| CONDUCTOR SCHEDULE |                             |                  |                      |      |                 |            |       |      |          |       |
|--------------------|-----------------------------|------------------|----------------------|------|-----------------|------------|-------|------|----------|-------|
| TAG                | CURRENT CARRYING CONDUCTORS |                  | GROUNDING CONDUCTORS |      | CONDUIT/RACEWAY |            | NOTES |      |          |       |
| IAG                | QTY.                        | SIZE             | INSULATION           | QTY. | SIZE            | INSULATION | QTY.  | SIZE | LOCATION | NOTES |
| C1                 | 6                           | 10 AWG           | THWN-2               | 1    | 10 AWG          | THWN-2     | 2     | 3/4" | EXT/INT  | 2,4   |
| C2                 | 3                           | 6 AWG            | THWN-2               | 1    | 10 AWG          | THWN-2     | 1     | 3/4" | EXT/INT  | 2,4   |
| C3                 | 3                           | 12 AWG           | THWN-2               | 1    | 12 AWG          | THWN-2     | 1     | 1/2" | EXT/INT  | 2,4   |
| C4                 | 3                           | 8 AWG            | THWN-2               | 1    | 10 AWG          | THWN-2     | 1     | 1"   | EXT/INT  | 2,4   |
| C5                 | 2                           | 12 AWG           | THWN-2               | 1    | 12 AWG          | THWN-2     | 1     | 1/2" | EXT/INT  | 2,4   |
| C6                 | 3                           | 4/0 AWG ALUMINUM | XHHW                 | 1    | 6 AWG           | THWN-2     | 1     | 2"   | EXT/INT  | 2,4   |
| C7                 | 2                           | 12 AWG           | THWN-2               | 1    | 12 AWG          | THWN-2     | 1     | 1/2" | EXT/INT  | 2,4   |
| C8                 | 4                           | 10 AWG           | THWN                 | 2    | 10 AWG          | THWN       | 1     | 1/2" | EXT/INT  | 2,4   |
| C9                 | 4                           | 10 AWG           | THWN                 | -    | =               | -          | 1     | 1/2" | EXT/INT  | 2,4   |
| XC                 | -                           | -                | -                    | -    | -               | -          | -     | -    | -        | 3     |

#### NOTES:

- 1. MANUFACTURER PROVIDED, UL LISTED WIRING HARNESS FOR USE ON EXPOSED ROOFS
- 2. CONDUIT SIZE SHOWN IS CODE MINIMUM. LARGER SIZES ARE ALLOWED.
- . EXISTING CONDUCTORS, FIELD VERIFY
- 4. EQUIPMENT TERMINAL RATING SHALL BE A MINIMUM OF 75°C AT BOTH END OF CONDUCTOR

| ENERGY MANAGEMENT   |                        |  |  |  |
|---------------------|------------------------|--|--|--|
| MAKE ENPHASE        |                        |  |  |  |
| MODEL               | IQ SYSTEM CONTROLLER 3 |  |  |  |
| ENCL. RATING        | NEMA 3R                |  |  |  |
| VOLT. RATING        | 240 VOLTS              |  |  |  |
| DISCONNECT CURR.    | 200 AMPS               |  |  |  |
| UL LIST. (Y/N)      | YES                    |  |  |  |
| MAIN BREAKER (Y/N)  | NO                     |  |  |  |
| MAIN BREAKER RATING | N/A                    |  |  |  |

- BACK-FEED SOLAR OUTPUT VIA 60A BREAKER IN DESIGNATED PV BREAKER POSITION
- CONNECT IQ GATEWAY VIA 20A QUAD BREAKER
- FEED BACKED-UP LOADS PANEL VIA BACKUP LUGS
- BACK-FEED BATTERY OUTPUT VIA 40A BREAKER IN DESIGNATED POSITION

| JUNCTION BO     | JUNCTION BOX (EXISTING) |  |  |  |  |
|-----------------|-------------------------|--|--|--|--|
| MAKE SOLADECK   |                         |  |  |  |  |
| PROTECT. RATING | NEMA TYPE 3R            |  |  |  |  |
| UL LIST. (Y/N)  | YES                     |  |  |  |  |

| DC / AC INVERTER (EXISTING) |                   |  |  |  |
|-----------------------------|-------------------|--|--|--|
| MAKE                        | ENPHASE           |  |  |  |
| MODEL                       | IQ7A-72-2-US      |  |  |  |
| DC INPUT:                   |                   |  |  |  |
| POWER RANGE (WATTS)         | 295-460           |  |  |  |
| MIN/MAX START VOLT.         | 33 / 58           |  |  |  |
| OPERATING VOLT. RANGE       | 18-58             |  |  |  |
| MAX. CURRENT                | 15 AMPS           |  |  |  |
| MODULE COMPATIBILITY        | 60, 66, & 72 CELL |  |  |  |
| AC OUTPUT:                  |                   |  |  |  |
| MAX. POWER                  | 366 WATTS         |  |  |  |
| NOM. POWER                  | 349 WATTS         |  |  |  |
| NOM. VOLT.                  | 211-240-264       |  |  |  |
| MAX. CURR.                  | 1.45 AMPS         |  |  |  |
| DC DISC. (Y/N)              | NO                |  |  |  |
| RAPID SHUTDOWN (Y/N)        | YES               |  |  |  |
| PROTECT. RATING             | NEMA TYPE 6       |  |  |  |
| UL LIST. (Y/N)              | YES               |  |  |  |
| MAX BRANCH CIRCUIT          | 11                |  |  |  |

| IQ LOAD CONTROLLER   |  |  |  |                   |         |
|--|--|--|--|-------------------|---------|
| MAKE ENPHASE   |  |  |  |                   |         |
| MODEL         EP-NA-LKO2-040           ENCL. RATING         NEMA 4X           UL LIST. (Y/N)         YES |  |  |  |                   |         |
|  |  |  |  | MAX AMPERAGE 32 A |         |
|  |  |  |  | MAX VOLTAGE       | 240 VAC |

INTERCEPT THE UP AND DOWN A/C UNIT CIRCUITS SO THAT THESE LOADS CAN BE SHED FROM THE BACKED-UP LOADS PANEL

|   | PV COMBINER PANEL   |                 |  |  |  |
|---|---------------------|-----------------|--|--|--|
|   | MAKE                | ENPHASE         |  |  |  |
|   | MODEL               | X2-IQ-AM1-240-5 |  |  |  |
|   | INPUT:              |                 |  |  |  |
|   | MAX BRANCH CIRCUITS | 4 TOTAL         |  |  |  |
|   | BRANCH CIRCUIT OCPD | 50.00 AMPS      |  |  |  |
|   | OUTPUT:             |                 |  |  |  |
|   | MAX POWER           | 15600 WATTS     |  |  |  |
|   | NOM. VOLTAGE        | 240 VOLTS       |  |  |  |
| _ | BUS RATING          | 125.00 AMPS     |  |  |  |
| R | MAIN BREAKER Y/N    | NO              |  |  |  |
|   | ENCL. RATING        | NEMA TYPE 3R    |  |  |  |
|   | UL LIST. (Y/N)      | YES             |  |  |  |
|   |                     |                 |  |  |  |

| ENERGY STORAGE SYSTEM |           |  |  |  |
|-----------------------|-----------|--|--|--|
| MAKE ENPHASE          |           |  |  |  |
| MODEL                 | 5P        |  |  |  |
| USABLE ENERGY         | 10.08 kWh |  |  |  |
| NOM. VOLT.            | 240 VOLTS |  |  |  |
| REAL POWER CONT.      | 3.84 kVA  |  |  |  |
| UL LIST. (Y/N)        | YES       |  |  |  |
| PROTECTION RATING     | NEMA 6    |  |  |  |
|                       |           |  |  |  |

#### BACKED-UP LOADS PANEL (EXISTING) MAKE SIEMENS MODEL N/A ENCL. RATING NEMA TYPE 1 VOLT. RATING BUS RATING 200 AMPS UL LIST. (Y/N) YES MAIN BREAKER (Y/N) YES MAIN BREAKER RATING 200 AMPS

- REMOVE N/G BOND AND SEPARATE GROUND AND NEUTRAL WIRES
- REMOVE SUPPLY SIDE TAP OF EXISTING SOLAR PV SYSTEM AND RELOCATE SOLAR BACKFEED TO IQ SYSTEM CONTROLLER 3

| PV MODULE (EXISTING) |               |  |  |
|----------------------|---------------|--|--|
| MAKE                 | REC           |  |  |
| MODEL                | REC405AA PURE |  |  |
| NOM. POWER (PNOM)    | 405 WATTS     |  |  |
| NOM. VOLT. (VMPP)    | 42.4 VOLTS    |  |  |
| O.C. VOLT (VOC)      | 48.9 VOLTS    |  |  |
| MAX. SYS. VOLT.      | 1000 VOLTS    |  |  |
| NOM. CURR. (IMPP)    | 9.6 AMPS      |  |  |
| S.C. CURR. (ISC)     | 10.3 AMPS     |  |  |
| TEMP. COEF. (PMPP)   | -0.26 %/C     |  |  |
| TEMP. COEF. (Voc)    | -0.24 %/C     |  |  |
| MAX SERIES FUSE      | 25 AMPS       |  |  |
| UL COMPLIANT (Y/N)   | YES           |  |  |

| RSD DEVICE         |                  |  |  |  |
|--------------------|------------------|--|--|--|
| MAKE               | ENPHASE          |  |  |  |
| MODEL              | EP200G-NA-02-RSD |  |  |  |
| PROTECT. RATING    | NEMA TYPE 4X     |  |  |  |
| UL LIST. (Y/N) YES |                  |  |  |  |
| UL LIST. (Y/N) YES |                  |  |  |  |

 USE SPLICES (INCLUDED WITH THE ENPHASE ENERGY SYSTEM) TO CONNECT RSD PORT 16 AWG TO LARGER 12 OR 14 AWG WIRE

| AC DISCONNECT 'A' & 'B' |           |  |  |  |
|-------------------------|-----------|--|--|--|
| MAKE                    | GENERIC   |  |  |  |
| MODEL                   | NA        |  |  |  |
| ENCL. RATING            | NEMA 3R   |  |  |  |
| VOLT. RATING            | 240 VOLTS |  |  |  |
| AMP RATING              | 60 AMPS   |  |  |  |
| UL LIST. (Y/N)          | YES       |  |  |  |
| FUSED (Y/N)             | NO        |  |  |  |

N/A

- LOAD-BREAK RATED
- VISIBLE OPEN

FUSE RATING

- LOCKABLE IN OPEN POSITION
- INSTALL ADJACENT TO METER
- DISCONNECT TO BE READILY ACCESSIBLE TO UTILITY COMPANY PERSONNEL AT ALL TIMES



**CLIENT INFO** 

JULIE BARAJAS 491 OLD FIELD LOOP SANFORD, NC 27332

## PROJECT INFO

DC INPUT: 13.365 kW
AC EXPORT: 11.517 kW
DOI INSPT. METHOD: OPTION 2

## Model Energy

300 Fayetteville St. #1430

Raleigh, NC 27602 919-274-9905 ModelEnergy.com

P-1194

## CODE REFERENCES

NATIONAL ELECTRICAL CODE v. 2017 NC FIRE PROTECTION CODE v. 2018 NC BUILDING CODE v. 2018 NC RESIDENTIAL CODE v. 2018 ACSE v. 7-10

### SITE CONDITIONS

WIND SPEED: 116 MPH
RISK CATEGORY: II
EXPOSURE: B
SNOW: 10 PSF

# SHEET INDEX PV-1: COVER SHEET

PV-1: COVER SHEET
PV-2: PV STRUCTURAL
PV-3: PV ELECTRICAL
PV-4: PV EQUIPMENT LABELS
PV-5: PV INSTALL GUIDE

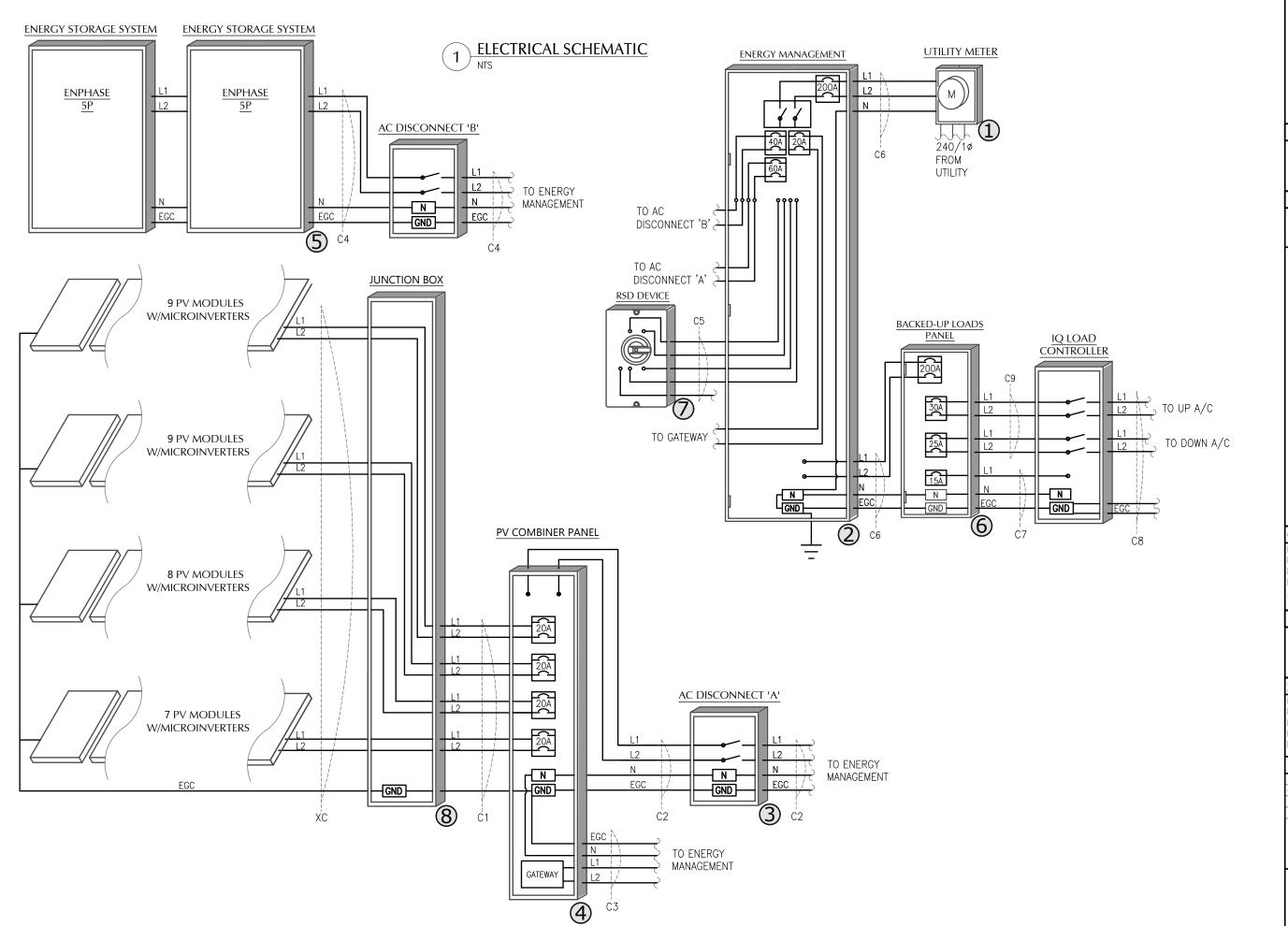
## VERSIONS

| FOR:         | DESIGNER | DATE      |
|--------------|----------|-----------|
| CONSTRUCTION | CRM      | 7/29/2024 |
|              |          |           |
|              |          |           |

PV SYSTEM ELECTRICAL

PV-1.1

| PV MATERIAL SUMMARY: DISTRIBUTOR  |   |  |  |
|-----------------------------------|---|--|--|
| X-IQ-NA-HD-125A HOLD DOWN KIT     | 2 |  |  |
| BRK-20A-2P-240V-B BOLT BREAKER    | 4 |  |  |
| IQBATTERY-5P-1P-NA IQ5P BATTERY   | 2 |  |  |
| SC200D111C240US01 IQ CONTROLLER 3 | 2 |  |  |
| X-IQ-AM1-240-5C COMBINER PANEL    | 1 |  |  |
| EP-NA-LKO2-040 LOAD CONTROLLER    | 1 |  |  |



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## **Model Energy**

300 Fayetteville St. #1430

Raleigh, NC 27602 919-274-9905 ModelEnergy.com

P-118

## **CODE REFERENCES**

NATIONAL ELECTRICAL CODE v. 2017 NC FIRE PROTECTION CODE v. 2018 NC BUILDING CODE v. 2018 NC RESIDENTIAL CODE v. 2018 ACSE v. 7-10

### SITE CONDITIONS

WIND SPEED: 116 MPH RISK CATEGORY: II EXPOSURE: B SNOW: 10 PSF

## SHEET INDEX

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## VERSIONS

| FOR:         | DESIGNER | DATE      |
|--------------|----------|-----------|
| CONSTRUCTION | CRM      | 7/29/2024 |
|              |          |           |
|              |          |           |

PV SYSTEM ELECTRICAL

**PV-1.2** 

# **MARNING**

PHOTOVOLTAIC SYSTEM **COMBINER PANEL** 

DO NOT ADD LOADS

NEC 705.12 (C)(3) PLACE ON PV COMBINER PANEI

**(4)** 

## **MARNING**

POWER SOURCE **OUTPUT CONNECTION** DO NOT RELOCATE THIS **OVERCURRENT DEVICE** 

NEC 705.12 (B)(2)(3)(b) PLACE ADJACENT TO BACK-FED BREAKER

# **!**WARNING! THREE POWER SOURCES 2

SOURCES: UTILITY GRID. BATTERY AND PV SOLAR ELECTRIC SYSTEM

NEC 705.12 (B)(3) PLACE ON ALL EQUIPMENT THAT IS SUPPLIED BY BOTH POWER SOURCES

## **BATTERY** DISCONNECT

PLACE ON RSD DEVICE

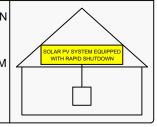
# **RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM**

PLACE ON RAPID SHUTDOWN SWITCH OR EQUIPMENT VITH INTEGRATED RAPID SHUTDOWN \*REFLECTIVE\*

## SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD

IN THE ARRAY



NEC 690.56 (C)(1)(a) PLACE WITHIN 3FT OF SERVICE DISCONNECTING MEANS TO WHICH THE PV SYSTEMS ARE CONNECTED AND SHALL INDICATE THE LOCATIONS OF RAPID SHUTDOWN SWITCHES

DISCONNECT NEC 690.13 (B)

PV SYSTEM

PLACE ON PV SYSTEM DISCONNECTING MEANS.

PHOTOVOLTAIC POWER SOURCE

PERATING AC VOLTAGE 240

MAXIMUM OPERATING 47.85 A AC OUTPUT CURRENT

> NEC 690.54 PLACE ON INTERCONNECTION DISCONNECTING MEANS

## **♠WARNING**

THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICES EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE SHALL NOT EXCEED AMPACITY OF BUSBAR.

NEC 705.12 (B)(2)(3)(c)

PLACE ON PV COMBINER PANEL AND IQ SYSTEM CONTROLLER

## **GENERATION PANEL:**

IN THE EVENT OF AN EMERGENCY TURN OFF ALL BREAKERS TO DISCONNECT BACKUP POWER SOURCE(S).

PLACE ON IQ SYSTEM CONTROLLER

SERVICE DISCONNECT LOCATED: **EXTERIOR EAST WALL OF RESIDENCE** 

**BATTERY DISCONNECT LOCATED: EXTERIOR EAST WALL OF RESIDENCE** 

PV DISCONNECT LOCATED: **EXTERIOR EAST WALL OF RESIDENCE** 



PLACE AT SERVICE EQUIPMENT AND PV SYSTEM DISCONNECTING MEANS.

## **WARNING:**

N THE EVENT OF A UTILITY OUTAGE THIS PANEL IS FED FROM **ENERGY STORAGE SYSTEM.** 

# **∱WARNING**

**ELECTRIC SHOCK HAZARD** 

LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

## LABEL NOTES

- LABELS SHOWN ARE HALF THEIR ACTUAL REQUIRED SIZE.
- LABEL MATERIAL SHALL BE SUITABLE FOR THE EQUIPMENT ENVIRONMENT.
- DC CONDUIT SHALL BE MARKED WITH REQUIRED LABEL EVERY 10
- LABELS WILL BE APPLIED IN ACCORDANCE WITH THE NEC. SOME LABELS MAY NOT BE NECESSARY.

## **DC WIRING NOTES**

- CONDUCTORS SHALL BE COPPER, RATED AT NOT LESS THAN 600 VOLTS FOR RESIDENTIAL CONSTRUCTION AND NOT LESS THAN 1000 VOLTS FOR COMMERCIAL CONSTRUCTION.
- MINIMUM SIZE SHALL BE #10 AWG UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- EXPOSED WIRING CONDUCTOR INSULATION SHALL BE TYPE PV WIRE, USE-2, OR RHW-2 WHERE THE OUTER LAYER OF THE INSULATION IS UV, SUNLIGHT, AND MOISTURE RESISTANT.
- EXTERIOR WIRING CONDUCTOR INSULATION SHALL BE TYPE THWN-2 AND INSTALLED IN ELECTRICAL METALLIC TUBING(EMT) OR RIGID POLYVINYL CHLORIDE CONDUIT(PVC). ALTERNATIVELY, METAL CLAD CABLE(MC) CAN BE USED AS WELL WHEN RATED FOR USE IN WET LOCATIONS.
- INTERIOR WIRING CONDUCTOR INSULATION SHALL BE TYPE THHN-2 AND INSTALLED IN ELECTRICAL METALLIC TUBING(EMT), FLEXIBLE METAL CONDUIT(FMC), OR METAL CLAD CABLE(MC).
- USE SCHEDULE 40 PVC OUTDOORS WHERE NOT SUBJECT TO PHYSICAL DAMAGE OR BELOW FLOOR SLAB. USE SCHEDULE 80 PVC OUTDOORS WHERE SUBJECT TO PHYSICAL DAMMAGE
- MINIMUM CONDUIT SIZE TO BE 1/2".
- WIRING METHODS TO CONFORM TO ARTICLES 330, 334, 348, 350, 352, 356, AND 358 OF THE 2017 NEC.

## **AC WIRING NOTES**

- CONDUCTORS SHALL BE COPPER OR ALUMINUM RATED AT NOT LESS THAN 600 VOLTS.
- MINIMUM SIZE SHALL BE #14 AWG UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- EXTERIOR WIRING CONDUCTOR INSULATION SHALL BE TYPE THWN AND INSTALLED IN ELECTRICAL METALLIC TUBING(EMT), RIGID POLYVINYL CHLORIDE CONDUIT(PVC), LIQUID-TIGHT FLEXIBLE METAL CONDUIT(LFMC), OR LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT(LFNC). ALTERNATIVELY, METAL CLAD CABLE(MC) CAN BE USED AS WELL WHEN RATED FOR USE IN WET LOCATIONS.
- INTERIOR WIRING CONDUCTOR INSULATION SHALL BE TYPE THHN AND INSTALLED IN ELECTRICAL METALLIC TUBING(EMT), FLEXIBLE METAL CONDUIT(FMC), METAL CLAD CABLE(MC), OR ROMEX.
- USE SCHEDULE 40 PVC OUTDOORS WHERE NOT SUBJECT TO PHYSICAL DAMAGE OR BELOW FLOOR SLAB. USE SCHEDULE 80 PVC OUTDOORS WHERE SUBJECT TO PHYSICAL DAMMAGE
- MINIMUM CONDUIT SIZE TO BE 1/2".
- WIRING METHODS TO CONFORM TO ARTICLES 330, 334, 348, 350, 352, 356, AND 358 OF THE 2017 NEC.

# **CONSTRUCTION NOTES**

- ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE NEC, STATE, AND LOCAL APPLICABLE CODES.
- FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS, BEST PRACTICES, AND SPECIFICATIONS. ENSURE REQUIRED MAINTENANCE ACCESS AND CLEARANCES ARE
- MAINTAINED.
- WIRES SHALL BE RATED AND LABELED "SUNLIGHT RESISTANT" WHERE EXPOSED TO AMBIENT CONDITIONS.
- FUSES 0 600 AMPS SHALL BE UL CLASS "RK-1" LOW PEAK DUAL ELEMENT TIME DELAY WITH 200,000 AMPERE INTERRUPTING RATING AS MANUFACTURED BY BUSSMANN, UNLESS NOTED OTHERWISE.
- ALL TERMINALS/LUGS SHALL BE 75° RATED. ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED
- PROVIDE A PULLWIRE IN ALL EMPTY CONDUITS.
- ALL PENETRATIONS THROUGH EXTERIOR ROOFS SHALL BE FLASHED IN A WATERPROOF MANNER.
- ALL PENETRATIONS THROUGH ATTIC FIRE BARRIERS SHALL BE SEALED WITH FIRE-BARRIER SEALANT CAULK.
- 10. SUPPORT ALL CONDUIT AND EQUIPMENT IN ACCORDANCE W/ NEC. ANY SUSPENDED MATERIALS SHALL BE DIRECTLY SUPPORTED BY THE **BUILDING STRUCTURE.**
- 11. METAL CONDUIT COUPLINGS CAN BE COMPRESSION TYPE, THREADED, OR BE SET-SCREW TYPE. PLASTIC CONDUIT COUPLINGS TO BE SOCKET GLUED TYPE.
- 12. A COMPLETE GROUNDING SYSTEM SHALL BE PRESENT OR PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE DRAWINGS.
- 13. EACH ELECTRICAL APPLIANCE SHALL BE PROVIDED WITH A NAMEPLATE GIVING THE IDENTIFYING NAME AND THE RATING IN VOLTS AND AMPERES, OR VOLTS AND WATTS. IF THE APPLIANCE IS TO BE USED ON A SPECIFIC FREQUENCY OR FREQUENCIES, IT SHALL BE SO MARKED. WHERE MOTOR OVERLOAD PROTECTION EXTERNAL TO THE APPLIANCES IS REQUIRED, THE APPLIANCE SHALL BE SO MARKED.
- WHERE APPLICABLE, GROUNDING ELECTRODE CONDUCTOR TO BE CONTINUOUS. GROUNDING CRIMPS TO BE IRREVERSIBLE.
- 15. PHOTOVOLTAIC SYSTEMS SHALL BE PERMANENTLY MARKED AT VARIOUS EQUIPMENT LOCATIONS TO IDENTIFY THAT A PHOTOVOLTAIC SYSTEM IS INSTALLED AND THAT VARIOUS DANGERS ARE PRESENT.
- 16. EACH PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS SHALL BE PERMANENTLY MARKED TO IDENTIFY IT AS A PHOTOVOLTAIC SYSTEM DISCONNECT.
- 17. WHERE ALL TERMINALS OF A DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION, A WARNING SIGN SHALL BE MOUNTED ON OR ADJACENT TO THE DISCONNECT.
- 18. A PERMANENT LABEL FOR THE DIRECT-CURRENT PHOTOVOLTAIC POWER SOURCE SHALL BE PROVIDED AT THE DC DISCONNECT MEANS.
- 19. A PERMANENT PLAQUE OR DIRECTORY, DENOTING ALL ELECTRIC POWER SOURCES SERVING THE PREMISES. SHALL BE INSTALLED AT EACH SERVICE EQUIPMENT LOCATION AND AT LOCATIONS OF ALL POWER PRODUCTION SOURCES.
- ALL MODULE GROUND CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH NEC SECTION 690.4 (C)
- 21. A NORTH CAROLINA REGISTERED DESIGN PROFESSIONAL WILL BE REQUIRED TO SEAL THE STRUCTURAL DESIGN AT THE TIME OF PERMIT APPLICATION IF ANY OF THE FOLLOWING EXIST AND ARE ATTESTED TO BY THE APPLICANT:
  - I. THE WEIGHT OF THE PV SYSTEM EXCEEDS THREE (3) POUNDS PER SQUARE FOOT(PSF)
  - II. THE ROOF POSSESSES MORE THAN ONE (1) LAYER OF ASPHALT
  - III. THE ROOFING MATERIAL CONSISTS OF A TYPE OTHER THAN ASPHALT SHINGLES OR METAL
  - IV. THE ROOF IS LOCATED IN A 140 MPH OR GREATER WIND ZONE

491 OLD FIELD LOOP SANFORD, NC 27332

**JULIE BARAJAS** 

## PROIECT INFO

DC INPUT: 13.365 kW AC EXPORT 11.517 kW DOLINSPT, METHOD: OPTION 2

Model Energy

300 Fayetteville St. #1430

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## **CODE REFERENCES**

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#### SITE CONDITIONS

WIND SPEED: 116 MPH RISK CATEGORY EXPOSURE: SNOW: 10 PSF

#### SHEET INDEX COVER SHEET

PV-2: PV STRUCTURAL PV-3: PV ELECTRICAL PV-4: PV EQUIPMENT LABELS

PV-5: PV INSTALL GUIDE

## VERSIONS

DESIGNER DATE ONSTRUCTION CRM

PV SYSTEM **EQUIPMENT LABELS** 

PV-2.1

WARNING: PHOTOVOLTAIC **POWER SOURCE** 

PLACE ON ALL JUNCTION BOXES, EXPOSED RACEWAYS, AND OTHER WIRING METHODS EVERY 10' AND ON EVERY SECTION SEPARATED BY

ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS.

TERMINALS ON THE LINE AND

NEC 690 13 (B) PLACE ON PV SYSTEM DISCONNECTING MEANS.