2.1.1 **SITE NOTES**

2.1.2 A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.

2.1.3 THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS AN UTILITY INTERACTIVE SYSTEM WITH NO STORAGE BATTERIES.

2.1.4 THE SOLAR PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.

2.1.5 PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION [NEC 110.26]

2.1.6 ALTERNATE POWER SOURCE PLACARD SHALL BE PLASTIC, ENGRAVED IN A CONTRASTING COLOR TO THE PLAQUE. THIS PLAQUE WILL BE ATTACHED USING AN APPROVED METHOD. IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANT. ALL PLAQUES AND SIGNAGE WILL BE INSTALLED AS REQUIRED BY THE NEC.

2.1.7 THE GROUNDING ELECTRODE CONDUCTOR SHALL BE PROTECTED FROM PHYSICAL DAMAGE BETWEEN THE GROUNDING ELECTRODE AND THE PANEL (OR INVERTER) IF SMALLER THAN #6 AWG COPPER WIRE PER NEC 250-64B. THE GROUNDING ELECTRODE CONDUCTOR WILL BE CONTINUOUS, EXCEPT FOR SPLICES OR JOINTS AT BUSBARS WITHIN LISTED EQUIPMENT PER [NEC 250.64C.]

2.1.8 ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF COVERING SHALL SERVE TO PROTECT THE BUILDING OR STRUCTURE.

2.1.9 RIGID CONDUIT (AND/OR NIPPLES) MUST HAVE A PULL BUSHING TO PROTECT WIRES.

2.1.10 BOLTED CONNECTION REQUIRED IN DC DISCONNECTS ON THE WHITE GROUNDED CONDUCTOR (USE POLARIS BLOCK OR NEUTRAL BAR)

2.1.11 ANY CONNECTION ABOVE LIVE PARTS MUST BE WATERTIGHT. REDUCING WASHERS DISALLOWED ABOVE LIVE PARTS, MEYERS HUBS RECOMMENDED

2.2.1 **SOLAR CONTRACTOR**

2.2.2 MODULE CERTIFICATIONS WILL INCLUDE UL1703, IEC61646, IEC61730.

2.2.3 IF APPLICABLE, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE MARKED GROUNDING LUG HOLES PER THE MANUFACTURERS' INSTALLATION REQUIREMENTS.

2.2.4 AS INDICATED BY DESIGN, OTHER NRTL LISTED MODULE GROUNDING DEVICES MAY BE USED IN PLACE OF STANDARD GROUNDING LUGS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ.

2.2.5 CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING AS REQUIRED BY FIELD CONDITIONS.

2.2.6 CONDUIT POINT OF PENETRATION FROM EXTERIOR TO INTERIOR TO BE INSTALLED AND SEALED WITH A SUITABLE SEALING COMPOUND.

2.2.7 DC WIRING LIMITED TO MODULE FOOTPRINT W/ ENPHASE AC SYSTEM.

2.2.8 ENPHASE WIRING SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY W/ SUITABLE WIRING CLIPS.

2.2.9 MAX DC VOLTAGE CALCULATED USING MANUFACTURER PROVIDED TEMP COEFFICIENT FOR VOC UNLESS NOT AVAILABLE.

2.2.10 ALL INVERTERS, MOTOR GENERATORS, PHOTOVOLTAIC MODULES, PHOTOVOLTAIC PANELS, AC PHOTOVOLTAIC MODULES, SOURCE CIRCUIT COMBINERS, AND CHARGE CONTROLLERS INTENDED FOR USE IN A PHOTOVOLTAIC POWER SYSTEM WILL BE IDENTIFIED AND LISTED FOR THE APPLICATION PER 690.4 (D).

2.2.11 ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE.

2.3.1 **EQUIPMENT LOCATIONS**

2.3.2 ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY [NEC 110.26].

2.3.3 EQUIPMENT INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY [NEC 690.31 (A)-(B)] AND [NEC TABLE 310.15 (B)(2)(C)].

2.3.4 ADDITIONAL AC DISCONNECTS SHALL BE PROVIDED WHERE THE INVERTER IS NOT ADJACENT TO THE UTILITY AC DISCONNECT, OR NOT WITHIN SIGHT OF THE UTILITY AC DISCONNECT.

2.3.5 ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL ACCORDING TO NEC APPLICABLE CODES.

2.3.6 ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE.

2.4.1 **WIRING & CONDUIT NOTES**

2.4.2 ALL CONDUIT SIZES AND TYPES, SHALL BE LISTED FOR ITS PURPOSE AND APPROVED FOR THE SITE APPLICATIONS

2.4.3 ALL PV CABLES AND HOMERUN WIRES BE #10AWG *USE-2, PV WIRE, OR PROPRIETARY SOLAR CABLING SPECIFIED BY MFR, OR EQUIVALENT; ROUTED TO SOURCE CIRCUIT COMBINER BOXES AS REQUIRED

2.4.4 ALL CONDUCTORS AND OCPD SIZES AND TYPES SPECIFIED ACCORDING TO [NEC 690.8 (A)(1) & (B)(1)], [NEC 240] [NEC 690.7] FOR MULTIPLE CONDUCTORS

2.4.5 ALL PV DC CONDUCTORS IN CONDUIT EXPOSED TO SUNLIGHT SHALL BE DERATED ACCORDING TO [NEC TABLE 310.15 (B)(2)(C)] BLACK ONLY**

2.4.6 EXPOSED ROOF PV DC CONDUCTORS SHALL BE USE-2, 90°C RATED, WET AND UV RESISTANT, AND UL LISTED RATED FOR 600V, UV RATED SPIRAL WRAP SHALL BE USED TO PROTECT WIRE FROM SHARP EDGES

2.4.7 PHASE AND NEUTRAL CONDUCTORS SHALL BE DUAL RATED THHN/THWN-2 INSULATED, 90°C RATED, WET AND UV RESISTANT, RATED FOR 600V PER NEC 2008 OR 1000V PER NEC 2011

2.4.8 4-WIRE DELTA CONNECTED SYSTEMS HAVE THE PHASE WITH THE HIGHER VOLTAGE TO GROUND MARKED ORANGE OR IDENTIFIED BY OTHER EFFECTIVE MEANS

2.4.9 ALL SOURCE CIRCUITS SHALL HAVE INDIVIDUAL SOURCE CIRCUIT PROTECTION

2.4.10 VOLTAGE DROP LIMITED TO 2% FOR DC CIRCUITS AND 1% FOR AC CIRCUITS

2.4.11 NEGATIVE GROUNDED SYSTEMS DC CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS: DC POSITIVE - RED (OR MARKED RED), DC NEGATIVE - GREY (OR MARKED GREY)

2.4.12 POSITIVE GROUNDED SYSTEMS DC CONDUCTORS COLOR CODED: DC POSITIVE - GREY (OR MARKED GREY), DC NEGATIVE - BLACK (OR MARKED BLACK)

2.4.13 AC CONDUCTORS >4AWG COLOR CODED OR MARKED: PHASE A OR L1- BLACK, PHASE B OR L2- RED, PHASE C OR L3- BLUE, NEUTRAL- WHITE/GRAY

*USE-2 IS NOT INDOOR RATED BUT PV CABLE IS RATED THWN/THWN-2 AND MAY BE USED INSIDE
**USE-2 IS AVAILABLE AS UV WHITE

2.5.1 **STRUCTURAL NOTES:**

2.5.2 RACKING SYSTEM & PV ARRAY SHALL BE INSTALLED ACCORDING TO CODE-COMPLIANT INSTALLATION MANUAL.

2.5.3 ROOF MOUNTED STANDARD RAIL REQUIRES ONE THERMAL EXPANSION GAP FOR EVERY RUN OF RAIL GREATER THAN 40'.

2.5.4 ARRAY SHALL BE A MIN. HEIGHT OF 3" ABOVE THE COMPOSITION ROOF.

2.5.5 JUNCTION BOX SHALL BE INSTALLED PER MANUFACTURERS' SPECIFICATIONS. IT SHALL BE FLASHED & SEALED PER LOCAL REQUIREMENTS.

2.5.6 ROOFTOP PENETRATIONS PERTAINING TO SOLAR RACKING WILL BE COMPLETED AND SEALED W/ APPROVED CHEMICAL SEALANT PER CODE BY A LICENSED CONTRACTOR.

2.5.7 ALL PV RELATED RACKING ATTACHMENTS WILL BE SPACED NO GREATER THAN THE SPAN DISTANCE SPECIFIED BY THE RACKING MANUFACTURER. O.C. FINAL ATTACHMENT LOCATIONS MAY BE ADJUSTED IN THE FIELD AS NECESSARY.

2.5.8 ALL PV RELATED RACKING ATTACHMENTS SHALL BE STAGGERED BY ROW AMONGST THE ROOF FRAMING MEMBERS.

2.6.1 **GROUNDING NOTES**

2.6.2 A GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH [NEC 690-47] AND [NEC 250-50] THROUGH [NEC 60 250-166] SHALL BE PROVIDED. PER NEC, GROUNDING ELECTRODE SYSTEM OF EXISTING BUILDING MAY BE USED AND BONDED TO AT THE SERVICE ENTRANCE. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, OR IS ONLY METALLIC WATER PIPING, A SUPPLEMENTAL GROUNDING ELECTRODE WILL BE USED AT THE INVERTER LOCATION CONSISTING OF A UL LISTED 8 FT GROUND ROD WITH ACORN CLAMP.

2.6.3 GROUNDING ELECTRODE CONDUCTORS SHALL BE NO LESS THAN #8 AWG AND NO GREATER THAN #6 AWG COPPER AND BONDED TO THE EXISTING GROUNDING ELECTRODE TO PROVIDE FOR A COMPLETE SYSTEM.

2.6.4 PV SYSTEM SHALL BE GROUNDED IN ACCORDANCE TO [NEC 250.21], [NEC TABLE 250.122], AND ALL METAL PARTS OR MODULE FRAMES ACCORDING TO [NEC 690.43].

2.6.5 MODULE SOURCE CIRCUITS SHALL BE GROUNDED IN ACCORDANCE TO [NEC 690.42].

2.6.6 THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDED CONDUCTOR TO ANOTHER MODULE.

2.6.7 EACH MODULE WILL BE GROUNDED USING THE SUPPLIED CONNECTIONS POINTS IDENTIFIED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

2.6.8 ENCLOSURES SHALL BE PROPERLY PREPARED WITH REMOVAL OF PAINT/FINISH AS APPROPRIATE WHEN GROUNDING EQUIPMENT WITH TERMINATION GROUNDING LUGS.

2.6.9 GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVISES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR DIRECT BURIAL.

2.6.10 GROUNDING AND BONDING CONDUCTORS SHALL BE COPPER, SOLID OR STRANDED, AND BARE WHEN EXPOSED.

2.6.11 EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZE ACCORDING TO [NEC 690.45] AND BE A MINIMUM OF #10AWG WHEN NOT EXPOSED TO DAMAGE (#6AWG SHALL BE USED WHEN EXPOSED TO DAMAGE).

2.6.12 GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLOR CODED GREEN (OR MARKED GREEN IF #4 AWG OR LARGER)

2.6.13 ALL CONDUIT BETWEEN THE UTILITY AC DISCONNECT AND THE POINT OF CONNECTION SHALL HAVE GROUNDED BUSHINGS AT BOTH ENDS.

2.6.14 AC SYSTEM GEC SIZED ACCORDING TO [NEC 690.47], [NEC TABLE 250.66], DC SYSTEM GEC SIZED ACCORDING TO [NEC 250.166], MINIMUM #8AWG WHEN INSULATED, #6AWG WHEN EXPOSED TO DAMAGE.

2.6.15 EXPOSED NON-CURRENT CARRYING METAL PARTS OF MODULE FRAMES, EQUIPMENTS, AND CONDUCTOR ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH 250.134 OR 250.136(A) REGARDLESS OF VOLTAGE.

2.7.1 **INTERCONNECTION NOTES**

2.7.2 PV DEDICATED BACKFEED BREAKERS MUST BE LOCATED AT THE OPPOSITE END OF THE BUS FROM THE MAIN SERVICE BREAKER OR TRANSFORMER INPUT FEEDER IN ACCORDANCE WITH [NEC 690.64(B)(7)]

2.7.3 SUM OF BREAKER RATINGS SUPPLYING THE BUS MAY NOT EXCEED 120% OF THE THE BUSBAR RATING PER [NEC 690.64(B)(2)] AND/OR [NEC 705.12(D)(1).

2.7.4 GROUND FAULT PROTECTION IN ACCORDANCE WITH [NEC 215.9] & [NEC 230.95] ALL EQUIPMENT TO BE RATED FOR BACKFEEDING.

2.7.5 SUPPLY SIDE INTERCONNECTION ACCORDING TO [NEC 690.64(A)] AND/OR [NEC 705.12(A)] WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH [NEC 230.42(B)]

2.7.6 MICROINVERTER BRANCHES SHALL BE CONNECTED TO A SINGLE BREAKER OCPD IN ACCORDANCE WITH [NEC 110.3(B)].

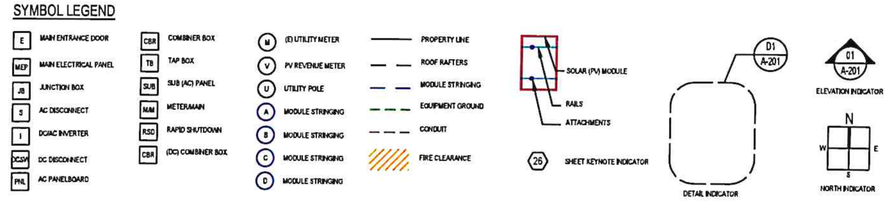
2.8.1 **DISCONNECT NOTES**

2.8.2 DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING LIVE ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS)

2.8.3 AC DISCONNECT MUST BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH

2.8.4 DC CURRENT CONDUCTORS ARE TO REMAIN OUTSIDE OF BUILDING PRIOR TO EITHER A FUSEABLE SOURCE CIRCUIT COMBINER BOX OR A LOAD-BREAK DISCONNECTING DEVICE

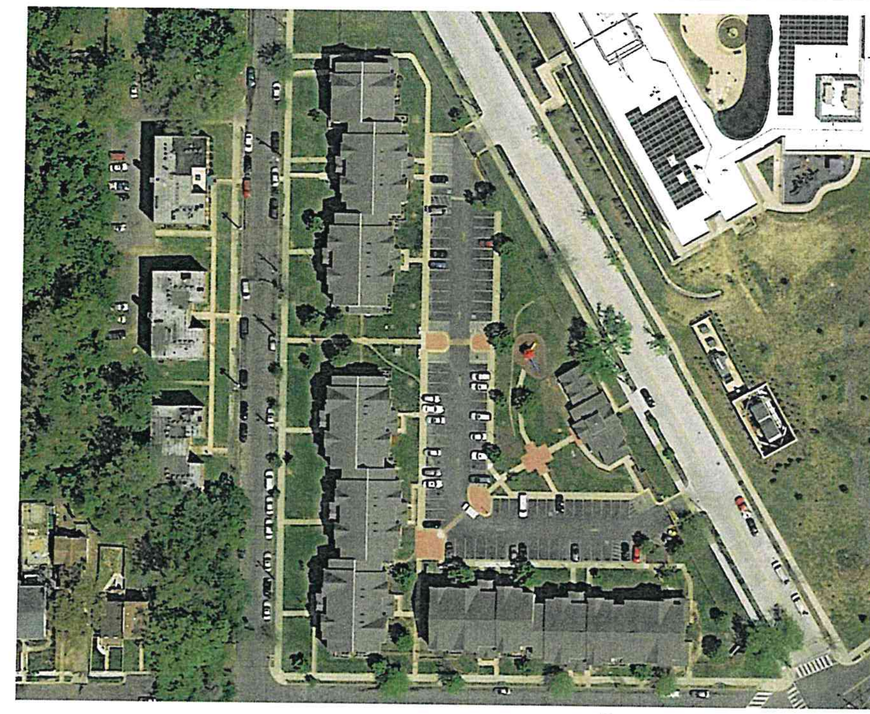
SYMBOL LEGEND



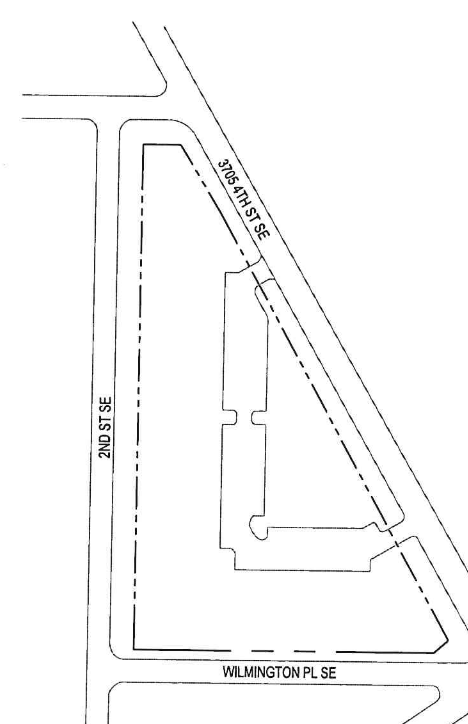
DISCLAIMER: PLEASE NOTE THAT THE ABBREVIATIONS, ANNOTATIONS, AND SYMBOLS LISTED ARE INTENDED TO ILLUSTRATE THOSE THAT ARE COMMONLY USED, NOT ALL ARE NECESSARILY UTILIZED WITHIN THIS SET OF DRAWINGS.

NEW PV SYSTEM: 354.255 kWp (DC): 316.600 kWp (AC) AHD PROPERTIES (ROYAL COURTS)

3705 4TH ST SE
WASHINGTON, DC 20032
ASSESSOR'S #: 6092-0801



01 AERIAL PHOTO
NOT TO SCALE



02 PLAT MAP
NOT TO SCALE

SHEET SCHEDULE

SHEET NUMBER	SHEET TITLE
T-001	COVER PAGE
A-101	SITE PLAN
A-102	ARRAY LAYOUT CARPORT
A-103	ARRAY LAYOUT BUILDING 3705
A-104	ROOF FRAMING PLAN
E-601	THREE LINE DIAGRAM
E-603	PLACARDS
R-001	RESOURCE DOCUMENTS
R-002	RESOURCE DOCUMENTS (2)

PROJECT INFORMATION

OWNER
NAME: AHD PROPERTIES (ROYAL COURTS)

PROJECT MANAGER
NAME: PAIGE OBER
PHONE: 703-853-6138

CONTRACTOR
NAME: NEW COLUMBIA SOLAR
ADDRESS: 401 NEW YORK AVENUE NE, WASHINGTON, DC 20002
PHONE: 202-810-1661
LICENSE: 410516000434

APPLICABLE CODES & STANDARDS
BUILDING: 2013 DISTRICT OF COLUMBIA BUILDING CODE
ELECTRICAL: NEC 2011
FIRE: 2013 DISTRICT OF COLUMBIA FIRE CODE
AHJ: DISTRICT OF COLUMBIA
UTILITY: PEPCO

LOT INFORMATION
ASSESSOR PARCEL: 6092-0801
ZONING TYPE: RESIDENTIAL APARTMENT ZONE RA-1
LAND USE CODE: 021

SCOPE OF WORK
CARPORT SYSTEM SIZE:
STC: 629 X 435 = 273.615 KW DC
PTC: 629 X 400.2 = 251.726 KW DC

(629) SUNPOWER SPR-435NE-WHT-D
(5) CPS SCA50KTL-DO/US-480
250,000 KW AC

ROOF SYSTEM SIZE: STC: 224 X 360 = 80.640 KW DC
PTC: 224 X 334.4 = 74.906 KW DC

(224) SUNPOWER SPR-X22-360-COM
(1) SOLAREDGE SE66.6KUS-480V
66,600 KW AC
(112) SOLAREDGE P800P POWER OPTIMIZERS

ATTACHMENT TYPE: SNAPNRACK SERIES 100 WITH FLASHED L-FOOT

MSP UPGRADE: NO

VECTOR ENGINEERS
851 W. GALENA PARK BLVD. STE. 101 DRAPER, UTAH 84020 PHONE (801) 990-1775 WWW.VECTORSE.COM

Vector Structural Engineering has reviewed the existing building structure with loading from the solar array and lag screw connections to the existing framing. The design of the racking system, connections, and all other structure is by others. Mechanical, architectural, and all other nonstructural aspects of the design are by others. Vector Structural Engineering did not review the design or structure of the carport or the proposed carport array. Electrical is by others, unless stamped by Dean Levorsen.

VECTOR PROJECT #: U1869-187-191

DISTRICT OF COLUMBIA ROGER T. ALWORTH PE901347 REGISTERED PROFESSIONAL ENGINEER

06/06/2019

STRUCTURAL PLANS CERTIFIED AS PROVIDED IN SECTION 106.1.4.1 OF THE DC CONSTRUCTION CODE

NEW COLUMBIA SOLAR

CONTRACTOR
NEW COLUMBIA SOLAR
PHONE: 202-810-1661
LIC. NO.: 410516000434

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS.

REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT
NEW PV SYSTEM:
354.255 kWp (DC): 316.600 kWp (AC)
AHD PROPERTIES (ROYAL COURTS)
3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)

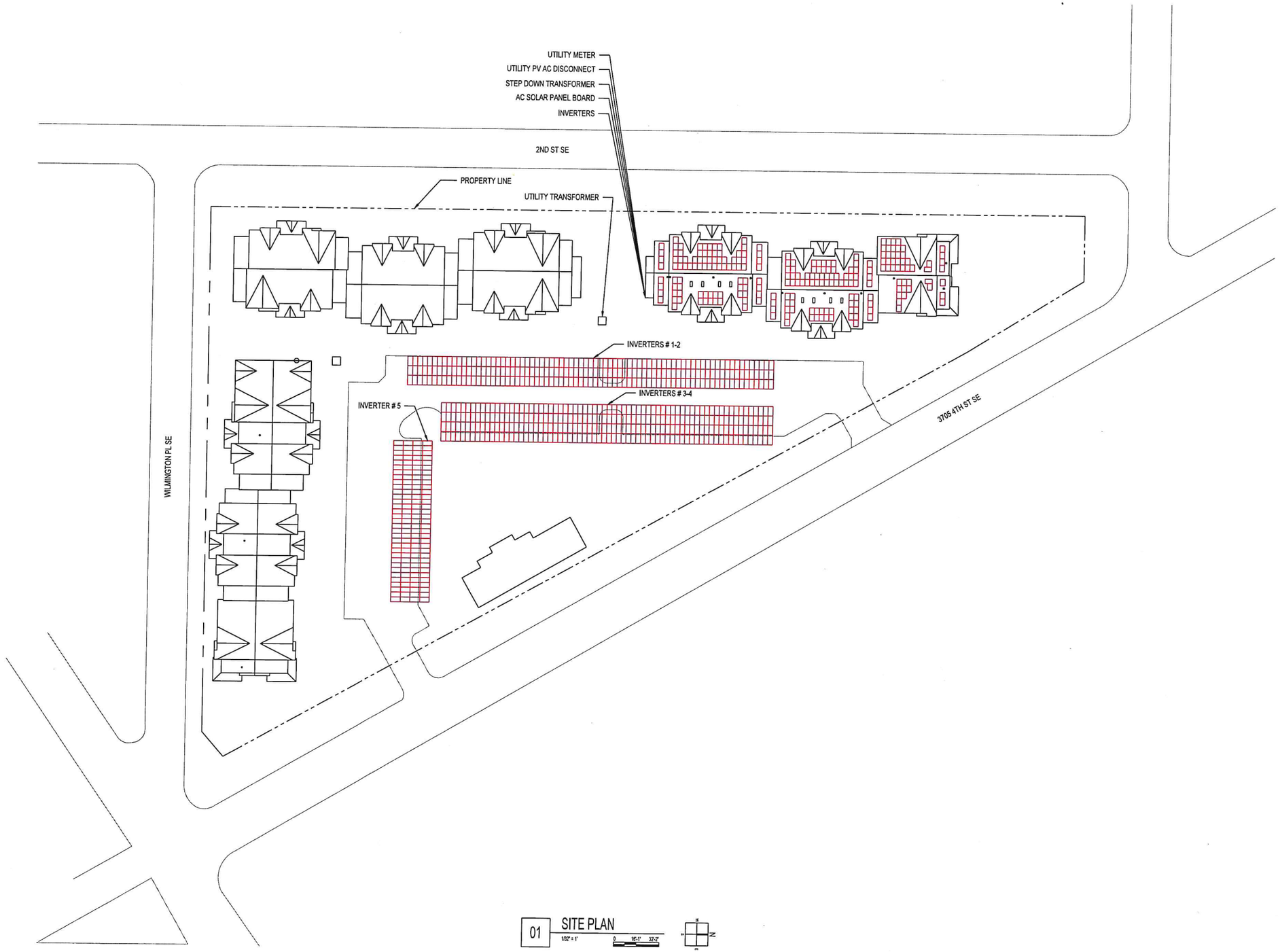
SHEET TITLE:
COVER PAGE
(SHEET 1)

DATE: 6.5.2019
DESIGN BY: J.P.
CHECKED BY: M.M.

SHEET NUMBER:
T-001

GENERAL NOTES

1. FIELD VERIFY ALL MEASUREMENTS
2. SEE SHEET T-001 FOR LEGEND OF SYMBOLS



01 SITE PLAN
1/32" = 1'
0 16'-1" 32'-2"

NEW COLUMBIA SOLAR

CONTRACTOR

NEW COLUMBIA SOLAR

PHONE: 202-410-1681

LIC. NO.: 4105160004434

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REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT

NEW PV SYSTEM:
354.255 kWp (DC); 316.600 kWp (AC)

AHD PROPERTIES
(ROYAL COURTS)

3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)

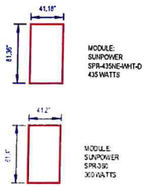
SHEET TITLE:
SITE PLAN

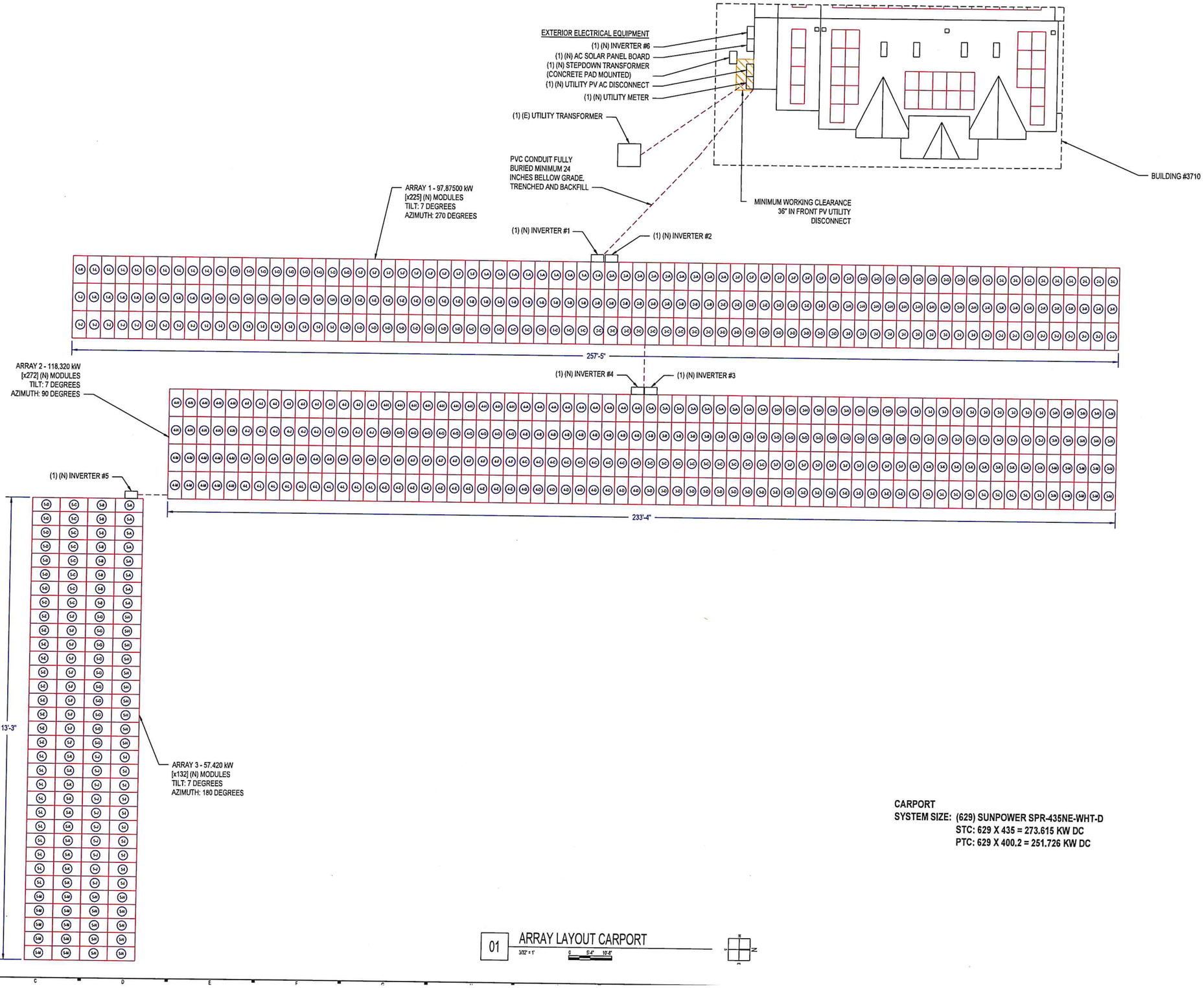
(SHEET 2)

DATE: 6.5.2019
DESIGN BY: J.P.
CHECKED BY: M.M.
SHEET NUMBER:
A-101

GENERAL NOTES

1. FIELD VERIFY ALL MEASUREMENTS
2. SEE SHEET T-001 FOR LEGEND OF SYMBOLS





CARPORT
SYSTEM SIZE: (629) SUNPOWER SPR-435NE-WHT-D
STC: 629 X 435 = 273.615 KW DC
PTC: 629 X 400.2 = 251.726 KW DC

01 ARRAY LAYOUT CARPORT
3/32" = 1'
0 5'-4" 10'-8"

NEW COLUMBIA SOLAR

CONTRACTOR
NEW COLUMBIA SOLAR
PHONE: 202-810-1551
LIC. NO.: 410516000434

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REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT
NEW PV SYSTEM:
354.255 kWp (DC): 316.600 kWp (AC)
AHD PROPERTIES
(ROYAL COURTS)
3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

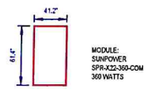
PAPER SIZE: 36" x 24" (ARCH D)

SHEET TITLE:
ARRAY LAYOUT CARPORT
(SHEET 3)

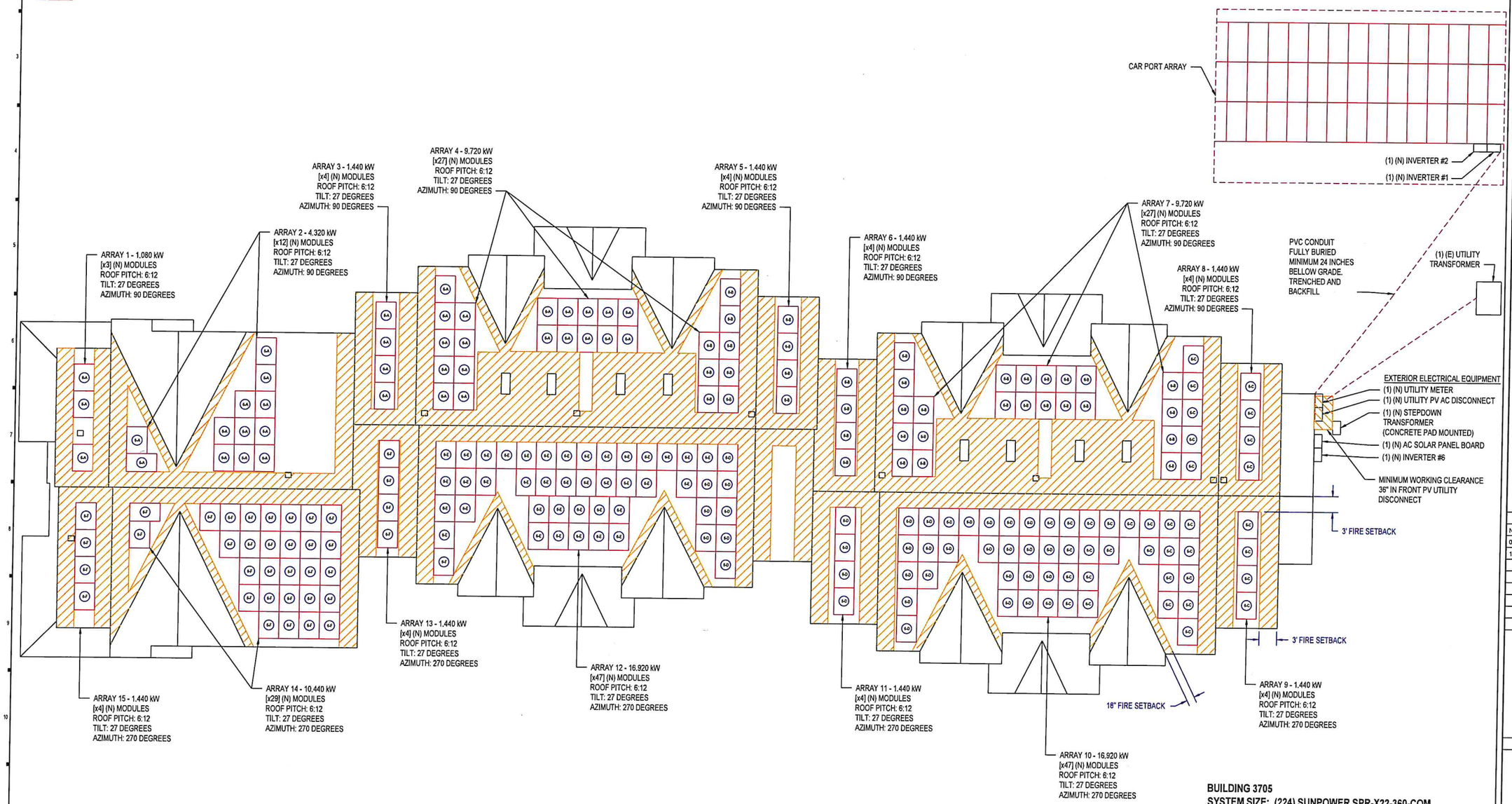
DATE: 6.5.2019
DESIGN BY: J.P.
CHECKED BY: M.M.
SHEET NUMBER:
A-102

GENERAL NOTES

1. FIELD VERIFY ALL MEASUREMENTS
2. SEE SHEET T-001 FOR LEGEND OF SYMBOLS



MODULE:
SUNPOWER
SPR-X22-360-COM
360 WATTS



BUILDING 3705
SYSTEM SIZE: (224) SUNPOWER SPR-X22-360-COM
STC: 224 X 360 = 80.640 KW DC
PTC: 224 X 334.4 = 74.906 KW DC

01 ARRAY LAYOUT BUILDING 3705
1/8" = 1'

NEW COLUMBIA SOLAR

CONTRACTOR

NEW COLUMBIA SOLAR

PHONE: 202-810-1661

LIC. NO.: 4105165004434

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REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT

NEW PV SYSTEM:
354.255 kWp (DC): 316.600 kWp (AC)

AHD PROPERTIES
(ROYAL COURTS)

3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6052-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)

SHEET TITLE:
ARRAY LAYOUT BUILDING 3705

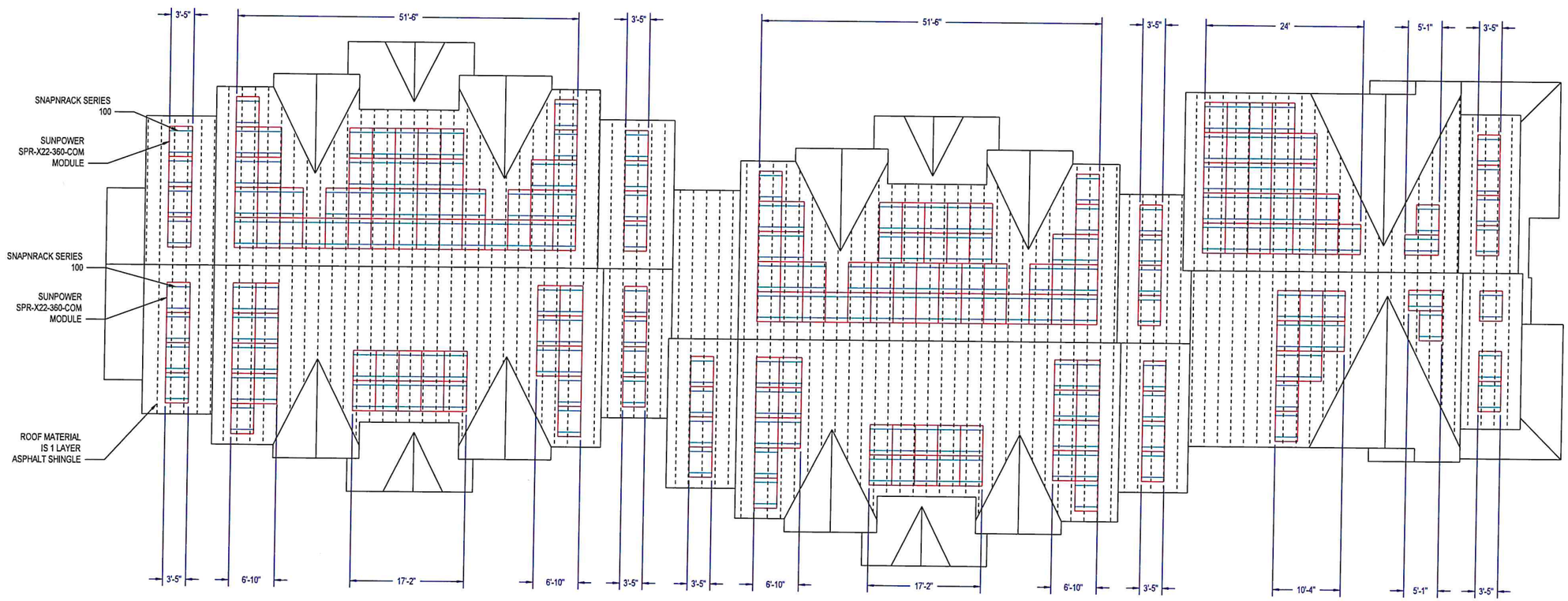
(SHEET 4)

DATE: 6.5.2019
DESIGN BY: J.P.
CHECKED BY: M.M.
SHEET NUMBER:
A-103

GENERAL NOTES

1. FIELD VERIFY ALL MEASUREMENTS
2. SEE SHEET T-001 FOR LEGEND OF SYMBOLS

MODULE:
SUNPOWER
SPR-X22-360-COM
360 WATTS



01 ROOF FRAMING PLAN
1/8" = 1'

VECTOR engineers
631 N. ORLEAN PARK BLVD., STE. 121 PHONE (801) 990-1773
SANDY, UTAH 84020 www.vectorse.com
Vector Structural Engineering has reviewed the existing building structural with respect to the new racking and leg screw connections to the existing framing. The design of the racking system, connections, and all other structure is by others. Mechanical, architectural, and all other nonstructural aspects of the design are by others. Vector Structural Engineering did not review the design or structure of the carport or the proposed carport array. Electrical is by others, unless stamped by Dean Levorsen.
VECTOR PROJECT #: U1869-187-191

DISTRICT OF COLUMBIA
ROGER T. ALWORTH
REGISTERED
PROFESSIONAL ENGINEER
06/06/2019

STRUCTURAL PLANS CERTIFIED AS PROVIDED IN SECTION 106.1.4.1 OF THE DC CONSTRUCTION CODE

NEW COLUMBIA SOLAR

CONTRACTOR

NEW COLUMBIA SOLAR

PHONE: 202-810-1551

LIC. NO.: 410516000434

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTION.

REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT

NEW PV SYSTEM:
354.255 kWp (DC): 316.600 kWp (AC)

AHD PROPERTIES
(ROYAL COURTS)

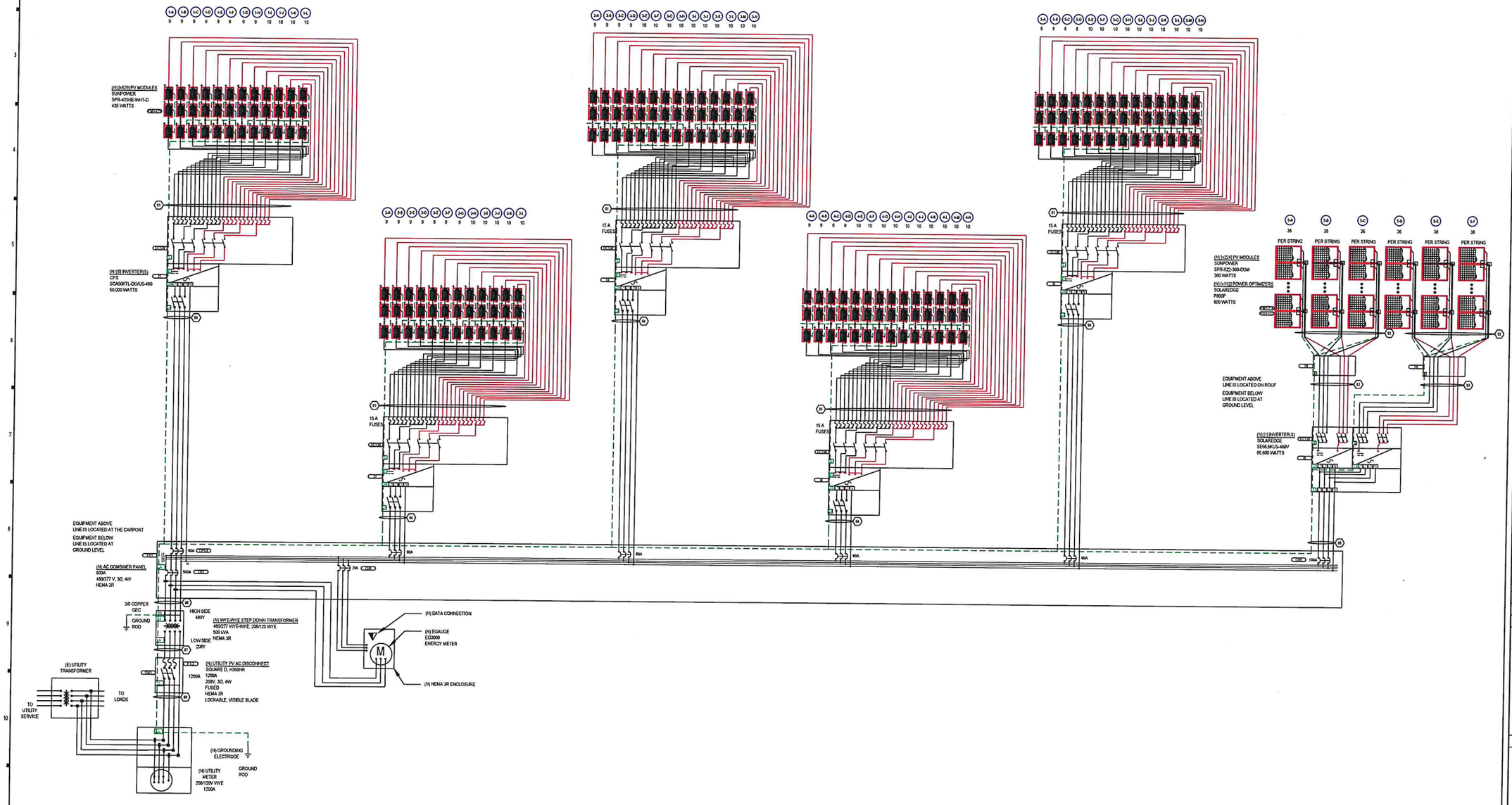
3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)

SHEET TITLE:
ROOF FRAMING PLAN
(SHEET 5)

DATE: 6.5.2019
DESIGN BY: J.P.
CHECKED BY: M.M.
SHEET NUMBER:
A-104



01 THREE LINE DIAGRAM

NOT TO SCALE

NEW COLUMBIA SOLAR

CONTRACTOR

NEW COLUMBIA SOLAR

PHONE: 202-810-1661

LIC. NO.: 410516000434

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REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT

NEW PV SYSTEM:
354.255 kWp (DC); 316.600 kWp (AC)

AHD PROPERTIES
(ROYAL COURTS)

3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)

SHEET TITLE:
THREE LINE DIAGRAM

(SHEET 6)

DATE: 6.5.2019

DESIGN BY: J.P.

CHECKED BY: M.M.

SHEET NUMBER:
E-601.00

SYSTEM SUMMARY #1 — CARPORT

	INVERTER 1		INVERTER 2			INVERTER 3-4		INVERTER 5	
ARRAY STC POWER	17,400W	15,660W	21,750W	15,660W	11,745W	21,750W	15,660W	21,750W	13,920W
ARRAY PTC POWER	16,008W	14,407W	20,010W	14,407W	10,805W	20,010W	14,407W	20,010W	12,806W
MPPT INPUT	MPPT 1	MPPT 2-3	MPPT 1	MPPT 2	MPPT 3	MPPT 1-2	MPPT 3	MPPT 1-2	MPPT 3
MODULES IN SERIES	4X10	4X9	5X10	4X9	3X9	5X10	4X9	5X10	4X8
MPPT VMP	729.0V	656.1V	729.0V	656.1V	656.1V	729.0V	656.1V	729.0V	583.2V
MPPT VOC	926V	833V	926V	833V	833V	926V	833V	926V	741V
MPPT IMP	23.9A	23.9A	29.9A	23.9A	17.9A	29.9A	23.9A	29.9A	23.9A
MPPT ISC	25.7A	25.7A	32.2A	25.7A	19.3A	32.2A	25.7A	32.2A	25.7A
NVERTER AC CURRENT	60.2A		60.2A			60.2A		60.2A	
NVERTER AC POWER	50,000W		50,000W			50,000W		50,000W	
NVERTER DC POWER	48,720W		49,155W			59,160W		57,420W	
TOTAL SYSTEM ARRAY STC POWER	273,615W								
TOTAL SYSTEM ARRAY PTC POWER	251,726W								
TOTAL SYSTEM MAX AC CURRENT	301.0A								
TOTAL SYSTEM MAX AC POWER	250,000W								

TOTAL OUTPUT OF COMBINED SYSTEMS

TOTAL SYSTEM ARRAY STC POWER	354,255W
TOTAL SYSTEM ARRAY PTC POWER	326,631W
TOTAL SYSTEM MAX AC CURRENT	381.0A
TOTAL SYSTEM MAX AC POWER	316,600W

SYSTEM #2 SUMMARY — ROOFTOP

	INVERTER # 6		
	STRINGS A-B	STRINGS C-D	STRINGS E-F
OPTIMIZERS MAX OUTPUT CURRENT	18A	18A	18A
OPTIMIZERS IN SERIES	19	18	19
NOMINAL STRING VOLTAGE	850V	850V	850V
STRING ARRAY OPERATING CURRENT	32.2A	30.5A	32.2A
STRING ARRAY STC POWER	13,680W	12,960W	13,680W
STRING ARRAY PTC POWER	12,707W	12,038W	12,707W
TOTAL STC POWER	80,640W		
TOTAL PTC POWER	74,906W		
TOTAL INVERTER AC CURRENT	80.2A		
TOTAL INVERTER AC POWER	66,600W		

DESIGN TEMPERATURES

ASHRAE EXTREME LOW	-12°C (10.4F), SOURCE: WASHINGTON DC REAGAN AP
ASHRAE 2% HIGH	34°C (93.2F), SOURCE: WASHINGTON DC REAGAN AP

MODULES

REF.	QTY.	MAKE AND MODEL	PMAX	PTC	ISC	IMP	VOC	VMP	TEMP. COEFF. OF VOC	FUSE RATING
PM1-629	629	SUNPOWER SPR-435NE-WHT-D	435W	400.2W	6.43A	5.97A	85.6V	72.9V	-0.326V/°C (-0.279%/°C)	15A
PM1-224	224	SUNPOWER SPR-X22-360-COM	360W	334.4W	6.48A	6.09A	69.5V	59.1V	-0.29V/°C (-0.202%/°C)	15A

INVERTERS

REF.	QTY.	MAKE AND MODEL	AC VOLTAGE	GROUND	MAX OCPD RATING	RATED POWER	MAX OUTPUT CURRENT	MAX INPUT CURRENT	MAX INPUT VOLTAGE	MAX EFFICIENCY
I1-5	5	CPS SCA50KTL-DO/US-480	480V	FLOATING	80A	50,000W	60.2A	180A	1000V	98.5%
I6	1	SOLAREDGE SE66.6KUS-480V	480V	FLOATING	100A	66,600W	80.0A	26.5A	1000V	98.5%

DISCONNECTS

REF.	QTY.	MAKE AND MODEL	RATED CURRENT	MAX RATED VOLTAGE
SW1	1	SQUARE D H368NR	1200A	208V

OCPDS

REF.	QTY.	RATED CURRENT	MAX VOLTAGE
CB1-5	5	80A	480VAC
CB6	1	100A	480VAC
CB7	1	500A	480VAC
CB8	1	20A	480VAC
F1-3	3	1200A	208VAC

CONDUCTOR AND CONDUIT SCHEDULE W/ELECTRICAL CALCULATIONS

ID	TYPICAL	CONDUCTOR	CONDUIT	CURRENT-CARRYING CONDUCTORS IN CONDUIT	OCPD	EGC	TEMP. CORR. FACTOR	CONDUIT FILL FACTOR	CONT. CURRENT	MAX. CURRENT (125%)	BASE AMP.	DERATED AMP.	TERM. TEMP. RATING	AMP. @ TERMINAL
1	34	10 AWG PV WIRE, COPPER	N/A	FREE AIR	15A	6 AWG BARE, COPPER	0.96 (34°C)	1.0	8A	10A	55A	52.8A	90°C	55A
2	6	10 AWG PV WIRE, COPPER	N/A	FREE AIR	N/A	6 AWG BARE, COPPER	0.71 (56°C)	1.0	18A	22.5A	55A	39.1A	90°C	55A
3	3	10 AWG PV-WIRE, COPPER	.75" DIA. EMT	6	N/A	10 AWG THWN-2, COPPER	0.71 (56°C)	0.8	18A	22.5A	40A	22.7A	90°C	35A
4	5	4 AWG THWN-2, COPPER	1" DIA. PVC-EMT	3+N	80A	10 AWG THWN-2, COPPER	0.96 (34°C)	1.0	60.2A	75.3A	95A	91.2A	75°C	85A
5	1	3 AWG THWN-2, COPPER	1" DIA. EMT	3+N	100A	8 AWG THWN-2, COPPER	0.96 (34°C)	1.0	80.0A	100.0A	115A	110.4A	75°C	100A
6	2	250 KCMIL THWN-2, COPPER	(2) 2" DIA. PVC-EMT	3+N (2 COND. PER PHASE)	500A	2 AWG THWN-2, COPPER	0.96 (34°C)	1.0	381.0A	476.3A	580A	556.8A	75°C	510A
7	4	350 KCMIL THWN-2, COPPER	(4) 2.5" DIA. PVC-EMT	3+N (4 COND. PER PHASE)	1200A	3/0 AWG THWN-2, COPPER	0.96 (34°C)	1.0	879.2A	1099.0A	1400A	1344.0A	75°C	1240A
8	4	350 KCMIL THWN-2, COPPER	(4) 2.5" DIA. PVC-EMT	3+N (4 COND. PER PHASE)	1200A	3/0 AWG THWN-2, COPPER	0.96 (34°C)	1.0	879.2A	1099.0A	1400A	1344.0A	75°C	1240A

BILL OF MATERIALS

CATEGORY	MAKE	MODEL NUMBER	REF	QTY	UNIT	QTY/UNIT	DESCRIPTION
MODULE	SUNPOWER	SPR-435NE-WHT-D	PM1-629	629	PIECES	1	SUNPOWER, SPR-435NE-WHT-D, 435 WATT, 120 MONOCRYSTALLINE CELLS
MODULE	SUNPOWER	SPR-X22-360-COM	PM1-224	224	PIECES	1	SUNPOWER, SPR-X22-360-COM, 360 WATT, 96 MONOCRYSTALLINE CELLS
INVERTER	CPS	SCA50KTL-DO/US-480	I1-5	5	PIECES	1	CPS, SCA50KTL-DO/US-480 , 50,000W INVERTER
INVERTER	SOLAREDGE	SE66.6KUS-480V	I6	1	PIECES	1	CPS, SE66.6KUS-480V, 66,600W INVERTER
DISCONNECT	SQUARE D	H368NR	SW1	1	PIECES	1	SQUARE D H368NR, 3-POLE, 1200A, 208VAC, OR EQUIVALENT
GENERATION METER	EGUAGE	EG3000	M1	1	PIECES	1	EGAUGE, EG3000, ENERGY METER
WIRING		GEN-6-AWG-BARE-CU	WR1	1000	FEET	1	6 AWG BARE, COPPER (GROUND)
WIRING		GEN-10-AWG-PV-WIRE-CU	WR1-3	2000	FEET	1	10 AWG PV WIRE, COPPER (POSITIVE AND NEGATIVE), 1000V
WIRING		GEN-10-AWG-PV-WIRE-CU	WR2-3	2000	FEET	1	10 AWG PV WIRE, COPPER (GROUND), 1000V
WIRING		GEN-4-AWG-THWN-2-CU-BL	WR4	10	FEET	1	4 AWG THWN-2, COPPER, BLACK (LINE 1)
WIRING		GEN-4-AWG-THWN-2-CU-RD	WR4	10	FEET	1	4 AWG THWN-2, COPPER, RED (LINE 2)
WIRING		GEN-4-AWG-THWN-2-CU-BLU	WR4	10	FEET	1	4 AWG THWN-2, COPPER, BLUE (LINE 3)
WIRING		GEN-10-AWG-THWN-2-CU-WH	WR4	10	FEET	1	10 AWG THWN-2, COPPER, WHITE (NEUTRAL)
WIRING		GEN-10-AWG-THWN-2-CU-GR	WR4	10	FEET	1	10 AWG THWN-2, COPPER, GREEN (GROUND)
WIRING		GEN-3-AWG-THWN-2-CU-BL	WR5	400	FEET	1	3 AWG THWN-2, COPPER, BLACK (LINE 1)
WIRING		GEN-3-AWG-THWN-2-CU-RD	WR5	400	FEET	1	3 AWG THWN-2, COPPER, RED (LINE 2)
WIRING		GEN-3-AWG-THWN-2-CU-BLU	WR5	400	FEET	1	3 AWG THWN-2, COPPER, BLUE (LINE 3)
WIRING		GEN-8-AWG-THWN-2-CU-WH	WR5	400	FEET	1	8 AWG THWN-2, COPPER, WHITE (NEUTRAL)
WIRING		GEN-8 AWG-THWN-2-CU-GR	WR5	400	FEET	1	8 AWG THWN-2, COPPER, GREEN (GROUND)
WIRING		GEN-250-KCMIL-THWN-2-CU-BL	WR6	50	FEET	1	250 KCMIL THWN-2, COPPER, BLACK (LINE 1)
WIRING		GEN-250-KCMIL-THWN-2-CU-RD	WR6	50	FEET	1	250 KCMIL THWN-2, COPPER, RED (LINE 2)
WIRING		GEN-250-KCMIL-THWN-2-CU-BLU	WR6	50	FEET	1	250 KCMIL THWN-2, COPPER, BLUE (LINE 3)
WIRING		GEN-2-AWG-THWN-2-CU-WH	WR6	50	FEET	1	2 AWG THWN-2, COPPER, WHITE (NEUTRAL)
WIRING		GEN-2 AWG-THWN-2-CU-GR	WR6	50	FEET	1	2 AWG THWN-2, COPPER, GREEN (GROUND)
WIRING		GEN-350-KCMIL-THWN-2-CU-BL	WR7-8	70	FEET	1	350 KCMIL THWN-2, COPPER, BLACK (LINE 1)
WIRING		GEN-350-KCMIL-THWN-2-CU-RD	WR7-8	70	FEET	1	350 KCMIL THWN-2, COPPER, RED (LINE 2)
WIRING		GEN-350-KCMIL-THWN-2-CU-BLU	WR7-8	70	FEET	1	350 KCMIL THWN-2, COPPER, BLUE (LINE 3)
WIRING		GEN-3/0-AWG-THWN-2-CU-WH	WR7-8	70	FEET	1	3/0 AWG THWN-2, COPPER, WHITE (NEUTRAL)
WIRING		GEN-3/0 AWG-THWN-2-CU-GR	WR7-8	70	FEET	1	3/0 AWG THWN-2, COPPER, GREEN (GROUND)
WIREWAY		GEN-EMT-.75DIA	WW3	310	FEET	1	EMT CONDUIT, 0.75 DIA.
WIREWAY		GEN-PVC-1DIA	WW4	400	FEET	1	PVC CONDUIT, 1 DIA.
WIREWAY		GEN-EMT-1DIA	WW4-5	60	FEET	1	EMT CONDUIT, 1 DIA.
WIREWAY		GEN-EMT-2DIA	WW6	10	FEET	1	EMT CONDUIT, 2 DIA.
WIREWAY		GEN-PVC-2DIA	WW6	35	FEET	1	PVC CONDUIT, 2 DIA.
WIREWAY		GEN-EMT-2.5DIA	WW7-8	10	FEET	1	EMT CONDUIT, 2.5 DIA.
WIREWAY		GEN-PVC-2.5DIA	WW7-8	50	FEET	1	PVC CONDUIT, 2.5 DIA.
OCPD	GENERIC MANUFACTURER	GEN-CB-80A-3 POLE	CB1-5	5	PIECES	1	CIRCUIT BREAKER, 80A, 3 POLE, 480VAC
OCPD	GENERIC MANUFACTURER	GEN-CB-100A-3 POLE	CB6	1	PIECES	1	CIRCUIT BREAKER, 100A, 3 POLE, 480VAC
OCPD	GENERIC MANUFACTURER	GEN-CB-20A-3 POLE	CB7	1	PIECES	1	CIRCUIT BREAKER, 20A, 3 POLE, 480VAC
OCPD	GENERIC MANUFACTURER	GEN-CB-500A-3 POLE	CB8	1	PIECES	1	CIRCUIT BREAKER, 500A, 3 POLE, 480VAC
OCPD	GENERIC MANUFACTURER	GEN-FU-1200A-3 POLE	F1-3	3	PIECES	1	FUSE, 1200A, 3 POLE, 208V

! WARNING !
ELECTRIC SHOCK HAZARD.
THE DC CONDUCTORS OF THIS
PHOTOVOLTAIC SYSTEM ARE UNGROUNDED
AND MAY BE ENERGIZED.

LABEL 1
AT EACH JUNCTION, COMBINER, DISCONNECT AND DEVICE WHERE ENERGIZED UNGROUNDED CONDUCTORS MAY BE EXPOSED DURING SERVICE
[NEC 690.35(F)]

! WARNING !
ELECTRIC SHOCK HAZARD
DO NOT TOUCH TERMINALS.
TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION.

LABEL 2
AT EACH DISCONNECTING MEANS FOR PHOTOVOLTAIC EQUIPMENT
[NEC 690.17]

OPERATING CURRENT: 29.9 A DC
OPERATING VOLTAGE: 926 V DC
MAX SHORT CURRENT: 32.2 A DC
MAX VOLTAGE: 926 V DC

LABEL 3 INVERTER #1
AT EACH APPLICABLE DC DISCONNECTING MEANS
[NEC 690.53]

OPERATING CURRENT: 37.3 A DC
OPERATING VOLTAGE: 926 V DC
MAX SHORT CURRENT: 40.2 A DC
MAX VOLTAGE: 926 V DC

LABEL 3 INVERTER #4-5
AT EACH APPLICABLE DC DISCONNECTING MEANS
[NEC 690.53]

OPERATING CURRENT: 94.67 A DC
OPERATING VOLTAGE: 850 V DC
MAX SHORT CURRENT: 120 A DC
MAX VOLTAGE: 1000 V DC

LABEL 3 INVERTER #6
AT EACH APPLICABLE DC DISCONNECTING MEANS
[NEC 690.53]

PHOTOVOLTAIC AC DISCONNECT
OPERATING CURRENT: 381.0A AC
OPERATING VOLTAGE: 480V AC

LABEL 4
AT POINT OF INTERCONNECTION, MARKED AT DISCONNECTING MEANS
[NEC 690.54]

PHOTOVOLTAIC AC DISCONNECT
OPERATING CURRENT: 879.2A AC
OPERATING VOLTAGE: 208V AC

LABEL 4
AT POINT OF INTERCONNECTION, MARKED AT DISCONNECTING MEANS
[NEC 690.54]

! WARNING !
DUAL POWER SOURCES. SECOND SOURCE IS PV SYSTEM

LABEL 5
AT POINT OF INTERCONNECTION; LABEL, SUCH AS LABEL 5 OR LABEL 6 MUST IDENTIFY PHOTOVOLTAIC SYSTEM
[NEC 705.12(D)(4)]

! CAUTION !
PHOTOVOLTAIC SYSTEM
CIRCUIT IS BACKFED

LABEL 6

INTERACTIVE PHOTOVOLTAIC SYSTEM CONNECTED

LABEL 7
AT UTILITY METER
[NEC 690.56(B)]

PHOTOVOLTAIC DC DISCONNECT

LABEL 8
AT EACH DC DISCONNECTING MEANS
[NEC 690.14(C)(2)]

WARNING: PHOTOVOLTAIC POWER SOURCE

LABEL 9
AT EXPOSED RACEWAYS, CABLE TRAYS, AND OTHER WIRING METHODS; SPACED AT MAXIMUM 10 FT SECTION OR WHERE SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS. [NEC 690.31(E)]
LETTERS AT LEAST 3/8 INCH; WHITE ON RED BACKGROUND; REFLECTIVE [IFC 605.11.1.1]

PHOTOVOLTAIC AC DISCONNECT

LABEL 10
AT EACH AC DISCONNECTING MEANS
[NEC 690.14(C)(2)]

! WARNING !
INVERTER OUTPUT CONNECTION.
DO NOT RELOCATE THIS
OVERCURRENT DEVICE

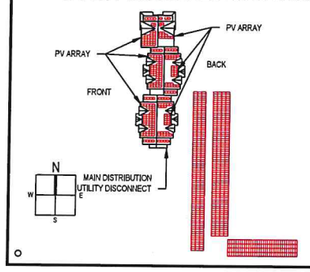
LABEL 11
AT POINT OF INTERCONNECTION OVERCURRENT DEVICE
[NEC 705.12(D)(7)]

INTERACTIVE PHOTOVOLTAIC SYSTEM CONNECTED
PHOTOVOLTAIC SYSTEM DISCONNECT LOCATED
SOUTH SIDE OF BUILDING #3705

PLAQUE

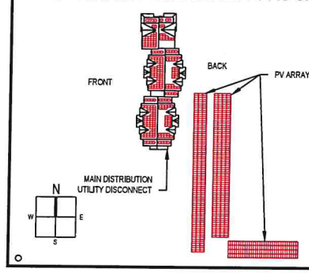
!CAUTION!

POWER TO THIS BUILDING IS ALSO SUPPLIED FROM ROOF MOUNTED SOLAR ARRAYS WITH SAFETY DISCONNECTS AS SHOWN:



!CAUTION!

POWER TO THIS BUILDING IS ALSO SUPPLIED FROM CARPORT MOUNTED SOLAR ARRAYS WITH SAFETY DISCONNECTS AS SHOWN:



DIRECTORY
PERMANENT PLAQUE OR DIRECTORY PROVIDING THE LOCATION OF THE SERVICE DISCONNECTING MEANS AND THE PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS IF NOT IN THE SAME LOCATION
[NEC 690.56(B)]
WHERE THE INVERTERS ARE REMOTELY LOCATED FROM EACH OTHER, A DIRECTORY IN ACCORDANCE WITH 705.10 SHALL BE INSTALLED AT EACH DC PV SYSTEM DISCONNECTING MEANS, AT EACH AC DISCONNECTING MEANS, AND AT THE MAIN SERVICE DISCONNECTING MEANS SHOWING THE LOCATION OF ALL AC AND DC PV SYSTEM DISCONNECTING MEANS IN THE BUILDING.
[NEC 690.4(H)]

LABELING NOTES:
1.1 LABELING REQUIREMENTS BASED ON THE 2011 NATIONAL ELECTRICAL CODE, INTERNATIONAL FIRE CODE 605.11, OSHA STANDARD 1910.145, ANSI Z535.
1.2 MATERIAL BASED ON THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
1.3 LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
1.4 LABELS TO BE A MINIMUM LETTER HEIGHT OF 3/8" AND PERMANENTLY AFFIXED.

NEW COLUMBIA SOLAR

CONTRACTOR
NEW COLUMBIA SOLAR
PHONE: 202-810-1561
LIC. NO.: 4105160004341

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REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT
NEW PV SYSTEM:
354.255 kWp (DC): 316.600 kWp (AC)
AHD PROPERTIES
(ROYAL COURTS)
3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)
SHEET TITLE: PLACARDS
(SHEET 8)
DATE: 6.5.2019
DESIGN BY: J.P.
CHECKED BY: M.M.
SHEET NUMBER: E-603

SUNPOWER — E20/435 SOLAR PANEL

20% EFFICIENCY
SunPower E20 panels are the highest efficiency panels on the market today, providing more power in the same amount of space

MAXIMUM SYSTEM OUTPUT
Comprehensive inverter compatibility ensures that customers can pair the highest efficiency panels with the highest-efficiency inverters, maximizing system output

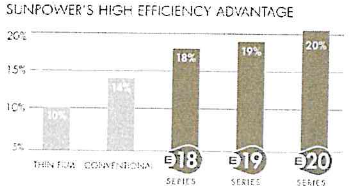
REDUCED INSTALLATION COST
More power per panel means fewer panels per install. This saves both time and money

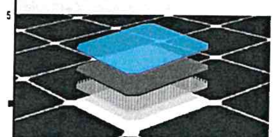
RELIABLE AND ROBUST DESIGN
SunPower's unique Maxeon™ cell technology and advanced module design ensure industry-leading reliability

THE WORLD'S STANDARD FOR SOLAR™

SunPower™ E20 Solar Panels provide today's highest efficiency and performance. Powered by SunPower Maxeon™ cell technology, the E20 series provides panel conversion efficiencies of up to 20.1%. The E20's low voltage temperature coefficient, anti-reflective glass and exceptional low-light performance attributes provide outstanding energy delivery per peak power watt.

SUNPOWER'S HIGH EFFICIENCY ADVANTAGE





MAXEON™ CELL TECHNOLOGY
Patented all-back-contact solar cell, providing the industry's highest efficiency and reliability

sunpowercorp.com

SUNPOWER — E20/435 SOLAR PANEL

MODEL: SPR-435NE-WHT-D

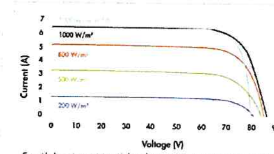
ELECTRICAL DATA
Measured at Standard Test Conditions (STC): irradiance 1000W/m², AM 1.5, and cell temperature 25°C

Nominal Power (+/-5%)	P_{nom}	435 W
Cell Efficiency	η	22.4%
Panel Efficiency	η	20.1 %
Rated Voltage	V_{mpp}	72.9 V
Rated Current	I_{mpp}	5.97 A
Open-Circuit Voltage	V_{oc}	85.6 V
Short-Circuit Voltage	I_{sc}	6.43 A
Maximum System Voltage	IEC	1000 V
Temperature Coefficients	Power (P)	– 0.38%/K
	Voltage (V_{oc})	-235.5mV/K
	Current (I_{sc})	3.5mA /K
NOCT		45°C +/- 2°C
Series Fuse Rating		20 A
Limiting Reverse Current (3 strings)	I_r	16.1 A
Grounding		Positive grounding not required

ELECTRICAL DATA
Measured at Nominal Operating Cell Temperature (NOCT): Irradiance 800W/m², 20°C, wind 1 m/s

Nominal Power	P_{nom}	323 W
Rated Voltage	V_{mpp}	67.2 V
Rated Current	I_{mpp}	4.81 A
Open-Circuit Voltage	V_{oc}	80.1 V
Short-Circuit Voltage	I_{sc}	5.20 A

I-V CURVE



Current/voltage characteristics with dependence on irradiance and module temperature.

TESTED OPERATING CONDITIONS

Temperature	– 40° C to +85° C
Max load	550 kg/m² (5400 Pa), front (e.g. snow) w/specified mounting configurations
	245 kg/m² (2400 Pa) front and back (e.g. wind)
Impact Resistance	Hail: 25 mm at 23 m/s

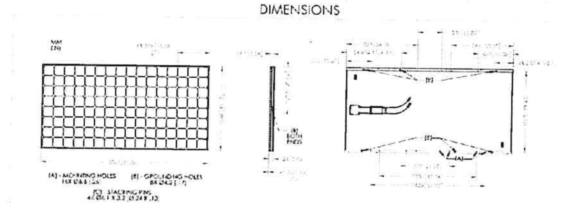
WARRANTIES AND CERTIFICATIONS

Warranties	25-year limited power warranty
	10-year limited product warranty
Certifications	IEC 61215 Ed. 2, IEC 61730 (SCII)

MECHANICAL DATA

Cells	128 SunPower Maxeon™ cells	Output Cables	700 mm cables / Multi-Contact (MC4) connectors
Front Glass	High-transmission tempered glass with anti-reflective (AR) coating	Frame	Anodised aluminium alloy type 6063 (silver)
Junction Box	IP-65 rated with 3 bypass diodes	Weight	28.6 kg
	32 x 155 x 128 mm		

DIMENSIONS



Please read safety and installation instructions before using this product, visit sunpowercorp.com for more details.

sunpowercorp.com

SunPower® X-Series Commercial Solar Panels | X22-360-COM

More than 22% Efficiency
Captures more sunlight and generates more power than conventional panels.

Maximum Performance
Designed to perform in demanding real world conditions of high temperatures, partial shade from overhead wires, and low light.

Commercial Grade
Intended for commercial sites where maximum energy production is critical.

Maxeon® Solar Cells: Fundamentally better
Engineered for performance, designed for reliability.

Engineered for Peace of Mind
Designed to deliver consistent, trouble-free energy over a very long lifetime.

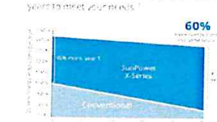
Designed for Reliability
The SunPower Maxeon solar cell is the only cell built on a solid metal foundation, virtually impervious to the corrosion and cracking that degrade conventional panels.

Same excellent durability as E-Series panels
#1 Rank in Fraunhofer durability test.

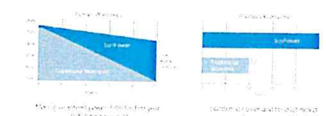
High Performance & Excellent Reliability

Highest Efficiency Available
Generate more energy per square foot

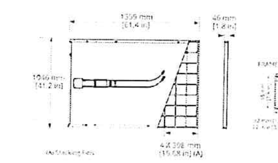
More energy to power your operations. X-Series commercial systems convert more sunlight to electricity by producing 45% more energy in the first year. This advantage increases over time, producing 60% more energy over the first 25 years to meet your needs.



Best Reliability, Best Warranty
A better warranty starts with a better product. Proven performance backs up our industry-best coverage, including our warranted 0.25% per year degradation rate.



SUNPOWER®



SUNPOWER®

Power Optimizer
P600 / P650 / P730 / P800p / P850

POWER OPTIMIZER

PV power optimization at the module-level
The most cost effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses and combiner boxes, over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Use with two PV modules connected in series or in parallel

solaredge.com

solaredge

Power Optimizer
P600 / P650 / P730 / P800p / P850

Optimizer Model (Typical Module Compatibility)	P600 (for 2 x 60-cell PV modules)	P650 (for 2 x 60-cell PV modules)	P730 (for 2 x 72-cell PV modules)	P800p (for parallel connection of 2x 96-cell 5" PV modules)	P850 (for series connection of 2x high power or bi-facial modules)	
INPUT						
[illegible]						
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)						
[illegible]						
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)						
[illegible]						
STANDARD COMPLIANCE						
[illegible]						
INSTALLATION SPECIFICATIONS						
[illegible]						

PV System Design Using a SolarEdge Inverter	Three Phase SE15K and larger	Three Phase SE16K and larger	Three Phase for 277/480V grid
[illegible]			

CE RoHS

CPS — 50/60kW, 1000Vdc String Inverters for North America

Datasheet

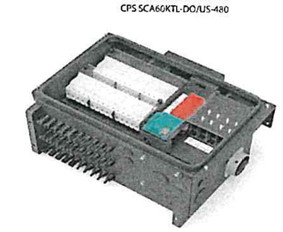
The 50 & 60kW medium power CPS three phase string inverters are designed for ground mount, large rooftop and carport applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 98.8% peak and 98.5% CEC, wide operating voltages, broad temperature ranges and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The CPS 50/60kW products ship with either the standard wire-box or the H4 style wire-box, each fully integrated and separable with touch safe fusing, monitoring, and AC and DC disconnect switches. The CPS Flex Gateway enables monitoring, controls and remote product upgrades.

Key Features

- NEC 2014 compliant & UL listed Arc-Fault circuit protection
- 0-90° Mounting orientation for lay flat roof installs
- Touch safe DC Fuse holders adds convenience and safety
- CPS Flex Gateway enables remote FW upgrades
- Integrated AC & DC disconnect switches
- Optional factory installed H4 connectors
- 3 MPPT's with 5 inputs each for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Advanced Smart-Grid features (Rule 21, HECO compatible)
- Separable wire-box design for fast service
- Standard 10 year warranty with extensions to 20 years
- Generous 1.5 DC/AC Inverter Load Ratio

CPS SCA50KTL-DO/US-480
CPS SCA60KTL-DO/US-480

50/60kW Standard Wire-box



50/60kW H4 Wire-box

CPS — Technical Data

Model Name	CPS SCA50KTL-DO/US-480		CPS SCA60KTL-DO/US-480
DC Input			
Max. PV Power	75kW (25kW per MPPT)		90kW (30kW per MPPT)
Max. DC Input Voltage		1000Vdc	
Operating DC Input Voltage Range		200-950Vdc	
Start-up DC Input Voltage / Power		330V / 80W	
Number of MPP Trackers		3	
MPPT Voltage Range	480-850Vdc		540-850Vdc
Max. Operating Current (Imp)	108A (36A per MPPT)		114A (38A per MPPT)
Max. PV Input Current (Isc x 1.25)		180A (60A per MPPT)	
Number of DC Inputs		15 inputs, 5 per MPPT	
DC Disconnection Type		Load rated DC switch	
AC Output			
Rated AC Output Power	50kW		60kW
Max. AC Output Power	50kVA		60kVA
Rated Output Voltage		480Vac	
Output Voltage Range[1]		422 - 528Vac	
Grid Connection Type		3Φ / PE / N	
Nominal AC Output Current @480Vac	60.2A		72.2A
Rated Output Frequency		60Hz	
Output Frequency Range[1]		57 - 63Hz	
Power Factor		>0.99 (±0.8 adjustable)	
Current THD @ Rated Load		<3%	
AC Disconnection Type		Load rated AC switch	
System and Performance			
Topology		Transformerless	
Max. Efficiency		98.8%	
CEC Efficiency		98.5%	
Stand-by / Night Consumption		<30W / <1W	
Environment			
Enclosure Protection Degree		NEMA Type 4X	
Cooling Method		Variable speed cooling fans	
Operating Temperature Range		-22°F to +140°F / - 30°C to +60°C (derating from +113°F / +45°C)	
Non-Operating Temperature Range[2]		No low temp minimum to +158°F / +70°C maximum	
Operating Humidity		0 to 95%, non-condensing	
Operating Altitude		13123.4ft / 4000m (derating from 9842.5ft / 3000m)	
Audible Noise		<60dB @ 1m and 25°C	
Display and Communication			
User Interface and Display		LCD+LED	
Inverter Monitoring		Modbus RS485 and TCP / IP	
Site Level Monitoring		CPS Flex Gateway (1 per 32 inverters)	
Modbus Data Mapping		SunSpec / CPS	
Remote Diagnostics / FW Upgrade Functions		Standard	
Mechanical			
Dimensions (HxWxD)		39.4 x 23.6 x 10.24in. (1000 x 600 x 260mm)	
Weight		Inverter: 123.5lbs/56kg; Wire-box: 33lbs/15kg	
Mounting / Installation Angle[3]		0 to 90 degrees from horizontal (vertical, angled, or lay flat)	
AC Termination		M8 Stud Type Terminal Block (Wire range: #4 - 2/0AWG CU/AL)	
DC Termination		Screw Clamp Fuse Holder (Wire range: #14 - #6AWG CU), Optional H4 (Amphenol)	
Fused String Inputs (5 per MPPT)		15A standard fuse value (20, 25, 30A acceptable)	
Safety			
Safety and EMC Standard		UL1741-2010, UL1741SA-2016[4], UL1699B, CSA-C22.2 NO.107.1-01, IEEE1547; FCC PART15	
Grid Standard and SRD		IEEE 1547-2003, Rule 21[4] and HECO/Rule14[4]	
Smart-Grid Features[4]		Voltage-RideThru, Frequency-RideThru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt	
Warranty			
Standard		10 years	
Extended Terms		15 and 20 years	

4) Certification Pending

NEW COLUMBIA SOLAR

CONTRACTOR	
NEW COLUMBIA SOLAR	
PHONE:	202-810-1661
LIC. NO.:	410516000434

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REVISION / RELEASE

NO.	DESCRIPTION	DATE
0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT

NEW PV SYSTEM:
354.255 kWp (DC): 316.600 kWp (AC)

AHD PROPERTIES (ROYAL COURTS)

3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)

SHEET TITLE: RESOURCE DOCUMENTS

(SHEET 11)

DATE: 6.5.2019
DESIGN BY: J.P.
CHECKED BY: M.M.
SHEET NUMBER: R-001

INVERTERS

Three Phase Inverter with Synergy Technology

for the 277/480V Grid for North America

SE66.6KUS / SE100KUS

12-20 YEAR WARRANTY

Specifically designed to work with power optimizers

- Easy two-person installation – each unit mounted separately, equipped with cables for simple connection between units
- Balance of System and labor reduction compared to using multiple smaller string inverters
- Independent operation of each unit enables higher uptime and easy serviceability
- No wasted ground area: wall/rail mounted, or horizontally mounted under the modules (10° inclination)
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- Built-in module-level monitoring with Ethernet or cellular GSM
- Fixed voltage inverter for superior efficiency (98.5%) and longer strings
- Integrated DC Safety Switch and optional surge protection
- Built-in RS485 Surge Protection, to better withstand lightning events

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Three Phase Inverter with Synergy Technology for the 277/480V Grid for North America

SE66.6KUS / SE100KUS

	SE66.6KUS	SE100KUS	
OUTPUT			
Rated AC Power Output	66600	100000	VA
Maximum AC Power Output	66600	100000	VA
AC Output Line Connections	4-wire WYE (L1-L2-L3-N) plus PE		
AC Output Voltage Minimum-Nominal-Maximum (L-N)	244 - 277 - 305		Vac
AC Output Voltage Minimum-Nominal-Maximum (L-L)	422.5 - 480 - 529		Vac
AC Frequency Min-Nom-Max	59.3 - 60 - 60.5		Hz
Maximum Continuous Output Current (per Phase) @277V	80	120	A
GFDI Threshold	1		A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes		
INPUT			
Maximum DC Power (Module STC) / Unit	90000 / 45000	135000 / 45000	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC to Gnd	500		Vdc
Maximum Input Voltage DC+ to DC-	1000		Vdc
Nominal Input Voltage DC to Gnd	425		Vdc
Nominal Input Voltage DC+ to DC-	850		Vdc
Maximum Input Current	80	120	Adc
Maximum Input Short Circuit Current	120		Adc
Reverse-Polarity Protection	Yes		
Ground Fault Isolation Detection	350kΩ Sensitivity per Unit		
CEC Weighted Efficiency	98.5		%
Nighttime Power Consumption	< 12		W
ADDITIONAL FEATURES			
Supported Communication Interfaces	RS485, Ethernet, Cellular GSM (optional)		
Rapid Shutdown	NEC2014 and NEC2017 compliant/certified, upon AC Grid Disconnect		
RS485 Surge Protection	Built-in		
DC SAFETY SWITCH			
DC Disconnect	1000V / 2 x 40A	1000V / 3 x 40A	
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1699B, UL1998, CSA 22.2		
Grid Connection Standards	IEEE 1547, Rule 21, Rule 14 (HI)		
Emissions	FCC part15 class A		
INSTALLATION SPECIFICATIONS			
Number of units	2	3	
AC Output Conduit Size / Max AWG / Max PE AWG	1.5" / 2/0 / 5	2" / 4/0 / 4	
DC Output Conduit Size / Terminal Block AWG Range / Number of Strings	2 x 1.25" / 6-14 / 6 strings	2 x 1.25" / 6-14 / 9 strings	
Dimensions (H x W x D)	Primary Unit: 37 x 12.5 x 10.5 / 940 x 315 x 260; Secondary Unit: 21 x 12.5 x 10.5 / 540 x 315 x 260		in / mm
Weight	Primary Unit: 105.8 / 48; Secondary Unit: 99.2 / 45		lb / kg
Operating Temperature Range	-40 to +140 / -40 to +60		°F / °C
Cooling	Fan (user replaceable)		
Noise	< 60		dBA
Protection Rating	NEMA 3R		
Mounting	Bracket provided		

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CE RoHS

eGauge | EG30xx Specifications

General

Warranty:	2 years, 5 years
Logging Values:	V, A, W, Wh, Hz, VA, VAr, THD, deg
Power Draw:	7.5W peak, 2W typical

Measurement Capacity

Voltage:	3 channels: 85-277Vrms (L1-N) 0-277Vrms (L2-N, L3-N)
Current:	12 channels, up to 4800A
Power:	any voltage/current combination
Frequency:	50 or 60 Hz

Regulatory

Safety:	Conforms to UL/IEC STD 61010-1; Certified to CAN/CSA STD C22.2 No. 61010.1; Conforms as Listed Device; Lead-free, RoHS compliant
FCC:	CISPR 11 Group 1 class B; FCC 47CFR 15 class B

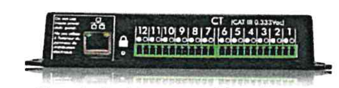
User Interface

Compatible web browsers*: Google Chrome, Firefox, Safari, Internet Explorer

*Up-to-date versions supported

Communication

HomePlug AV:	Compatible with HomePlug AV adapter within ~100ft. on same phase as L1 terminal
Ethernet:	IEEE 802.3 - LAN



eGauge is a flexible, secure, web-based electric energy and power meter that can measure up to 12 circuits on up to three phases.

Product Capabilities

	EG3000	EG3010
Ethernet Port	✓	✓
HomePlug PLC		✓
3ph/4w	✓	✓
3ph/3w	✓	✓
1ph/3w	✓	✓
0-4800A	✓	✓
12 CT Channels	✓	✓
Track Use./Gen.	✓	✓
CSV Export	✓	✓
16/64 Registers**	✓	✓
UI Firmware	✓	✓

**Database Storage Capacity

The EG30xx model has two database options: 16 and 64 register. They differ in how long and with what granularity data is stored. Both options have 10 minutes of data at one second granularity in volatile memory.

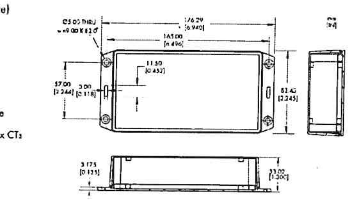
	1 min average	15 min average	1 hr average
16 Register Database	1 year	29 years	—
64 Register Database	1 year	—	6 years

Environmental Conditions

Operating Temp:	-30°C to 70°C (-22°F to 158°F)
Max Altitude:	4000m (13,000 ft)
Max Humidity:	80% up to 31°C
Meas. Category:	III (fixed installation)
Location:	Indoor or outdoor (in NEMA 4 Enclosure)
Pollution Degree:	2

Enclosure

Material:	Flame-retardant ABS (UL94-V0)
Size:	176x83x33mm (6.94x3.25x1.3IN)
Weight:	220g (8oz)



Revenue Grade Accuracy

[1]Accuracy Options: (A000) ANSI C12.1 - 1%; (A010) ANSI C12.1 - 1% with Certificate; (A005) ANSI C12.20 - 0.5% with Certificate

[1]Revenue grade accuracy requires the use of model CC-ACT-xxx-xxxx CTs. Contact eGauge sales for more information

Current Transformer Options

CT Type	CT Inner Diameter		20A	30A	50A	75A	100A	150A	200A	250A	300A	400A	600A	800A	1000A	1500A	...	4800A
Split-core																		
JD-SCT-010-xxxx	0.39"	10 mm			x	x												
JD-SCT-016-xxxx	0.63"	16 mm			x		x											
JD-SCT-024-xxxx	0.94"	24 mm					x		x									
JD-SCT-036-xxxx	1.42"	36 mm										x	x					
ML-SCT-050-xxxx	2.00"	50.8 mm					x		x		x	x	x	x	x	x		
Revenue Grade Accuracy																		
CC-ACT-020-xxxx	0.79"	20 mm	x		x		x		x	x								
CC-ACT-032-xxxx	1.25"	32 mm								x		x	x					
Rogowski Coil (Rope)																		
ML-RCT-150-4800	6.0"	152.4 mm			Linear measurement range from 50A-4800A													
JD-RCT-115-4085	4.5"	115 mm			Linear measurement range from 50A-4085A													

Wire Gauge Sizing**

AWG/kcmil	DIAMETER (IN)	AWG/kcmil	DIAMETER (IN)	AWG/kcmil	DIAMETER (IN)	AWG/kcmil	DIAMETER (IN)
12	0.127	4	0.317	0	0.474	250	0.678
10	0.160	3	0.344	00	0.518	300	0.730
8	0.212	2	0.375	000	0.568	350	0.777
6	0.248	1	0.435	0000	0.624	400	0.821

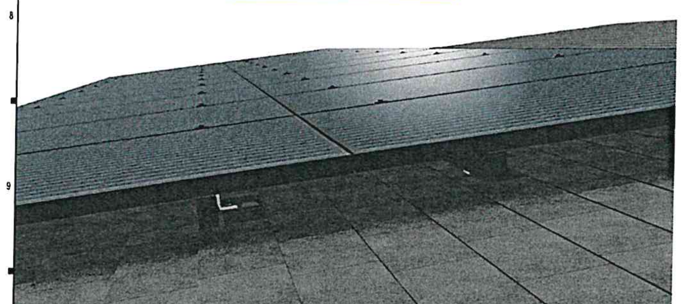
**Sizes based on approximate outer diameters of THHN cable. Should be used only as a guide.

www.egauge.net / sales@egauge.net / (877) 342-8431

SnapNrack Solar Mounting Solutions

Series 100

Series 100



The Installers Choice for Residential Solar Mounting

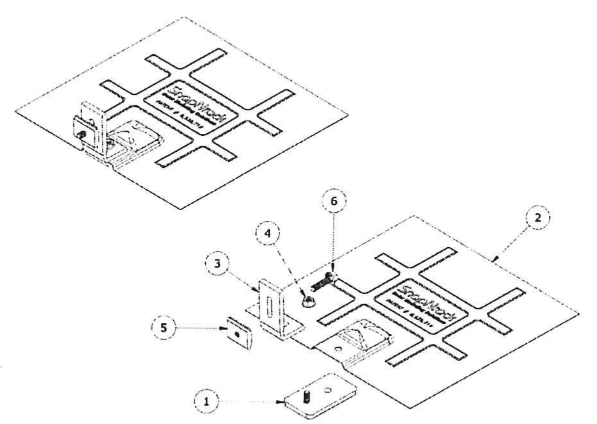
- Entire Mounting System from Single Manufacturer under 1 Warranty
- Snap-in features make the install process intuitive and fast
- Industry Leading Technical Support Services for Every Customer
- The Most Comprehensive UL 2703 Listing in the Industry

Start Mounting Solar on Your Roof Today

RESOURCES	snapnrack.com/resources
DESIGN	snapnrack.com/configurator
WHERE TO BUY	snapnrack.com/where-to-buy

DESCRIPTION:	DRAWN BY:
SNAPNRACK, FLASHED L FOOT	M.Watkins
PART NUMBER(S):	REVISION:
242-92047, 242-92048, 242-92050, 242-92051	A

SnapNrack Solar Mounting Solutions



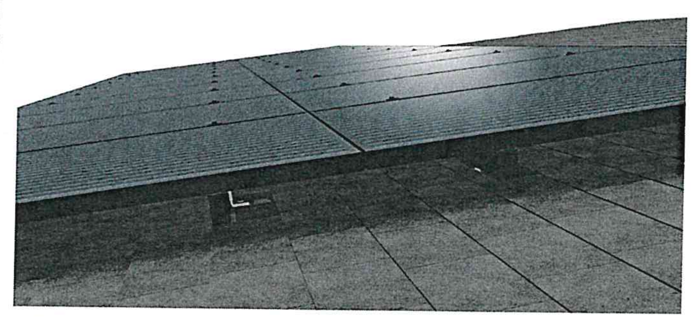
ITEM	QTY	PARTS LIST DESCRIPTION
1	1	SNAPNRACK, L FOOT BASE, MILL
2	1	SNAPNRACK, L FOOT FLASHING, 12IN X 12IN, BLACK GALV
3	1	SNAPNRACK L FOOT, COMPOSITION 92DEG, CLEAR / BLACK
4	1	NUT, FLANGE, SERRATED, 5/16IN-18, SS
5	1	SNAPNRACK CHANNEL NUT 5/16IN-18
6	1	BOLT, FLANGED HEX, 5/16IN-18 X 1-1/4IN, SS

MATERIALS:	6000 SERIES ALUMINUM, STAINLESS STEEL	OPTIONS:
DESIGN LOAD (LBS):	309 UP, 1469 DOWN, 251 SIDE	CLEAR / BLACK ANODIZED
ULTIMATE LOAD (LBS):	928 UP, 4406 DOWN, 754 SIDE	GALV STEEL / ALUM FLASHING
TORQUE SPECIFICATION:	10+ LB-FT	
CERTIFICATION:	UL 2703, FILE E359313	
WEIGHT (LBS):	0.90 - 1.25	

SnapNrack Solar Mounting Solutions

Series 100

Series 100



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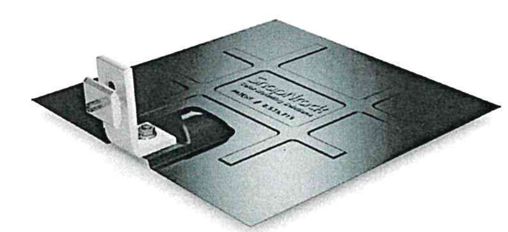
Start Mounting Solar on Your Roof Today

RESOURCES	snapnrack.com/resources
DESIGN	snapnrack.com/configurator
WHERE TO BUY	snapnrack.com/where-to-buy

SnapNrack Solar Mounting Solutions

Series 100

Flashed L Foot



Reliable & Weatherproof Roof Attachment

- Cutting of shingles not required
- Preassembled, snap-in hardware reduces installation time
- Single tool installation, using a standard 1/2" socket
- Included in Series 100 UL 2703 Listing

Start Installing the Flashed L Foot Today

RESOURCES	snapnrack.com/resources
DESIGN	snapnrack.com/configurator
WHERE TO BUY	snapnrack.com/where-to-buy

NEW COLUMBIA SOLAR

CONTRACTOR

NEW COLUMBIA SOLAR

PHONE: 202-810-1661

LIC. NO.: 410516000434

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REVISION / RELEASE

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0.1	30%	5.29.2019
1.2	90%	6.5.2019

PROJECT

NEW PV SYSTEM: 354.255 kWp (DC): 316.600 kWp (AC)

AHD PROPERTIES (ROYAL COURTS)

3705 4TH ST SE
WASHINGTON, DC 20032
APN: 6092-0801

ENGINEER OF RECORD

PAPER SIZE: 36" x 24" (ARCH D)

SHEET TITLE: RESOURCE DOCUMENTS (2)

(SHEET 10)

DATE: 6.5.2019

DESIGN BY: J.P.

CHECKED BY: M.M.

SHEET NUMBER: R-002

DISTRICT OF COLUMBIA GOVERNMENT
OFFICE OF THE SURVEYOR

Washington, D.C., May 7, 2019

Plat for Building Permit of: SQUARE 6092 Lot 801

Scale: 1 inch = 50 feet

Recorded in Book A & T Page 3851 - N

Receipt No. 19-04931 Drawn by: A.S.

Furnished to: NICHOLAS BIHUN

"I hereby certify that the dimensions and configuration of the lot(s) hereon depicted are consistent with the records of the Office of the Surveyor unless otherwise noted, but may not reflect actual field measurements. The dimensions and configuration of A&T lots are provided by the Office of Tax and Revenue and may not necessarily agree with the deed description(s)."

_____

Surveyor, D.C.

I hereby certify that on this plat on which the Office of the Surveyor has drawn the dimensions of this lot, I have accurately and completely depicted and labeled the following:

1) all existing buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, and any existing face-on-line or party wall labeled as such, well as projections and improvements in public space - with complete and accurate dimensions;

2) all proposed demolition or raze of existing buildings duly labeled as such; all proposed buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, any existing face-on-line or party wall labeled as such, as well as projections and improvements in public space and the improvements used to satisfy pervious surface or green area ratio requirements - with complete and accurate dimensions, in conformity with the plans submitted with building permit application _____; and

3) any existing chimney or vent on an adjacent property that is located within 10 feet of this lot.

I also hereby certify that:

1) my depiction on this plat, as detailed above, is accurate and complete as of the date of my signature hereon;

2) there is no elevation change exceeding ten feet measured between lot lines; or if so, this elevation change is depicted on a site plan submitted with the plans for this permit application;

3) I have/have not (*circle one*) filed a subdivision application with the Office of the Surveyor;

4) I have/have not (*circle one*) filed a subdivision application with the Office of Tax & Revenue; and

5) if there are changes to the lot and its boundaries as shown on this plat, or to the proposed construction and plans as shown on this plat, that I shall obtain an updated plat from the Office of the Surveyor on which I will depict all existing and proposed construction and which I will then submit to the Office of the Zoning Administrator for review and approval prior to permit issuance.

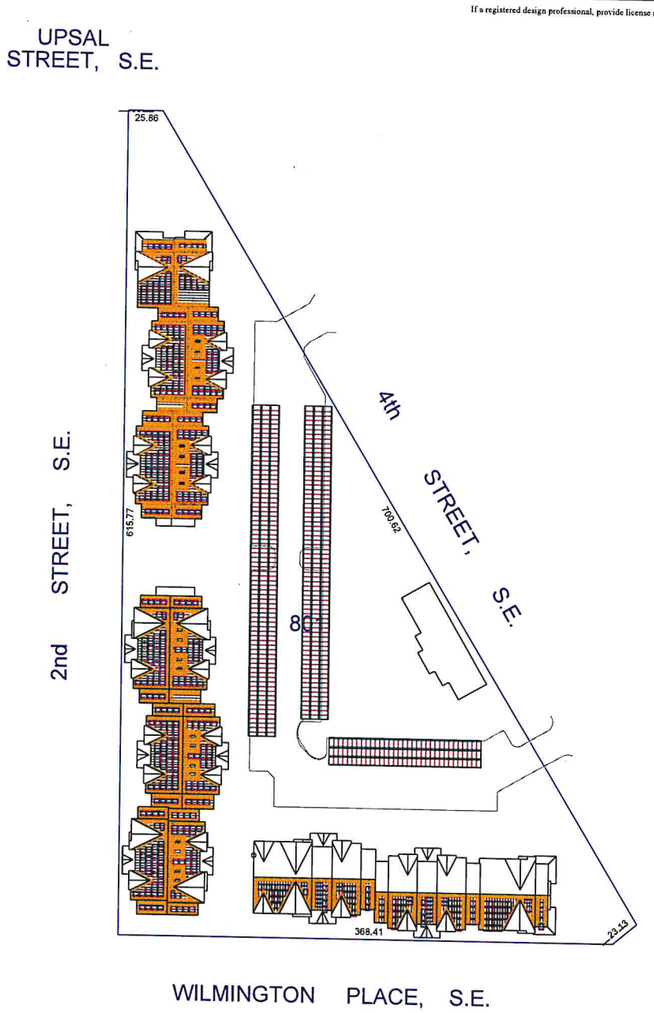
The Office of the Zoning Administrator will only accept a Building Plat issued by the Office of the Surveyor within the two years prior to the date DCRA accepts a Building Permit Application as complete.

I acknowledge that any inaccuracy or errors in my depiction on this plat will subject any permit or certificate of occupancy issued in reliance on this plat to enforcement, including revocation under Sections 105.6(1) and 110.5.2 of the Building Code (Title 12A of the DCMR) as well as prosecution and penalties under Section 404 of D.C. Law 4-164 (D.C. Official Code §22-2405).

Signature: _____ Date: _____

Printed Name: _____ Relationship to Lot Owner: _____

If a registered design professional, provide license number _____ and include stamp below.



0 10 30 60 100 200

SCALE: 1:50

SR-19-04931(2019)
* E-MAIL