been treated to a concentration of less than 100 mg/kg HTF, it will be moved from the LTU to another portion of the site until it is reused at the Project site as fill material.~~

~~86. Based on available operation data from other sites, it is anticipated that approximately 1,666 cubic yards (on average) of HTF-affected soil may be treated per year. Larger or smaller quantities could be generated during some years, depending on the frequency and size of leaks and spills.~~

~~87. A Spill Prevention, Control, and Countermeasure (SPCC) Plan will be developed for the Project (refer to Section 13.4 for details). Periodically, equipment failures in and around mirror fields are expected at the Project that may result in spills of HTF onto soil.~~

~~88. Excess wastewater or rain fall may occasionally accumulate in the LTU. The LTU has been constructed with 2-foot high berms such that storm water will not drain into or from the LTU. Based on the frequency of storms in the area, it is anticipated accumulation of rainwater within the containment would occur on a yearly basis. Water that accumulates within the LTU will be sampled for HTF and amendments as described in Section 12. If HTF is not detected above the practical quantitation limit (PQL) and amendment concentrations (i.e., nitrate, phosphate, TDS) are at or near background groundwater concentrations and below State of California primary or secondary maximum contaminant levels the water may be reused in the~~

~~plant process. If HTF is detected and amendment concentrations exceed background or drinking water standards the waste will be properly disposed of at a licensed TSDF.~~

Hazardous Waste

71. There will be a variety of chemicals stored and used during construction and operation of the project. The storage, handling, and use of all chemicals will be conducted in accordance with applicable laws, ordinances, regulations, and standards.

72. Hazardous materials will be stored in proper containers in material yards and designated construction areas. Cleanup materials (spill kits) will also be stored in these areas. Fuel, oil, and hydraulic fluids used in on-site vehicles will be transferred directly from a service truck to construction equipment and will not otherwise be stored on site.

73. Designated, trained service personnel will perform fueling either prior to the start of the workday or at completion of the workday. Service personnel and construction contractors will follow SOPs for filling and servicing construction equipment and vehicles.

~~74. Any HTF impacted soil classified as hazardous will be removed from the LTU staging area after the initial characterization. The evaporation ponds will not contain hazardous wastewater or sludge as it is illegal to discharge hazardous waste into surface impoundments under the Toxic Pits Cleanup Act of 1984.~~

Basin Plan

74. ~~75.~~ The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on November 17, 1993, and designates the beneficial uses of ground and surface water in this Region.

75. ~~76.~~ The Basin Plan designates beneficial uses for surface waters in each watershed of the Colorado River Basin region. Beneficial uses of surface waters within the Facility area and vicinity that could be impacted by the Facility include:

    a. Agricultural use

    b. Municipal use

    c. Industrial use

    d. Recreational use

    e. Groundwater recharge

    f. Wildlife habitat

g. Preservation of Rare, Threatened, or Endangered Species

76. ~~77.~~ The beneficial uses of ground water in the Imperial Hydrological Unit are:

a. Municipal Supply (MUN)

b. Industrial Supply (IND)

c. Agricultural supply

Monitoring Parameters

77. ~~78.~~ Based on the chemical characteristics of the projected discharges to the evaporation ponds from wastewater, the following list of monitoring parameters are required. These specific parameters are selected because they provide the best distinction between the wastewater and the groundwater in the Project area that can be used to differentiate a potential release that could change the chemical composition of the groundwater.

a. Cations: Antimony, Arsenic, Barium, Cadmium, Calcium, Total Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Zinc;

b. Anions: Chloride and Sulfate; and

c. Other: ~~HTF,~~ Total Dissolved Solids, Specific Conductivity, and pH.

California Environmental Quality Act (CEQA)

78. ~~79.~~ The California Energy Commission (CEC) is the lead agency under the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) for all thermal power plants with power ratings of 50 MW or more. **The CEC's authority to permit this PV project has been extended through special legislation.** The CEC's power plant licensing process is a CEQA-equivalent process. The CEC will coordinate reviews and approvals with the regulatory agencies to ensure that the proposed project meets CEQA requirements. This includes obtaining these WDRs from the staff of the Regional Board. The CEC will certify this project and will include these WDRs as conditions of certification in accordance with the Warren-Alquist Act.[1]

[1] The Warren-Alquist State Energy Resources Conservation and Development Act is the authorizing legislation for the California Energy Commission. The Act is codified at Public Resources Code (PRC) Section 25000 et seq.. PRC Section 25500 establishes the Commission's authority to certify all sites and related facilities for thermal power plants with power ratings of 50 megawatts or more. The section further declares that "the issuance of a certificate by the commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law, for such use of the site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law."

Monitoring and Reporting Program

79. ~~80.~~ The monitoring and reporting requirements in the Monitoring and Reporting Program (Appendix **D**~~C~~), and the requirement to install groundwater monitoring wells, are necessary to determine compliance with these WDRs, and to determine the Facility's impacts, if any, on receiving water.

Table 1: Raw Water Quality and Predicted Chemistry of Wastewater Streams

	Supply Water[1]	Wastewater To Evaporation Pond[2]	STCL[3]	TCLP[4]
24-Average Flow Rate (GPM)		8.748	---	---
Peak Operation Flow Rate (GPM)		14.636	---	---
Constituent	(mg/L)	(mg/L)	(mg/L)	(mg/L)
CATIONS				
Calcium	287	369	---	---
Magnesium	60	185	---	---
Sodium	457	14818	---	---
Potassium	11	198	---	---
ANIONS				
M-Alkinity			---	---
Sulfate	970	17918	---	---
Chloride	559	10325	---	---
Nitrate	1	12	---	---
Silicon Dioxide	15	277	---	---
GENERAL WATER QUALITY				
Bicarbonate			---	---
Carbonate			---	---
OH		2	---	---
P-Alkalinity				
pH	7.2		---	---
Spec Cond	3338	61676	---	---
TDS	2,170	40089	---	---
Total Hardness (CaC03)				
Turbidity	1.6	136		
Total Phosphate	0.3		---	---
Fluoride	1.3	24	180	---
Barium	0.017	0	---	---
Iron	0.123	2	---	---
Total Suspended Solids	1	0	---	---
Biological Oxygen Demand	1	0	---	---
TRACE METALS				
Boron	1.41	26.042	--	--
Copper	0.01	0.175	25	--
Molybdenum	0.031	0.569	350	--
Vanadium	0.005	0	24	--
Zinc	0.235	0.092	250	--

NOTES:
1 - Water quality data from AFC Table Water 4, AECOM, 2009 **apply to the Approved Project. Data for the Modified Project will be the same or less than these values.**
2 - Water Quality data from Kiewit Evaporation Pond Preliminary Design, Operations and Maintenance Plan, April 2010
3 - STLC = Soluble Threshold Limit Concentration, Regulated by CCR Title 22, Division 4.5, Article 3, Section 66261.24
4 - TCLP = Toxicity Characteristics Leaching Procedure; Regulate under 40 CFR Section 261.24

Source: AECOM ROWD May 14, 2010

Table 2: Estimated Chemistry of Evaporation Pond Residue

	Concentration in Evaporation Pond Discharge	Total Residue Mass After 30 Years	Concentration in Residue		STLC	TTLC	TCLP
	ppm	lbs	% or ppm		mg/L	mg/kg	mg/L
Aluminum	0.00	0	0	ppm	-	-	-
Arsenic	0.00	0	0	ppm	5.0	500	5.0
Barium	0.305	1,401	6.81	ppm	-	-	-
Boron	26.04	119,740	582.01	ppm	-	-	-
Calcium	369	1,698,481	0.83	%	-	-	-
Chloride	10325	47,474,130	23.1	%	-	-	-
Copper	0.18	809	3.93	ppm	-	-	-
Fluoride	24	110,397	536.60	ppm	180	18000	-
Iron	2.3	10,445	50.77	ppm	-	-	-
Magnesium	185	849,267	0.41	%	-	-	-
M-Alkalinity	573	2,634,625	1.28	%	-	-	-
Molybdenum	0.57	2,616	12.72	ppm	-	-	-
Nitrate	12	54,204	263.47	ppm	-	-	-
Phosphate	6	27,588	134.09	ppm	-	-	-
Potassium	198	911,395	0.44	%	-	-	-
Selenium	0	0	0.00	ppm	1.0	100	1.0
Silica	277	1,274,858	0.62	%	-	-	-
Sodium	14818	68,131,223	33.1	%	-	-	-
Sulfate	17918	82,386,733	40.0	%	-	-	-
Total Phosphate	6	26,428	128.46	ppm	-	-	-
Vanadium	0.09	423	2.06	ppm	-	-	-
Zinc	4.34	19,955	96.99	ppm	250	5000	-
TDS	44,745	205,734,718	100	%	-	-	-

Notes: Where a constituent was reported as "ND" the amount in the supply water was assumed to be zero (0) ppm. Reporting those constituents at their lower detection limit would change the results above.

Source: AECOM ROWD May 14, 2010

Values apply to the Approved Project. Data for the Modified Project will be the same or less than these values.

Table 3 Classification of Wastewater and Evaporation Pond Residue

Waste Stream	Waste Stream Compared To	Regulation	Waste Stream Characteristic	State & Federal Classification	CWC Section 13173 Classification[1]
Wastewater	STLC	CCR Title 22, Chapter 11, Division 4.5, Article 3, Section 66261.24 "Characteristics of Toxicity"	<STLC	Non-hazardous	Designated waste
	TCLP	Code of Federal Regulations (CFR) Part 261, Section 261.24	<TCLP	Non-hazardous	Designated waste
Evaporation Pond Residue	STLC	CCR, Title 22, Chapter 11, Division 4.5, Article 3, Section 66261.24 "Characteristics of Toxicity"	<STLC	Non-hazardous	Designated waste
	TTLC	CCR, Title 22, Chapter 11, Division 4.5, Article 3, Section 66261.24 "Characteristics of Toxicity"	<TTLC	Non-hazardous	Designated waste
	TCLP	Code of Federal Regulations (CFR) Part 261, Section 261.24	<TCLP	Non-hazardous	Designated waste

Source: AECOM ROWD May 14, 2010

SOIL AND WATER
APPENDIX H-2

Waste Discharge Requirement
Requirements for Waste Discharge

SOIL AND WATER RESOURCES – APPENDIX H-2

REQUIREMENTS FOR WASTE DISCHARGE— NextEra Blythe Solar Energy Center ~~Palo Verde Solar I~~, LLC, Owner/Operator, Blythe Solar Power Project, Riverside County

A. Discharge Specifications

1. The treatment or disposal of wastes at this Facility shall not cause pollution or nuisance as defined in Sections 13050 of Division 7 of the California Water Code (CWC).

2. The Discharger will maintain the monitoring wells in good working order at all times. Well maintenance may include periodic well re-development to remove sediments.

3. Thirty days prior to introduction of a new waste stream into the evaporation ponds, the Discharger must receive approval from the Regional Board's Executive Officer.

4. Waste material shall be confined or discharged to the evaporation ponds ~~and LTU~~.

5. Prior to drilling a new well or abandoning a well at the Facility, the Discharger shall notify, in writing, the Regional Board's Executive Officer of the proposed change.

6. Containment of waste shall be limited to the areas designated for such activities. Any revision or modification of the designated waste containment area, or any proposed change in operation at the Facility that changes the nature and constituents of the waste produced must be submitted in writing to the Regional Board's Executive Officer for review and approval before the proposed change in operations or modification of the designated area is implemented.

7. Any substantial increase or change in the annual average volume of material to be discharged under this order at the Facility must be submitted in writing to the Regional Board's Executive Officer for review and approval.

8. If any portions of the evaporation ponds are to be closed, the Discharger shall notify the Regional Board's Executive Officer at least 180 days prior to beginning any partial or final closure activities.

9. Fluids and/or materials discharged to and/or contained in the evaporation ponds shall not overflow the ponds.

10. Prior to the use of new chemicals for the purposes of adjustment or control of microbes, pH, scale, and corrosion of the cooling tower water and wastewater, the Discharger shall notify the Regional Board's Executive Officer in writing.

11. For the liquids in the evaporation ponds, a minimum freeboard of two (2) feet shall be maintained at all times.

12. Final disposal of residual waste from cleanup of the evaporation ponds shall be accomplished to the satisfaction of the Regional Board's Executive Officer upon abandonment or closure of operations.

13. The evaporation ponds shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods having a predicted frequency of once in 100 years.

14. Prior to removal of solid material that has accumulated in the concrete evaporation ponds, an analysis of the material must be conducted and the material must be disposed of in a manner consistent with that analysis and applicable laws and regulations.

15. Conveyance systems throughout the Facility area shall be cleaned out at least every 90 days to prevent the buildup of solids.

16. Pipe maintenance and de-scaling activities that include hydroblasting and/or sandblasting shall be performed within a designated area that minimizes the potential for release to the environment. Waste generated as a result of these activities shall be disposed of in accordance with applicable laws and regulations. Water from the hydroblasting process shall be conveyed to the evaporation ponds.

17. Public contact with wastewater shall be precluded through such means as fences, signs, or other acceptable alternatives.

18. The evaporations ponds shall be managed and maintained to ensure their effectiveness.~~, in particular,~~

19. Implementation of erosion control measures shall assure that small coves and irregularities are not created.

20. The liner beneath the evaporation ponds shall be appropriately maintained to ensure its proper functioning.

21. Solid material shall be removed from the evaporation ponds in a manner that minimizes the likelihood of damage to the liner.

22. Ninety days prior to the cessation of discharge operations at the Facility, the Discharger shall submit a workplan, subject to approval of the Regional Board's Executive Officer, for assessing the extent, if any, of contamination of natural geological materials and waters of the Palo Verde Mesa Groundwater Basin by the waste. One hundred twenty days following workplan approval, the Discharger shall submit a technical report presenting results of the contamination assessment. A

California Registered Civil Engineer or Certified Engineering Geologist must prepare the workplan, contamination assessment, and engineering report.

23. Upon ceasing operation at the Facility, all waste, all natural geologic material contaminated by waste, and all surplus or unprocessed material shall be removed from the site and disposed of in accordance with applicable laws and regulations.

24. The Discharger shall establish an irrevocable bond for closure in an amount acceptable to the Regional Board's Executive Officer or provide other means to ensure financial security for closure if closure is needed at the discharging site. The closure fund shall be established (or evidence of an existing closure fund shall be provided) within six (6) months of the adoption of this Order.

25. Surface drainage from tributary areas or subsurface sources, shall not contact or percolate through the waste discharged at this site.

26. The Discharger shall implement the attached Monitoring and Reporting Program, Appendix D, and revisions thereto, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Facility, or any impairment of beneficial uses associated with (caused by) discharges of waste to the ~~brine~~ **evaporation** pond.

27. The Discharger shall use the constituents listed in the attached Monitoring and Reporting Program, Appendix D, and revisions thereto, as "Monitoring Parameters".

28. The Discharger shall follow the Water Quality Protection Standard (WQPS) for detection monitoring established by the Regional Board. The following are parts of WQPS as established by the Regional Board's Executive Officer:

    a. The Discharger shall test for the monitoring parameters and the Constituents of Concern (COCs) listed in the Monitoring and Reporting R7-2010-0xxx and revisions thereto.

    b. Concentration Limits – The concentration limit for each monitoring parameter and constituents of concern for each monitoring point (as stated in the Detection Monitoring Program), shall be its background valued as obtained during that reporting period.

29. All current, revised, and/or proposed monitoring points must be approved by the Region Board's Executive Officer.

30. Water used for the process and site maintenance shall be limited to the amount necessary in the process, for dust control, and for Facility cleanup and maintenance.

31. The Discharger shall not cause or permit the release of pollutants, or waste constituents, in a manner which could cause or contribute to a condition of contamination, nuisance, or pollution to occur.

32. The Discharger must develop and implement a Hazardous Materials Business Plan (HMBP), which will include, at a minimum, procedures for:

    a. Hazardous materials handling, use, and storage;
    b. Emergency response;
    c. Spill control and prevention;
    d. Employee training; and
    e. Reporting and record keeping.

33. Hazardous materials expected to be used during construction include: unleaded gasoline, diesel fuel, oil, lubricants (i.e., motor oil, transmission fluid, and hydraulic fluid), solvents, adhesives, and paint materials. There are no feasible alternatives to these materials for construction or operation of construction vehicles and equipment, or for painting and caulking buildings and equipment.

34. The construction contractor will be responsible for assuring that the use, storage and handling of these materials will comply with applicable federal, state, and local laws, ordinances, regulations and standards (LORS), including licensing, personnel training, accumulation limits, reporting requirements, and recordkeeping.

35. During Facility operations, chemicals will be stored in chemical storage areas appropriately designed for their individual characteristics. Bulk chemicals will be stored outdoors on impervious surfaces in aboveground storage tanks with secondary containment. Secondary containment areas for bulk storage tanks will not have drains. Any chemical spills in these areas will be removed with portable equipment and reused or disposed of properly. Other chemicals will be stored and used in their delivery containers.

36. A portable storage trailer may be on site for storage of maintenance lube oils, chemicals, paints, and other construction materials, as needed. All drains and vent piping for volatile chemicals will be trapped and isolated from other drains to eliminate noxious vapors. The storage, containment, handling, and use of these chemicals will be managed in accordance with applicable laws, ordinances, regulations, and standards.

37. Small quantities of hazardous wastes will be generated over the course of construction. These may include paint, spent solvents, and spent welding materials. Some hazardous wastes will be recycled, including used oils from equipment maintenance, and oil-contaminated materials such as spent oil filters, rags, or other cleanup materials. Used oil must be recycled, and oil or heavy metal contaminated materials (e.g., filters) requiring disposal must be disposed of in a Class I waste disposal facility. Scale from pipe and equipment cleaning operations, and solids from the evaporation pond, will be disposed of in a similar manner.

38. All hazardous wastes generated during facility construction and operation must be handled and disposed of in accordance with applicable laws, ordinances, regulations, and standards. Any hazardous wastes generated during construction must be collected in hazardous waste accumulation containers near the point of generation and moved daily to the contractor's 90-day hazardous waste storage area located on site. The accumulated waste must subsequently be delivered to an authorized waste management facility. Hazardous wastes must be either recycled or managed and disposed of properly in a licensed Class I waste disposal facility authorized to accept the waste.

39. The Discharger shall monitor the evaporation ponds in conformance with applicable CCR Title 27 requirements for Class II surface impoundment waste management units.

40. The leachate collection and removal system must be used to provide preliminary detection monitoring of leaks through the top liner of the double-lined evaporation ponds. Physical evidence of leachate beneath the upper concrete liner shall be interpreted as a warning that containment of the evaporation pond contents may be compromised.

41. Groundwater monitoring wells must be constructed adjacent to and both up gradient and down gradient of the evaporation ponds to provide background and detection monitoring for any potential release from the evaporation ponds containment. The Point of Compliance to be used for the detection monitoring must be the shallow groundwater beneath the evaporation pond. The groundwater monitoring wells must be constructed in conformance with Title 27 CCR Section 20415 requirements. The monitoring wells must be designed to meet the background and detection monitoring requirements in conformance with Title 27 CCR Section 20415(b)(1)(B) as applicable, including:

    a. Providing a sufficient number of monitoring points to yield ground water samples from the uppermost aquifer that represent the quality of ground water passing the Point of Compliance and to allow for the detection of a release from the evaporation ponds;

    b. Providing a sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer to provide the best assurance of the earliest possible detection of a release from the evaporation ponds; and

    c. Selecting monitoring point locations and depths that include the zone(s) of highest hydraulic conductivity in the ground water body monitored.

42. The detection monitoring wells shall be constructed to meet the well performance standards set forth in Title 27 CCR Section 20415(b)(4), as applicable, including:

43. All monitoring wells shall be cased and constructed in a manner that maintains the integrity of the monitoring well bore hole and prevents the bore hole from acting as a conduit for contaminant transport.

44. The sampling interval of each monitoring well shall be appropriately screened and fitted with an appropriate filter pack to enable collection of representative ground water samples.

45. For each monitoring well, the annular space (i.e., the space between the bore hole and well casing) above and below the sampling interval shall be appropriately sealed to prevent entry of contaminants from the ground surface, entry of contaminants from the unsaturated zone, cross contamination between portions of the zone of saturation, and contamination of samples.

46. All monitoring wells shall be adequately developed to enable collection of representative ground water samples.

47. The monitoring program must also meet the general requirements set forth in Title 27 CCR Section 20415(e), which require that all monitoring systems be designed and certified by a registered geologist or a registered civil engineer. The applicable general requirements set forth for boring logs, quality assurance/quality control, sampling and analytical methods used, background sampling, data analysis, and other reporting as applicable will be implemented.

48. Baseline samples of the groundwater must be collected from each of the monitoring wells and analyzed prior to discharging wastewater to the evaporation ponds. The groundwater must be initially sampled for each of the proposed monitoring parameters listed in the attached Monitoring and Reporting Program, Appendix D, and any additional Constituents of Concern (COC) identified by the Regional Board.

B. Prohibitions

1. The discharge or deposit of solid waste to the evaporation ponds as a final form of disposal is prohibited, unless authorized by the Regional Board's Executive Officer.

2. The Discharger is prohibited from discharging, treating or composting at this site the following wastes:

    a. Municipal solid waste;

    b. Sludge (including sewage sludge, water treatment sludge, and industrial sludge);

    c. Septage;

d. Liquid waste, unless specifically allowed by these WDRs or approved by the Regional Board's Executive Officer;

e. Oily and greasy liquid waste; unless specifically allowed by these WDRs or approved by the Regional Board's Executive Officer;

f. Hot, burning waste materials or ash.

3. The Discharger shall not cause degradation of any groundwater aquifer or water supply.

4. The discharge of waste to land not owned or controlled by the Discharger is prohibited.

5. Use of wastewater ~~or cooling tower liquids~~ on access roads, well pads, or other developed project locations for dust control is prohibited.

6. The discharge of hazardous or designated wastes to other than a waste management unit authorized to receive such waste is prohibited.

7. Any hazardous waste generated or stored at the facility will be contained and disposed in a manner that complies with federal and state regulations.

8. Wastewater or any fluids in the evaporation ponds shall not enter any canal, drainage, or drains (including subsurface drainage systems) which could provide flow to the Waters of the State.

9. The Discharger shall appropriately dispose of any materials, including fluids and sediments removed from the evaporation ponds.

10. The Discharger shall neither cause nor contribute to the contamination or pollution of ground water via the release of waste constituents in either liquid or gaseous phase.

11. Direct or indirect discharge of any waste to any surface water or surface drainage courses is prohibited.

12. The Discharger shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned for Detection Monitoring pursuant to the attached Monitoring and Reporting, Appendix C, and future revisions thereto.

C. Provisions

1. The Discharger shall comply with the attached Monitoring and Reporting Program, Appendix D, and future revisions thereto, as specified by the Regional Board's Executive Officer.

2. Unless otherwise approved by Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guideline Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

3. The laboratory shall use detection limits less than or equal to Environmental Protection Agency (EPA) Action Level/Maximum Contaminate Levels (MCLs) or California Department of Public Health (CDPH) Notification Level/MCL for all samples analyzed. The lowest concentration, whether EPA or CDPH, of the two agencies must be used for the analysis.

4. Prior to any change in ownership of this operation, the Discharger shall transmit a copy of the Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.

5. Prior to any modification in this facility that would result in material change in the quality or quantity of discharge, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Board's Executive Officer and obtain revised waste discharge requirements before any modification is implemented.

6. All permanent containment structures and erosion and drainage control systems shall be certified by a California Registered Civil Engineer or Certified Engineering Geologist as meeting the prescriptive standards and performance goals.

7. The Discharger shall ensure that all site-operating personnel are familiar with the content of these WDRs, and shall maintain a copy of these WDRs at the site.

8. These WDRs do not authorize violation of any federal, state, or local laws or regulations.

9. The Discharger shall allow the Regional Board, or an authorized representative, upon presentation of credential and other documents as may be required by law, to:

    a. Enter upon the premises regulated by these WDRs, or the place where records must be kept under the conditions of these WDRs;

    b. Have access to and copy, at reasonable times, any records that shall be kept under the condition of these WDRs;

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under these WDRs; and

d. Sample or monitor at reasonable times, for the purpose of assuring compliance with these WDRs or as otherwise authorized by the CWC or California Code of Regulations, any substances or parameters at this location.

10. The Discharger shall comply with all of the conditions of these WDRs. Any noncompliance with these WDRs constitutes a violation of the Porter-Cologne Water Quality Act and may be grounds for enforcement action.

11. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with these WDRs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures.

12. These WDRs do not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

13. The Discharger shall comply with the following:

    a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

    b. The Discharger shall retain records of all monitoring information, copies of all reports required by these WDRs, and records of all data used to complete the application for these WDRs, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Board's Executive Officer at any time.

    c. Records of monitoring information shall include:

        i. The date, exact places, and time of sampling or measurements.
        ii. The individual(s) who performed the sampling or measurements.
        iii. The date(s) analyses were performed.
        iv. The individual(s) responsible for reviewing the analyses.
        v. The results of such analyses.

    d. Monitoring must be conducted according to test procedures described in the attached Monitoring and Reporting Program, Appendix D, unless other test procedures have been specified in these WDRs or approved by the Regional Board's Executive Officer.

14. All monitoring systems shall be readily accessible for sampling and inspection.

15. The Discharger is the responsible party for the WDRs, and the monitoring and reporting program for the Facility. The Discharger shall comply with all conditions

of these WDRs. Violations may result in enforcement actions, requiring corrective action or imposing civil monetary liability.

16. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.

17. The Discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.

18. The procedure for preparing samples for the analyses shall be consistent with the attached Monitoring and Reporting Program, Appendix D, and any future revisions thereto. The Monitoring Reports shall be certified to be true and correct, and signed, under penalty of perjury, by an authorized official of the company. All technical reports require the signature of a California Registered Professional Engineer or Professional Geologist.

19. All monitoring shall be done as described in Title 27 of the CCRs.

SOIL AND WATER
APPENDIX H-3

Waste Discharge Requirement
Monitoring and Reporting Program

SOIL AND WATER RESOURCES – APPENDIX H-3

MONITORING AND REPORTING PROGRAM-- NextEra Blythe Solar Energy Center, LLC ~~Palo Verde Solar I~~, LLC, Owner/Operator, Blythe Solar Power Project, Riverside County

PART I
GENERAL REQUIREMENTS

A. GENERAL

A Discharger who owns or operates a Class II Surface Impoundment is required to comply with the provisions of Title 27, Division 2, Chapter 3, Subchapter 3, Article 1 of the California Code of Regulations for the purpose of detecting, characterizing, and responding to releases to the groundwater. Section 13267, California Water Code (CWC) gives the Colorado River Basin Regional Water Quality Control Board (Regional Board) authority to require monitoring program reports for discharges that could affect the quality of waters within its region.

1. This Monitoring and Reporting Program (MRP) is Appendix C of the WDRs set forth in Appendices A and B, and are incorporated herein by this reference...The principal purpose of this self-monitoring program is:

    a. To document compliance with Waste Discharge Requirements (WDRs), and prohibitions established by the Regional Board;

    b. To facilitate self-policing by the Discharger in the prevention and abatement of pollution arising from waste discharge;

    c. To conduct water quality analyses.

2. The Regional Board Executive Officer may alter the monitoring parameters, monitoring locations, and/or the monitoring frequency during the course of this monitoring program.

B. DEFINITION OF TERMS

1. Affected Persons – all persons who either own or occupy land outside the boundaries of the parcel upon which a waste management unit (surface impoundment or impoundment) is located that has been or may be affected by the release of waste constituents from the unit.

2. Background Monitoring Point – a device (e.g. well) or location (e.g. a specific point along a lakeshore) that is upgradient or side gradient from the impoundment assigned by this MRP, where water quality samples are taken that are not affected by a release from the impoundment and that are used as a basis of comparison against samples taken from downgradient Monitoring Points.

3. Constituents of Concern (COCs) – those constituents likely to be in the waste, or derived from waste constituents in the event of a release from the impoundment.

4. Matrix Effect – refers to any change in the Method Detection Limit (MDL) or Practical Quantitation Limit (PQL) for a given constituent as a result of the presence of other constituents - either of natural origin or introduced through a spill or release - that are present in the sample being analyzed.

5. Method Detection Limit (MDL) – the lowest constituent concentration that can support a non-zero analytical result with 99 percent reliability. The MDL is laboratory specific and should reflect the detection capabilities of specific procedures and equipment used by the laboratory.

6. Monitored Media – water - bearing media monitored pursuant to this Monitoring and Reporting Program. The Monitored Media may include: (1) groundwater in the uppermost aquifer, in any other portion of the zone of saturation (as defined in Title 27, Section 20164) in which it would be reasonable to anticipate that waste constituents migrating from the surface impoundment could be detected, and in any perched zones underlying the impoundment, (2) any bodies of surface water that could be measurably affected by a release, (3) soil-pore liquid beneath and/or adjacent to the surface impoundment, and (4) soil-pore gas beneath and/or adjacent to the surface impoundment.

7. Monitoring Parameters – the list of constituents and parameters used for the majority of monitoring activity.

8. Monitoring Point – a device (e.g. well) or location (e.g. a specific point along a lakeshore) that is downgradient from the surface impoundment assigned by this MRP, at which samples are collected for the purpose of detecting a release by comparison with samples collected at Background Monitoring Points.

9. Practical Quantification Limit (PQL) – the lowest constituent concentration at which a numerical concentration can be assigned with a 99 percent certainty that its value is within 10 percent of the actual concentration in the sample. The PQL is laboratory specific and should reflect the detection capabilities of specific procedures and equipment used by the laboratory.

10. Reporting Period – the duration separating the submittal of a given type of monitoring report from the time the next iteration of that report is scheduled for

submittal. Unless otherwise stated, the due date for any given report shall be 30 days after the end of its Reporting Period.

11. Sample Locations -

    a. For Monitoring Points – the number of data points obtained from a given Monitoring Point during a given Reporting Period – used for carrying out the statistical or non-statistical analysis of a given analyte during a given Reporting Period.

    b. For Background Monitoring Points – the number of new and existing data points from all applicable Background Monitoring Points in a given Monitored Medium – used to collectively represent the background concentration and variability of a given analyte in carrying out a statistical or non-statistical analysis of that analyte during a given Reporting Period.

12. Uppermost Aquifer – the geologic formation nearest the natural ground surface that is an aquifer, as well as, lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

13. Volatile Organic Constituents (VOCs) – the suite of organic constituents having a high vapor pressure. The term includes at least the 47 organic constituents listed in Appendix I to 40 CFR Part 258.

14. VOC_{water} – the composite monitoring parameter that includes all VOCs that are detectable in less than 10 percent of the applicable background samples. This parameter is analyzed, using the non-statistical method described in Part III.A.2. of this MRP, to identify releases of VOCs that are detected too infrequently in backgroundwater to allow for statistical analysis.

C. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analysis shall be performed according to the most recent version of Standard USEPA methods, and California ELAP rulings. Water and waste analysis shall be performed by a laboratory approved for these analyses by the California Department of Public Health. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and approval by the Regional Board Executive Officer prior to use. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurement. In addition, the Discharger is responsible for verifying that laboratory analysis of all samples from Monitoring Points and Background Monitoring Points meet the following restrictions:

1. Methods, analysis, and detection limits used must be appropriate for expected concentrations. For detection monitoring of any constituent or parameter found in concentrations that produce more than 90% non-numerical determinations (i.e. "trace" or "ND") in data from Background Monitoring Points for that medium, the analytical methods having the lowest "facility-specific method detection limit (MDL)", defined in Part I.B.5., shall be selected from among those methods that provide valid results in light of any "Matrix Effects" (defined in Part I.B.4.) involved.

2. Analytical results falling between the MDL and the PQL shall be reported as “trace”, and shall be accompanied both by the estimated MDL and PQL values for that analytical run, and by an estimate of the constituent's concentration.

3. MDLs and PQLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific equipment used by the lab. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly, along with an estimate of the detection limit and quantitation limit actually achieved.

4. All Quality Assurance/Quality Control (QA/QC) data shall be reported, along with the sample results to which it applies, including the method, equipment, and analytical detection limits, the recovery rates, an explanation of any recovery rate that is less than method recovery standards, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recovery.

5. Upon receiving written approval from the Regional Board Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Reporting Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Regional Board staff.

6. In cases where contaminants are detected in QA/QC samples (i.e. field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.

7. The MDL shall always be calculated such that it represents a concentration associated with a 99% reliability of a non-zero result.

D. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five (5) years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

1. Identity of sample and of the Monitoring Point or Background Monitoring Point from which it was taken, along with the identity of the individual who obtained the sample;

2. Date and time of sampling;

3. Date and time that analyses were started and completed, and the initials of the personnel performing each analysis;

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;

5. Calculations of results; and

6. Results of analyses, and the MDL and PQL for each analysis.

E. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Detection Monitoring Reports – For each Monitored Medium, all Monitoring Points and Background Monitoring Points assigned to detection monitoring under Part II.A.7 of this MRP shall be monitored **semiannually** for the Monitoring Parameters (Part II.A.4). A "Detection Monitoring Report" shall be submitted to the Regional Board in accordance with the schedule contained in the Summary of Self-Monitoring and Reporting Requirements, and shall include the following:

    a. A Letter of Transmittal that summarizes the essential points in each report shall accompany each report submittal. The letter of transmittal shall be signed by a principal executive officer at the level of vice-president or above, or by his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter of transmittal shall include:

        i. A discussion of any violations noted since the previous report submittal and a description of the actions taken or planned for correcting those violations. If no violations have occurred since the last submittal, that should be so stated;

        ii. If the Discharger has previously submitted a detailed time schedule or plan for correcting any violations, a progress report on the time schedule and status of the corrective actions being taken; and

iii. A statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

b. A Compliance Evaluation Summary shall be included in each Detection Monitoring Report. The compliance evaluation summary shall contain at least:

i. Velocity and direction of groundwater flow for each monitored groundwater body under and around the surface impoundment based upon the water level elevations taken during the collection of water quality data. A description and graphical presentation (e.g., arrow on a map) shall be submitted;

ii. Methods used for water level measurement and pre-sampling purging for each monitoring well addressed by the report including:

1. Method, time, and equipment used for water level measurement;

2. Type of pump used for purging, placement of the pump in the well, pumping rate, and well recovery rate;

3. Methods and results of field testing for pH, temperature, electrical conductivity, and turbidity, including;

a. Equipment calibration methods, and

b. Method for disposing of purge water

iii. Methods used for sampling each Monitoring Point and Background Monitoring Point, including:

1. A description of the type of pump, or other device used, and its placement for sampling;

2. A detailed description of the sampling procedure: number and description of samples, field blanks, travel blanks, and duplicate samples; types of containers and preservatives used; date and time of sampling; name and qualifications of individual collecting samples, and other relevant observations;

c. A map or aerial photograph showing the locations of Monitoring Points, and Background Monitoring Points;

d. For each Detection Monitoring Report, provide all relevant laboratory information including results of all analyses, and other information needed to demonstrate compliance with Part I.C.;

e. An evaluation of the effectiveness of the run-off/run-on control facilities;

f. A summary of reportable spills/leaks occurring during the reporting period; include estimated volume of liquids/solids discharged outside designated containment area, a description of management practices to address spills/leaks, and actions taken to prevent reoccurrence.

2. Annual Summary Report – The Discharger shall submit to the Regional Board, an "Annual Summary Report" for the period extending from January 1 through December 31. The "Annual Summary Report" is due **March 15** of each year, and shall include the following:

   a. A graphical presentation of analytical data for each Monitoring Point and Background Monitoring Point (Title 27, Section 20415(e)(14)). The Discharger shall submit, in graphical format, the laboratory analytical data for all samples taken within at least the previous five (5) calendar years. Each such graph shall plot the concentration of one (1) or more constituents over time for a given Monitoring Point and Background Monitoring Point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. On the basis of any aberrations noted in the plotted data, the Regional Board Executive Officer may direct the Discharger to carry out a preliminary investigation (Title 27, Section 20080(d)(2)), the results of which will determine whether or not a release is indicated;

   b. A tabular presentation of all monitoring analytical data obtained during the previous two (2) Monitoring and Reporting Periods, submitted on hard copy within the annual report as well as digitally on electronic media in a file format acceptable to the Regional Board Executive Officer (Title 27, Section 20420(h)). The Regional Board regards the submittal of data in hard copy and on diskette CD-ROM as "...a form necessary for..." statistical analysis in that this facilitates periodic review by the Regional Board statistical consultant;

   c. A comprehensive discussion of the compliance record and any corrective actions taken or planned, which may be needed to bring the Discharger into full compliance with WDRs;

   d. A written summary of the groundwater analyses, indicating changes made since the previous annual report; and

   e. An evaluation of the effectiveness of the run on/run-off control facilities, pursuant to Title 27, Section 20365.

3. Contingency Reporting

   a. The Discharger shall report any spill of ~~HTL or~~ evaporation pond liquid by telephone within 48 hours of discovery. The reportable quantity for evaporation pond liquid is 150 gallons.

      After reporting a spill, a written report shall be filed with the Regional Board Executive Officer within seven (7) days, containing at a minimum the following:

      i. A map showing the location(s) of the discharge/spill;

      ii. A description of the nature of the discharge (all pertinent observations and analyses including quantity, duration, etc.); and

iii. Corrective measures underway or proposed.

b. Should the initial statistical comparison (Part III.A.1.) or non-statistical comparison (Part III.A.2.) indicate, for any Constituent of Concern or Monitoring Parameter, that a release is tentatively identified, the Discharger shall immediately notify the Regional Board verbally as to the Monitoring Point(s) and constituent(s) or parameter(s) involved, shall provide written notification by certified mail within seven (7) days of such determination (Title 27, Section 20420(j)(1)), and shall conduct a discrete retest in accordance with Part III.A.3. If the retest confirms the existence of a release, the Discharger shall carry out the requirements of Part I.E.3.d. In any case, the Discharger shall inform the Regional Board of the outcome of the retest as soon as the results are available, following up with written results submitted by certified mail within seven (7) days of completing the retest.

c. If either the Discharger or the Regional Board determines that there is significant physical evidence of a release (Title 27, Section 20385(a)(3)), the Discharger shall immediately notify the Regional Board of this fact by certified mail (or acknowledge the Regional Board's determination) and shall carry out the requirements of Part I.E.3.d. for all potentially-affected monitored media.

d. If the Discharger concludes that a release has been discovered:

   i. If this conclusion is <u>not</u> based upon “direct monitoring” of the Constituents of Concern, pursuant to Part II.A.5., then the Discharger shall, within thirty days, sample for all Constituents of Concern at all Monitoring Points and submit them for laboratory analysis. Within seven (7) days of receiving the laboratory analytical results, the Discharger shall notify the Regional Board, by certified mail, of the concentration of all Constituents of Concern at each Monitoring Point. Because this scan is not to be tested against background, only a single datum is required for each Constituent of Concern at each Monitoring Point (Title 27 Section 20420(k)(1));

   ii. The Discharger shall, within 90 days of discovering the release (Title 27, Section 20420(k)(5)), submit a Revised Report of Waste Discharge proposing an Evaluation Monitoring Program meeting the requirements of Title 27, Section 20425; and

   iii. The Discharger shall, within 180 days of discovering the release (Title 27, Section 20420(k)(6), submit a preliminary engineering feasibility study meeting the requirements of Title 27, Section 20430.

e. Any time the Discharger concludes - or the Regional Board Executive Officer directs the Discharger to conclude - that a liquid phase release from the surface impoundment has proceeded beyond the facility boundary, the Discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume (Affected Persons).

i. Initial notification to Affected Persons shall be accomplished within 14 days of making this conclusion and shall include a description of the Discharger's current knowledge of the nature and extent of the release; and

ii. Subsequent to initial notification, the Discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding a material change in the nature or extent of the release has occurred.

4. Surface Impoundment - Leakage Detection System (LDS), and Solids Monitoring

a. Sampling and reporting shall be conducted semi-annually.

b. Provide volume of solids removed from the holding pond each month for that reporting period, and transported to a waste management facility for disposal. Include name and location of waste management facility.

c. Conduct quarterly inspections of Leakage Detection System (LDS), and holding pond.

PART II

MONITORING REQUIREMENTS FOR GROUNDWATER

A. GROUNDWATER SAMPLING AND ANALYSIS FOR DETECTION MONITORING

1. Groundwater Surface Elevation and Field Parameters – Groundwater sampling and analysis shall be conducted semiannually pursuant to California ELAP rulings, and include an accurate determination of the groundwater surface elevation and field parameters (temperature, electrical conductivity, turbidity) for each Monitoring Point and Background Monitoring Point (Title 27, Section 20415(e)(13)). Groundwater elevation obtained prior to purging the well and sample collection, shall be used to fulfill the semi-annual groundwater flow rate/direction analyses required under Part I.E.1.b.i. Groundwater wells shall be gauged using an electronic sounder capable of measuring depth to groundwater within 100^{th} of an inch. Following gauging, wells shall be purged according to EPA groundwater sampling procedures until:

   a. pH, temperature, and conductivity are stabilized within 10 percent, and

   b. turbidity has been reduced to 10 NTUs or the lowest practical levels achievable.

   The above identified parameters shall be recorded in the field, and submitted in the monitoring report. Sampling equipment shall be decontaminated between wells. Purge water may be discharged to the brine pond; discharge to the ground surface is prohibited.

2. Groundwater Sample Collection - Groundwater samples shall be collected from all monitoring points and background monitoring points after wells recharge to within at least 80 percent of their original static water level. Groundwater samples shall be collected with a paristaltic pump that is decontaminated between sampling events. Samples shall be labeled, logged on chain-of-custody forms, and placed in cold storage pending delivery to a State certified analytical laboratory.

3. Five-Day Sample Procurement Limitation – To satisfy data analysis requirements for a given reporting period, samples collected from all Monitoring Points and Background Monitoring Points shall be taken within a span not exceeding five (5) days, and shall be taken in a manner that insures sample independence to the greatest extent feasible (Title 27, Section 20415(e)(12)(B)).

4. Groundwater Monitoring Parameters for Detection Monitoring – Groundwater samples collected from monitoring points and background monitoring points shall be analyzed for the following:

Parameter	Unit	Sample Type
Chloride	mg/L	Grab
Sulfate	mg/L	Grab
Total Dissolved Solids (TDS)	mg/L	Grab
pH	#	Grab
Specific Conductance	µohms/cm	Grab
~~HTF~~	~~mg/L~~	~~Grab~~
Heavy Metals (Sb, As, Ba, Cd, Ca, Cr, Co, Cu, Pb, Hg, Ni, Se, Zn)	mg/L	Grab
Oil & Grease	mg/L	Grab

All Monitoring Points and Background Monitoring Points assigned to Detection Monitoring shall be sampled semi-annually in **June** and **December** of each year in accordance with Part I of this MRP. Monitoring results shall be reported in the semi-annual Detection Monitoring Report.

5. Data Analysis – Statistical or non-statistical analysis shall be carried out as soon as the data is available, in accordance with Part III of this monitoring program.

   Monitoring Points and Background Monitoring Points – At a minimum of 90 days prior to the operation of the facility, the Discharger shall submit a proposed groundwater monitoring program, including background and detection monitoring locations, to the Executive Officer for review and approval.

6. Initial Background Determination: For the purpose of establishing an initial pool of background data for each Constituent of Concern at each Background Monitoring Point (Title 27, Section 20415(e)(6)):

   a. Whenever a new Constituent of Concern is added to the Water Quality Protection Standard, including any added by the adoption of this Board Order, the Discharger shall collect at least one (1) sample **quarterly** for at least one (1) year from each Background Monitoring Point in each monitored medium and analyze for the newly-added constituent(s); and

   b. Whenever a new Background Monitoring Point is added, including any added by this Board Order, the Discharger shall sample the new monitoring point at least **quarterly** for at least one (1) year, analyzing for all Constituents of Concern and Monitoring Parameters.

7. Semiannual Determination of Groundwater Flow Rate/Direction (Title 27, Section 20415(e)(15): The Discharger shall measure the water level in each well and determine groundwater flow rate and direction in each groundwater body described in Part II.A.1. at least semiannually. This information shall be included in the semi-annual Detection Monitoring Reports required under Part I.E.1.

PART III

STATISTICAL AND NON-STATISTICAL ANALYSES

A. STATISTICAL AND NON-STATISTICAL ANALYSIS

The Discharger shall use the most appropriate of the following methods to compare the downgradient concentration of each monitored constituent or parameter with its respective background concentration to determine if there has been a release from the surface impoundment. For any given data set, proceed sequentially down the list of statistical analysis methods listed in Part III.A.1., followed by the non-statistical method in Part III.A.2., using the first method for which the data qualifies. If that analysis tentatively indicates the detection of a release, implement the retest procedure under Part III.A.3.

1. Statistical Methods. The Discharger shall use one (1) of the following statistical methods to analyze Constituents of Concern or Monitoring Parameters that exhibit concentrations exceeding their respective MDL in at least ten percent of the background samples taken during that Reporting Period. Each of these statistical methods is more fully described in the Statistical Methods discussion below. Except for pH, which uses a two-tailed approach, the statistical analysis for all constituents and parameters shall be a one-tailed (testing only for statistically significant increase relative to background) approach:

    a. One-Way Parametric Analysis of Variance (ANOVA) followed by multiple comparisons (Title 27, Section 20415(e)(8)) – This method requires at least four (4) independent samples from each Monitoring Point and Background Monitoring Point during each sampling episode. It shall be used when the background data for the parameter or constituent obtained during a given sampling period, has not more than 15% of the data below PQL. Prior to analysis, replace all 'trace' determinations with a value halfway between the PQL and the MDL values reported for that sample run, and replace all "non-detect" determinations with a value equal to half the MDL value reported for that sample run. The ANOVA shall be carried out at the 95% confidence level. Following the ANOVA, the data from each downgradient Monitoring Point shall be tested at a 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis (i.e., that there is no release) to be rejected at any Monitoring Point, the Discharger shall conclude that a release is tentatively indicated from that parameter or constituent; or

    b. One-Way Non-Parametric ANOVA (Kruskal-Wallis Test), followed by multiple comparisons – This method requires at least nine (9) independent samples from each Monitoring Point and Background Monitoring Point; therefore, the Discharger shall anticipate the need for taking more than four (4) samples per Monitoring Point, based upon past monitoring results. This method shall be used when the pooled background data for the parameter or constituent, obtained within a given sampling period, has not more than 50% of the data below the

PQL. The ANOVA shall be carried out at the 95% confidence level. Following the ANOVA, the data from each downgradient Monitoring Point shall be tested at a 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis (i.e., that there is no release) to be rejected at any Monitoring Point, the Discharger shall conclude that a release is tentatively indicated for that parameter or constituent; or

c. Method of Proportions – This method shall be used if the "combined data set" – the data from a given Monitoring Point in combination with the data from the Background Monitoring Points – has between 50% and 90% of the data below the MDL for the constituent or parameter in question. This method; (1) requires at least nine (9) downgradient data points per Monitoring Point per Reporting Period, (2) requires at least thirty data points in the combined data set, and (3) requires that n * P > 5 (where n is the number of data points in the combined data set and P is the proportion of the combined set that exceeds the MDL); therefore, the Discharger shall anticipate the number of samples required, based upon past monitoring results. The test shall be carried out at the 99% confidence level. If the analysis results in rejection of the Null Hypothesis (i.e., that there is no release), the Discharger shall conclude that a release is tentatively indicated for that constituent or parameter; or

d. Other Statistical Methods. – These include methods pursuant to Title 27, Section 20415(e)(8)(c-e).

2. Non-Statistical Method. The Discharger shall use the following non-statistical methods for all constituents that are not amenable to statistical analysis by virtue of having been detected in less than 10% of applicable background samples. A separate variant of this test is used for the VOC_{water} Composite Monitoring Parameters. Regardless of the test variant used, the method involves a two-step process: (1) from all constituents to which the test variant applies, compile a list of those constituents which equal or exceed their respective MDL in the downgradient sample from a given Monitoring Point, then (2) evaluate whether the listed constituents meet either of the test variant's two possible triggering conditions. For each Monitoring Point, the list described above shall be compiled based on either the data from a single sample taken during the Monitoring Period for that Monitoring Point, or (where several independent samples have been analyzed for that constituent at a given Monitoring Point) from the sample that contains the largest number of detected constituents. Background shall be represented by the data from all samples taken from the appropriate Background Monitoring Points during that Reporting Period (at least one (1) sample from each Background Monitoring Point). The method shall be implemented as follows:

a. VOC_{water} Composite Monitoring Parameter – For any given Monitoring Point, the VOC_{water} Monitoring Parameter is a composite parameter addressing all detectable VOCs including at least all 47 VOCs listed in Appendix I to 40 CFR 258 and all unidentified peaks. The Discharger shall compile a list of each VOC which (1) exceeds its MDL in the Monitoring Point sample (an unidentified peak is

compared to its presumed (MDL), and also (2) exceeds its MDL in less than ten percent of the samples taken during that Reporting Period from that medium's Background Monitoring Points. The Discharger shall conclude that a release is tentatively indicated for the VOC_{water} composite Monitoring Parameter if the list either (1) contains two or more constituents, or (2) contains one constituent that exceeds its PQL;

b. Constituents of Concern: As part of the COC monitoring required under Part 2.A.5 of this MRP, for each Monitoring Point, the Discharger shall compile a list of COCs that exceed their respective MDL at the Monitoring Point, yet do so in less than ten percent of the background samples taken during that Reporting Period. The Discharger shall conclude that a release is tentatively indicated if the list either (1) contains two or more constituents, or (2) contains one constituent that exceeds its PQL.

3. Discrete Retest – In the event that the Discharger concludes that a release has been tentatively indicated (under Parts III.A.1. or III.A.2.), the Discharger shall, within 30 days of that conclusion, collect two (2) new suites of samples for the indicated Constituent(s) of Concern or Monitoring Parameter(s) at each indicated Monitoring Point, collecting at least as many samples per suite as were used for the initial test. Re-sampling of Background Monitoring Points is optional. As soon as the retest data is available, the Discharger shall use the same statistical method or non-statistical comparison separately on each suite of retest data. For any indicated Monitoring Parameter or Constituent of Concern at an affected Monitoring Point, if the test results of either (or both) of the retest data suites confirms the original indication, the Discharger shall conclude that a release has been discovered. All retests shall be carried out only for the Monitoring Point(s) for which a release is tentatively indicated, and only for the Constituent of Concern or Monitoring Parameter that triggered the indication there, as follows:

   a. If an ANOVA method was used in the initial test, the retest shall involve only a repeat of the multiple comparison procedure, carried out separately on each of the two (2) new suites of samples taken from the indicating Monitoring Point;

   b. If the Method of Proportions statistical test was used, the retest shall consist of a full repeat of the statistical test for the indicated constituent or parameter, carried out separately on each of the two (2) new sample suites from the indicating Monitoring Point;

   c. If the non-statistical comparison was used:

      i. Because the VOC Composite Monitoring parameters (VOC_{water}) each address, as a single parameter, an entire family of constituents which are likely to be present in any surface impoundment release, the scope of the laboratory analysis for each retest sample shall include all VOCs detectable in that retest sample. Therefore, a confirming retest for either parameter shall have validated the original indication even if the suite of constituents in the

confirming retest sample(s) differs from that in the sample that initiated the retest;

ii. Because all Constituents of Concern that are jointly addressed in the non-statistical testing under Part III.A.2. remain as individual Constituents of Concern, the scope of the laboratory analysis for the non-statistical retest samples shall be narrowed to involve only those constituents detected in the sample which initiated the retest.

SUMMARY OF SELF-MONITORING AND REPORTING REQUIREMENTS

A. GROUNDWATER MONITORING

1. Groundwater monitoring wells shall be sampled/analyzed semi-annually for the following parameters/constituents:

Parameters & Constituent	Unit	Type of Sample	Reporting Frequency
a. Chloride	mg/L	grab	semiannual
b. Sulfate	mg/L	grab	semiannual
Total Dissolved Solids (TDS)	mg/L	grab	semiannual
c. PH	#	field measurement	semiannual
d. Specific Conductance	μohms/cm	field measurement	semiannual
~~e. HTF~~	~~mg/L~~	~~grab~~	~~semiannual~~
e~~f~~. Heavy Metals (Sb,As, Ba, Cd, Ca, Cr, Co, Cu, Pb, Hg, Ni, Se, Zn)	mg/L	grab	semiannual
f~~g~~. Oil & Grease	mg/L	grab	semiannual

2. The collection, preservation, and holding times of all samples shall be in accordance with the U.S. Environmental Protection Agency approved procedures. All analyses shall be conducted by a laboratory certified by the California Department of Public Health to perform the required analyses.

B. SURFACE IMPOUNDMENT: Leakage Detection System (LDS), and Solids Monitoring

	Unit	Observation or Sampling Frequency	Reporting Frequency
1. Estimated volume of solid/liquid in holding pond	ft^3	Monthly	semiannual
2. Measurement of freeboard	ft	Monthly	semiannual
3. Volume of solids removed and shipped to off site waste management facility	tons	Monthly	semiannual

C. MONITORING REPORTS AND OBSERVATION SCHEDULE

"Reporting Period" means the duration separating the submittal of a given type of monitoring report from the time the next iteration of that report is scheduled for submittal. An annual report, which is a summary of all the monitoring during the previous year, shall also be submitted to the Regional Board. The submittal dates for Detection Monitoring Reports and the Annual Summary Report are as follows:

1. Detection Monitoring Reports

a. 1st Semiannual Report (January 1 through June 30) – report due by **August 1**

b. 2nd Semiannual Report (July 1 through December 31) – report due by **March 1**

2. Annual Summary Report

January 1 through December 31 – report due **March 15** of the following year.

3. The Detection Monitoring Reports and the Annual Summary Report shall include the following:

   a. The Discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with WDRs.

   b. Records of monitoring information shall include:

      i. The date, exact place, and time of sampling or measurement;

      ii. The individual performing the sampling or measurement;

      iii. The date the analysis was performed;

      iv. The initials of the individual performing the analysis;

      v. The analytical technique or method used; and

      vi. The result of the analysis.

   c. Each report shall contain the following statement:

      "I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations."

   d. A duly authorized representative of the Discharger may sign the documents if:

      i. Authorization is made in writing by the person described in Part I.E.1.a;

      ii. Authorization specifies an individual or person having responsibility for the overall operation of the regulated disposal system; and

      iii. Written authorization is submitted to the Regional Board Executive Officer.

      iv. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report.

APPENDIX I VISUAL SIMULATIONS

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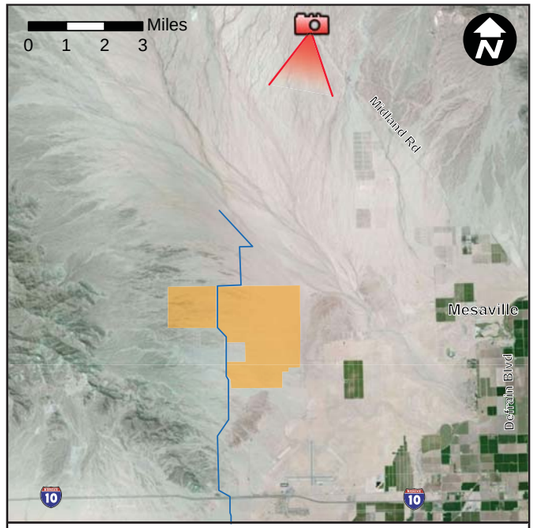

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Gen-tie Line

KOP 001
Existing Conditions

Photograph Information

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- Time of Photograph: 9:11 am
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- Longitude: 114°42’56.15”W

Blythe Solar Power Project

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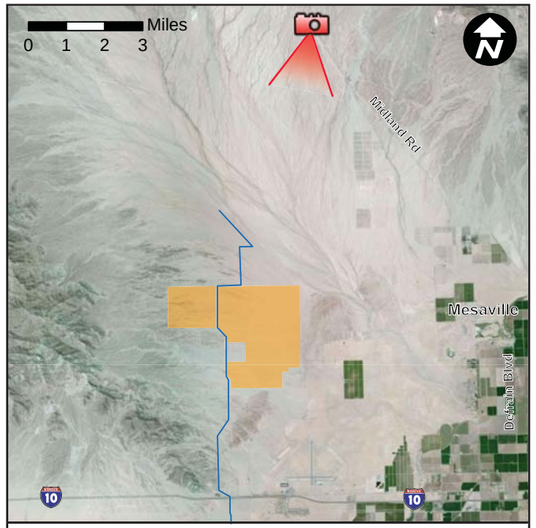

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KOP 001

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Blythe Solar Power Project

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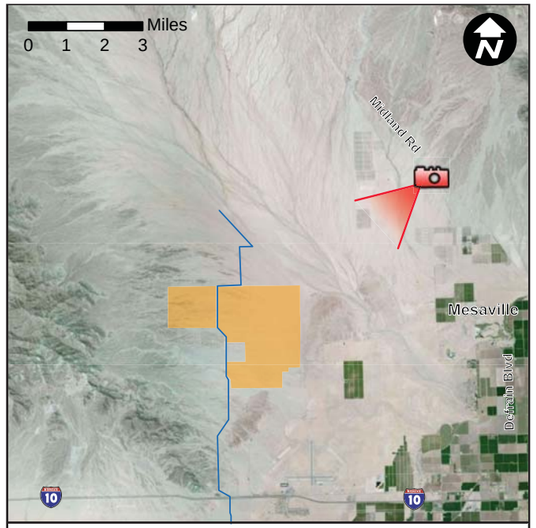

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Blythe Solar Power Project

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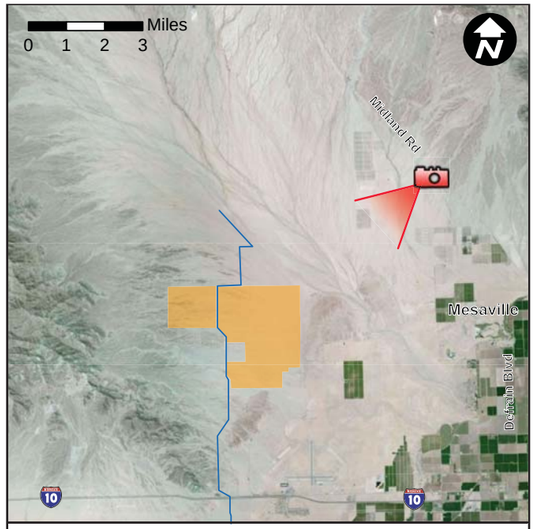

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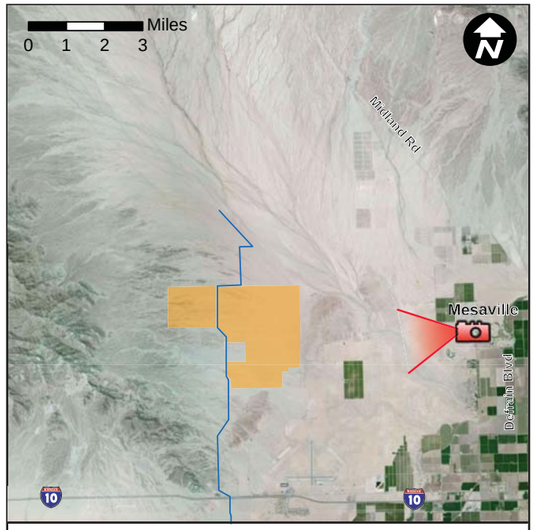
Blythe Solar Power Project

TETRA TECH



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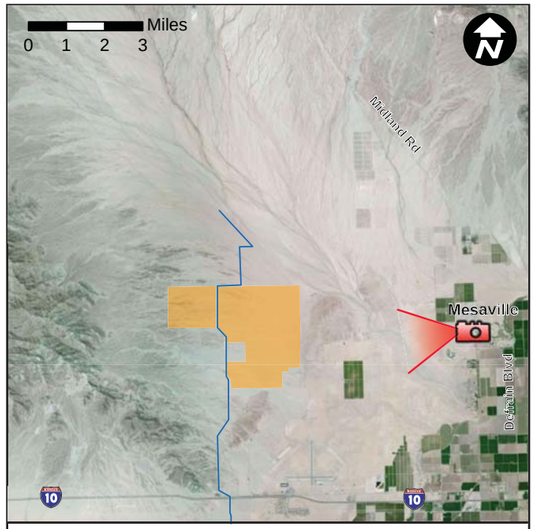

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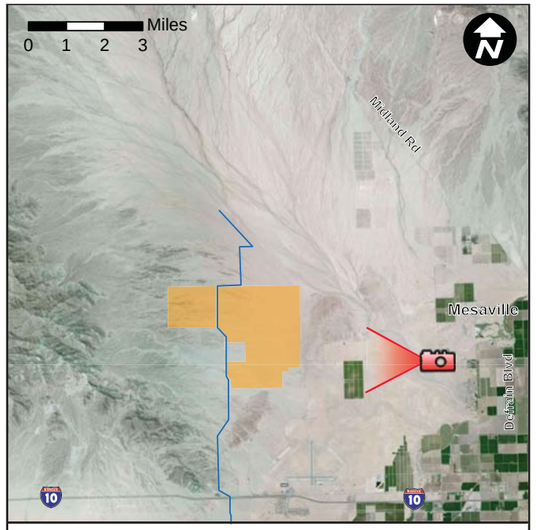

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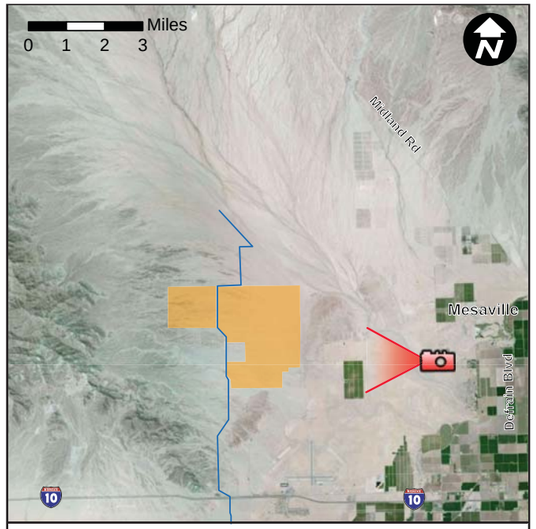

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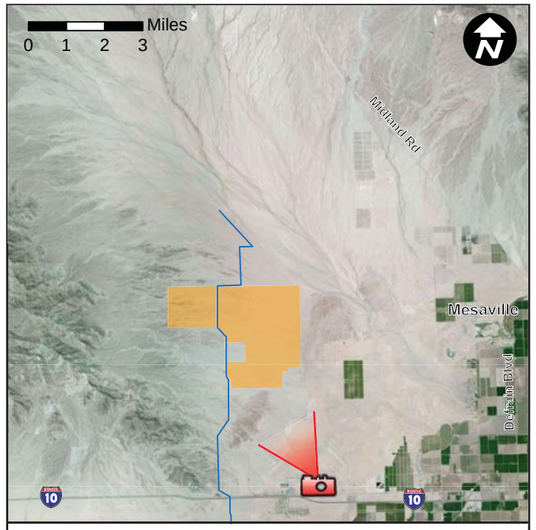

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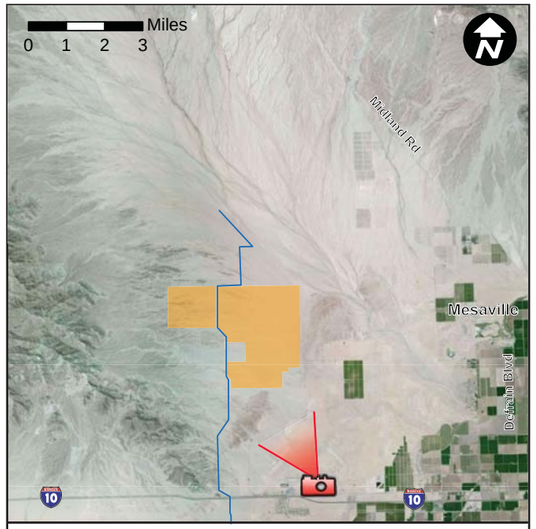

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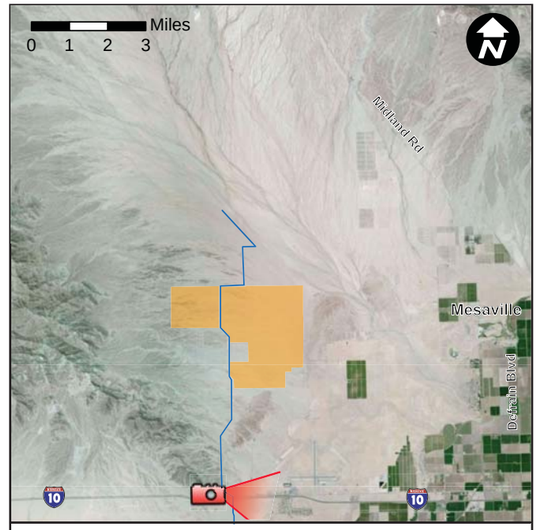

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Site Boundary

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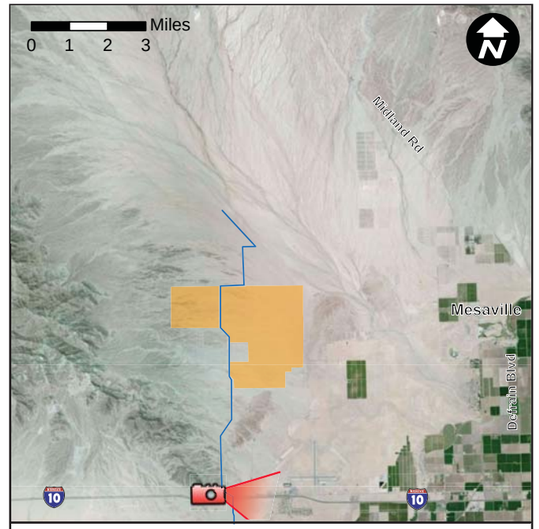

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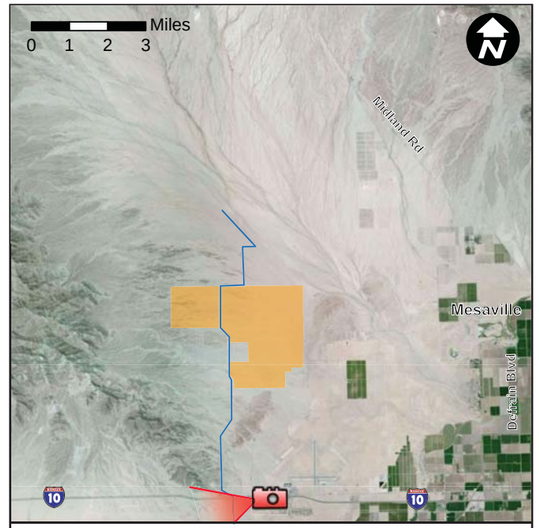


Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

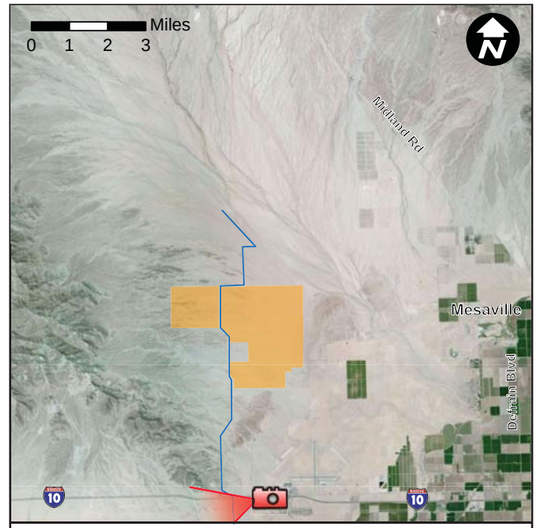
KOP 007MC
Existing Conditions

Photograph Information

- Photo Point Number: 007MC
- Date of Photograph: 11/3/2011
- Time of Photograph: 1:39 pm
- Weather Condition: Mostly Sunny
- Viewing Direction: West/Southwest
- Latitude: 33°36'34.55"N
- Longitude: 114°44'8.69"W

Blythe Solar Power Project

TETRA TECH



Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

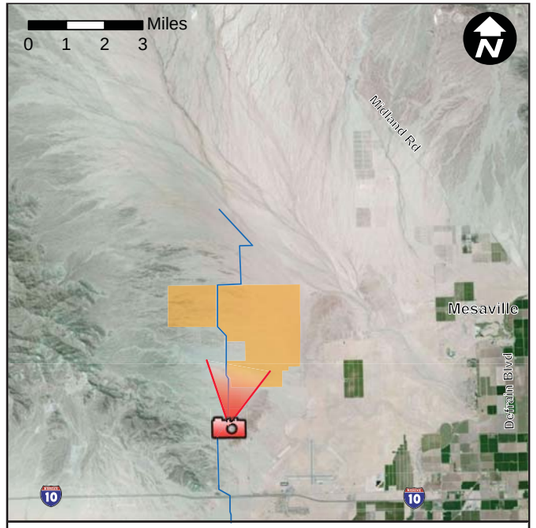
KOP 007MC
Photographic Simulation

Photograph Information

- Photo Point Number: 007MC
- Date of Photograph: 11/3/2011
- Time of Photograph: 1:39 pm
- Weather Condition: Mostly Sunny
- Viewing Direction: West/Southwest
- Latitude: 33°36'34.55"N
- Longitude: 114°44'8.69"W

Blythe Solar Power Project

TETRA TECH



Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

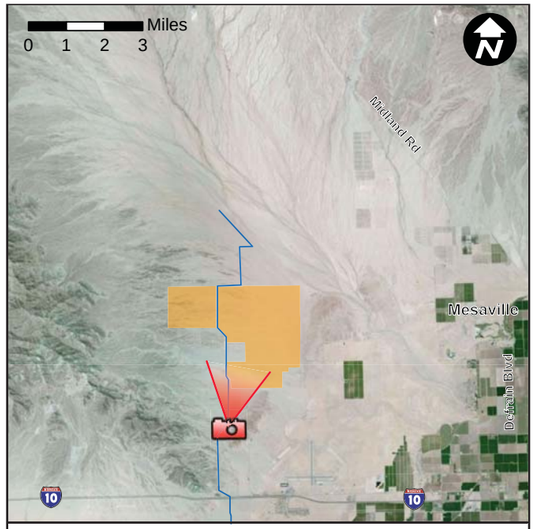
KOP 008
Existing Conditions

Photograph Information

- Photo Point Number: 008
- Date of Photograph: 12/14/2009
- Time of Photograph: 9:53 am
- Weather Condition: Sunny
- Viewing Direction: North/Northeast
- Latitude: 33°38’21.10”N
- Longitude: 114°45’12.20”W

Blythe Solar Power Project

TETRA TECH



Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

KOP 008

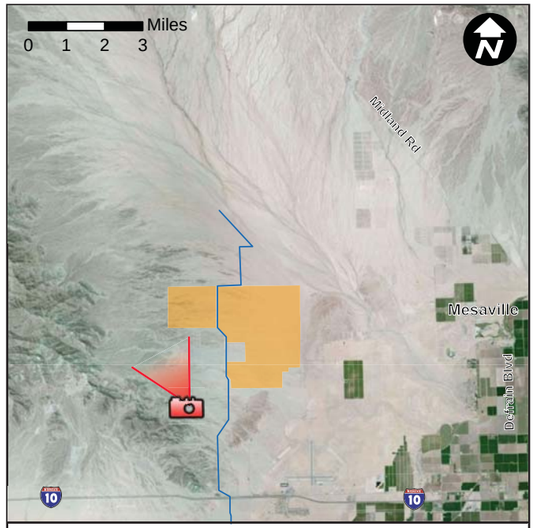
Photographic Simulation

Photograph Information

- Photo Point Number: 008
- Date of Photograph: 12/14/2009
- Time of Photograph: 9:53 am
- Weather Condition: Sunny
- Viewing Direction: North/Northeast
- Latitude: 33°38’21.10”N
- Longitude: 114°45’12.20”W

Blythe Solar Power Project

TETRA TECH



Legend

Site Boundary

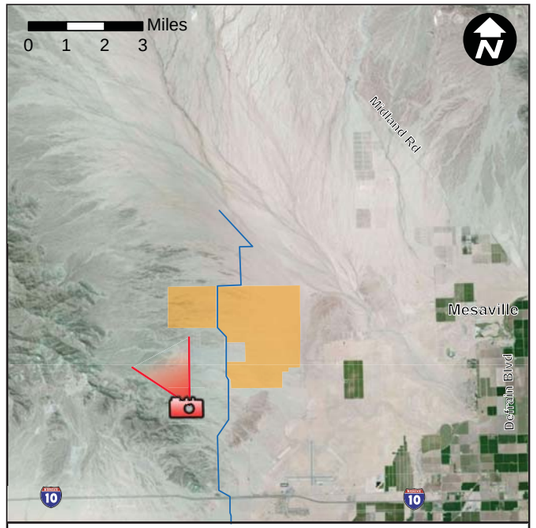
KOP Cone of Vision

Gen-tie Line

KOP 009
Existing Conditions

Photograph Information

- Photo Point Number: 009
- Date of Photograph: 12/14/2009
- Time of Photograph: 10:21 am
- Weather Condition: Sunny
- Viewing Direction: Northwest
- Latitude: 33°38’48.10”N
- Longitude: 114°46’23.60”W



Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

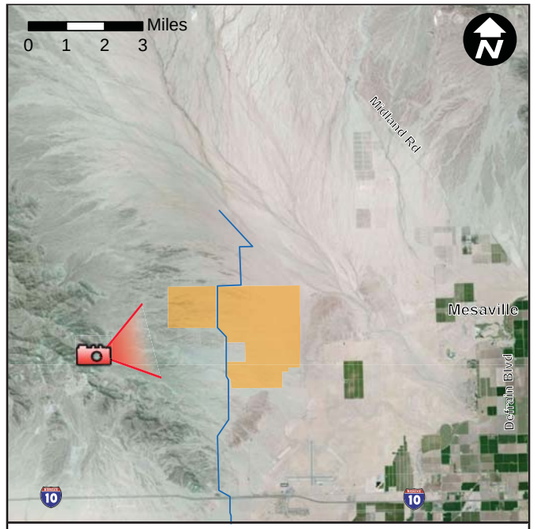
KOP 009
Photographic Simulation

Photograph Information

- Photo Point Number: 009
- Date of Photograph: 12/14/2009
- Time of Photograph: 10:21 am
- Weather Condition: Sunny
- Viewing Direction: Northwest
- Latitude: 33°38’48.10”N
- Longitude: 114°46’23.60”W

Blythe Solar Power Project

TETRA TECH



Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

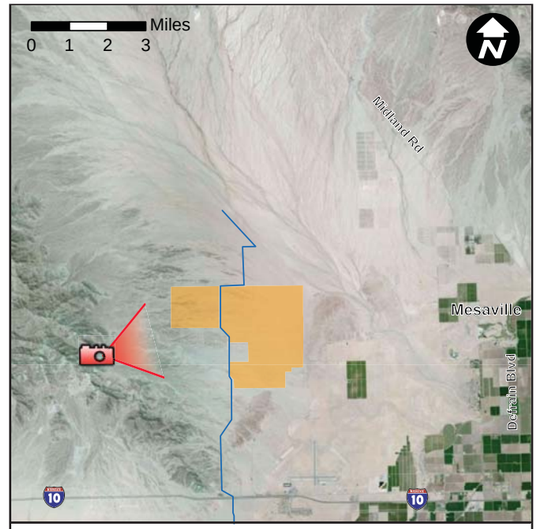
KOP 010
Existing Conditions

Photograph Information

- Photo Point Number: 010
- Date of Photograph: 12/14/2009
- Time of Photograph: 11:12 am
- Weather Condition: Sunny
- Viewing Direction: East/Northeast
- Latitude: 33°39’48.50”N
- Longitude: 114°48’52.60”W

Blythe Solar Power Project

TETRA TECH



Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

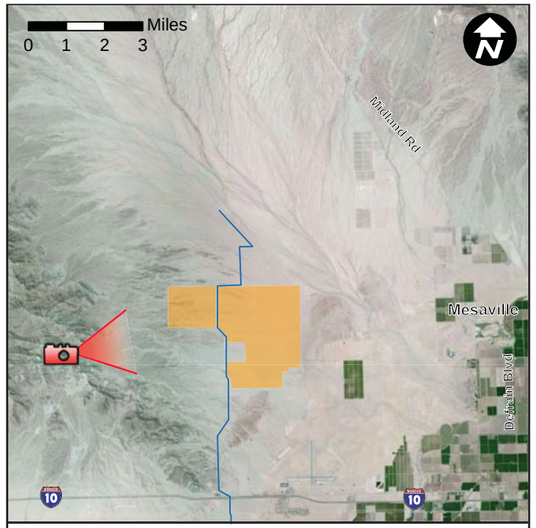
KOP 010
Photographic Simulation

Photograph Information

- Photo Point Number: 010
- Date of Photograph: 12/14/2009
- Time of Photograph: 11:12 am
- Weather Condition: Sunny
- Viewing Direction: East/Northeast
- Latitude: 33°39’48.50”N
- Longitude: 114°48’52.60”W

Blythe Solar Power Project

TETRA TECH



Legend

Site Boundary

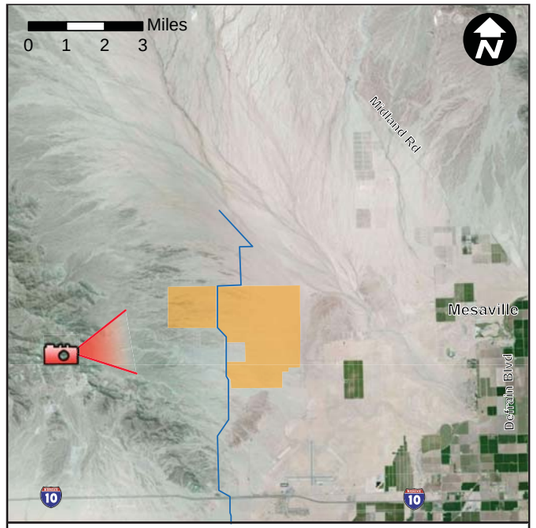
KOP Cone of Vision

Gen-tie Line

KOP 011
Existing Conditions

Photograph Information

- Photo Point Number: 011
- Date of Photograph: 12/14/2009
- Time of Photograph: 12:12 pm
- Weather Condition: Sunny
- Viewing Direction: East/Northeast
- Latitude: 33°39’52.40”N
- Longitude: 114°49’47.50”W



Legend

Site Boundary

KOP Cone of Vision

Gen-tie Line

KOP 011
Photographic Simulation

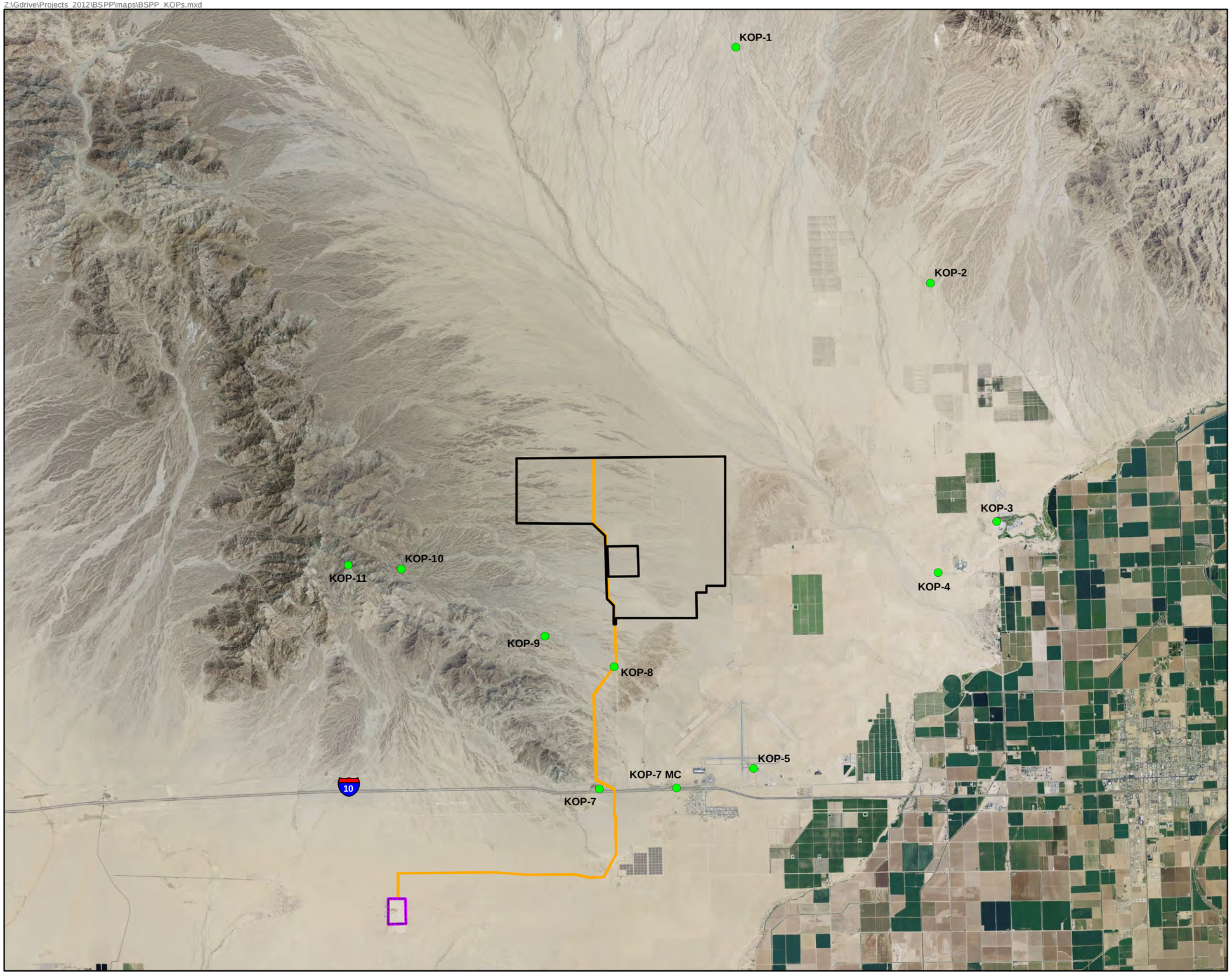
Photograph Information

- Photo Point Number: 011
- Date of Photograph: 12/14/2009
- Time of Photograph: 12:12 pm
- Weather Condition: Sunny
- Viewing Direction: East/Northeast
- Latitude: 33°39’52.40”N
- Longitude: 114°49’47.50”W

Blythe Solar Power Project

TETRA TECH

Z:\Gdrive\Projects_2012\BSPP\maps\BSPP_KOPs.mxd



BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA

Legend

- Solar Plant Site Boundary
- Linear Corridor
- SCE Colorado River Substation
- KOP

0 1 2 4
Miles

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: USDA, Tt, Worley Parsons

KEY OBSERVATION POINTS FOR THE BSPP VISUAL SIMULATIONS

TETRA TECH

APPENDIX J LIST OF PROPERTY OWNERS

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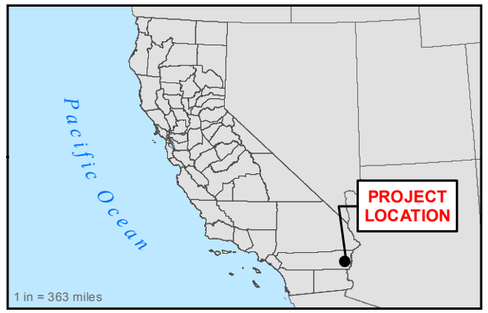
Z:\Gdrive\Projects_2012\BSPP\maps\BSPP_Project_Parcels.mxd

BLYTHE SOLAR POWER PROJECT RIVERSIDE COUNTY, CA



Legend

- Blythe Solar Plant Site Boundary
- Linear Corridor
- Assessor's Parcel
- 500-foot Linear Buffer
- 1,000-foot ROW Buffer
- SCE Colorado River Substation

0 2,500 5,000 10,000
Feet

Notes:
(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: ESRI, USGS, TTEC

PROJECT PARCELS

TETRA TECH

APN	FLAG	MAIL_TO_NA	MAIL_TO_ST	MAIL_TO_CI	MAIL_TO_ZI	ACRE	OWNER1_LAS	OWNER1_FIR	OWNER1_MID
818160007	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	160.58	USA 818		
879080022	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	895.09	USA 879		
879090031	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	635.08	USA 879		
879090032	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	435.64	USA 879		
818160014		C/O PROPERTY TAX	700 UNIVERSE BLV	JUNO BEACH FL	33408	140.28	NEXTERA BLYTHE SOLAR ENERGY CENTER		
818180014	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	160.40	USA 818		
818241019	EX	NONE	US DEPT OF INTERIOR	WASHINGTON DC	21401	283.27	USA 818		
818160006	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.46	USA 818		
879090034	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	480.00	USA 879		
818180011	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	160.54	USA 818		
818210003	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	126.15	USA 818		
818160003	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.24	USA 818		
821020032	EX	NONE	US DEPT OF THE INTERIOR	WASHINGTON DC	21401	625.54	USA 821		
818180015	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	160.30	USA 818		
818242027	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	106.00	USA 818		
818180013	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	160.00	USA 818		
818210004	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	33.22	USA 818		
818180012	EX	US DEPARTMENT OF THE INTERIOR	US DEPT OF INTERIOR	WASHINGTON DC	21401	159.62	USA 818		
818180017	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	292.60	USA 818		
818210014	EX	C/O REAL ESTATE DIVISION	P O BOX 1180	RIVERSIDE CA	92502	4.50	COUNTY OF RIVERSIDE		
818160010	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.68	USA 818		
879080021	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	477.81	USA 879		
818180018	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.28	USA 818		
818242026	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	26.50	USA 818		
821020030	EX	NONE	US DEPT OF THE INTERIOR	WASHINGTON DC	21401	635.86	USA 821		
818160005	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.40	USA 818		
879080025	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	160.00	USA 879		
818160013	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.52	USA 818		
818180010	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	318.75	USA 818		
818160012	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.60	USA 818		
818160011	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	160.34	USA 818		
818160004	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	320.32	USA 818		
879090033	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	640.00	USA 879		
879080020	EX	NONE	DEPT OF INTERIOR	WASHINGTON DC	21401	160.00	USA 879		
818160009	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	321.04	USA 818		
818241021	EX	NONE	US DEPT OF INTERIOR	WASHINGTON DC	21401	23.51	USA 818		
818160002	EX		1807 13TH ST	SACRAMENTO CA	95814	640.84	STATE SCHOOL LANDS		
818242025	EX		US DEPT OF INTERIOR	WASHINGTON DC	21401	130.25	USA 818		
821050030	EX	NONE	US DEPT OF THE INTERIOR	WASHINGTON DC	21401	133.55	USA 821		
818160015		C/O PROPERTY TAX	700 UNIVERSE BLV	JUNO BEACH FL	33408	20.04	NEXTERA BLYTHE SOLAR ENERGY CENTER		