

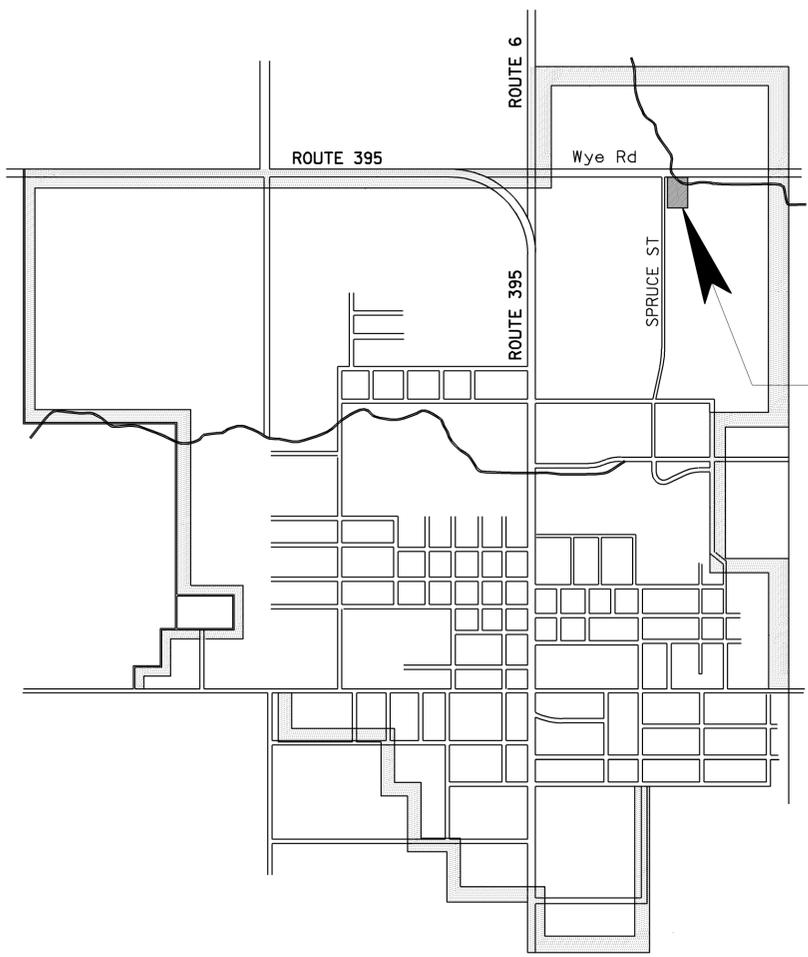
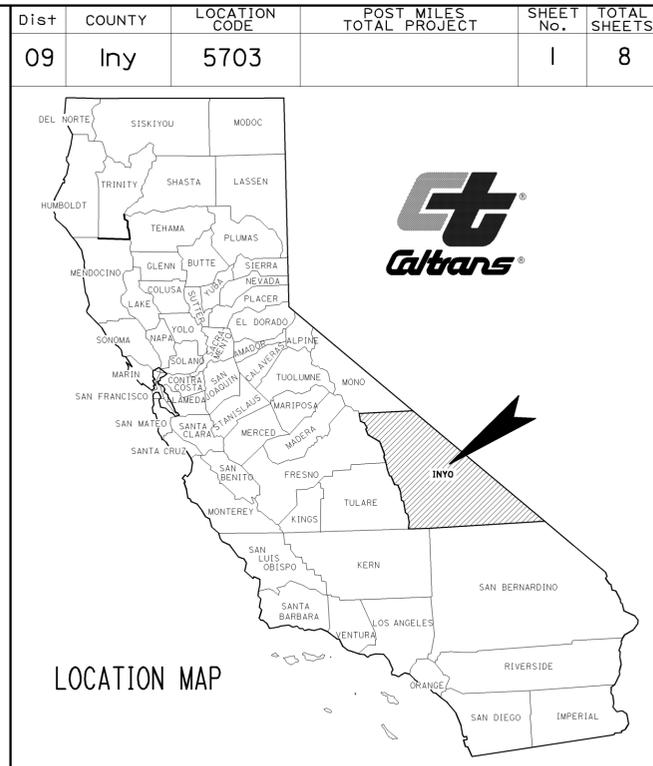
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
STRUCTURE PLANS	
2	GENERAL PLAN AND LEGEND
3-8	ELECTRICAL PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR BUILDING CONSTRUCTION
IN INYO COUNTY
IN BISHOP
AT THE
BISHOP MAINTENANCE STATION
AT 1250 SPRUCE STREET

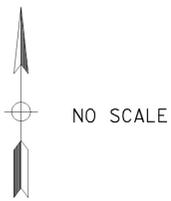
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



LOCATION OF CONSTRUCTION
BISHOP MAINTENANCE STATION
LOCATION CODE NO. 5703

CALIFORNIA STATE FIRE MARSHAL
APPROVED
 Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.
 Reviewed by: *Jason D. DeWitt*
 Approval date: 1-19-10

PHOTOVOLTAIC SYSTEMS
 CSM FILE # 01-26-11-0020



PROJECT MANAGER
Brian McElwain
 DESIGN ENGINEER
ALAN TORRES

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

Jarid Amirazodi 1-20-10
 PROJECT ENGINEER DATE
 REGISTERED ELECTRICAL ENGINEER



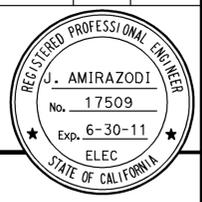
1-19-2010
 PLANS APPROVAL DATE
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CONTRACT No. 09-0AA034

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5703		2	8

1-19-2010
PLANS APPROVAL DATE

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INDEX OF SHEETS

SHEET No.	DESCRIPTION
GP	GENERAL PLAN AND LEGEND
ELECTRICAL	
EE-0	EXISTING UTILITY SITE PLAN
EE-1	SITE PLAN
EE-2	SINGLE LINE DIAGRAM GRID-TIED PHOTOVOLTAIC SYSTEM
EE-3	OFFICE/SERVICE BAYS ROOF PLAN
EE-4	EQUIPMENT SHED ROOF PLAN
EE-5	ELEVATION AND DETAILS

EXISTING EQUIPMENT SHED AND OFFICE/EQUIPMENT BAYS DATA

BUILDING/PORTION		OCCUPANCY GROUP	CONSTRUCTION TYPE	ALLOWABLE AREA	ACTUAL AREA	YEAR BUILT
EQUIPMENT SHED	STORAGE	H-2	V-N	2500 SF	375 SF	1989
	PARKING	B-1	V-N	8000 SF	7145 SF	1989
OFFICE/EQUIP. BAYS	OFFICE	B-2	V-N	8000 SF	2535 SF	1989
	EQUIP. BAYS	H-4	V-N	5100 SF	4325 SF	1989
	SHOP	B-2	V-N	8000 SF	1680 SF	1989

APPLICABLE CODES

2007 California Building Code (CBC)
Title 24, Part 2 CCR

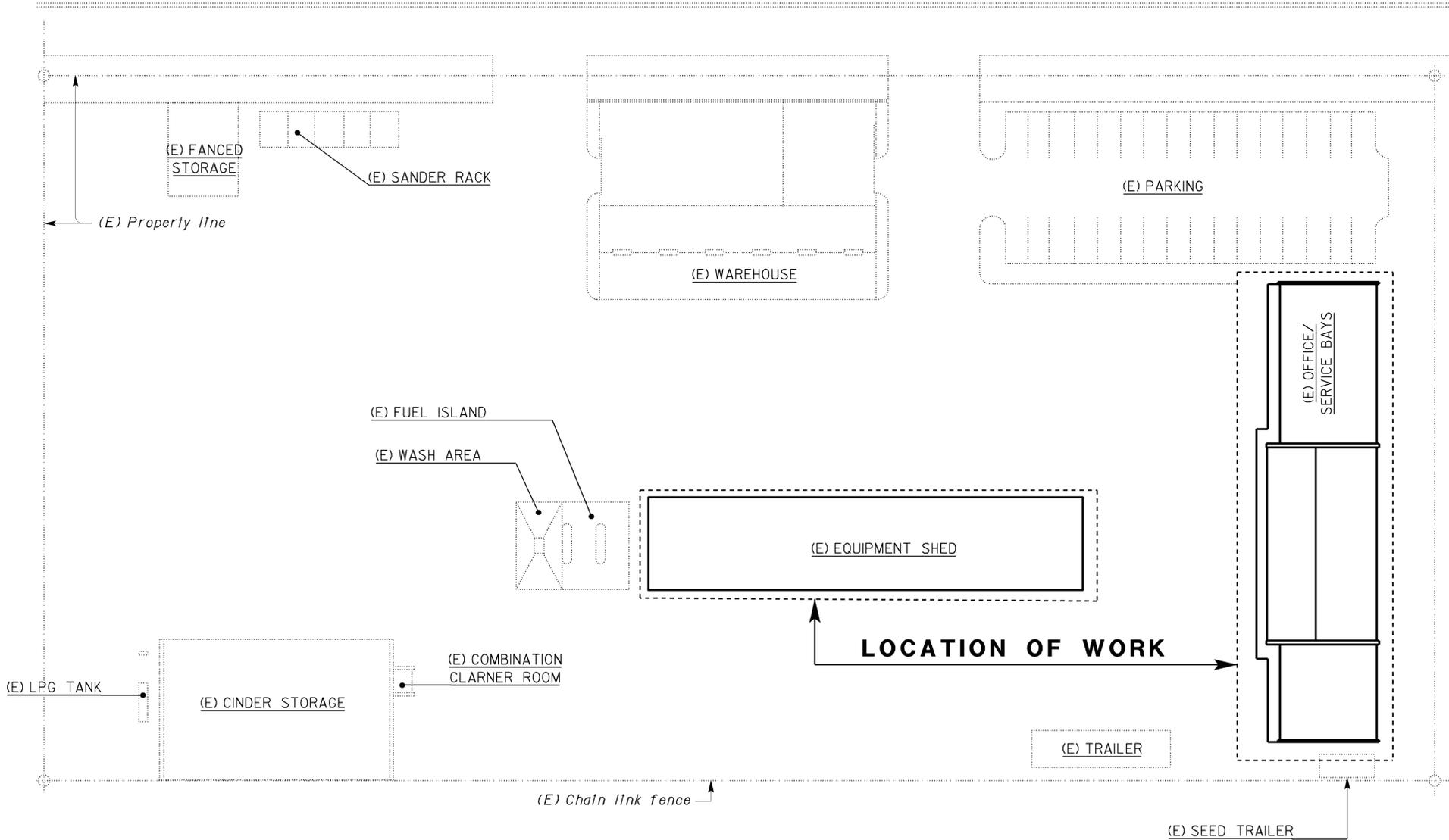
2007 California Electrical Code (CEC)
Title 24, Part 3 CCR

2007 California Fire Code (CEC)
Title 24, Part 9 CCR

CALIFORNIA STATE FIRE MARSHAL APPROVED

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Reviewed by: *JASON D. DeWITT*
Approval date: 1-19-10



GRAPHIC SYMBOLS

SYMBOL	DESCRIPTION
(2) 1/2" C, PVC, 2#12	CONDUCTOR INFO (PER CONDUIT)
—	CONDUIT TYPE
—	CONDUIT SIZE
—	NUMBER OF CONDUITS (NO NUMBER INDICATES ONE CONDUIT)
— MC —	CONDUIT, RIGID STEEL, UNDERGROUND
— PVC —	CONDUIT, POLYVINYL CHLORIDE, UNDERGROUND
~~~~~	CONDUIT, FLEXIBLE
—○—	CONDUIT, TURN UP
—●—	CONDUIT, TURN DOWN
△	SECTION/ELEVATION LETTER
EE-2	SHEET NUMBER
1	DETAIL NUMBER
EE-2	SHEET NUMBER
-E-E-	EXISTING CONDUIT AND CONDUCTORS-TO REMAIN UNLESS OTHERWISE NOTED
—*—	CONDUIT EXPOSED
BC	INSTALL PULL BOX IN EXISTING CONDUIT RUN
— —	CIRCUIT BREAKER, SINGLE POLE
—  —	CIRCUIT BREAKER, DOUBLE POLE
— /—	CONTACT, NORMALLY OPEN
— / —	SWITCH, DOUBLE-POLE
— —	FUSE
— —	GROUNDING ELECTRODE
— —	ENCLOSURE BOND

ABBREVIATIONS

A	AMPERES
AC	ALTERNATE CURRENT
C	CONDUIT
COTG	CLEANOUT TO GRADE
DC	DIRECT CURRENT
E	EXISTING
G	GROUND
JB	JUNCTION BOX
MC	METALIC CONDUIT
MT	EMPTY CONDUIT
MIN	MINIMUM
MSB	MAIN SWITCHBOARD
P	POLE
PB	PULL BOX
PTC	PV USA TEST CONDITIONS
PVC	POLYVINYL CHLORINE
PV	PHOTOVOLTAIC
STC	STANDARD TEST CONDITIONS
TYP	TYPICAL
V	VOLT

SITE PLAN

SCALE 1" = 30'-0"

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

DESIGN SUPERVISOR <i>J. Schreff</i>	DESIGN	BY <i>JavId Amirzodi</i>	CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO.	BISHOP MAINTENANCE STATION PHOTOVOLTAIC SYSTEM	SHEET GP
	DESIGN ENGINEER <i>Jaswinder K Sandhu</i>	DETAILS	BY <i>Dall Zhou</i>			CHECKED <i>JavId Amirzodi</i>		
	QUANTITIES	BY <i>JavId Amirzodi</i>	CHECKED <i>Jesse Sandhu</i>					

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

CU 09124 EA 0AA031

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 9/25/08 1/20/10

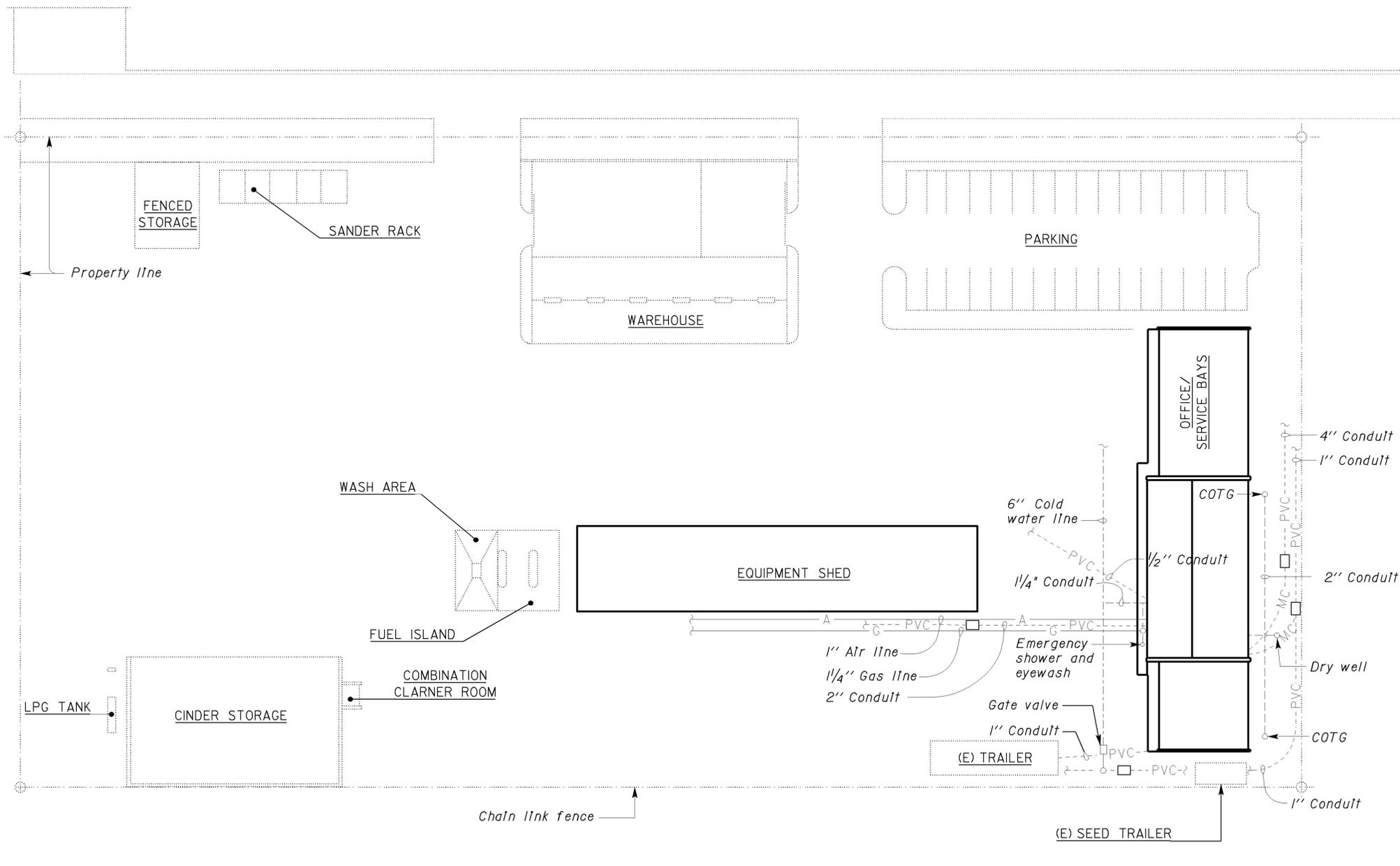
REVISION DATES (PRELIMINARY STAGE ONLY)

20-JAN-2010 09:31

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DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5703		3	8
APPROVED CALIFORNIA STATE FIRE MARSHAL Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times. Reviewed by: <i>JASON D. DeWITT</i> Approval date: 1-19-10				REGISTERED ELECTRICAL ENGINEER <i>Jarid Amirzodi</i> No. 17509 Exp. 6-30-11 ELEC STATE OF CALIFORNIA	
1-19-2010					
PLANS APPROVAL DATE					
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- Notes:**
1. For complete right of way, see Right of Way Record Maps at District office.
  2. This plan accurate for Utility Information only.
  3. Location of Utility Facilities shown are approximate and shall be verified during construction.

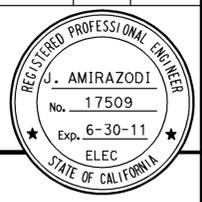


**SITE PLAN**  
SCALE 1" = 30'-0"

DOES SD Imperial Rev. 1/07	DESIGN	BY <i>JavId Amirzodi</i>	CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO.	48M5703	BISHOP MAINTENANCE STATION PHOTOVOLTAIC SYSTEM	SHEET <b>EE-0</b>
	DETAILS	BY <i>Dall Zhou</i>	CHECKED <i>JavId Amirzodi</i>			POST MILE			
	QUANTITIES	BY <i>JavId Amirzodi</i>	CHECKED <i>Jesse Sandhu</i>					REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 09124 EA 0AA031	DISREGARD PRINTS BEARING EARLIER REVISION DATES		9/25/09 1/20/10	

20-JAN-2010 09:31  
ee_0.dgn

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5703		4	8
Reviewed by: <i>Javid Amirzodi</i> APPROVED Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times. Reviewed by: JASON D. DeWITT Approval date: 1-19-10				1-20-10 DATE REGISTERED ELECTRICAL ENGINEER	
1-19-2010 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

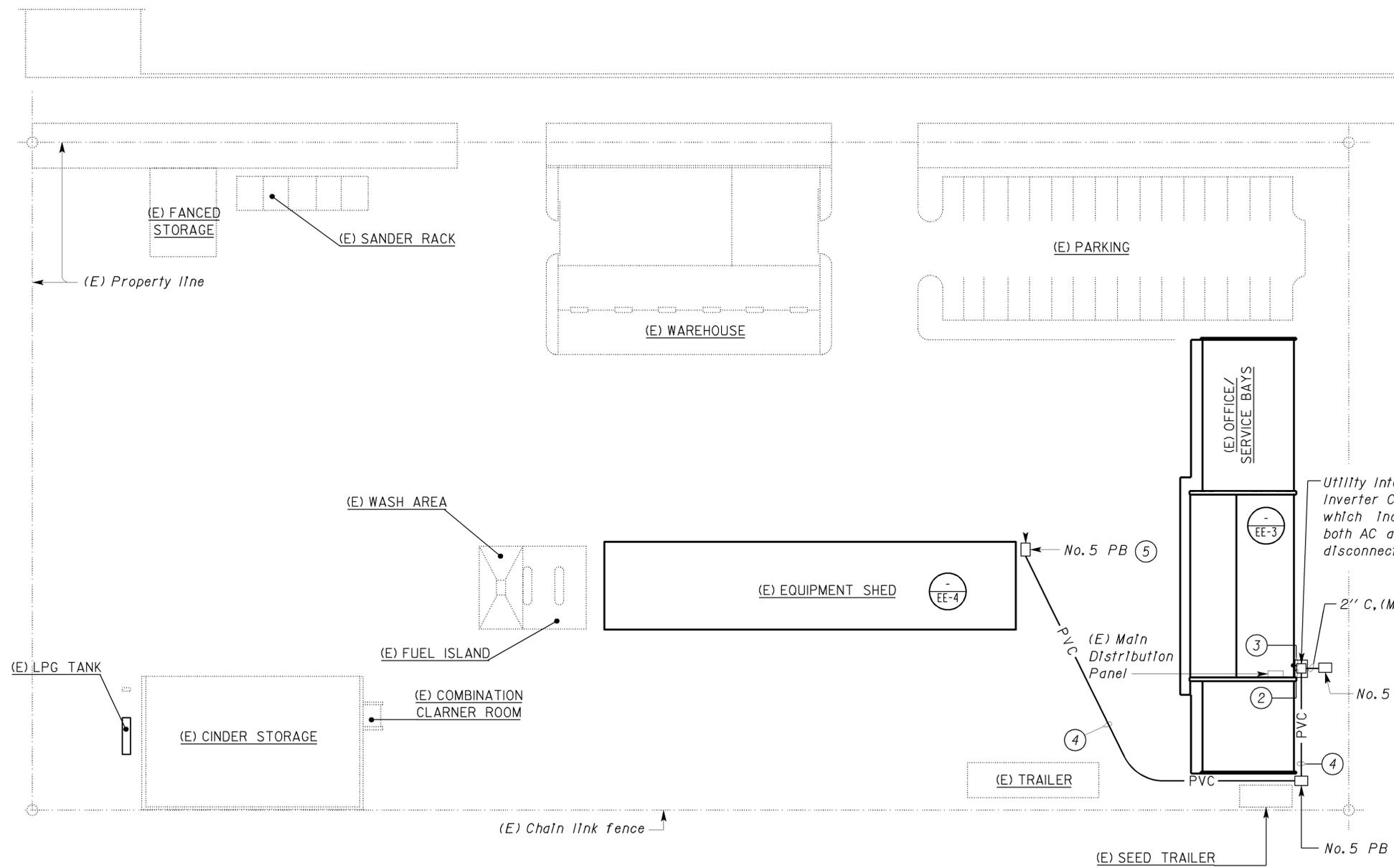


**General Notes:**

- A. The Contractor shall verify true north prior to installation of photovoltaic system.
- B. All AC/DC feeder conductors and equipment grounding conductors shall be sized to meet or exceed the following:
  - Total net voltage drop of the photovoltaic system, from photovoltaic source to the existing Main Switchboard shall not exceed 2%.
  - Upon occurrence of any kind of fault at any point in the system, overcurrent protective devices shall trip within 1/2 cycle.
- C. Not all electrical/mechanical equipment and conduit systems are shown.
- D. Location of all existing equipment and conduit systems as shown are approximate only. Contractor shall verify the exact location, of all equipment and conduit systems, in the field where required.
- E. Saw cut existing paved surfaces, at places where required for installation of underground conduit system, and repair disturbed surfaces to match existing.
- F. For photovoltaic system single line diagram, see sheet EE-2.
- G. For Graphic Symbols and Abbreviations, see GP sheet.
- H. Penetrations of walls and wall membranes required to have a fire-resistance rating shall be protected with through-penetration fire stops suitable for the method of penetration. Through-penetration fire stops shall be tested using ASTM E-814 or UL-1479 (C.B.C. Section 712). This note applies to all electrical sheets.

**Notes:**

- ① Existing Main Distribution Panel (located inside the Utility Room) is Siemens I-T-E, Catalog number CDP-7, 208/120-Volt, 3-phase, 4-wire, with 600-Ampere main circuit breaker. Install 175-Ampere, 3-pole molded case circuit breaker in spaces 41-43-45 for connecting photovoltaic system. Install screw on type nameplate with letter height of 1/4" to read "PHOTOVOLTAIC SYSTEM" at the side of new 3-pole circuit breaker. Install screw on type sign on existing Main Distribution Panel door with letter height of 1/2" to read "THIS PANEL FED BY MULTIPLE SOURCES (UTILITY AND SOLAR)".
- ② 3" C, MC. Install five conductors; three phase, one neutral and one equipment grounding conductor to 3-pole circuit breaker for photovoltaic system inside the existing Main Distribution Panel. Core drill through existing wall using "LB" type conduit body for conduit penetration.
- ③ 2" C, MC with DC conductors and equipment grounding conductor from photovoltaic Array Circuit Combiner Box #2 to Fused Sub-Array Combiner Inside Utility Interactive Inverter Cabinet. For location of photovoltaic Array Circuit Combiner Box #2, see sheet EE-3.
- ④ 2" C with DC conductors and equipment grounding conductor from photovoltaic Array Circuit Combiner Box #1 to Fused Sub-Array Combiner Inside Utility Interactive Inverter Cabinet. For location of photovoltaic Array Circuit Combiner Box #1, see sheet EE-4.
- ⑤ Install ground rod inside the pull box and connect equipment grounding conductor to it using ground clamp.



  
**SITE PLAN**  
 SCALE 1" = 30'-0"

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

DESIGN	BY	Javid Amirzodi	CHECKED	Jesse Sandhu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 48M5703	POST MILE	BISHOP MAINTENANCE STATION PHOTOVOLTAIC SYSTEM	SHEET EE-1
	DETAILS	BY	Dall Zhou	CHECKED						
QUANTITIES	BY	Javid Amirzodi	CHECKED	Jesse Sandhu	CU 09124 EA 0AA031	DISREGARD PRINTS BEARING EARLIER REVISION DATES	9/25/09	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5703		5	8

<i>Javid Amirzodi</i> REGISTERED ELECTRICAL ENGINEER DATE 1-20-10		
1-19-2010 PLANS APPROVAL DATE		

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**Photovoltaic Module**

Each PV module shall be minimum 185 (STC) watt, polycrystalline silicon cell type module with interconnection connectors rated for 90°C. PV modules shall be UL 1703 listed with a maximum system voltage of 600 VDC. PV module manufacturer shall be one of those manufacturers listed as eligible California Solar Initiative (CSI) PV module manufacturer.

**Photovoltaic Array Circuit Combiner Box**

PV array circuit combiner box shall be factory assembled, combiner box with fused input circuits, two isolated DC bus bars, ground bus bar, all enclosed inside NEMA 3R lockable hinged cover enclosure. The combiner box shall be UL 1741 listed.

PV array circuit combiner box shall have the following components:

- DIN Rail mounted touch safe fuse holders with fuse rated for 600 VDC.
- Positive DC bus bar, Negative DC bus bar and ground bus bar.
- DIN rail mounted Grid-Tie surge arrester: The surge arrester shall be Type I heavy duty surge protector rated for over 600 VDC, withstand 40kA induced transient surges and compatible to use with grounded PV arrays.

**Utility Interactive Inverter Cabinet**

Utility Interactive Inverter Cabinet shall be outdoor type, factory assembled system consisting of the following equipment:

- NEMA 3R enclosure.
- 50 kW/50 kVA, 208/120 V, 3-phase, 4-wire, at a power factor of 0.99 or greater.
- Fused sub-array combiner, with minimum of 4 array inputs for positive DC, negative DC, and DC ground bus bars. Positive array inputs fuse shall be sized to match loading.
- Built-in DC and AC disconnect switches, size to match loading.
- Integrated 50 kVA, 208/120 V, 3-phase, 4-wire, output isolation type transformer.
- Ground fault protection.
- Integrated AC and DC surge protections.
- Integrated AC and DC contactors.
- Pre-charge circuit.
- Human machine interface (HMI). AC/DC Inverter's HMI shall be equipped with LCD and keypad displaying main menu. HMI main menu shall display system monitoring, status and faults, and operation. Monitoring menu shall display system status, metering, daily, weekly and monthly energy production. Status and faults menu shall display status messages, system output, and number of faults. Operation menu shall display control and settings.
- Local and remote monitoring systems capabilities.
- AC ground bus bars.

Enclosure shall be NEMA 3R, 14-gauge, and powder-coated standard factory finish steel enclosure. All screws, latches, hinge pins and similar hardware shall be stainless steel. HMI, AC and DC disconnect switches and equipment rating labels shall be mounted on the exterior door. Exterior door shall have interlock switch and be lockable with a padlock. The cabinet shall have MEV13 rated filtered, top entry forced air cooling system with one fan, sloped roof, and shall be suitable for seismic zone 4 compliance.

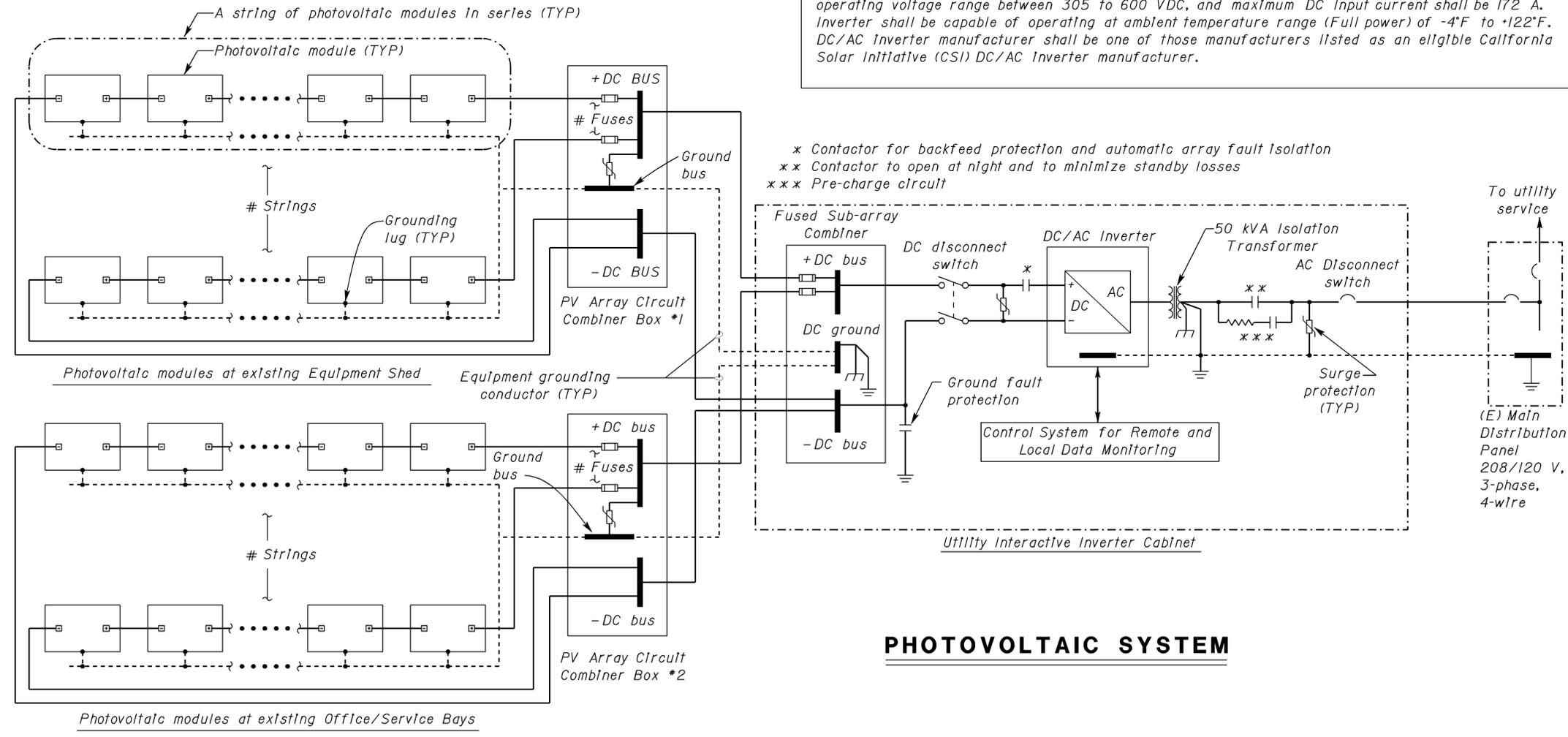
DC/AC Inverter shall be rated at maximum continuous output power of 50 kW (50 kVA), with input operating voltage range between 305 to 600 VDC, and maximum DC input current shall be 172 A. Inverter shall be capable of operating at ambient temperature range (Full power) of -4°F to +122°F. DC/AC Inverter manufacturer shall be one of those manufacturers listed as an eligible California Solar Initiative (CSI) DC/AC Inverter manufacturer.

CALIFORNIA STATE FIRE MARSHAL APPROVED

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Reviewed by: *JASON D. DeWITT*  
 JASON D. DeWITT  
 Approval date: 1-19-10

- General Notes:**
- Provide and install all necessary warning labels/markings per Article 690 of California Electrical Code (CEC) and the State Fire Marshal's guideline for solar PV installation.
  - Solar PV installation shall comply with the latest guideline from California Department of Forestry & Fire Protection, Office of the State Fire Marshal and latest Program Handbook from California Solar Initiative (CSI), unless otherwise noted.
  - For graphic symbols and abbreviations, see sheet GP.



- Photovoltaic System Requirements**
- Photovoltaic System complete design and installation details inclusive of all Engineering calculations signed by an Professional Engineer of the respective field (both Electrical and Civil Engineering) in the State of California shall be submitted for approval by the Contractor. The PV design shall meet or exceed the following requirements;
- The total designed output capacity of photovoltaic system at existing existing Equipment Shed and Office/Service Bays shall be equal to 35 kW of the CEC AC rating. Number of PV module per string shall be arranged in a manner to meet or exceed the following:
    - Maximum system voltage based on lowest expected ambient temperature at the site (Voc maximum on coldest day) shall be no less than 1% of the Inverter's maximum Input DC voltage range.
    - Maximum system power voltage based on average high ambient temperature at the site (Vmp on warmest day) shall be 20% greater than the Inverter's minimum Input DC voltage range.
  - Photovoltaic system module row spacing shall be designed to prevent shading from adjacent module.
  - All wiring except at module interconnection shall be concealed inside conduit system.
  - Photovoltaic system modules structural support system shall be designed to withstand wind forces of 85-mile per hour.
  - Photovoltaic system wiring and protective devices shall meet or exceed the requirements of all applicable codes.
  - PV Array Circuit Combiner Boxes locations as shown are arbitrary only. Contractor shall install the combiner boxes at locations that best suit the photovoltaic system strings layout.
  - PV modules installed on different slopes, elevations and/or orientations shall not be part of the same string except PV modules installed on flat roof.

**PHOTOVOLTAIC SYSTEM**

DOES SD Imperial Rev. 1/07	DESIGN	BY <i>Javid Amirzodi</i>	CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO.	48M5703	BISHOP MAINTENANCE STATION PHOTOVOLTAIC SYSTEM SINGLE LINE DIAGRAM GRID-TIED PHOTOVOLTAIC SYSTEM	SHEET <b>EE-2</b>
	DETAILS	BY <i>Dall Zhou</i>	CHECKED <i>Javid Amirzodi</i>			POST MILE			
	QUANTITIES	BY <i>Javid Amirzodi</i>	CHECKED <i>Jesse Sandhu</i>			CU 09124 EA 0AA031	REVISION DATES (PRELIMINARY STAGE ONLY)		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES

20-JAN-2010 09:31 ee_2.dgn

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5703		6	8

<i>Javid Amirzodi</i> REGISTERED ELECTRICAL ENGINEER DATE 1-20-10		
1-19-2010		
PLANS APPROVAL DATE		

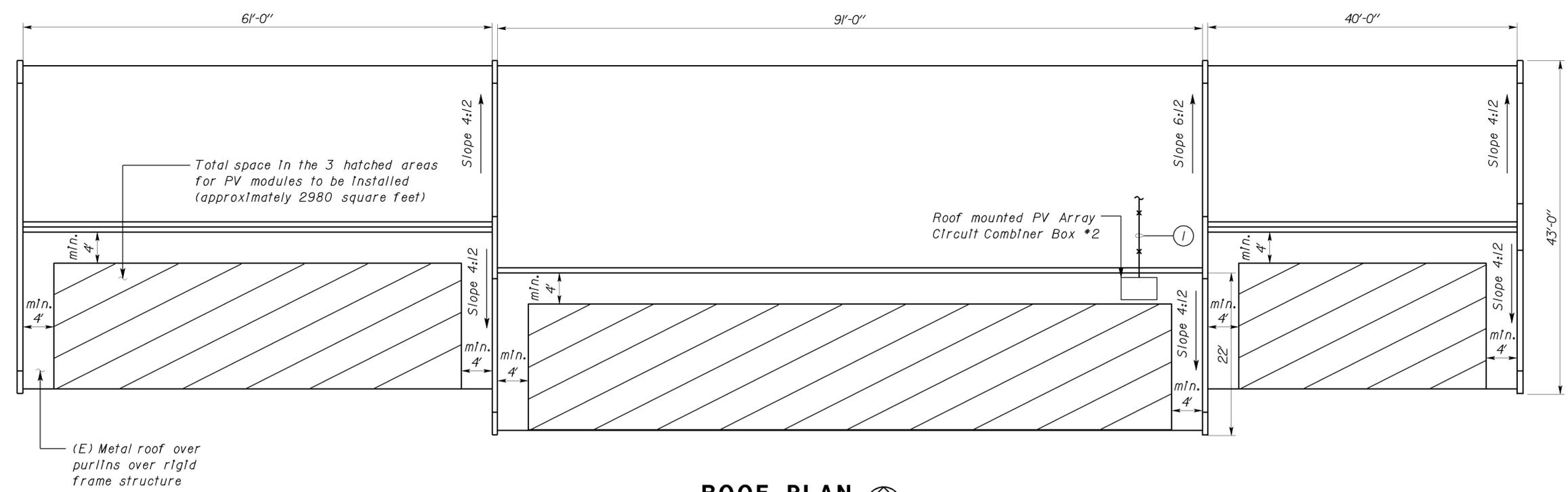
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 Reviewed by: *JASON D. DeWITT*  
 Approval date: 1-19-10

- General notes:*
- Provide and Install approved conduit support on top of the roof to support conduit system and junction boxes. Conduit support shall be one-piece and non metallic type. For conduit support details, see detail 1 on sheet EE-5.
  - All exposed conduits shall be galvanized rigid steel, with minimum size 3/4".
  - Size conduits to allow for 50% future capacity.
  - No DC wiring except at the module connector shall be exposed.
  - Use type CGB connectors at conduit terminations to exposed conductors.
  - DC conduit/conductors between PV modules and PV Array Circuit Combiner Boxes are not shown.
  - Existing Office/Service Bays height from ground to top of plate is approximately 20'.
  - For graphic symbols and abbreviations, see sheet GP.
  - For PV rack mounting, see roof attachment detail 2 on sheet EE-5.

*Note:*

① 2" C, MC with DC conductors and equipment grounding conductor to Utility Interactive Inverter Cabinet. For continuation, see sheet EE-1.



**ROOF PLAN**  
 SCALE 1/8" = 1'-0"

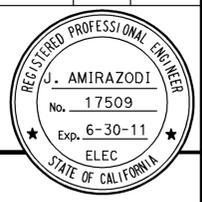
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	DETAILS BY <i>Dall Zhou</i>	CHECKED <i>Javid Amirzodi</i>			POST MILE		REVISION DATES (PRELIMINARY STAGE ONLY)	OF
	QUANTITIES BY <i>Javid Amirzodi</i>	CHECKED <i>Jesse Sandhu</i>			CU 09124 EA 0AA031		DISREGARD PRINTS BEARING EARLIER REVISION DATES → 10/6/09 1/20/10	

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DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5703		7	8

*Javid Amirazodi*  
 REGISTERED ELECTRICAL ENGINEER DATE 1-20-10



1-19-2010  
 PLANS APPROVAL DATE

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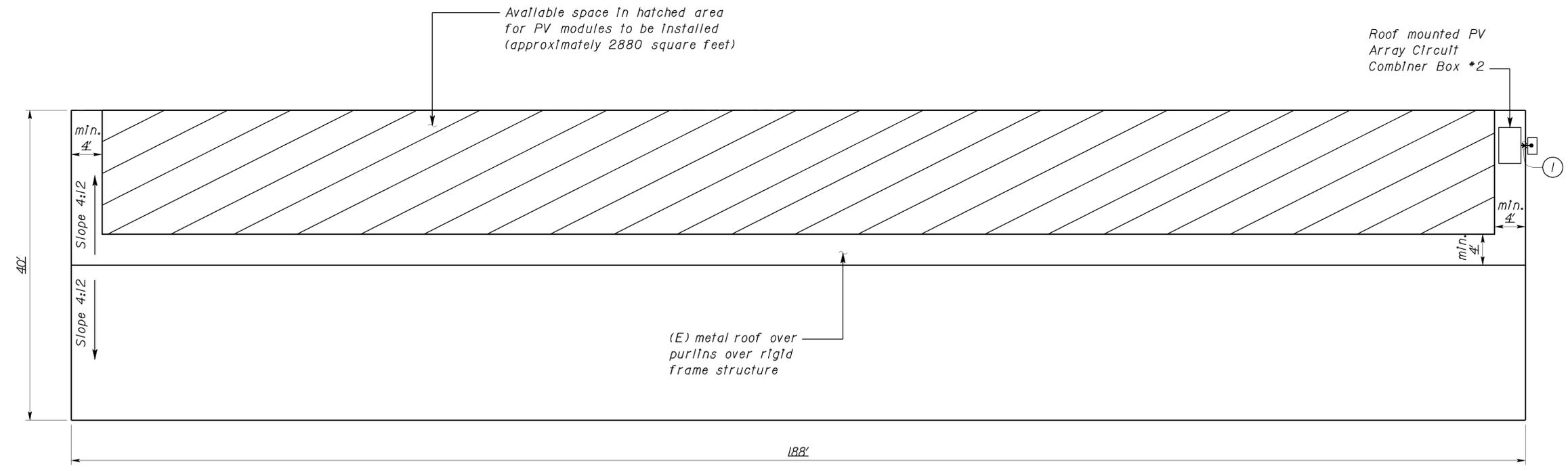
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 Reviewed by: *JASON D. DeWITT*  
 Approval date: 1-19-10

General notes:

- A. Provide and install approved conduit support on top of the roof to support conduit system and junction boxes. Conduit support shall be one-piece and non-metallic type. For conduit support details, see "Detail 1" on sheet EE-5.
- B. All exposed conduits shall be galvanized rigid steel, with minimum size 3/4".
- C. Size conduits to allow for 50% future capacity.
- D. No DC wiring except at the module connector shall be exposed.
- E. Use type CGB connectors at conduit terminations to exposed conductors.
- F. DC conduit/conductors between photovoltaic modules and photovoltaic Array Circuit Combiner Boxes are not shown.
- G. Existing Equipment Shed height from ground to the highest edge of the roof is approximately 17'.
- H. For Graphic Symbols and Abbreviations, see GP sheet.
- I. For photovoltaic rack mounting, see "Roof Attachment Detail" on sheet EE-5.

Note:

- ① 2" MC, with DC conductors and equipment grounding conductor to Utility Interactive Inverter Cabinet via No. 5 pull box. For continuation, see sheet EE-1.



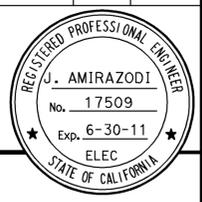
**ROOF PLAN**  
 SCALE 1/8" = 1'-0"

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DESIGN BY <i>Javid Amirazodi</i> CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 48M5703	<b>BISHOP MAINTENANCE STATION PHOTOVOLTAIC SYSTEM</b>	SHEET <b>EE-4</b>	
			POST MILE			EQUIPMENT SHED ROOF PLAN
			CU 09124 EA 0AA031			
DETAILS BY <i>Dall Zhou</i> CHECKED <i>Javid Amirazodi</i>	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DISREGARD PRINTS BEARING EARLIER REVISION DATES	9/25/09 1/20/10	SHEET OF		
QUANTITIES BY <i>Javid Amirazodi</i> CHECKED <i>Jesse Sandhu</i>	0 1 2 3					

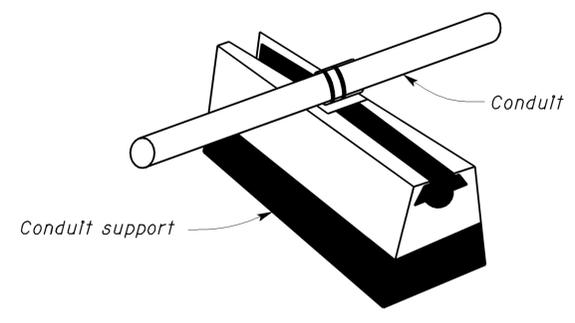
DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5703		8	8

**Jarid Amirzodi**  
 REGISTERED ELECTRICAL ENGINEER  
 No. 17509  
 Exp. 6-30-11  
 ELEC  
 STATE OF CALIFORNIA

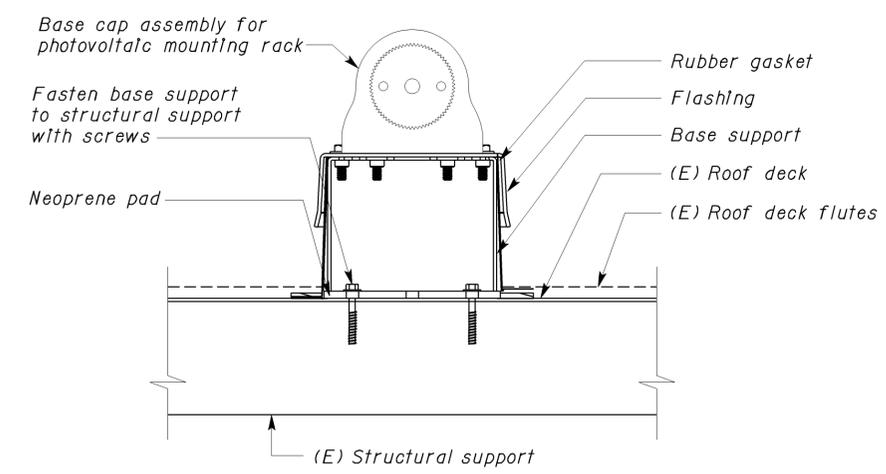


1-19-2010  
 PLANS APPROVAL DATE  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

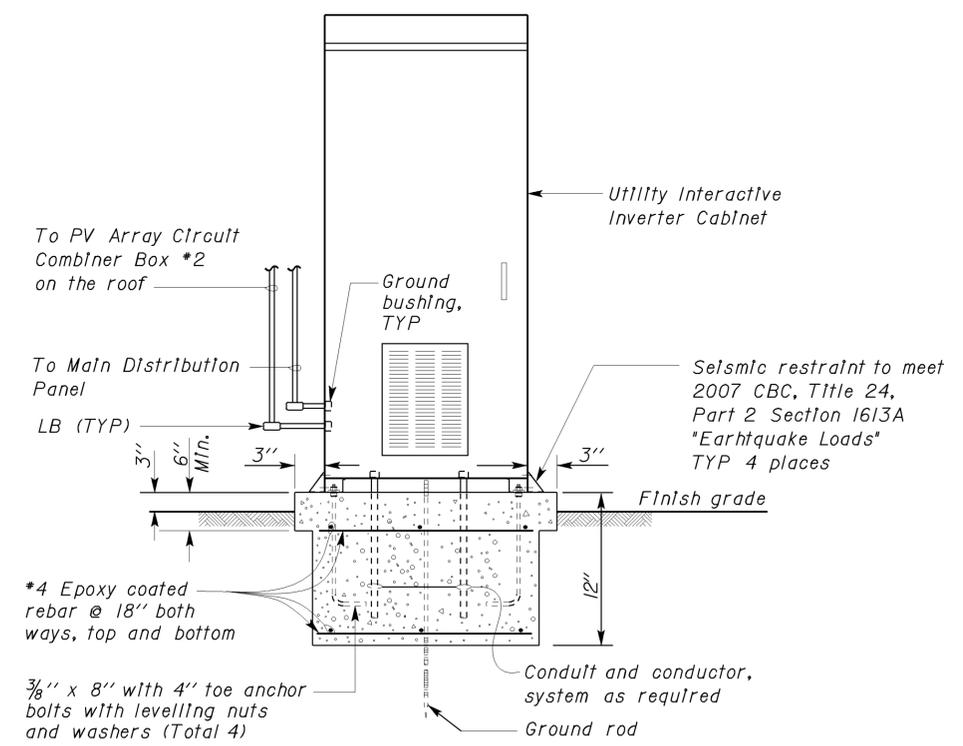
CALIFORNIA STATE FIRE MARSHAL  
 APPROVED  
 Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approvals subject to field inspection. One set of approved plans shall be available on the project site at all times.  
 Reviewed by: **JASON D. DEWITT**  
 Approval date: 1-19-10



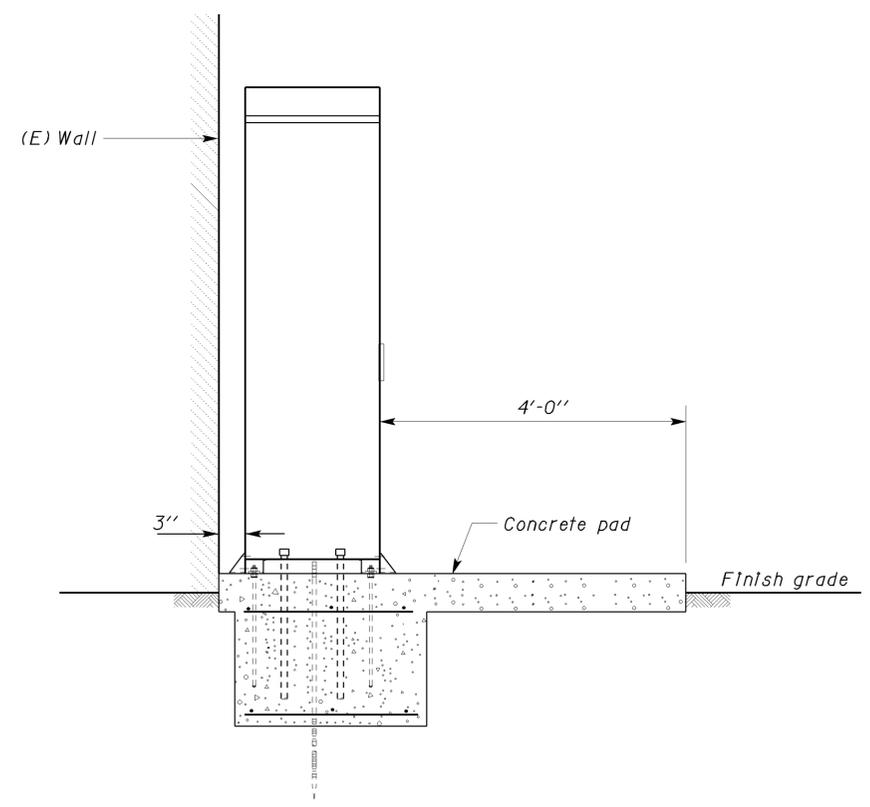
**1 ROOF MOUNTED CONDUIT SUPPORT**



**2 ROOF ATTACHMENT DETAIL**  
NO SCALE



**FRONT VIEW**



**SIDE VIEW**

**A ELEVATION**  
NO SCALE

DESIGN	BY	JavId Amirzodi	CHECKED	Jesse Sandhu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO.	BISHOP MAINTENANCE STATION PHOTOVOLTAIC SYSTEM	SHEET <b>EE-5</b>	
	DETAILS	BY	Dall Zhou	CHECKED			JavId Amirzodi			48M5703
	QUANTITIES	BY	JavId Amirzodi	CHECKED			Jesse Sandhu			POST MILE
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					0 1 2 3	CU 09124 EA 0AA031	REVISION DATES (PRELIMINARY STAGE ONLY)		SHEET OF	
DISREGARD PRINTS BEARING EARLIER REVISION DATES							1/20/10			