

PROJECT OWNER:

KELLY, VANCE
69 ABBOTT CR.
CHICO, CA 95973
APN:006.800.052 PH#:406.670.2904
EMAIL:vkellycpa@gmail.com

CONTRACTOR:

ALTERNATIVE ENERGY SYSTEMS INC.
13620 HIGHWAY 99
CHICO, CA 95973
CSLB: 853351 C-10, C-46

BUILDING JURISDICTION:

CITY OF CHICO
BLD. & DEVELOPMENT SERVICES

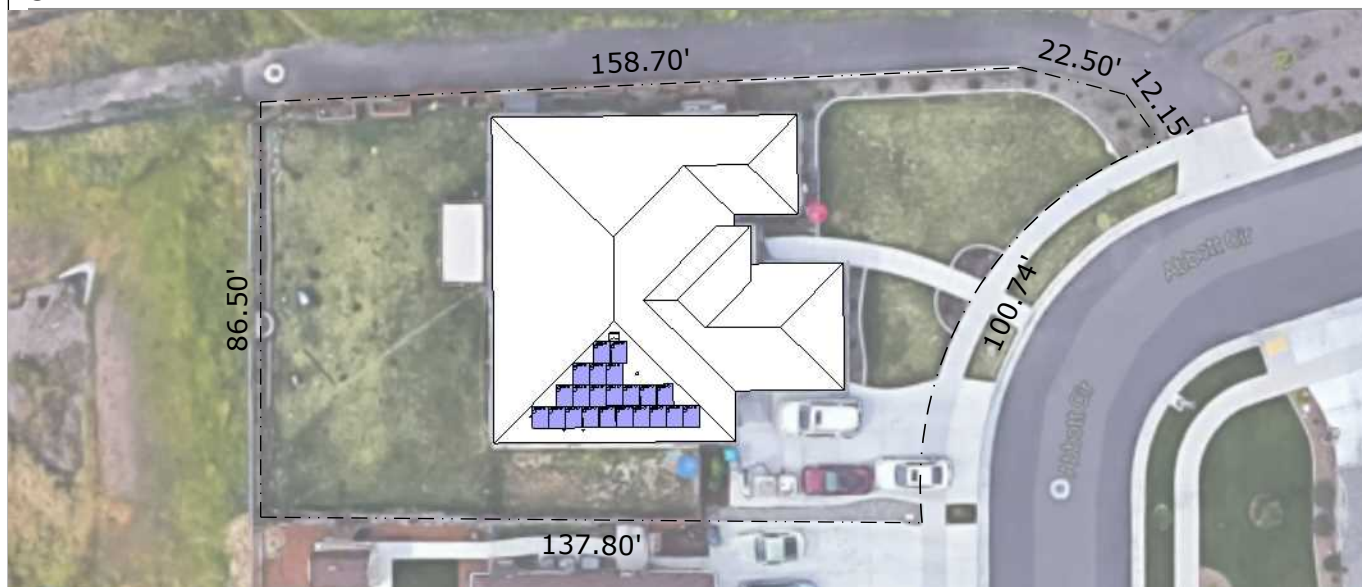
411 MAIN STREET
CHICO, CA 95927
OFFICE#: (530) 879-6700
www.chico.ca.us/building_development

SCOPE:

INSTALL PHOTOVOLTAIC SOLAR SYSTEM ON A TRUSS ROOF, MOUNTED IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES SPECIFICALLY REFERENCING THE 2016 CALIFORNIA ELECTRICAL CODE/ 2014 NEC USING THE FOLLOWING SPECIFIC EQUIPMENT:

1. MODULES: SUNPOWER
(22) SPR-E20-327-C-AC
7.19kW SYSTEM
402 SQFT COVERED
2. INVERTER(S): SUNPOWER
(22) MODULE INTEGRATED 320W

SITE MAP



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PV-2.0
PV-3.0
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RACKING SPECS
WIRE CALCS

SCOPE

PV-1.0

COORDINATOR

C. PAVONE

DESIGNER

R. CORREA

DATE MODIFIED

06/06/2017

SCALE

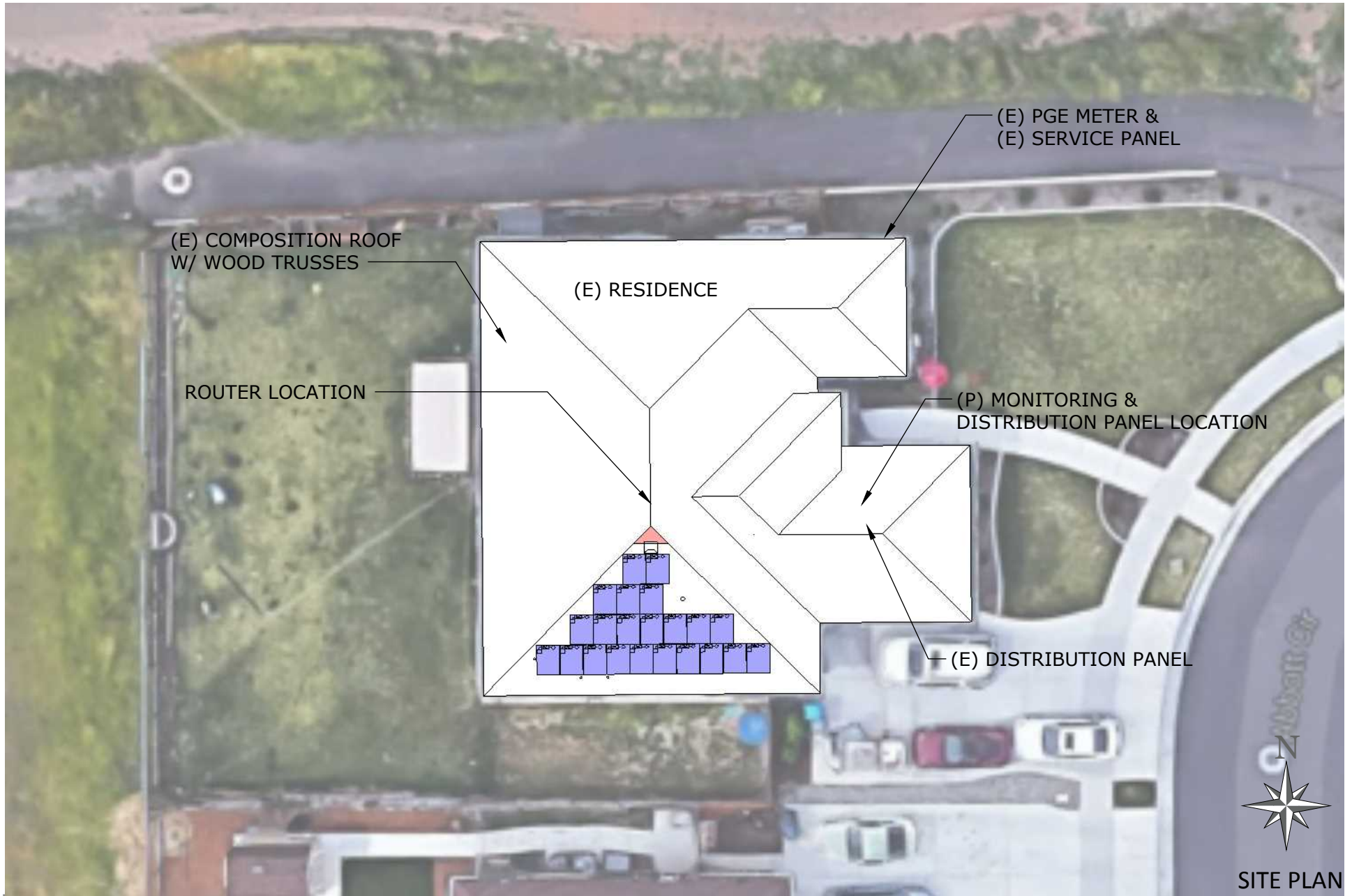
1" = 40' (1:480)

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AES Energy For Life
Alternative Energy Systems Inc.

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REVISION



SITE PLAN

SITE PLAN

PV-2.0

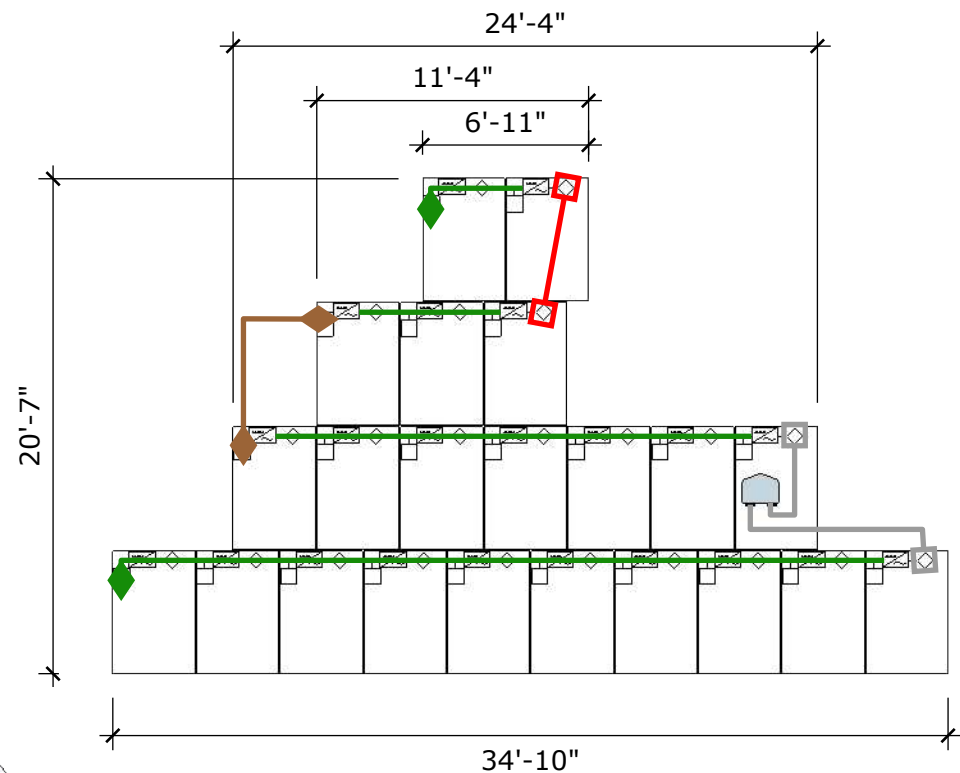
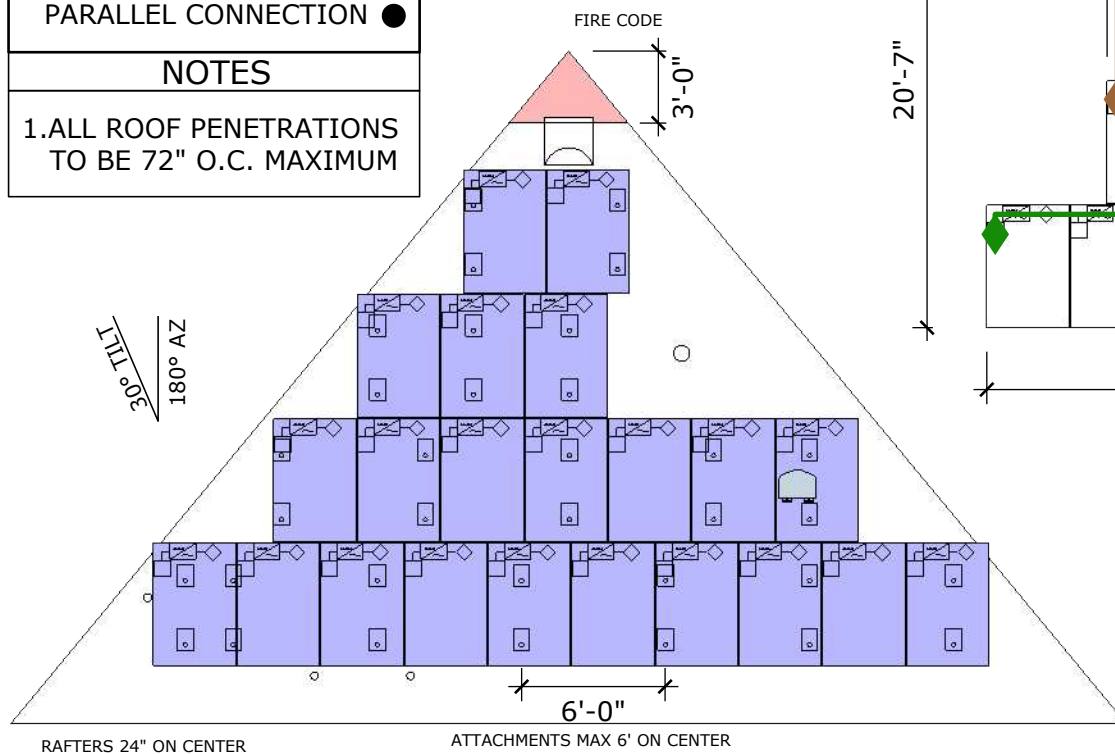
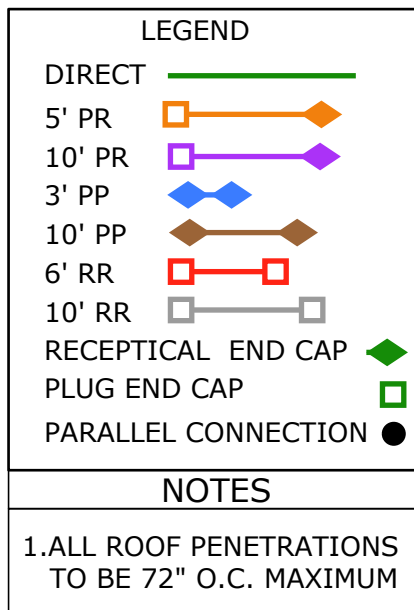
SCALE
1" = 20' (1:240)
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DESIGNER
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COORDINATOR
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ARRAY LAYOUT

ARRAY LAYOUT

PV-3.0

COORDINATOR

R. CORREA

DESIGNER

06/06/2017

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1/8" = 1'-0" (1:96)

SCALE

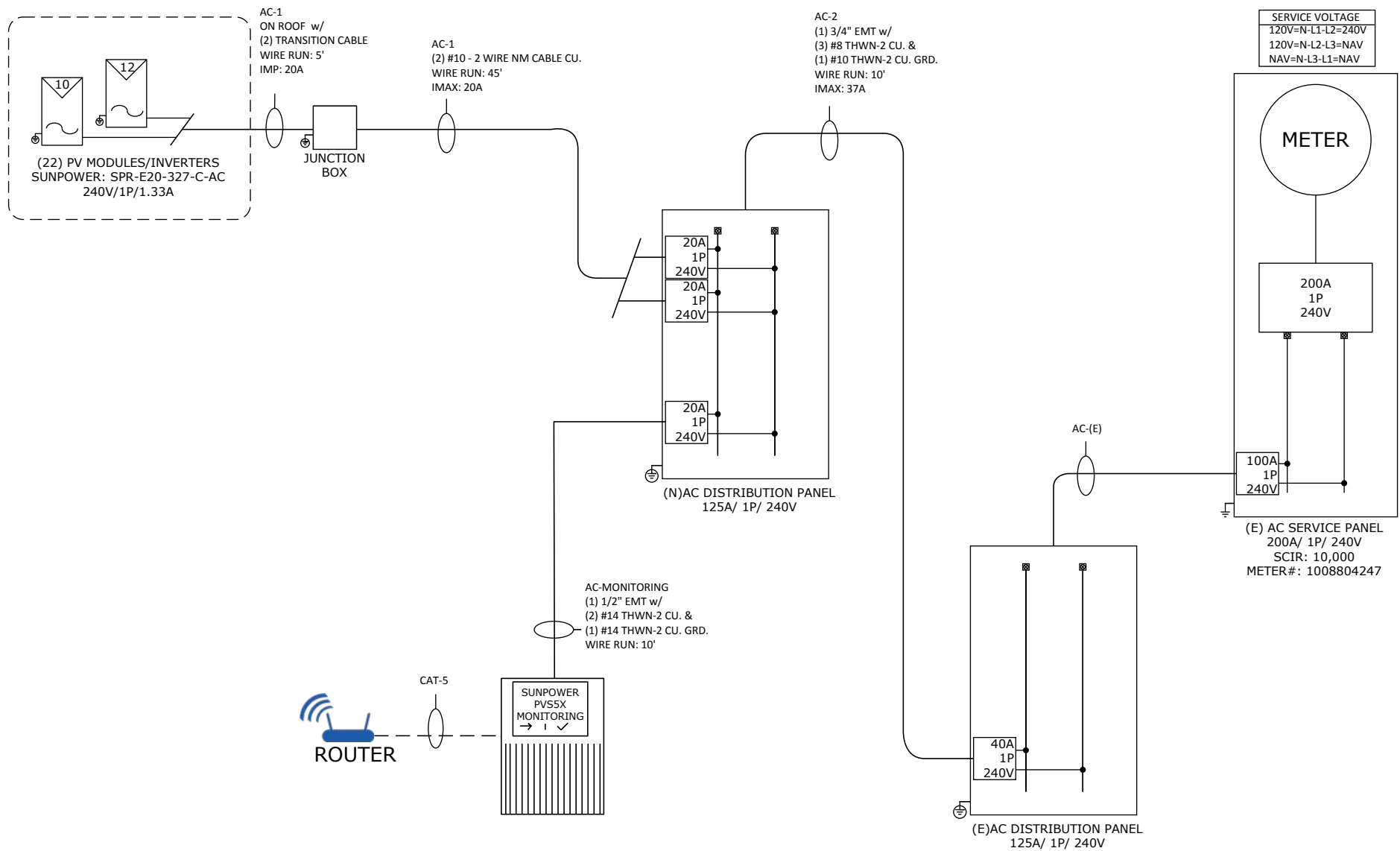
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ELECTRICAL DIAGRAM

ELECTRICAL
DIAGRAM

PV-4.0

COORDINATOR
C. PAYONE

DESIGNER
R. CORREA

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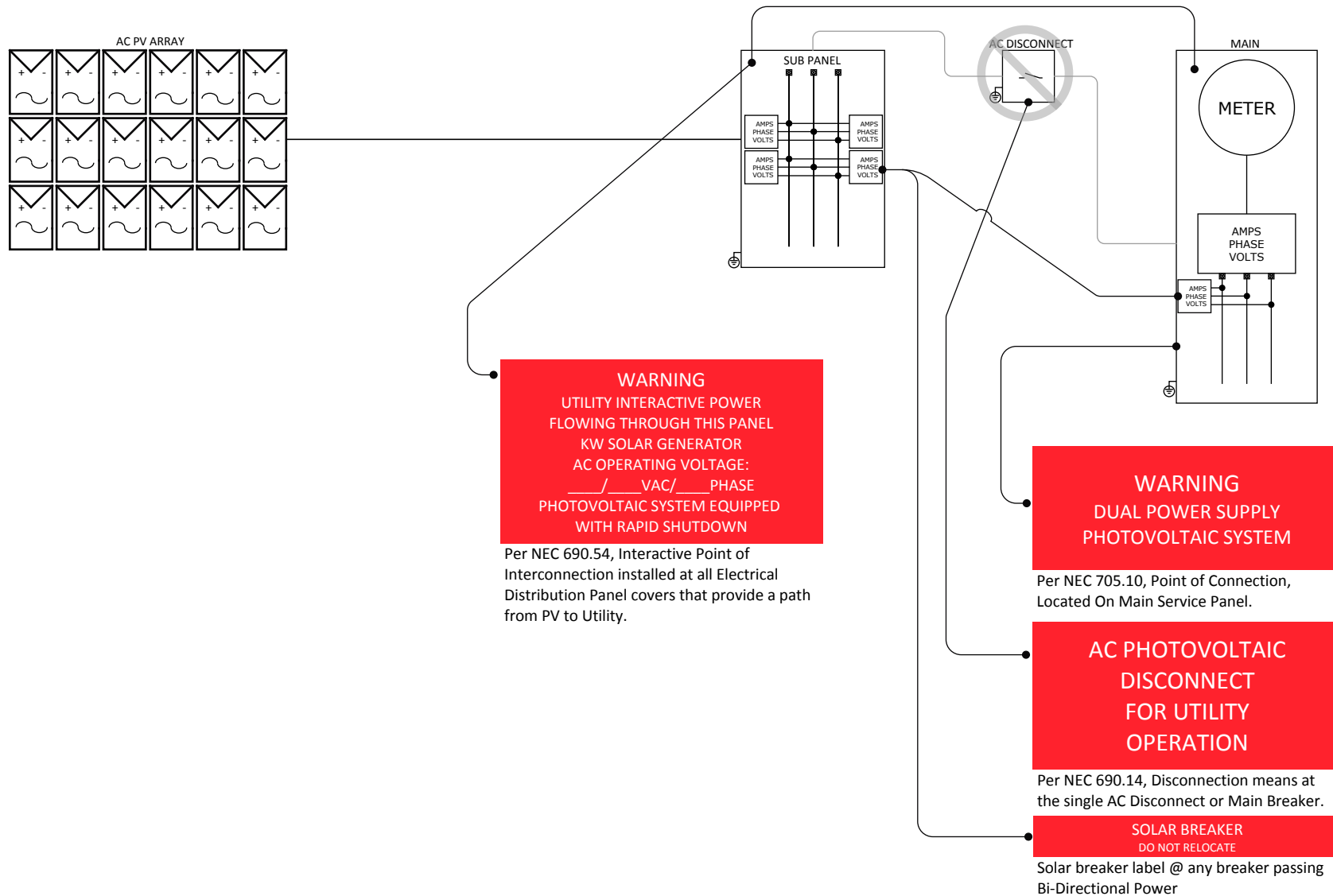
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LABEL DIAGRAM

PV-4.1
 LABEL
 DIAGRAM

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REVISION

ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2014 NATIONAL ELECTRIC CODE (NEC), OR LOCAL MUNICIPAL CODE, AND FIRE DISTRICT REGULATIONS.

1. ALL EQUIPMENT SHALL BE LISTED AND LABELED PER RECOGNIZED ELECTRICAL TESTING LABORATORY AN INSTALLED PER THE LISTING REQUIREMENTS AND THE MANUFACTURER'S INSTRUCTIONS.
2. ALL INVERTERS SHALL BE IEEE 929 COMPLIANT AND SHALL BE INSPECTED BY LOCAL UTILITY BEFORE COMMISSIONING, TESTING, AND OPERATION OF THE SYSTEM.
3. ALL OUTDOOR EQUIPMENT SHALL BE MINIMUM NEMA 3R, INCLUDING OUTDOOR MOUNTED TRANSITION BOXES, COMBINER BOXES, AND SWITCHES.
4. ALL EQUIPMENT SHALL BE PROPERLY GROUNDED PER THE REQUIREMENTS OF NEC ART.250,690.
5. NEC. ART. 690.9(A). ALL CIRCUITS CONNECTED TO MORE THAN ONE SOURCE SHALL HAVE OVERCURRENT DEVICES LOCATED SO AS TO PROVIDE OVERCURRENT PROTECTION FROM ALL SOURCES.
6. NEC ART. 690.18. DUE TO THE FACT THAT PV MODULES ARE ENERGIZED WHENEVER THEY ARE EXPOSED TO LIGHT, PV CONTRACTOR SHALL DISABLE THE ARRAY DURING INSTALLATION AND SERVICE BY SHORT CIRCUITING, OPEN CIRCUITING, OR COVERING THE ARRAY WITH AN OPAQUE COVERING.
7. PHOTOVOLTAIC SYSTEM SHALL BACKFEED THE DISTRIBUTION SYSTEM ON SITE PER THE REQUIREMENTS OF NEC ART.690.64(B). ALL BACKFEED BREAKERS SHALL BE IDENTIFIED AS SUCH AND SHALL BE SECURED IN PLACE BY ADDITIONAL FASTENER PER THE REQUIREMENTS OF NEC 408.16(F).
8. FALL ARREST PROTECTION PER OSHA REQUIREMENTS SHALL BE PROVIDED FOR ALL ROOF WORK.
9. ALL CONDUCTORS AND TERMINATIONS SHALL BE RATED FOR 75° C MINIMUM.
10. NEC ART. 690.14. - SEE SHEET RE-4.1 FOR LABEL DIAGRAM
11. NEC ART. 690.53. - SEE SHEET RE-4.1 FOR LABEL DIAGRAM
12. NEC ART. 690.17. EACH AC DISCONNECT SHALL ALSO BE LABELED WITH: "WARNING!-ELECTRICAL SHOCK HAZARD - DO NOT TOUCH TERMINALS. TERMINALS ON BOTH LINE AND LOAD SIZE MAY BE ENERGIZED IN THE OPEN POSITION".
13. GROUNDING OF ALL DWELLINS SHALL BE CONFIRMED.
14. CONTRACTOR TO PROVIDE GROUND FAULT PROTECTION FOR ROOF MOUNTED PHOTOVOLTAIC ARRAYS LOCATED ON DWELLINGS PER 2014 NEC ART.690.17.
15. WHERE MORE THAN ONE NOMINAL VOLTAGE SYSTEM EXIST, THE DIFFERENT SYSTEMS SHALL BE IDENTIFIED BY PHASE AND SYSTEM PER 2014 NEC ART.210.4D
16. PROVIDE AN ACCESSIBLE DISCONNECT DEVICE THAT IS LOCKABLE IN OPEN POSITION AND IS LOCATED WITHIN 10'-0" OF THE METER PER LOCAL ELECTRICAL UTILITY REGULATIONS.
17. PHOTOVOLTAIC SOURCE CURRENTS MUST BE RATED AT BOTH 125% OF THE PARALLEL MODULE AND AT A CONTINUOUS LOAD OF ANOTHER 125% FOR A TOTAL OF 156% OF THE LOAD.
18. PROVIDE PERMANENT PLAQUE OR DIRECTORY PROVIDING THE LOCATION OF THE SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC SYSTEM DISCONNECT MEANS IF THEY ARE NOT IN THE SAME LOCATION PER 2014 NEC ART.690.56.
19. INSTALLATION OF PV PANEL ARRAYS SHOULD RESIST SLIDING AND POP-UP RESULTING FROM SEISMIC EVENTS AND SHOULD COMPLY WITH CBC SECTION 1613A AND ASCE STANDARD 7-05, CHAPTER 13.
20. PV SYSTEM INSTALLER WILL BE RESPONSIBLE FOR FURNISHING AND INSTALLATION OF ALL RELATED EQUIPMENT, CABLES, ADDITIONAL CONDUITS, BOXES WIREWAYS AND OTHER ACCESSORIES NECESSARY FOR COMPLETE AND OPERATIONAL PHOTOVOLTAIC SYSTEMS.
21. PV SYSTEM CONTRACTOR SHALL COORDINATE ALL THE WORK WITH THE ENGINEER, THE CONSTRUCTION MANAGER AND ALL OTHER CONTRACTORS TO ENSURE THAT PV SYSTEM IS INSTALLED AS SPECIFIED IN THESE DRAWINGS.
22. DRAWING IN GENERAL OR DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF THE EQUIPMENT AND WORK INCLUDED. THE INTENTION OF THE DRAWING IS TO INDICATE SIZE, CAPACITY, APPROXIMATE LOCATION AND GENERAL RELATIONSHIP, BUT NOT EXACT DETAIL OR PHYSICAL PLACEMENT.
23. FIELD VERIFIES EXACT AIC RATING REQUIRED OF THE MAIN SWITCHBOARD FROM LOCAL UTILITY.
24. A PV SYSTEM WITH MULTIPLE INVERTERS, WHERE INVERTERS ARE REMOTELY LOCATED FROM EACH OTHER, WILL HAVE A DIRECTORY CREATED FOR EACH LOCATION. AS PER 2014 NEC 690.5(H) AND IN ACCORDANCE WITH 2014 NEC 705.10.
25. A NON FOLDING LADDER WILL BE IN PLACE AND SECURED TO THE ROOF TO PROVIDE ACCESS FOR ALL INSPECTIONS. ALL J BOXES WILL BE OPENED UPON REQUEST.
26. SMOKE AND CARBON MONOXIDE ALARMS WILL BE INSTALLED IN ACCORDANCE WITH CRC R314 R315

GENERAL NOTES

PV-5.0

COORDINATOR

R. CORREA

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