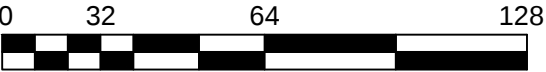
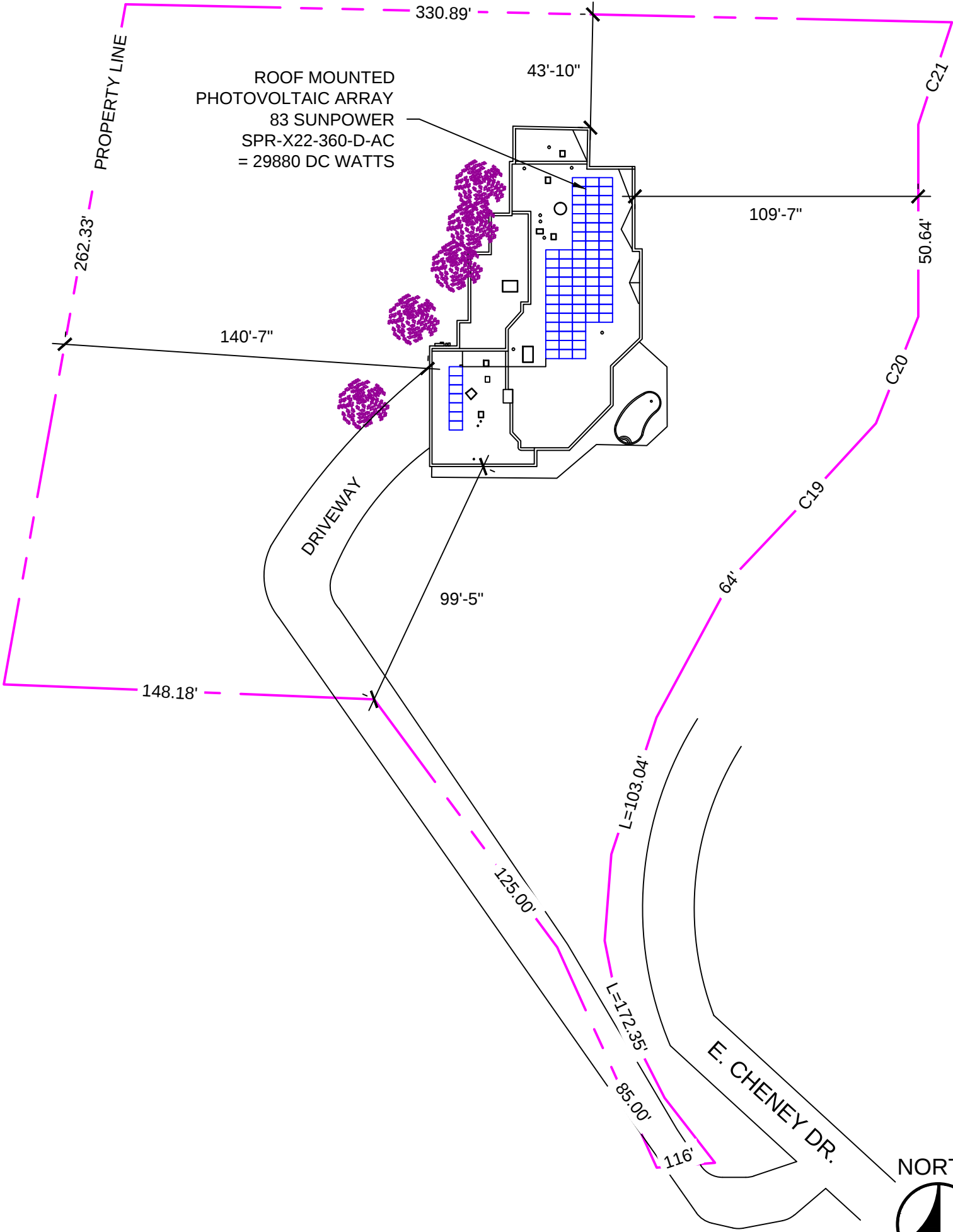
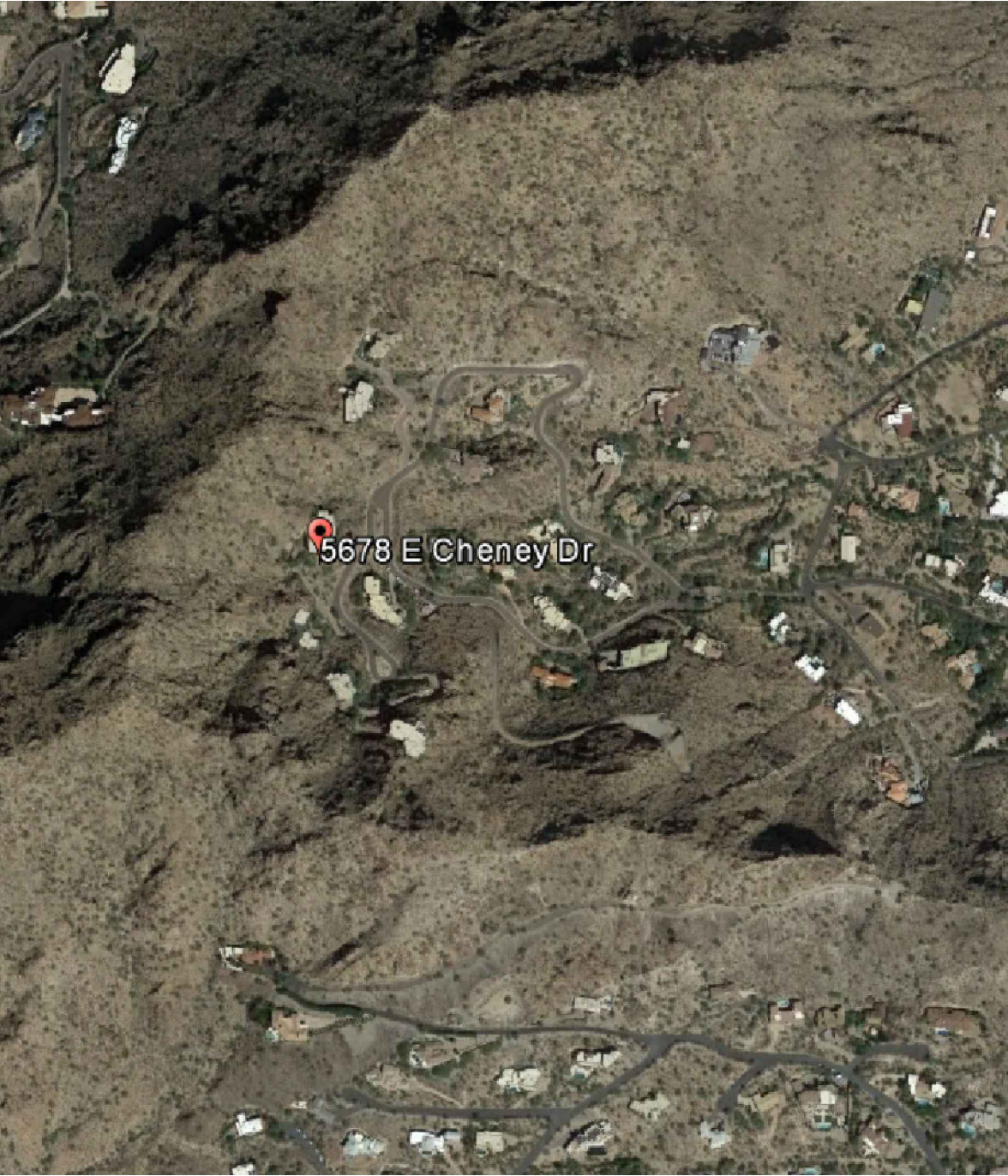


SHEET INDEX

- PV1 COVER/ MAP/NOTES
- PV2 SITE LAYOUT
- PV3 PV LAYOUT
- PV4 ARRAY
- PV5 ONE LINE DIAGRAM
- PV6 THREE LINE DIAGRAM
- PV7 LABELING
- PV8 NOTES AND REFERENCES



2317 W. HUNTINGTON DRIVE
TEMPE, AZ 85282 (480) 446-3600
ROC: CR-11 249334

SYSTEM SIZE:

29.880 DC KW
26.560 AC KW
GRID TIED
AC-MODULE
PV SYSTEM

PROJECT NAME:
SCHLUTER, ROBERT
RESIDENCE
5678 E CHENEY DR
PARADISE VALLEY,
AZ 85253
APN: 169-02-017A

DRAWN BY: KG
DATE: 05-09-2018
SCALE: N.T.S. (AS NOTED)
AHJ: PARADISE VA SHEET:
UTILITY: APS
1'-0"=1/64"

PV1



ROOF MOUNTED
PHOTOVOLTAIC ARRAY
83 SUNPOWER
SPR-X22-360-D-AC
= 29880 DC WATTS

SEE EQUIPMENT
LOCATION
ELEVATION

AC CONDUIT
RAN ON EXTERIOR
OF HOME 1" EMT.
JUNCTION BOX
APPROX. LOCATION

DRIVEWAY

AC INNER ARRAY CONDUIT
RAN ON EXTERIOR
OF HOME

FENCE

RESIDENCE

NOTE:
ALL CONSTRUCTION / INSTALLATION
IS TO COMPLY WITH THE FOLLOWING:
2012 IRC,IBC,IFC
2011 NEC
ALL DIMENSIONS ARE APPROXIMATE



EXISTING 400AMP
ELECTRICAL SERVICE
ENTRANCE & UTILITY
REVENUE METER
SERVICE PANEL

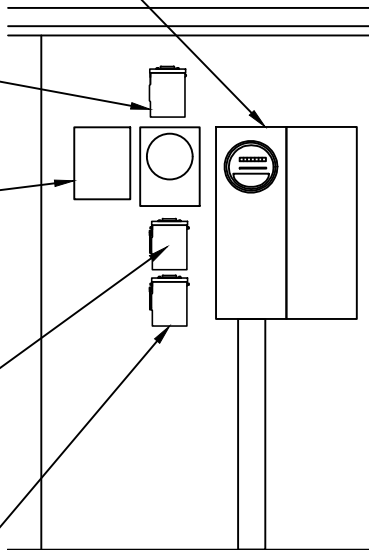
AC
COMBINER BOX

MONITOR BOX

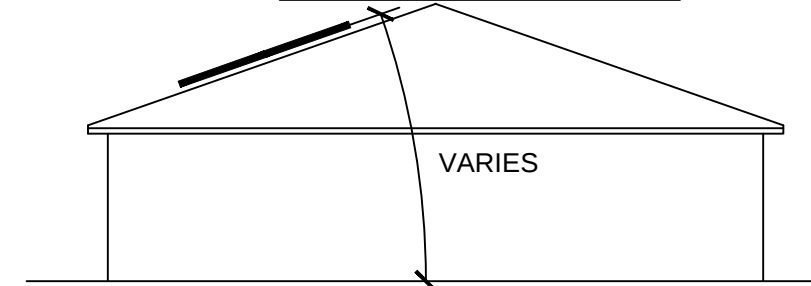
PHOTOVOLTAIC
PRODUCTION UTILITY METER
UTILITY DISCONNECT
SWITCH AND
PV SYSTEM METER

FUSED AC DISCONNECT

EQUIPMENT LOCATION ELEVATION



PANEL LOCATION ELEVATION



NOTE:
UTILITY HAS 24 HR. UNRESTRICTED
ACCESS TO ALL PV SYSTEM COMPONENTS:
LOCATED AT SERVICE ENTRANCE.

NOTE:
WORKSPACE IN FRONT OF AC
ELECTRICAL SYSTEM COMPONENTS SHALL
BE IN ACCORDANCE WITH APS AND NEC
REQUIREMENTS: FOR APS REQUIREMENTS, REF.
SECTION 300 OF THE APS ESRM AND SECTION 8.2 OF
THE APS INTERCONNECTION REQUIREMENTS.

NOTE:
REFERENCE SECTION 301.15 OF THE
APS ESRM FOR ELECTRICAL METER
SEPARATION BETWEEN WATER AND GAS.

AZIMUTH = 0°
MODULE TILT ANGLE = 0°

PROPERTY HAS NO PROPERTY FENCE

ROOF VENTS, SKYLIGHTS,
WILL NOT BE COVERED
UPON PV INSTALLATION



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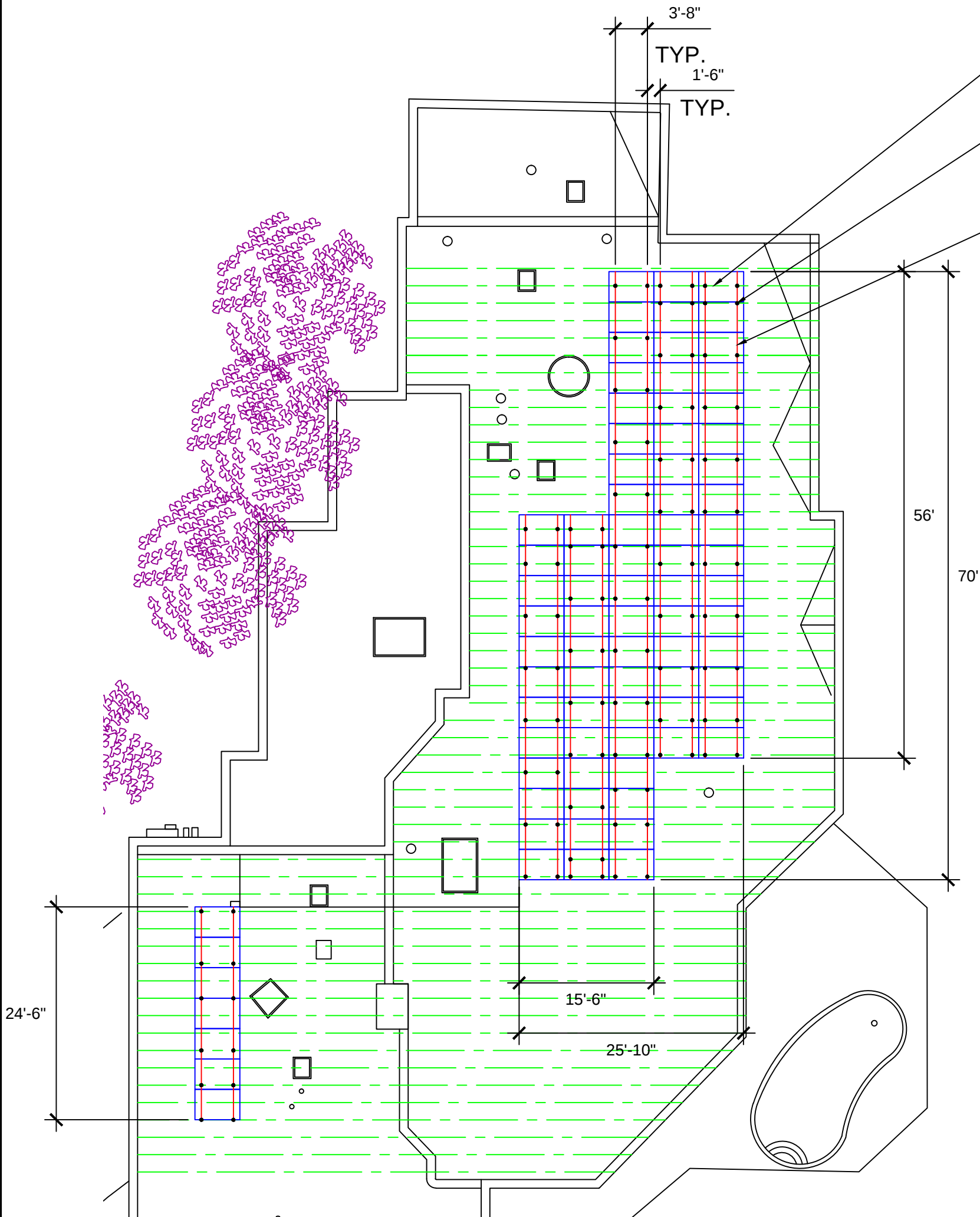
SCALE: N.T.S. (AS NOTED)

AHJ: PARADISE VA SHEET:

UTILITY: APS

1'-0"=1/32"

PV2



2"X4" PRE-FAB TRUSSES @
24" O.C., VERIFY LOCATIONS
MOUNTING POINTS,
REFER TO DETAIL
(TYP TYPE RACKING)
SUNPOWER INVISIMOUNT
PRE-MANUFACTURED
ALUMINUM MOUNTING RAIL
(TYP TYPE RACKING)

MEETS OR EXCEEDS 2012 IBC
IRC CONSTRUCTION STANDARDS
CASE 1 LOAD CALCULATIONS

SUNPOWER
SPR-X22-360-D-AC
45.5 LBS./PANEL
83 X 50.00 = 4150LBS

A=LXW (PANEL):
18 SQ FT = 41.2" X 61.3"
ARRAY:
83 SQ FT X 18 = 1494 SQ FT

83 PANEL ARRAY
UPLIFT CALCULATION
4150 LBS / 116 CONNECTORS
(232 $\frac{5}{16}$ "X3-1/2" LAG BOLTS
2.5" MIN. EMBED) =36 LBS
83*18 = 1494 SQFT * 30PSF= 44820LBS
232* 2.5"*210LBS= 121800LBS

DISTRIBUTED LOAD CALCULATION
4150LBS. / 1494SQ. FT. = 2.77 PSF

NOTE:
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IS TO COMPLY WITH THE FOLLOWING:
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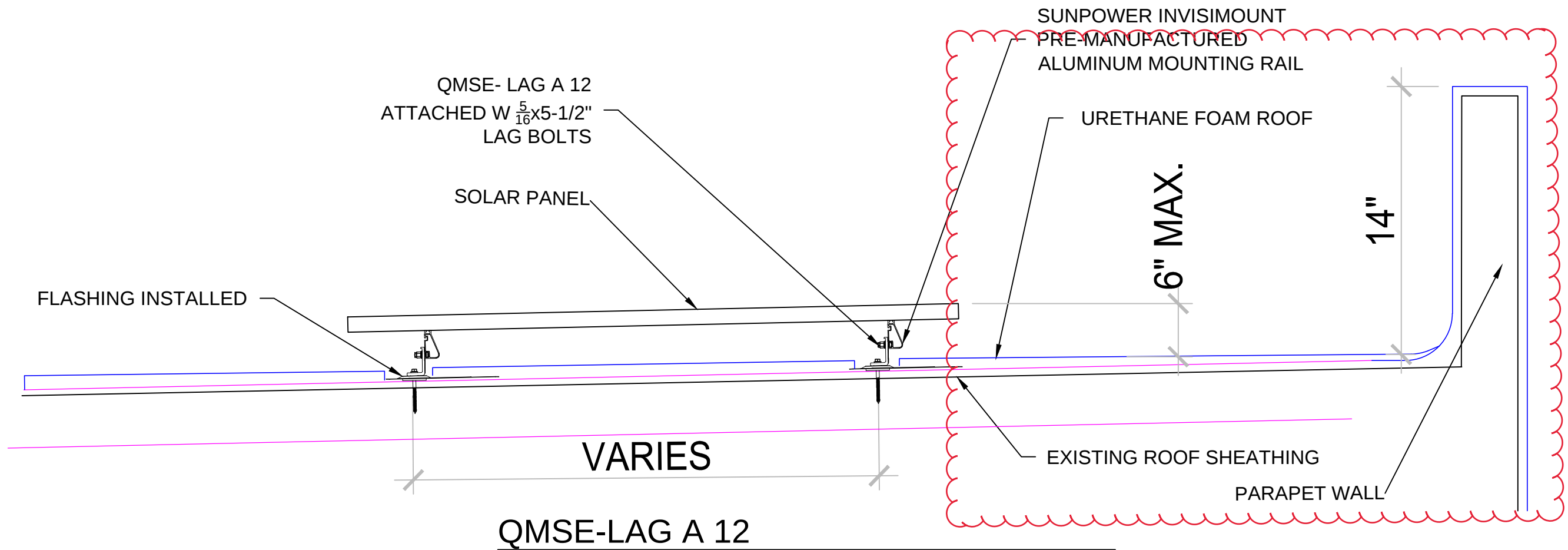
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DATE: 05-09-2018
SCALE: N.T.S. (AS NOTED)
AHJ: PARADISE VA SHEET:
UTILITY: APS
PV3



AZIMUTH = 0°
 MODULE TILT ANGLE = 0°

NOTE:
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 2011 NEC
 ALL DIMENSIONS ARE APPROXIMATE



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 GRID TIED
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 PV SYSTEM

PROJECT NAME:

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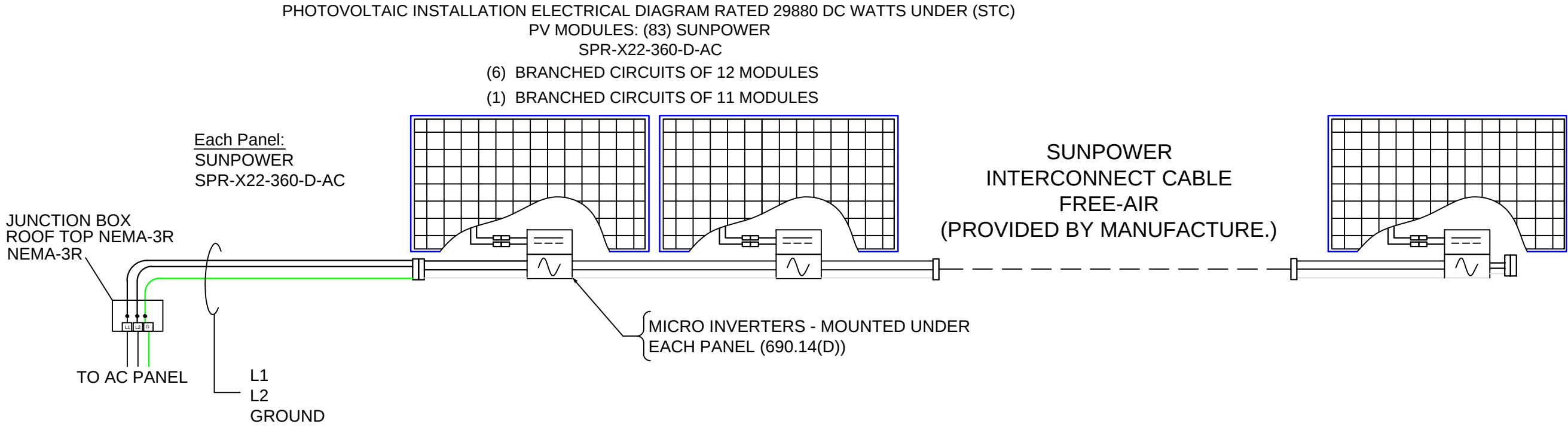
SCALE: N.T.S. (AS NOTED)

AHJ: PARADISE VA

SHEET:

UTILITY: APS

PV3b



NOTE:
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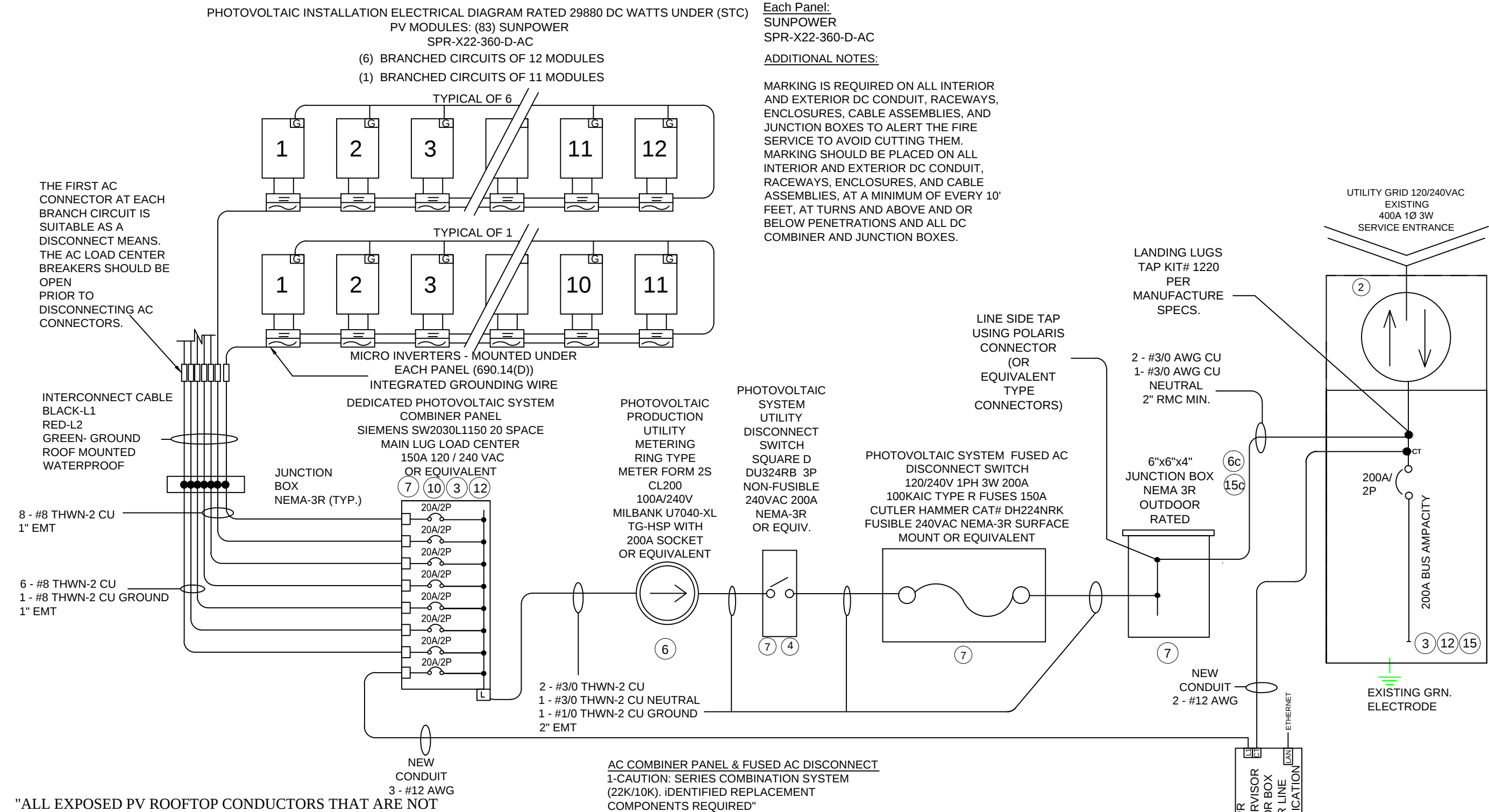
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AHJ: PARADISE VA SHEET:
UTILITY: **APS**

PV4



"ALL EXPOSED PV ROOFTOP CONDUCTORS THAT ARE NOT LOCATED UNDER THE ARRAY MODULES, SHALL INCLUDE LISTED JUNCTION BOXES AT BOTH ENDS OF THE RACEWAY TO TRANSITION FROM EXPOSED CONDUCTORS TO THE LISTED RACEWAYS. 2011 NEC ARTICLE 690.31(A) AND (B) EXCEPTION"



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29.880 DC KW
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GRID TIED
AC-MODULE
PV SYSTEM

PROJECT NAME:

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SCALE: N.T.S. (AS NOTED)

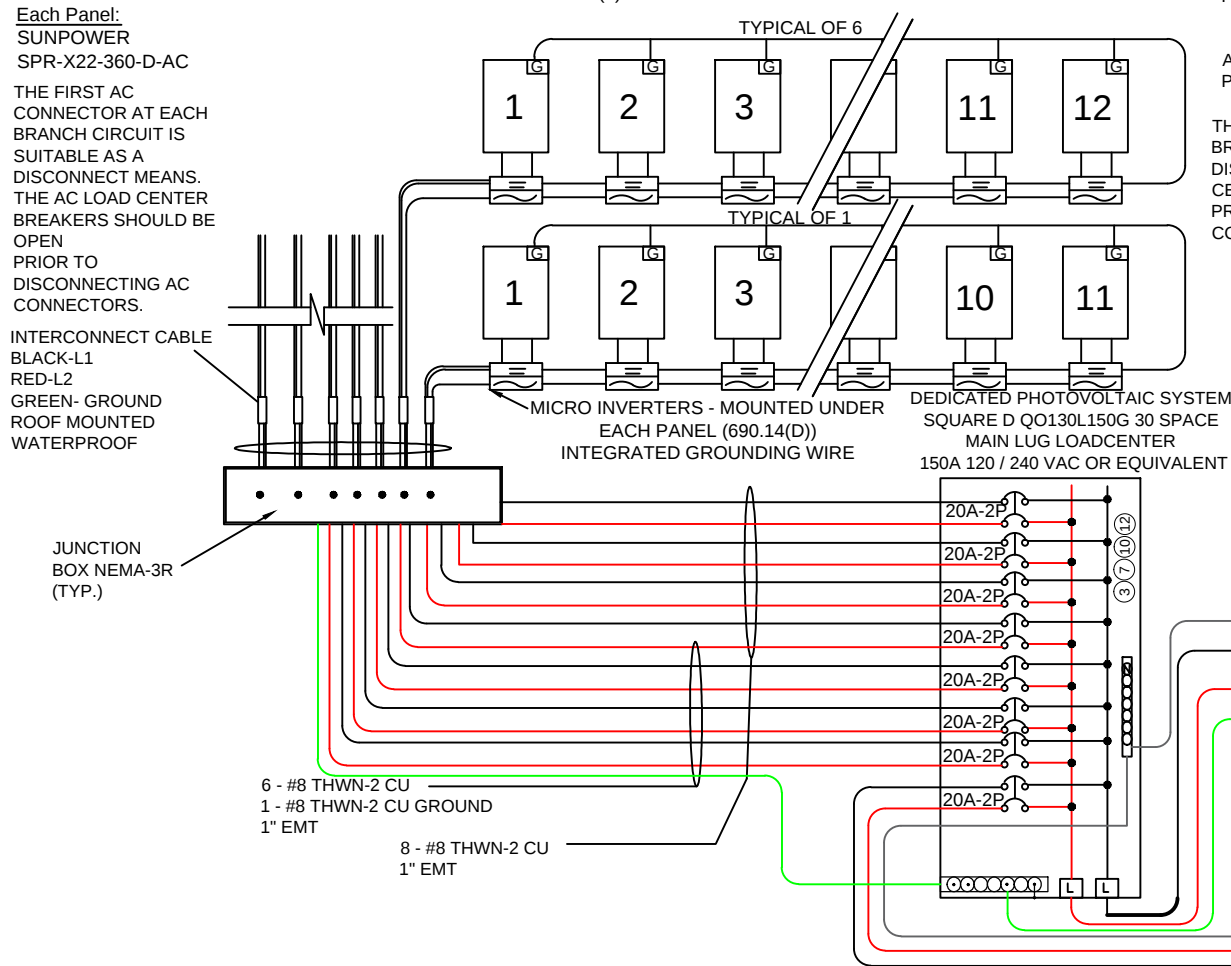
AHJ: PARADISE VA

UTILITY: APS

SHEET:
PV5

PHOTOVOLTAIC INSTALLATION ELECTRICAL DIAGRAM RATED 29880 DC WATTS UNDER (STC)
PV MODULES: (83) SUNPOWER
SPR-X22-360-D-AC

- (6) BRANCHED CIRCUITS OF 12 MODULES
(1) BRANCHED CIRCUITS OF 11 MODULES



Each Panel:
SUNPOWER
SPR-X22-360-C-AC

CONDUCTOR SIZING PER NEC TABLE
310.16
OVERCURRENT DEVICE SIZING
PER NEC 240.4(B) AND 240.6(A):

DC CALCS:
PER NEC 690.8(A)(1) AND (B)(1):
 $I_{sc} \times 1.25 \times 1.25$

AC CALCS:
PER NEC 690.8(A)(3) AND (B)(1):
 $I \times 1.25$
THE FIRST AC CONNECTOR AT EACH BRANCH CIRCUIT IS SUITABLE AS A DISCONNECT MEANS. THE AC LOAD CENTER BREAKERS SHOULD BE OPEN PRIOR TO DISCONNECTING AC CONNECTORS.

CONDUIT FILL CALC FOR #10AWG
.20 sq. in x 8 WIRES = 1.6 sq. in
1.6 sq. in / .40% = 4 sq. in

CONDUIT FILL CALC FOR #10AWG
.20 sq. in x 6 WIRES = 1.2 sq. in
1.2 sq. in / .40% = 3 sq. in

MODULE CALCS:
VOC x 1.12 CORRECTION FACTOR
 $69.5V \times 1.12 = 78V$

AC CALCS:
ISC x 1.25
 $1.33A \times (83) 110.39A \times 1.25 = 137.98A$

BREAKERS FOR SES PANEL:
 $1.33A \times (83) 110.39A \times 1.25 = 137.98A$
(150A BREAKER- 200A FUSED
DISCONNECT FOR THE LINE SIDE TAP)

BREAKERS FOR AC COMBINER PANEL:
TOTAL SYSTEM:
 $11 \times 1.33A = 14.63A \times 1.25 = 18.2A$
(20A BREAKER)
 $12 \times 1.33A = 15.96A \times 1.25 = 19.9A$
(20A BREAKER)

AC WIRE SIZING:
BETWEEN 150A LC > SES
#3/0 AWG THWN-2
TEMPERATURE DE-RATE @ 114-122F
PER NEC 310.16 90°C(194°F)
 $225A \times .71 = 159.75A > OK$

BETWEEN ARRAY > 150A LC
#8 AWG THWN-2
TEMPERATURE DE-RATE @ 114-122F
PER NEC 310.16 90°C(194°F)
 $55A \times 0.5 \times .71 = 19.5A > OK$

LINE SIDE TAP
USING POLARIS
CONNECTOR
(OR
EQUIVALENT
TYPE
CONNECTORS)

PHOTOVOLTAIC SYSTEM FUSED AC
DISCONNECT SWITCH
120/240V 1PH 3W 200A
100KAIC TYPE R FUSES 150A
CUTLER HAMMER CAT# DH224NRK
FUSIBLE 240VAC NEMA-3R SURFACE
MOUNT OR EQUIVALENT

FAULT CURRENT AT
PHOTOVOLTAIC SYSTEM
DISCONNECT SWITCH
FAULT CURRENT AT
TERMINAL 14035A

AC COMBINER PANEL & FUSED AC DISCONNECT
1-CAUTION: SERIES COMBINATION SYSTEM
(22K/10K). IDENTIFIED REPLACEMENT
COMPONENTS REQUIRED"

"ALL EXPOSED PV ROOFTOP CONDUCTORS THAT ARE NOT
LOCATED UNDER THE ARRAY MODULES, SHALL INCLUDE
LISTED JUNCTION BOXES AT BOTH ENDS OF THE RACEWAY
TO TRANSITION FROM EXPOSED CONDUCTORS TO THE
LISTED RACEWAYS. 2011 NEC ARTICLE 690.31(A) AND (B)
EXCEPTION"

SYSTEM SIZE:

29.880 DC KW
26.560 AC KW
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PV SYSTEM

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5678 E CHENEY DR
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AHJ: PARADISE VA

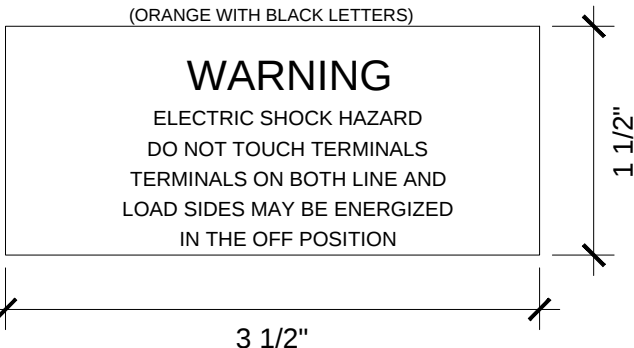
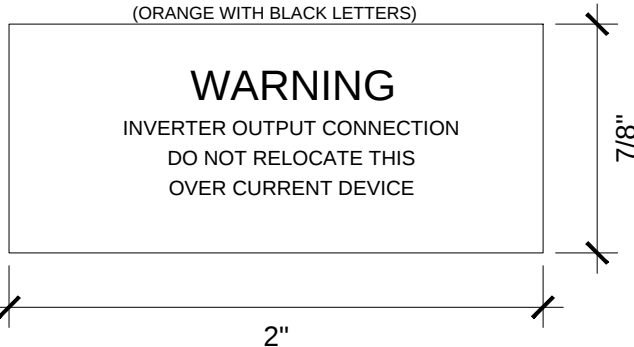
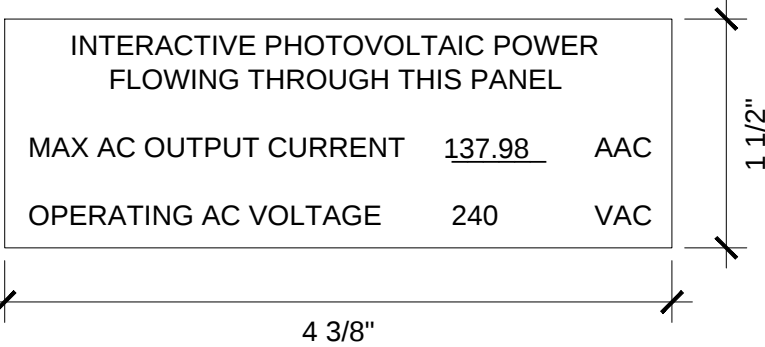
UTILITY: APS

SHEET:

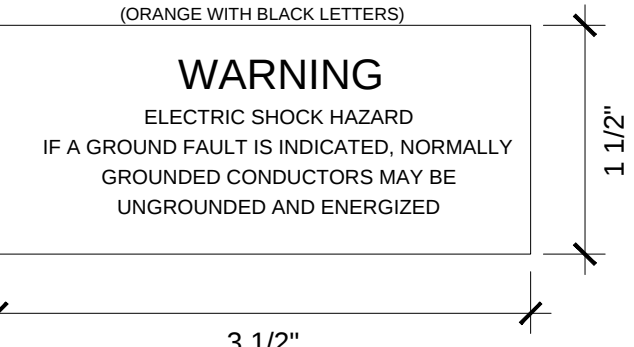
PV6

ALL LABELS TO BE ENGRAVED AND MECHANICALLY BONDED UNLESS OTHERWISE STATED

MAIN SERVICE PANEL

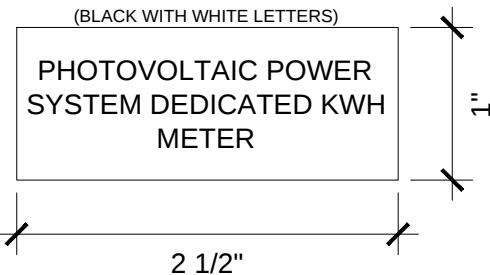


J-BOX

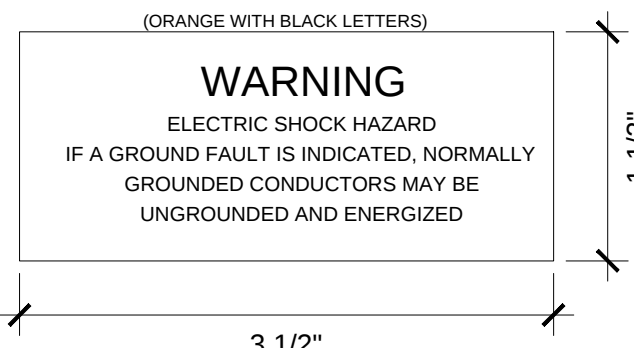
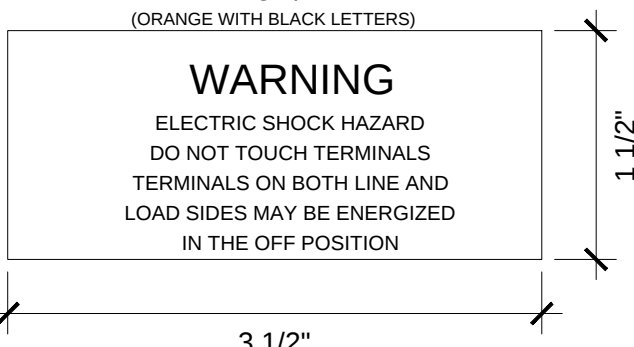
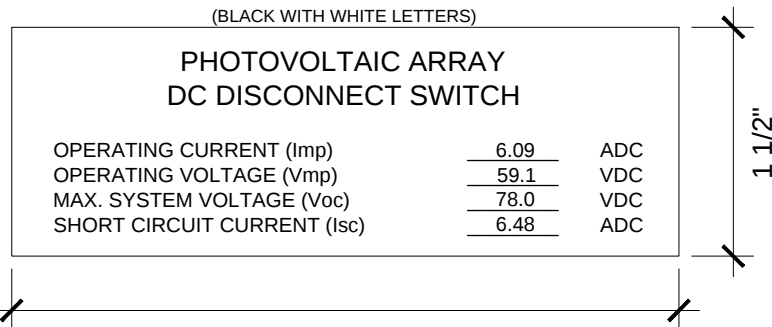


DEDICATED PV SYSTEM

KWH METER

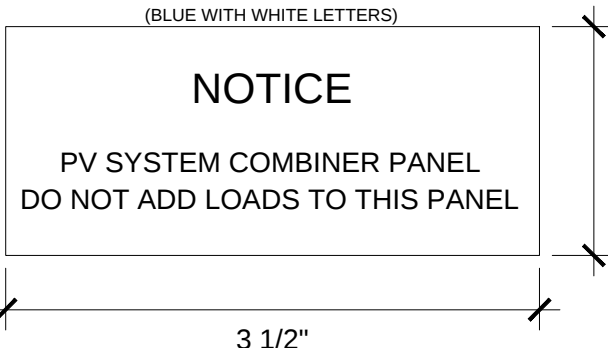


INVERTER

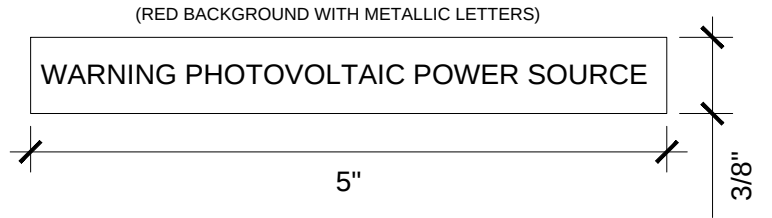


COMBINER PANEL

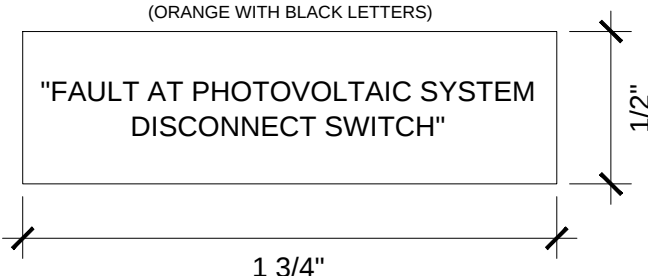
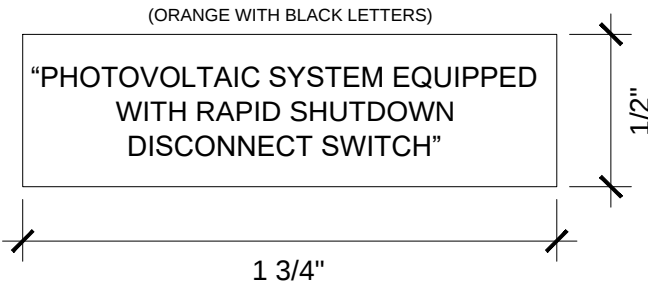
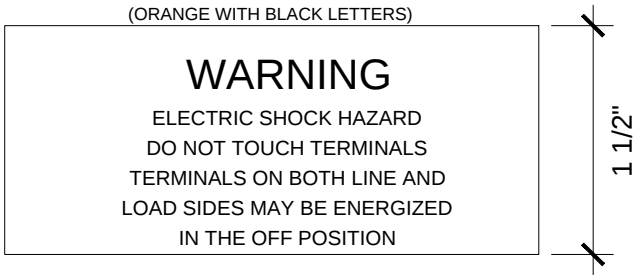
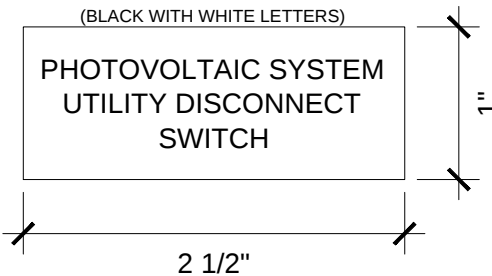
WHEN COMBINING TWO OR MORE INVERTERS



STICKER ON ALL DC CONDUIT



AC DISCONNECT



PV SOLAR LABEL REQUIREMENTS PER 2012 IFC SECTIONS 605.11.1.1 THUR 605.11.1.4 AND 2011 NEC ARTICLE 690.31(E)(3): "WARNING: PHOTOVOLTAIC POWER SOURCE" LABEL REQUIRES CAPITALIZATION LETTERS MIN. HEIGHT 3/8" INCH WHITE LETTERING ON RED BACKGROUND. LABEL MUST BE REFLECTIVE AND WEATHER RESISTANT. LABELS SHALL BE PLACED ON INTERIOR AND EXTERIOR DC CONDUIT, RACEWAYS, ENCLOSURES AND CABLE ASSEMBLIES EVERY 10', WITHIN 1' OF TURNS OR BENDS WITHIN 1' ABOVE AND BELOW PENETRATIONS OF ROOF/ CEILING ASSEMBLIES, WALLS OR BARRIERS.



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ROC: CR-11 249334

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26.560 AC KW
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AC-MODULE
PV SYSTEM

PROJECT NAME:

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5678 E CHENEY DR
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AZ 85253
APN: 169-02-017A

DRAWN BY: KG	
DATE: 05-09-2018	
SCALE: N.T.S. (AS NOTED)	
AHJ: PARADISE VA	SHEET:
UTILITY: APS	PV7

PHOTOVOLTAIC SYSTEM SHALL BE INSTALLED ACCORDING TO THE 2011 NATIONAL ELECTRIC CODE WITH REFERENCE TO THE FOLLOWING:
ARTICLE 690, AND SECTIONS 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122 TO INCLUDE REFERENCED SECTIONS AND TABLES
ALL EQUIPMENT PROVIDED SHALL BE LISTED BY AN INDEPENDENT TESTING AGENCY

PARTICULAR NOTE TO THE FOLLOWING:

- NEC 240.4(B)

DEVICES RATED 800 AMPERES OR LESS. THE NEXT HIGHER STANDARD OVERCURRENT DEVICE RATING (ABOVE THE AMPACITY OF THE CONDUCTORS BEING PROTECTED) SHALL BE PERMITTED TO BE USED IF: 1) THE CONDUCTORS BEING PROTECTED ARE NOT PART OF A MULTIOUTLET BRANCH CIRCUIT SUPPLYING RECEPTACLES FOR CORD-AND-PLUG-CONNECTED PORTABLE LOADS. 2) THE AMPACITY OF THE CONDUCTORS DOES NOT CORRESPOND WITH THE STANDARD AMPERE RATING OF A FUSE OR A CIRCUIT BREAKER WITHOUT OVERLOAD TRIP ADJUSTMENTS ABOVE ITS RATING. 3) THE NEXT HIGHER STANDARD RATING SELECTED DOES NOT EXCEED 800 AMPERES.
- NEC 240.6(A)

FUSES AND FIXED-TRIP CIRCUIT BREAKERS. THE STANDARD AMPERE RATINGS FOR FUSES AND INVERSE TIME CIRCUIT BREAKERS SHALL BE CONSIDERED: 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110,125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500, 600, 700, 800, 1000, 1200, 1600, 2000, 2500, 3000, 4000, 5000, 6000 AMPERES.
- NEC 240.64(C)
NEC 250.160
AND PART VII

GROUNDING ELECTRODE CONDUCTOR BE CONTINUOUS, GROUND CRIMPS TO BE IRREVERSIBLE
- NEC 250.97

FOR CIRCUITS OVER 250 VOLTS TO GROUND, THE ELECTRICAL CONTINUITY OF METAL RACEWAYS AND CABLES WITH METAL SHEATHS THAT CONTAIN ANY CONDUCTOR OTHER THAN SERVICE CONDUCTORS SHALL BE ENSURED BY ONE OR MORE OF THE METHODS SPECIFIED FOR SERVICES IN 250.90(B), EXCEPT OR (B)(1).
- NEC 422.30

DISCONNECTING MEANS
- NEC 422.60

NAMEPLATE MARKING
- NEC 422.62(B)

ADDITIONAL NAMEPLATE MARKING
- NEC 690.4(C)

MODULE CONNECTION ARRANGEMENT SHALL BE ARRANGED SO THAT REMOVAL OF A MODULE OR PANEL FROM A PHOTOVOLTAIC SOURCE CIRCUIT DOES NOT INTERRUPT A GROUNDED CONDUCTOR TO ANOTHER PHOTOVOLTAIC SOURCE CURRENT
- NEC 690.5

GROUND-FAULT PROTECTION
- NEC 690.7(D)

....OUTPUT CIRCUITS OVER 150 VOLTS TO GROUND SHALL NOT BE ACCESSIBLE TO OTHER THAN QUALIFIED PERSONS WHILE ENERGIZED.
- NEC 690.8(A)(1)

PHOTOVOLTAIC SOURCE CIRCUIT CURRENTS. THE MAXIMUM CURRENT SHALL BE THE SUM OF THE PARALLEL MODULE RATED SHORT-CIRCUIT CURRENTS MULTIPLIED BY 125 PERCENT.
- NEC 690.8(A)(3)

INVERTER OUTPUT CIRCUIT CURRENT. THE MAXIMUM CURRENT SHALL BE THE INVERTER CONTINUOUS OUTPUT CURRENT RATING.
- NEC 690.8(B)(1)

SIZING OF CONDUCTORS AND OVERCURRENT DEVICES. THE CIRCUIT CONDUCTORS AND OVERCURRENT DEVICES SHALL BE SIZED TO CARRY NOT LESS THAN 125 PERCENT OF THE MAXIMUM CURRENTS AS CALCULATED IN 690.8(A). THE RATING OR SETTING OF OVERCURRENT DEVICES SHALL BE PERMITTED IN ACCORDANCE WITH 240.4(B) AND (C).
- NEC 690.17

PV SYSTEM DISCONNECT SHALL BE SIGNED LABELED:
WARNING - ELECTRICAL SHOCK HAZARD
TERMINALS ON BOTH LINE AND LOAD SIDES
MAY BE ENERGIZED IN THE OPEN POSITION
- NEC 690.14(C)(2)

PV SYSTEM DISCONNECT SHALL BE PERMANENTLY MARKED AS A "PHOTOVOLTAIC SYSTEM DISCONNECT"

- NEC 690.33

(A) CONFIGURATION
(B) INTERRUPTION OF CIRCUIT
(C) CONNECTORS SHALL BE OF THE LOCKING OR LATCHING TYPE
(E) LABELED "DO NOT OPEN UNDER LOAD"
- NEC 690.53

PERMANENT LABEL FOR DIRECT-CURRENT PHOTOVOLTAIC POWER SOURCE AT DISCONNECTING MEANS
RATED MAXIMUM POWER-POINT CURRENT
RATED MAXIMUM POWER-POINT VOLTAGE
MAXIMUM SYSTEM VOLTAGE [REF: 690.7 (A)]
SHORT-CIRCUIT CURRENT [REF: 690.8 (A)]
MAXIMUM RATED OUTPUT CURRENT OF THE CHARGE CONTROLLER [IF INSTALLED]
- NEC 690.56(B)

PERMANENT LABEL/PLAQUE: [SOURCE/LABEL]
PV SYSTEM DISCONNECT / REF: NEC690.14 (C) (2)
UTILITY SERVICE PANEL / "UTILITY SERVICE DISCONNECT"
- NEC 690.64(B)(5)

CIRCUIT BREAKERS, IF BACKFED, SHALL BE SUITABLE FOR SUCH OPERATION
- NEC 705.10

A PERMANENT PLAQUE OR DIRECTORY, DENOTING ALL ELECTRIC POWER SOURCES ON OR IN THE PREMISES, SHALL BE INSTALLED AT EACH SERVICE EQUIPMENT LOCATION AND AT LOCATIONS OF ALL ELECTRIC POWER PRODUCTION SOURCES CAPABLE OF BEING INTERCONNECTED. EXCEPTION: INSTALLATIONS WITH LARGE NUMBERS OF POWER PRODUCTION SOURCES SHALL BE PERMITTED TO BE DESIGNATED BY GROUPS
- NEC TABLE 250.66

SIZE OF ALTERNATING-CURRENT GROUNDING ELECTRODE CONDUCTOR. THE SIZE OF THE GROUNDING ELECTRODE CONDUCTOR AT THE SERVICE, AT EACH BUILDING OR STRUCTURE WHERE SUPPLIED BY A FEEDER(S) OR BRANCH CIRCUIT(S), OR AT A SEPARATELY DERIVED SYSTEM OF A GROUNDED OR UNGROUNDED AC SYSTEM SHALL NOT BE LESS THAN GIVEN IN TABLE 250.66, EXCEPT AS PERMITTED IN 250.66(A) THROUGH (C).
- NEC TABLE 310.16

ALLOWABLE AMPACITIES OF INSULATED CONDUCTORS RATED 0 THROUGH 2000 VOLTS, 60°C THROUGH 90°C, NOT MORE THAN THREE CURRENT-CARRYING CONDUCTORS IN RACEWAY, CABLE, OR EARTH, BASED ON AMBIENT TEMPERATURE OF 30°C. NOTE CORRECTION FACTORS FOR AMBIENT TEMPERATURE AT END OF TABLE.

NOTE:
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2011 NEC
ALL DIMENSIONS ARE APPROXIMATE

Arizona

Solar Concepts

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AHJ: PARADISE VA SHEET:
UTILITY:APS
PV8

- (A) FOR MINIMUM DISTANCE FROM CONDUIT TO ROOFTOP FOR AMBIENT TEMP. DERATING FACTOR. 2011 NEC TABLE 310.15(B)(3)(c). ABOVE 13mm(.5in)-90mm(3.5in) 40°f
- (B) ALL ELECTRICAL EQUIPMENT TERMINATIONS TO BE MIN. 75°c RATED FOR AMBIENT TEMP. CALCULATION 2011 NEC ARTICAL 110.14(C)(1) & TABLE 310.15(B)(16).
- (1) EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE 2011 NEC AND ALL APPLICABLE REQUIREMENTS OF THE SERVING ELECTRICAL UTILITY COMPANY AND OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- (2) BI-DIRCTIONAL UTILITY METER TO BE INSTALLED BY UTLITY COMPANY (WHEN REQUIRED).
- (3) LABEL BREAKER "PHOTOVOLTAIC ELECTRIC POWER SOURCE". PER NEC 705.10 AND "BREAKERS ARE BACKFED" PER NEC 690.64(B)(5). LABEL WITH THE MAXIMUM AC OUTPUT OPERATING CURRENT AND THE OPERATING VOLTAGE PER NEC 690.54.
- (4) LABEL "PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH". SWITCH COVER TO BE LOCKED AT ALL TIMES. SWITCH TO BE VISUAL OPEN AND ACCESSIBLE PER UTILITY REQUIREMENTS AND CONFORM TO NEC 705.22.
- (5) LABEL "PHOTOVOLTAIC POWER SYSTEM DEDICATED KWH METER". METER ENCLOSURE AND SOCKET PROVIDED AND INSTALLED BY CUSTOMER PER APS ESRM. METER PROVIDED BY CUSTOMER.
- (6) LABEL "PHOTOVOLTAIC POWER SYSTEM DEDICATED KWH METER". METER ENCLOSURE AND SOCKET PROVIDED AND INSTALLED BY CUSTOMER PER APS ESRM. METER PROVIDED BY CUSTOMER.
- (6b) A PLACARD OR DIRECTORY IS INSTALLED AT THE SERVICE ENTRANCE WITH EXPLICIT DIRECTIONS TO THE LOCATION OF THE PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH AS REQUIRED BY APS.
- (6c) GROUNDING BUSHINGS AT EVERY ENTRY AND EXIT POINT TO 10 ENCLOSURES WITH RMC
- (6d) SUPPLY SIDE CONNECTION IS INSTALLED PER NEC 230, APS ESRM, AND APS INTERCONNECTION REQUIREMENTS. LABEL " PHOTOVOLTAIC SYSTEM SERVICE DISCONNECT SWITCH". SWITCH COVER TO BE LOCKED AT ALL TIMES.
- (7a) A PERMANENT PLACARD OR DIRECTORY IS INSTALLED PER NEC 705.10.
- (7) PROVIDE WARNING SIGN PER NEC 690.17 READING "WARNING-ELECTRICAL SHOCK HAZARD- DO NOT TOUCH TERMINALS- TERMINALS ON BOTH LINE AND LOCAD SIDES MAY BE ENGERIZED IN THE OFF POSITION".
- (8) LISTING AGENCY NAMES AND NUMBERS TO BE INDICATED ON POWER INVERTER AND SOLAR MODULES PER NEC 110.3(b).
- (9) METALLIC CONDUIT SHALL BE USED WITHIN BUILDING PER NEC 690.31(E).
- (10) LABEL "DEDICATED PHOTOVOLTAIC SYSTEM COMBINER PANEL" AND " LOADS NOT TO BE ADDED TO THIS PANEL.
- (11) GEC TO BE INSTALL AS REQUIRED BY MANUFACTURER INSTRUCTIONS AND NEC 690.47
- (12) PER NEC 690.64 B.2: THE SUM OF THE AMPERE RATINGS OF OVERCURRENT DEVICES IN CIRCUITS SUPPLYING POWER TO THE BUS BAR SHALL NOT EXCEED 120% THE RATING OF THE BUS BAR OR CONDUCTOR FOR A DWELLING UNIT.
- (13) THE PV PANELS AND THE INVERTERS REQUIRE NEGATIVE GROUNDING PER MANUFACTURE'S INSTRUCTIONS.
- (14) ANTI-ISLANDING PROTECTION ENSURES THE SYSTEM WILL NOT EXPORT POWER INTO A BALANCED 60 Hz RESONANT LOAD WHILE THE UTILITY IS DISCONNECTED.
- (15) PER NEC 690.64(B)(7): UNLESS THE PANELBOARD IS RATED NOT LESS THAN THE SUM OF THE AMPERE RATINGS OF ALL OVERCURRENT DEVICES SUPPLYING IT, A CONNECTION IN A PANELBOARD SHALL BE POSITIONED AT THE OPPOSITE (LOAD) END FROM THE INPUT FEEDER LOCATION OR MAIN CIRCUIT LOCATION. THE BUS OR CONDUCTOR RATING SHALL BE SIZED FOR THE LOADS CONNECTED IN ACCORDANCE WITH ARTICLE 220. A PERMANENT WARNING LABEL SHALL BE APPLIED TO THE DISTRIBUTION EQUIPMENT WITH THE FOLLOWING OR EQUIVALENT MARKING: "WARNING INVERTER OUTPUT CONNECTION DO NOT RELOCATE THIS OVERCURRENT DEVICE"
- (15b) LABEL "WARNING - A GENERATION SOURCE IS CONNECTED TO THE SUPPLY (UTILITY) SIDE OF THE SERVICE DISCONNECTING MEANS. FOLLOW PROPER LOCKOUT/ TAGOUT PROCEDURES TO ENSURE THE PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH IS OPENED PRIOR TO PERFORMING WORK ON THIS DEVICE."
- (15c) SUPPLY SIDE CONNECTION IS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DOCUMENTATION IS INCLUDED WITH THE APS INTERCONNECTION APPLICATION. ENSURE UL LISTED CONNECTORS

NOTE:
ALL CONSTRUCTION / INSTALLATION IS TO COMPLY WITH THE FOLLOWING:
2012 IRC,IBC,IFC
2011 NEC
ALL DIMENSIONS ARE APPROXIMATE



2317 W. HUNTINGTON DRIVE
TEMPE, AZ 85282 (480) 446-3600
ROC: CR-11 249334

SYSTEM SIZE:

29.880 DC KW
26.560 AC KW
GRID TIED
AC-MODULE
PV SYSTEM

PROJECT NAME:

SCHLUTER, ROBERT
RESIDENCE
5678 E CHENEY DR
PARADISE VALLEY,
AZ 85253
APN: 169-02-017A

DRAWN BY: KG	
DATE: 05-09-2018	
SCALE: N.T.S. (AS NOTED)	
AHJ: PARADISE VA	SHEET:
UTILITY: APS	PV9

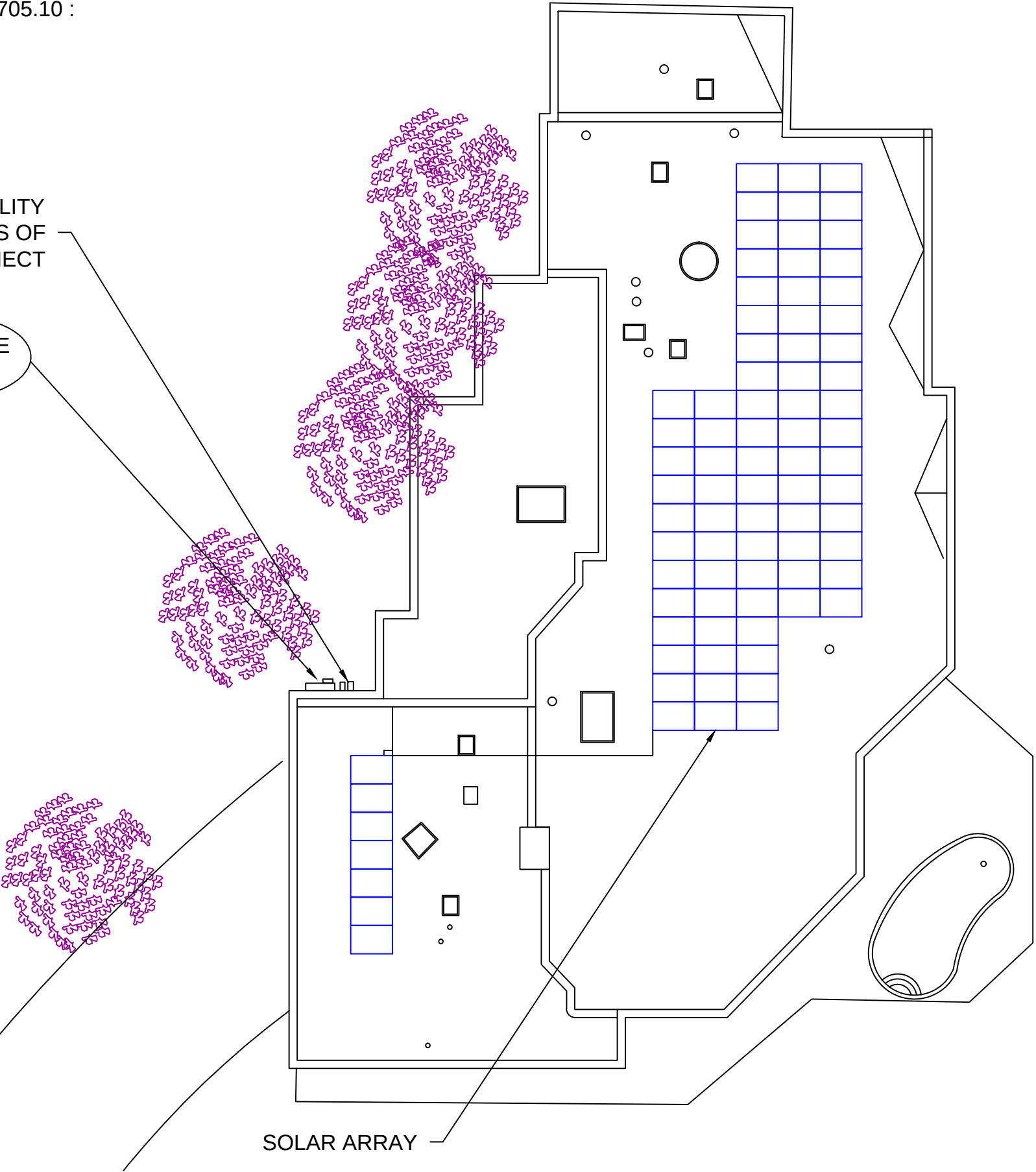
CAUTION

POWER TO THIS BUILDING IS ALSO SUPPLIED FROM
THE FOLLOWING SOURCES WITH DISCONNECT(S)
LOCATED AS SHOWN PER NEC 705.10 :

PLAQUE DIMENSION 6"x 8"

SERVICE POINT UTILITY
METERING, MEANS OF
AC DISCONNECT

YOU ARE
HERE




2317 W. HUNTINGTON DRIVE
TEMPE, AZ 85282

