

PHOTOVOLTAIC ROOF MOUNT SYSTEM

33 MODULES-ROOF MOUNTED - 14.355 kW DC, 10.000 kW AC, 8 BATTERY HILL DRIVE, VOORHEES TOWNSHIP, NJ 08043

PHOTOVOLTAIC SYSTEM SPECIFICATIONS:

SYSTEM SIZE: 14.355 kW DC
10.000 kW AC
MODULE TYPE & AMOUNT: (33) HANWHA Q.TRON BLK M-G2+ 435W [33:14V]
(L/W/H) 67.8"/44.6"/1.18"
MODULE DIMENSIONS:
INVERTER: (01) SOLAREDGE SE10000H-US HOME HUB [240V]
OPTIMIZER: (33) SOLAREDGE U650 OPTIMIZERS [60V]
INTERCONNECTION METHOD: SUPPLY SIDE CONNECTION
UTILITY COMPANY: ACE (ATLANTIC CITY ELECTRIC)
UTILITY METER NUMBER: 1ND311903099
AHJ: VOORHEES TOWNSHIP CAMDEN COUNTY

GOVERNING CODES

GOVERNING CODES ADOPTED CONSTRUCTION CODES -

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL EXISTING BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE - NJ EDITION
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FIRE CODE
- 2020 NATIONAL ELECTRICAL CODE
- NJ UCC REHABILITATION SUBCODE

GENERAL NOTES:

- INSTALLATION OF SOLAR PHOTOVOLTAIC SYSTEM SHALL BE IN ACCORDANCE WITH NEC ARTICLE 690, AND ALL OTHER APPLICABLE NEC CODES WHERE NOTED OR EXISTING.
- PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL COMPLY WITH NEC ARTICLE 110.
- ALL CONDUCTORS, INCLUDING THE GROUNDING ELECTRODE CONDUCTOR SHALL BE PROTECTED FROM PHYSICAL DAMAGE IN ACCORDANCE WITH NEC ARTICLE 250.
- THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE; THIS SYSTEM IS UTILITY INTERACTIVE PER UL 1741 AND ALSO INCLUDE STORAGE BATTERY.
- ALL DC WIRES SHALL BE SIZED ACCORDING TO NEC 690.8]
- DC CONDUCTORS SHALL BE WITHIN PROTECTED RACEWAYS IN ACCORDANCE WITH NEC 690.31]
- ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH LOCAL JURISDICTIONAL BUILDING CODE.
- PV MODULES TO BE RATED UL 1703 CLASS C FIRE RATING OR BETTER.
- ALL EQUIPMENT TO BE CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.

1 PLOT PLAN

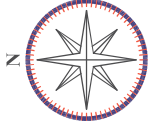
SCALE: 1/16" = 1'-0"

SHEET INDEX:

- PV 0.0: COVER SHEET
PV 1.0: SITE PLAN
PV 2.0: MOUNTING PLANE DETAIL
PV 3.0: BILL OF MATERIALS
S 1.1: MOUNT DETAILS
S 1.2: ROOF SECTION DETAIL
E 1.1: 3-LINE DIAGRAM
E 1.2: NOTES
E 1.3: WARNING LABELS & PLACARD
DS+: EQUIPMENT SPEC SHEET

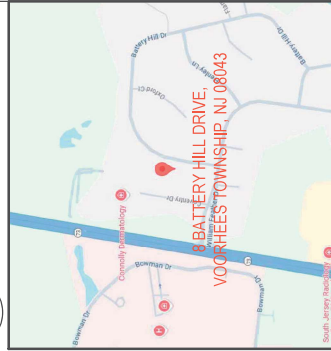
ROOF ACCESS POINT

ROOF ACCESS POINT SHALL NOT BE LOCATED IN AREAS THAT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT STRONG POINTS OF BUILDING CONSTRUCTION IN LOCATIONS WHERE THE ACCESS POINT DOES NOT CONFLICT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREE LIMBS, WIRES OR SIGNS.



2 SATELLITE VIEW

SCALE: NTS



3 VICINITY MAP

SCALE: NTS

PV 0.0

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REVISIONS		
Description	Date	Rev
Initial Design	5/17/2025	00

Signature with Seal

Project Name & Address

FRIEDMAN, BRYAN RESIDENCE
8 BATTERY HILL DRIVE,
VOORHEES TOWNSHIP, NJ 08043

Sheet Name

COVER SHEET

Sheet Size

ANSI B
11" X 17"

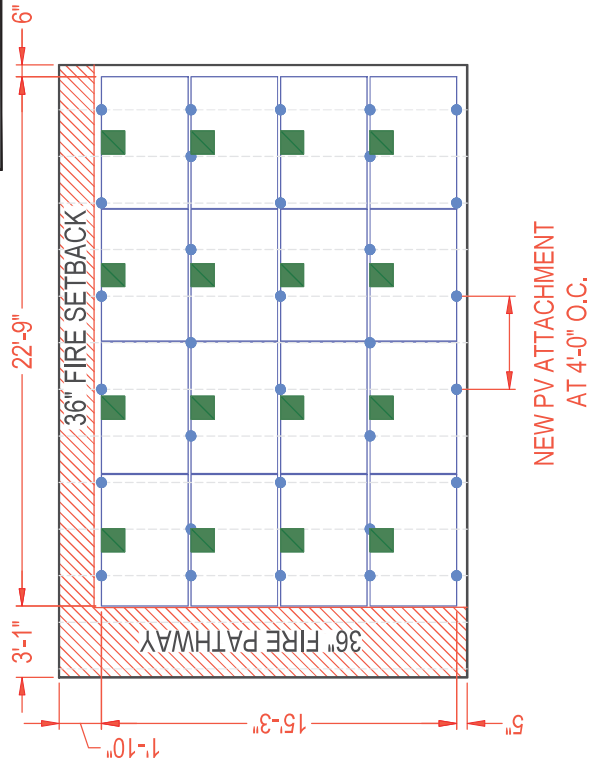
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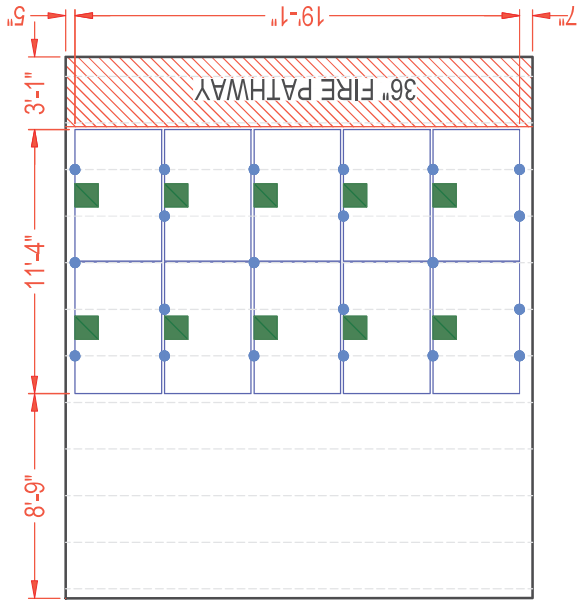
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NOTE:- AT LEAST ONE MOUNT PER MODULE PER MOUNTING SIDE.



1 ROOF #1
PV20
SCALE: 3/16" = 1'-0"



2 ROOF #3
PV20
SCALE: 3/16" = 1'-0"

SYSTEM LEGEND

- 33 NEW HANWHA Q.TROM BLK M-32+ 435W MODULES WITH SOLAREDOGE OPTIMIZER U650 MOUNTED ON THE BACK OF EACH MODULES.
- = FIRE PATHWAY
- = ROOF OBSTRUCTIONS
- = TRUSS & RAFTER
- = ATTACHMENT POINTS

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MOUNTING
PLANE DETAIL

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PV 2.0

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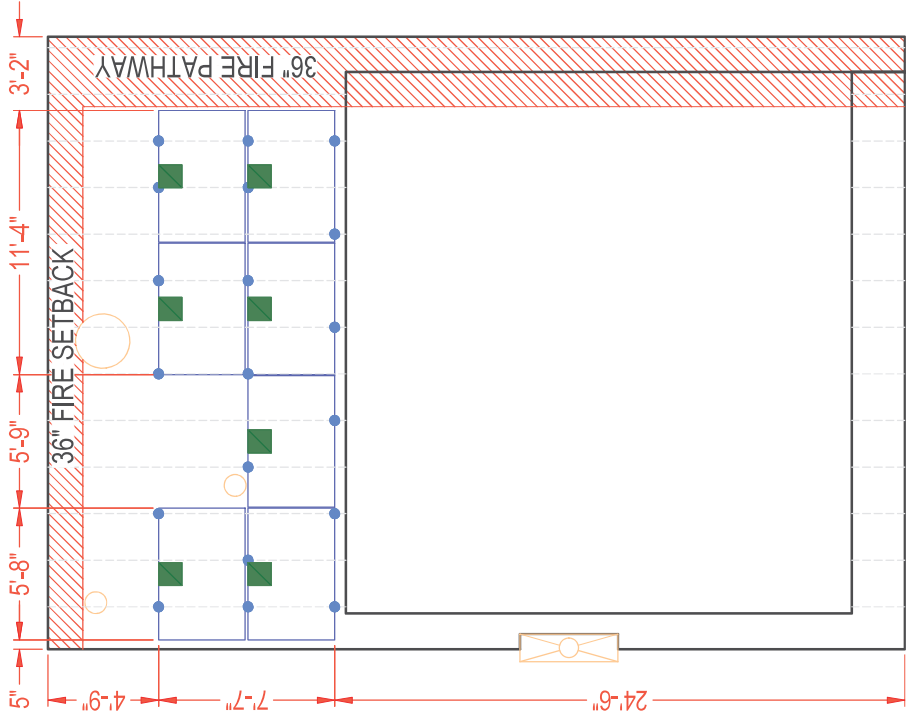
ROOF SECTIONS

- ROOF #01
MODULE - 16
SLOPE - 47°
AZIMUTH - 99°
MATERIAL - COMP. SHINGLE
TRUSS SIZE & SPACING - 2'X4" @ 24" O.C.
- ROOF #03
MODULE - 10
SLOPE - 14°
AZIMUTH - 279°
MATERIAL - COMP. SHINGLE
RAFTER SIZE & SPACING - 2'X8" @ 24" O.C.

MODULE, ARRAY WEIGHT (LOAD
CALCS)

Number of Modules	33	
Module Weight	46.7	LBS
Total Module (Array) Weight	1541.10	LBS
Number of Attachment point	72	
Mounting System Weight	1.5	LBS
Mounting System Weight	108.00	LBS
Total System Weight	1649.10	LBS
Weight at Each Attachment Point	21.40	LBS
Module Area (67.8'x44.6')	21.00	SqFt
Total Array Area	692.97	SqFt
Distributed Load	2.30	Per SqFt
Total Roof Area	2319	SqFt
Total Percentage of Roof Covered	29.88%	
Total Array Area Total Roof Area	100	

NOTE:- AT LEAST ONE MOUNT PER MODULE PER MOUNTING SIDE.



SYSTEM LEGEND

- 33 NEW HANWHA Q.TRON BLK M432+435W MODULES WITH SOLAREdge OPTIMIZER U650 MOUNTED ON THE BACK OF EACH MODULES.
- = FIRE PATHWAY
- = ROOF OBSTRUCTIONS
- = TRUSS & RAFTER
- = ATTACHMENT POINTS

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8 BATTERY HILL DRIVE,
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ROOF SECTIONS

ROOF #02
MODULE - 07
SLOPE - 36°
AZIMUTH - 279°
MATERIAL - COMP. SHINGLE
TRUSS SIZE & SPACING - 27X4" @ 24" O.C.

MODULE, ARRAY WEIGHT (LOAD
CALC'S)

Number of Modules	33	
Module Weight	46.7	LBS
Total Module (Array) Weight	1541.10	LBS
Number of Attachment point	72	
Mounting System Weight	1.5	LBS
Mounting System Weight (Per Module)	108.00	LBS
Total System Weight (Module Weight + Mounting System Weight)	1648.10	LBS
Weight at Each Attachment Point	21.40	LBS
Module Area (67.8"x44.6")	21.00	SqFt
Total Array Area	692.97	SqFt
Distributed Load	2.30	Per SqFt
Total Roof Area	2319	SqFt
Total Percentage of Roof Covered	29.88%	
Total Array Area Total Roof Area 100		

MODULE, ARRAY & ATTACHMENT POINT WEIGHT

	QUANT ITY	LBS./UNIT	LBS./QTY.	DOMESTIC SKU#
HANWHA Q.TRON BLK M-G2+ 435W MODULE	33	46.7	1541.10	
SOLAREDGE SE10000H-US HOME HUB [240V] INVERTER	1	1.00	1.00	USE10000H-USMNB75
60A FUSIBLE AC DISCONNECT, WITH 60A FUSES, 240V	1	1.00	1.00	
SOLAREDGE U650 OPTIMIZERS [60V]	33	1.00	33.00	U650-1GM4MRMU
ROCK-IT MOUNT BLK	72	4.50	324.00	2011037
ROCK-IT COUPLING BLK	28	4.00	112.00	2011038
ROCK-IT ARRAY SKIRT US AL BLK 82"	9	2.30	20.70	2099044
ROCK-IT SMARTSLIDE BLK	72	1.00	72.00	2011039
ROCK-IT CLIP SS	33	1.00	33.00	
TOTAL POINT ATTACHMENT LOAD PER STANDOFF			29.69	
TOTAL SYSTEM WEIGHT (LBS.)			2137.80	
ATTACHMENT POINT WEIGHT (LBS.) PER SQ.FT.		SYSTEM WEIGHT / ARRAY AREA	4.62	
ARRAY AREA				
MODULE AREA		MODULE DIM (67.8" X 44.6")	21.00 SQ. FT.	
AREA OF ARRAY			692.97 SQ. FT.	
ROOF AREA			2319 SQ. FT.	
ROOF COVERAGE (IN PERCENTAGE)		ROOF AREA/ARRAY AREA	29.88%	

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Sheet Name
BILL OF
MATERIALS

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Sheet Number
PV 3.0

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ROOF #2

AZIMUTH - 279°
SLOPE - 36°



S12

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INVERTER CHARACTERISTICS - SOLAREDDGE SE10000H-US [240V] ENERGY HUB INVERTER			
W	10000	W	
MAX OUTPUT POWER	380	V	
SYSTEM OPERATING VOLTAGE	42	A	
MAX CONTINUOUS OUTPUT CURRENT	480	V	
MAX INPUT VOLTAGE	15	A	
SYSTEM SHORT CIRCUIT CURRENT	99	%	
MAX EFFICIENCY			
OPTIMIZER SPECIFICATIONS			
MANUFACTURER	SOLAREDDGE U650		
DC INPUT POWER	650	W	
DC MAX INPUT VOLTAGE	60V		
DC MAX OUTPUT CURRENT	15A		
MAX SHORT CIRCUIT CURRENT	18.75A		

PV MODULE RATING @ STC	
MANUFACTURER	HANWHA Q.TRON BLK M-G2+ 435W
MAX. POWER-POINT CURRENT (MP)	13.13 AMPS
MAX. POWER-POINT VOLTAGE (VMP)	33.14 VOLTS
OPEN-CIRCUIT VOLTAGE (VOC)	39.60 VOLTS
SHORT-CIRCUIT CURRENT (ISC)	13.62 AMPS
NOM. MAX. POWER AT STC (PMAX)	435 WATT
MAX. SYSTEM VOLTAGE	1000V
VOC TEMPERATURE COEFFICIENT	-0.24 %/°K

MODULE: (33) HANWHA Q.TRON BLK M-G2+ 435W [33.14V]
INVERTER: (01) SOLAREDDGE SE10000H-US HOME HUB [240V]
OPTIMIZER: (33) SOLAREDDGE U650 OPTIMIZERS [60V]

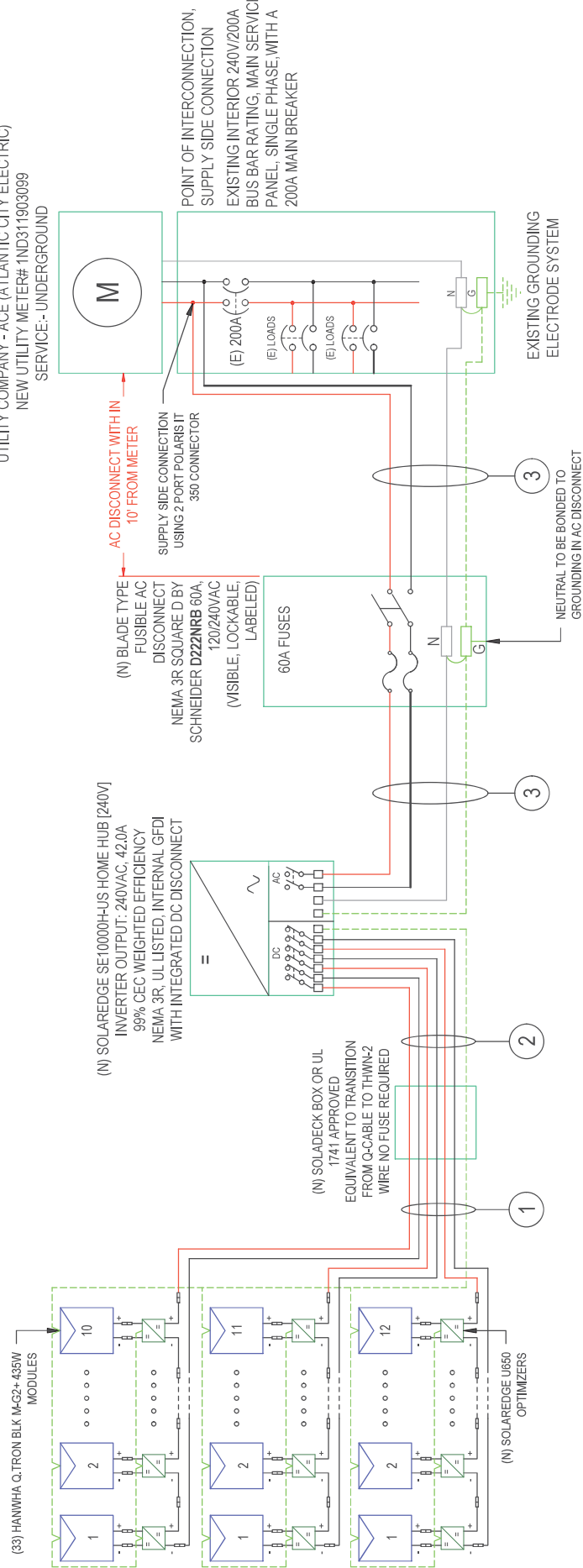
Rooftop conductor ampacities designed in compliance with art. 690.8, tables 310.15(b)(2)(a), 310.15(b)(1), 310.15(c)(1), location specific temperature obtained from ashtree 2017 data tables	
RECORD LOW TEMP	-14°C
AMBIENT TEMP (HIGH TEMP 2%)	34°C
CONDUIT HEIGHT	0.5"
ROOF TOP TEMP	56°C
CONDUCTOR TEMPERATURE RATE	90°C

VISIBLE, LOCKABLE, LABELED DISCONNECT WITHIN 10' OF UTILITY METER

PHOTOVOLTAIC SYSTEM	
DC SYSTEM SIZE (WATTS)	14355W
AC SYSTEM SIZE (WATTS)	10000W
TOTAL NUMBER OF MODULES	33
NOMINAL AC VOLTAGE	240V
120% RULE [NEC 705.12(B)(3)(2)]	
1) INVERTER OUTPUT (43.0A x 125% = MAIN BREAKER (200A) = 262.5A	
2) 120% BUS RATING (200A) = 240A	
THE VALUE OF 1) IS LESS THAN OR EQUAL TO 2)	

NOTE:- AC DISCONNECT IS ACCESSIBLE 24/7.

UTILITY COMPANY - ACE (ATLANTIC CITY ELECTRIC)
NEW UTILITY METER# 1ND311903099
SERVICE:- UNDERGROUND



WIRE TAG #	WIRE FROM ---	CONDUIT	WIRE QTY	WIRE GAUGE	WIRE RATING	TEMP RATING	WIRE AMP	CONDUIT FILL	WIRE OCP	STRING WATTAGE	OPERATING VOLTAGE	STRING AMPS	MAX SYSTEM VOLTAGE	GRND SIZE	GRND WIRE TYPE
1	ARRAY TO JUNCTION BOX	PV WIRE IN AIR	6	#10	USE-2	90°	40A	x 1.00	N/A	5220W	/	13.74A	480V	#6	SBC
2	JUNCTION BOX TO INVERTER	3/4" OR 1" EMT OR FLEX OR 102 MC CABLE	6	MIN. #10	THHN	75°	35A	x 1.00	28.00A	5220W	/	13.74A	480V	#10	THHN
3	INVERTER TO MSP	1" EMT OR FLEX	3	MIN. #6	THHN	75°	65A	x 1.00	65.00A			42.0A	240V	#8	THHN

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FRIEDMAN, BRYAN RESIDENCE
8 BATTERY HILL DRIVE,
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Sheet Name
3-LINE
DIAGRAM

Sheet Size
ANSI B
11" X 17"

Sheet Number
E 1.1

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PremiumCAD

SITE NOTES:

1. A LADDER WILL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.
2. THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS A UTILITY INTERACTIVE SYSTEM WITH NO STORAGE BATTERIES.
3. THE SOLAR PV INSTALLATION WILL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
4. PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION NEC 110.26.
5. ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF COVERING SERVES TO PROTECT THE BUILDING OR STRUCTURE.

EQUIPMENT LOCATIONS:

1. ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY NEC 110.26.
2. WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY NEC 690.31 (A)(C) AND NEC TABLE 310.15 (B)(2)(A) AND 310.15 (B)(3)(C).
3. JUNCTION AND PULL BOXES PERMITTED INSTALLED UNDER PV MODULES ACCORDING TO NEC 690.34.
4. ADDITIONAL AC DISCONNECT(S) SHALL BE PROVIDED WHERE THE INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT. 2.2.6 ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL ACCORDING TO NEC APPLICABLE CODES.
5. ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE.

STRUCTURAL NOTES:

1. RACKING SYSTEM & PV ARRAY WILL BE INSTALLED ACCORDING TO CODE-COMPLIANT INSTALLATION MANUAL. TOP CLAMPS REQUIRE A DESIGNATED SPACE BETWEEN MODULES, AND RAILS MUST ALSO EXTEND A MINIMUM DISTANCE BEYOND EITHER EDGE OF THE ARRAY/SUBARRAY, ACCORDING TO RAIL MANUFACTURER'S INSTRUCTIONS.
2. JUNCTION BOX WILL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. IF ROOF-PENETRATING TYPE, IT SHALL BE FLASHED & SEALED PER LOCAL REQUIREMENTS.
3. ROOFTOP PENETRATIONS FOR PV RACEWAY WILL BE COMPLETED AND SEALED W/ APPROVED CHEMICAL SEALANT PER CODE BY A LICENSED CONTRACTOR.
4. ALL PV RELATED ROOF ATTACHMENTS TO BE SPACED NO GREATER THAN THE SPAN DISTANCE SPECIFIED BY THE RACKING MANUFACTURER. 2.3.6 WHEN POSSIBLE, ALL PV RELATED RACKING ATTACHMENTS WILL BE STAGGERED AMONGST THE ROOF FRAMING MEMBERS.

WIRING & CONDUIT NOTES:

1. ALL CONDUIT AND WIRE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.
2. CONDUCTORS SIZED ACCORDING TO NEC 690.8, NEC 690.7.
3. VOLTAGE DROP LIMITED TO 1.5%.
4. DC WIRING LIMITED TO MODULE FOOTPRINT. MICROINVERTER WIRING SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY W/ SUITABLE WIRING CLIPS.
5. AC CONDUCTORS COLORED OR MARKED AS FOLLOWS: PHASE A OR L1- BLACK PHASE B OR L2- RED, OR OTHER CONVENTION IF THREE PHASE C OR L3- BLUE, YELLOW, ORANGE**, OR OTHER CONVENTION NEUTRAL- WHITE OR GREY IN 4-WIRE DELTA CONNECTED SYSTEMS THE PHASE WITH HIGHER VOLTAGE TO BE MARKED ORANGE [NEC 110.13].

GROUNDING NOTES:

1. GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVICES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR SUCH USE.
2. PV EQUIPMENT SHALL BE GROUNDED ACCORDING TO NEC 690.43 AND MINIMUM NEC TABLE 250.122.
3. METAL PARTS OF MODULE FRAMES, MODULE RACKING, AND ENCLOSURES CONSIDERED GROUNDING IN ACCORD WITH 250.134 AND 250.136(A).
4. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC 690.45 AND MICROINVERTER MANUFACTURER'S INSTRUCTIONS.
5. EACH MODULE WILL BE GROUNDED USING WEBB GROUNDING CLIPS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ. IF WEBBS ARE NOT USED, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE SPECIFIED GROUNDING LUG HOLES PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
6. THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.
7. GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER [NEC 250.119].
8. THE GROUNDING ELECTRODE SYSTEM COMPLIES WITH NEC 690.47 AND NEC 250.50 THROUGH 250.106. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, A GROUNDING ELECTRODE SYSTEM PROVIDED ACCORDING TO NEC 250, NEC 690.47 AND AHJ.
9. GROUND-FAULT DETECTION SHALL COMPLY WITH NEC 690.41(B)(1) AND (2) TO REDUCE FIRE HAZARDS

DISCONNECT AND OVER-CURRENT PROTECTION NOTES:

1. DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED 'LINE SIDE' (TYPICALLY THE UPPER TERMINALS).
2. DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH
3. PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION TO REDUCE SHOCK HAZARD FOR EMERGENCY RESPONDERS IN ACCORDANCE WITH 690.12(A) THROUGH (D).
4. ALL OCPD RATINGS AND TYPES SPECIFIED ACCORDING TO NEC 690.8, 690.9, AND 240.
5. MICROINVERTER BRANCHES CONNECTED TO A SINGLE BREAKER OR GROUPED FUSES IN ACCORDANCE WITH NEC 110.3(B).
6. IF REQUIRED BY AHJ, SYSTEM WILL INCLUDE ARC-FAULT CIRCUIT PROTECTION ACCORDING TO NEC 690.11 AND UL 1699B.

INTERCONNECTION NOTES:

1. LOAD-SIDE INTERCONNECTION SHALL BE IN ACCORDANCE WITH [NEC 705.12 (B)]
2. THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS OUTPUT MAY NOT EXCEED 120% OF BUSBAR RATING [NEC 705.12(D)(2)(3)].
3. THE SUM OF 125 PERCENT OF THE POWER SOURCE(S) OUTPUT CIRCUIT CURRENT AND THE RATING OF THE OVERCURRENT DEVICE PROTECTING THE BUSBAR SHALL NOT EXCEED 120 PERCENT OF THE AMPACITY OF THE BUSBAR, PV DEDICATED BACKFEED BREAKERS MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD [NEC 705.12(B)(2)(3)].
4. AT MULTIPLE ELECTRIC POWER SOURCES, OUTPUT COMBINER PANEL, TOTAL RATING OF ALL OVERCURRENT DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR. HOWEVER, THE COMBINED OVERCURRENT DEVICE MAY BE EXCLUDED ACCORDING TO NEC 705.12 (B)(2)(3)(C).
5. FEEDER TAP INTERCONNECTION (LOADSIDE) ACCORDING TO NEC 705.12 (B)(2)(1)
6. SUPPLY SIDE TAP INTERCONNECTION ACCORDING TO NEC 705.12 (A) WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH NEC 230.42 2.7.8 BACKFEEDING BREAKER FOR ELECTRIC POWER SOURCES OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING [NEC 705.12 (B)(6)].

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NOTES

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ANSI B
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Sheet Number

E 1.2

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WARNING

ELECTRICAL SHOCK HAZARD

TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

LABEL LOCATION: COMBINER PANEL, AC DISCONNECT, POINT OF INTERCONNECTION
PER CODE(S): NEC 690.13(B)

WARNING

TURN OFF PHOTOVOLTAIC AC DISCONNECT PRIOR TO WORKING INSIDE PANEL

LABEL LOCATION: COMBINER PANEL(S), MAIN SERVICE DISCONNECT
PER CODE(S): NEC 110.27(C), OSHA 1910.145(f)(7)

WARNING: PHOTOVOLTAIC POWER SOURCE

LABEL LOCATION: CONDUIT, JUNCTION BOX
PER CODE: NEC 690.31(D)(2)

PHOTOVOLTAIC SYSTEM AC DISCONNECT

RATED AC OPERATING CURRENT 42.0 AMPS
AC NOMINAL OPERATING VOLTAGE 240 VOLTS

LABEL LOCATION: COMBINER PANEL, AC DISCONNECT, POINT OF INTERCONNECTION
PER CODE: NEC 690.54

WARNING DUAL POWER SOURCE SECOND SOURCE IS PHOTOVOLTAIC SYSTEM

LABEL LOCATION: MAIN SERVICE DISCONNECT, PRODUCTION/METER
PER CODE: NEC 690.59, 705.12(C)

PV SYSTEM DISCONNECT

LABEL LOCATION: AC DISCONNECT
PER CODE: NEC 690.13(B)

WARNING

THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICES, EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE, SHALL NOT EXCEED CAPACITY OF 6,000A.

LABEL LOCATION: AC DISCONNECT
PER CODE: 705.12(B)(3)(3)

WARNING

POWER SOURCE OUTPUT CONNECTION, DO NOT RELOCATE THIS OVERCURRENT DEVICE.

LABEL LOCATION: POINT OF INTERCONNECTION
PER CODE: 705.12(B)(3)(2)

MAIN PHOTOVOLTAIC SYSTEM DISCONNECT

LABEL LOCATION: MAIN SERVICE DISCONNECT, UTILITY METER
PER CODE: NEC 690.13(B)

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUTDOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY

LABEL LOCATION: INVERTER
PER CODE: NEC 690.56(C)

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

LABEL LOCATION: RSD INITIATION DEVICE, AC DISCONNECT
PER CODE(S): NEC 690.56(C)(2)

PHOTOVOLTAIC SYSTEM DC DISCONNECT

OPERATING CURRENT: 37.8 ADC
OPERATING VOLTAGE: 380 VDC
MAXIMUM SYSTEM VOLTAGE: 480 VDC
MAXIMUM SHORT CIRCUIT CURRENT: 45 ADC

LABEL LOCATION: INVERTER(S), DC DISCONNECT(S).
PER CODE: NEC 690.63

CAUTION:

MULTIPLE SOURCES OF POWER

SIZE:-2" X 5.5"

WARNING

ELECTRICAL SHOCK HAZARD

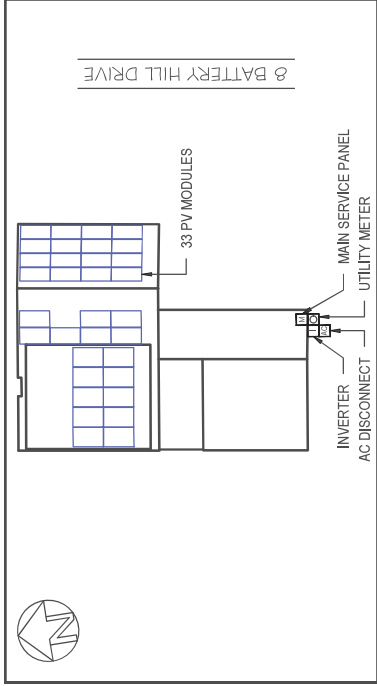
TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

DC VOLTAGE IS ALWAYS PRESENT WHEN SOLAR MODULES ARE EXPOSED TO SUNLIGHT

LABEL LOCATION: DC DISCONNECT
PER CODE: NEC 690.13(B)

CAUTION:

POWER TO THIS BUILDING IS ALSO SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECT(S) LOCATED AS SHOWN. DANGEROUS VOLTAGE MAY BE PRESENT AT ALL TIMES



SIZE:-3" X 5.5"

REVISIONS	
Description	Date
Initial Design	5/17/2022

Signature with Seal

Project Name & Address

FRIEDMAN, BRYAN RESIDENCE
8 BATTERY HILL DRIVE,
VOORHEES TOWNSHIP, NJ 08043

Sheet Name
WARNING LABELS & PLACARD

Sheet Size
**ANSI B
11" X 17"**

Sheet Number
E 1.3

Drawn By
PremiumCAD