



HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert K. Sutton
Chairman

Date: November 30, 2021

MEMORANDUM

TO: Mitra Pedoeem
Department of Permitting Services

FROM: Dan Bruechert
Historic Preservation Section
Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit # 975414 - Solar Panel Installation

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **approved** by Staff.

The HPC staff has reviewed and stamped the attached construction drawings.

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: Adam Wendell
Address: 10111 Meadowneck Ct., Silver Spring

This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made. Once work is complete the applicant will contact Dan Bruechert at 301.563.3400 or dan.bruechert@montgomeryplanning.org to schedule a follow-up site visit.





HISTORIC PRESERVATION COMMISSION

HAWP #: _____ at: _____

submitted on: _____

has been reviewed and determined that the proposal fits into the following category/categories:

Repair or replacement of a masonry foundation with new masonry materials that closely match the original in appearance;

Installation of vents or venting pipes in locations not visible from the public right-of-way;

New gutters and downspouts;

Removal of vinyl, aluminum, asbestos, or other artificial siding when the original siding is to be repaired and/or replaced in kind;

Removal of accessory buildings that are not original to the site or non-historic construction;

Repair or replacement of missing or deteriorated architectural details such as trim or other millwork, stairs or stoops, porch decking or ceilings, columns, railings, balusters, brackets shutters, etc., with new materials that match the old in design, texture, visual characteristics, and, where possible materials, so long as the applicant is able to provide one extant example, photographic evidence, or physical evidence that serves as the basis for the work proposed;

Construction of wooden decks that are at the rear of a structure and are not visible from a public right-of-way;

Roof replacement with -compatible roofing materials, or with architectural shingles replacing 3-Tab asphalt shingles;

Installation of storm windows or doors that are compatible with the historic resource or district;

Repair, replacement or installation of foundation-level doors, windows, window wells, and areaways, or foundation vents, venting pipes, or exterior grills that do not alter the character-defining features and/or the historic character of the resource;

Construction of fences that are compatible with the historic site or district in material, height, location, and design;

Fence is lower than 48" in front of rear wall plane;

Construction of walkways, parking pads, patios, driveways, or other paved areas that are not visible from a public right-of-way and measure no more than 150 square feet in size;

Replacement of existing walkways, parking pads, patios, driveways, or other paved areas with materials that are compatible with the visual character of the historic site and district and that are no greater than the dimensions of the existing hardscape;

Construction of small accessory buildings no larger than 250 square feet in size that are not visible from the public right-of-way;

Installations of skylights on the rear of a structure that will not be visible from the public right-of-way, and would not remove or alter character-defining roof materials;

Installation of solar panels and arrays in locations that are not readily visible from the public right-of-way or that are designed so as to have a minimal impact on the historic resource or the historic district (e.g., systems that are ground-mounted in areas other than the front or side yard of a corner lot, located on accessory or outbuildings, on non-historic additions, or on rear facing roof planes);

Installation of car charging stations in any location on a property or in the right-of-way;

Installation of satellite dishes;

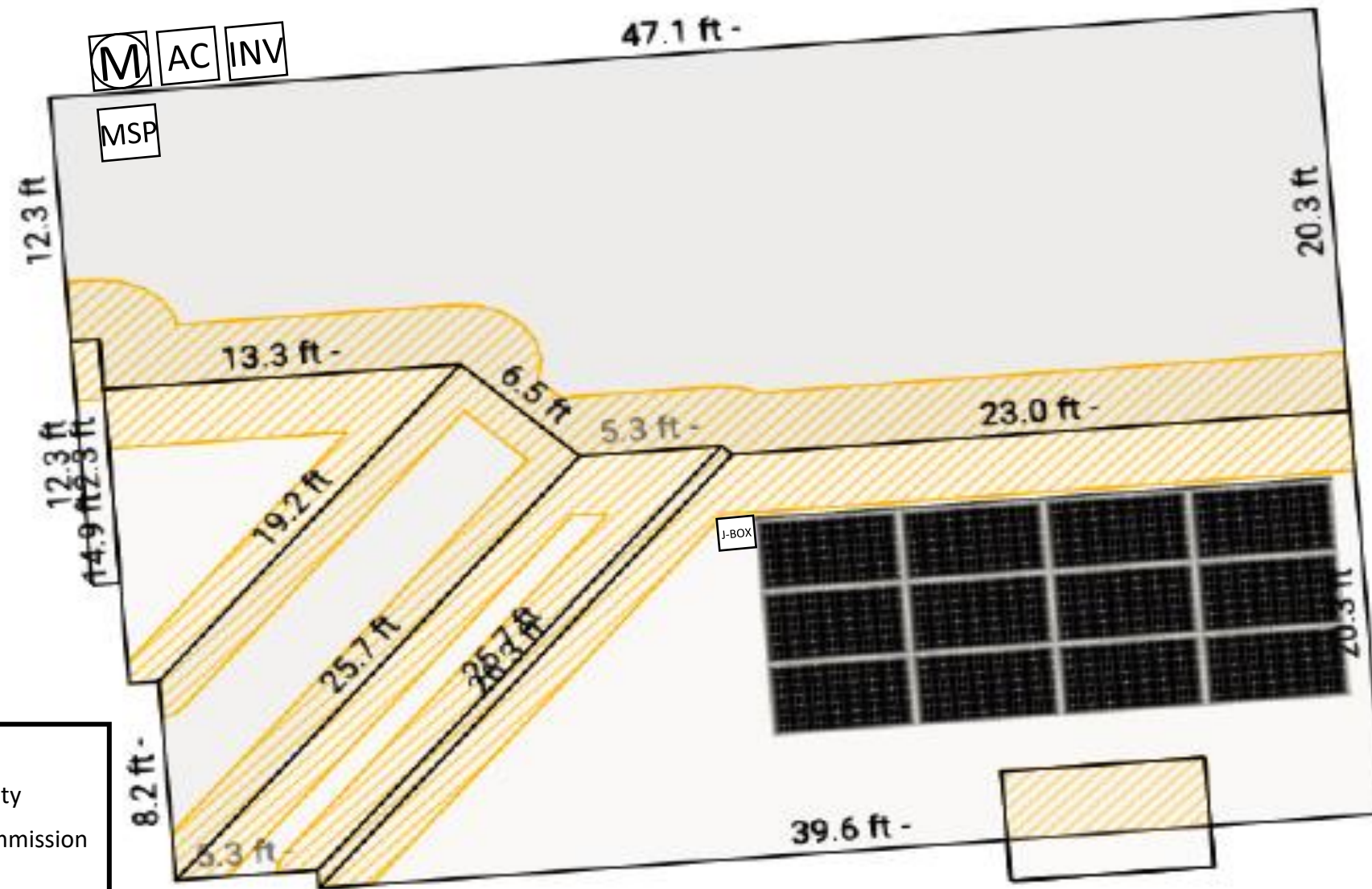
Removal of trees greater than 6" in diameter (d.b.h.) that are dead, dying, or present an immediate hazard.

Removal of trees greater than 6" in diameter (d.b.h.) in the rear of the property that will not impact the overall tree canopy of the surrounding district or historic site;

Replacement tree required as a condition; and,

Other minor alterations that may be required by the Department of Permitting Services post-Commission approval that would have no material effect on the historic character of the property.

Staff finds the proposal complies with Chapter 24A, the Secretary of the Interior's Standards for Rehabilitation, and any additional requisite guidance. Under the authority of COMCOR No. 24A.04.01, this HAWP is approved by J. Brueckert on _____. The approval memo and stamped drawings follow.



MP#1 Pitch: 8.5 /12
Azimuth: 175 °

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

↑
NORTH

EQUIPMENT LEGEND

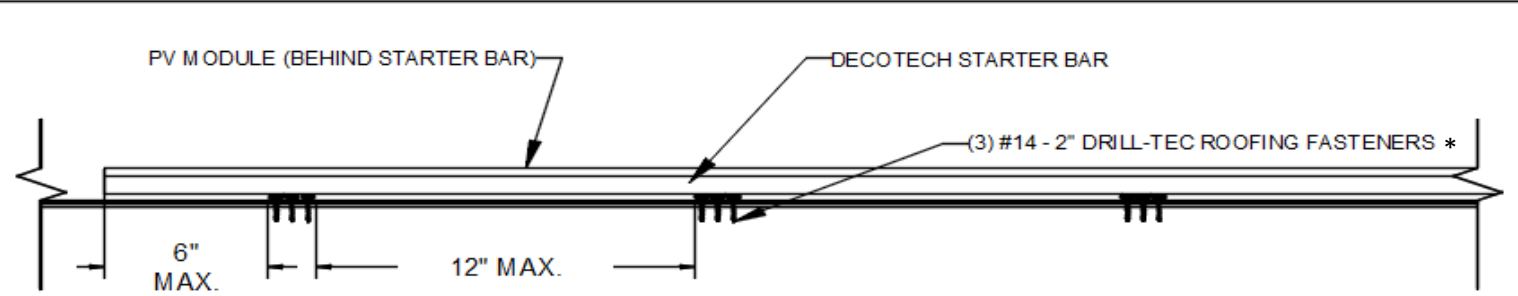
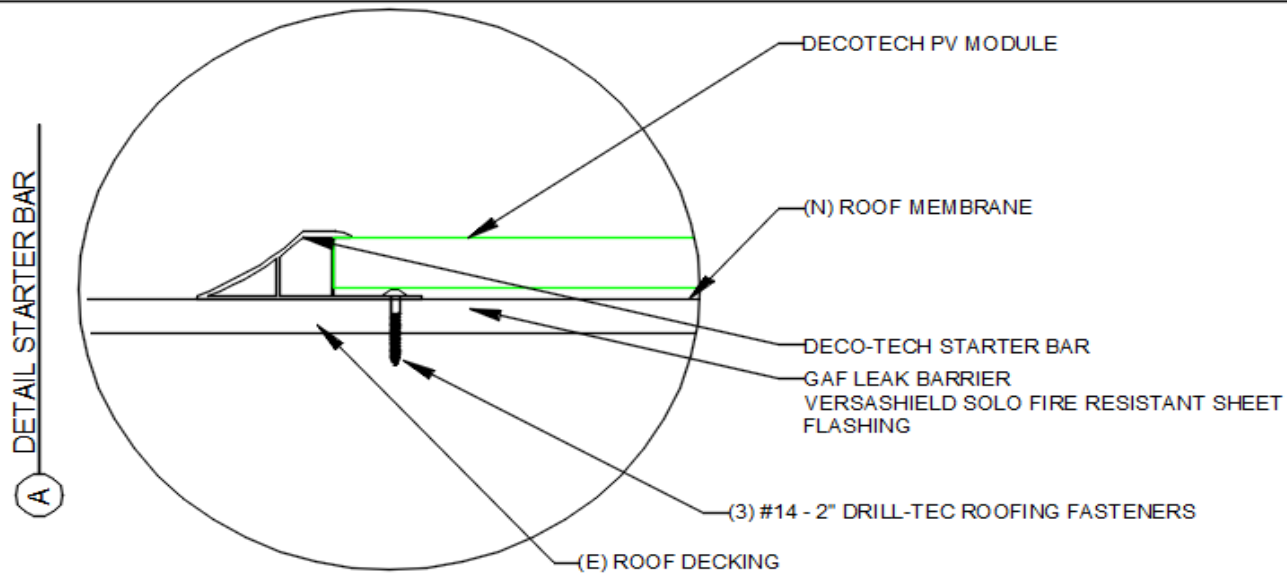
- M UTILITY METER
- MSP MAIN SERVICE PANEL
- LC LOAD CENTER
- AC AC DISCONNECT
- PV METER SOCKET (FOR UTILITY PV METER)
- INV INVERTER
- J-BOX JUNCTION BOX
- BAT BATTERY(IES)
- FIRE ACCESS PATHWAY (3' TYP.)

APPROVED
Montgomery County
Historic Preservation Commission

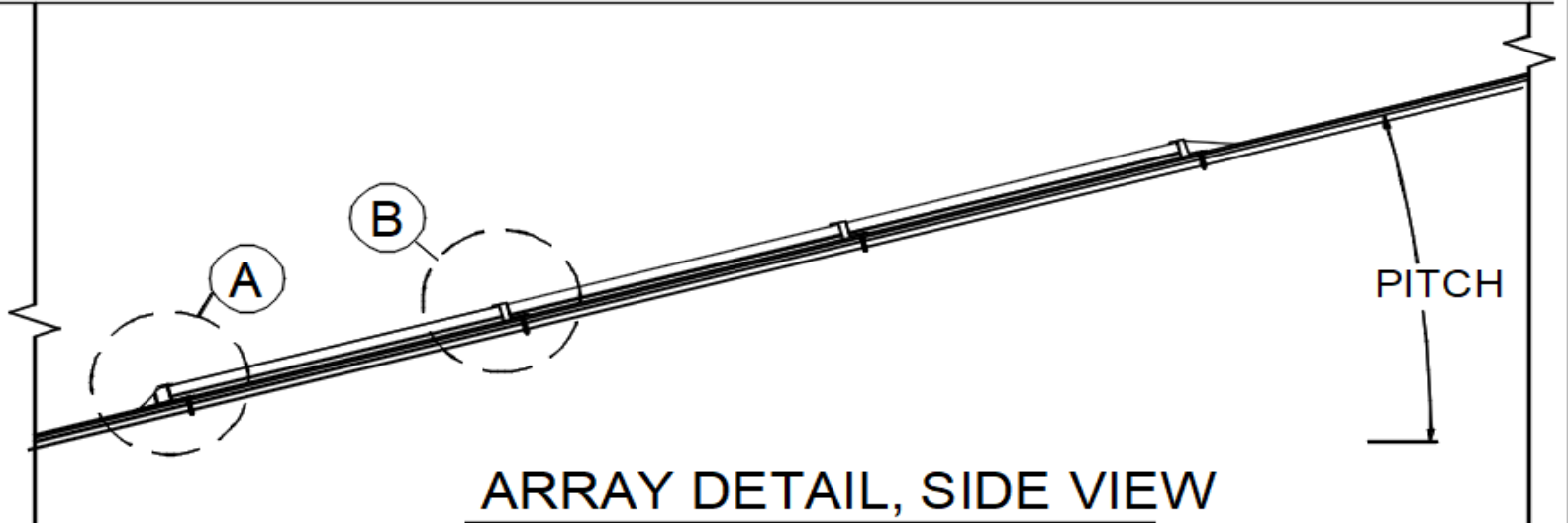
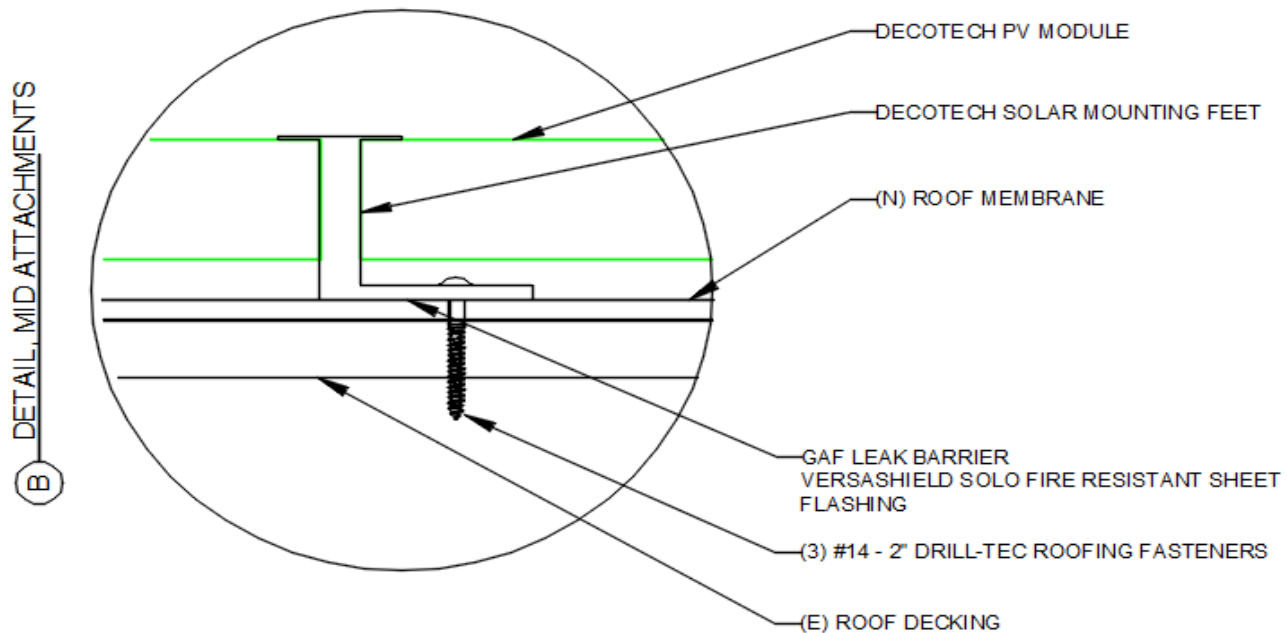
Robert H. Bennett

REVIEWED
By Dan.Bruechert at 11:04 am, Nov 30, 2021

ADDRESS: Adam Wendell 10111 Meadowneck Court Silver Spring MD 20910	CONTRACTOR: GAF Energy LLC (MD) 973-628-3411 125 Mitchell Blvd, Suite D 14629 San Rafael CA 94903	EQUIPMENT: 4.32 KW (DC) 3.8 KW (AC) 12 Solaria PowerXT 360R-PD (1) SolarEdge SE3800H-US (240V)	DATE 11/22/2021 REV 0 PV2 SITE PLAN BY: CBennett
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ARRAY DETAIL, FRONT VIEW



ARRAY DETAIL, SIDE VIEW

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 Historic Preservation Commission



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 By Dan.Bruechert at 11:04 am, Nov 30, 2021

Roof deck type	* Fasteners per adjustable foot
Plywood	3 fasteners per foot
OSB	6 fasteners per foot

FRAMING DETAILS	
Rafter Size	2x4
Rafter Spacing	24
Framing Type	Manufactured Truss

ADDRESS:	CONTRACTOR:	EQUIPMENT:	DATE	REV
Adam Wendell 10111 Meadowneck Court Silver Spring MD 20910	GAF Energy LLC (MD) 973-628-3411 14629 125 Mitchell Blvd, Suite D San Rafael CA 94903	4.32 KW (DC) 3.8 KW (AC) 12 Solaria PowerXT 360R-PD (1) SolarEdge SE3800H-US (240V)	11/22/2021	0
			PV3 MOUNTING DETAIL	
			BY: CBennett	

WIRE SCHEDULE

1	(1) #10 AWG PV-WIRE, USE-2 COPPER (POS)	2	(1) #10 AWG THWN-2 (POS)	3	(1) #10 AWG THWN-2 (L1)	4		5		6	
	(1) #10 AWG PV-WIRE, USE-2 COPPER (NEG)		(1) #10 AWG THWN-2 (NEG)		(1) #10 AWG THWN-2 (L2)						
	(1) #12 AWG BARE, COPPER (GROUND)		(1) #10 AWG THWN-2 (GND)		(1) #10 AWG THWN-2 (NEUT)						
	(1) 3/4in EMT CONDUIT		(1) 3/4in EMT CONDUIT		(1) #10 AWG THWN-2 (GND)						
(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)	

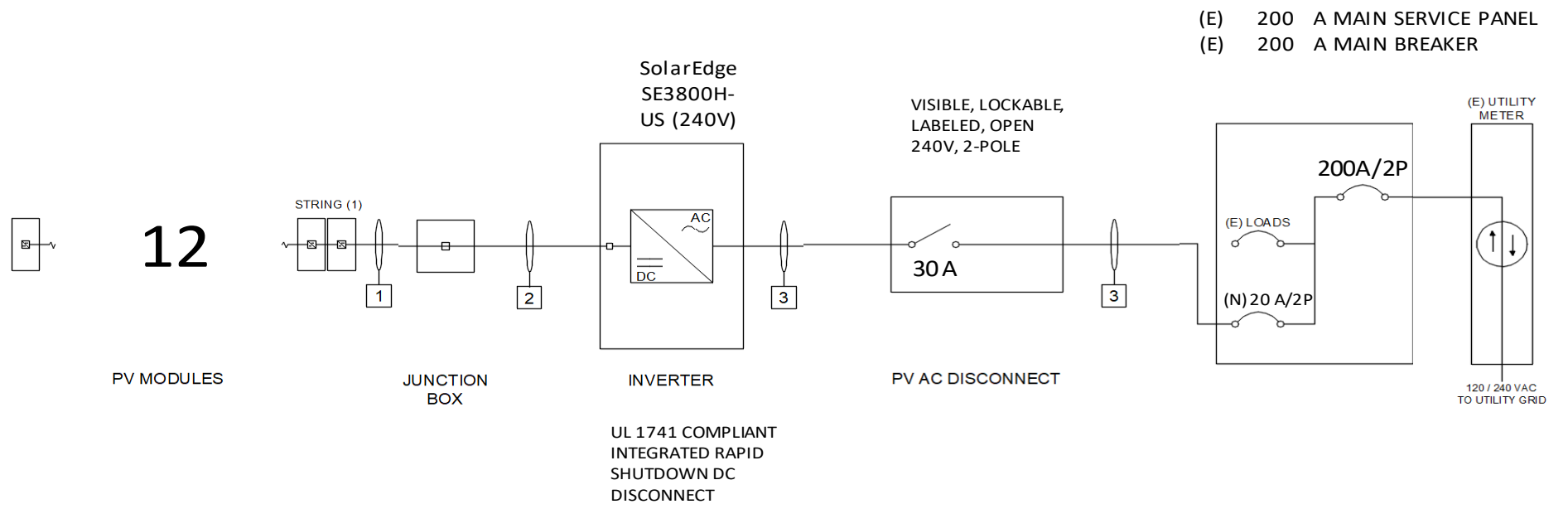
Vmp (Vdc): 380 Imp (Adc): 10.50
 Voc (Vdc): 480 Isc (Adc): 10.50
 V (Vac): 240 I (Aac): 16
Inverter 1

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

APPROVED
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 Historic Preservation Commission



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INTERCONNECTION NOTES

- GROUND FAULT PROTECTION IN ACCORDANCE WITH [NEC 215.9] & [NEC 230.95]
- SUPPLY SIDE INTERCONNECTION ACCORDING TO [NEC 705.12(A)] WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH [NEC 240.21(B)]

DISCONNECT NOTES

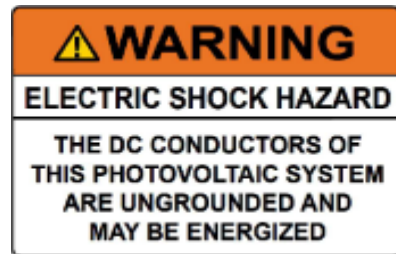
- DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING LIVE ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS)
- AC DISCONNECT MUST BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH

GROUNDING & GENERAL NOTES

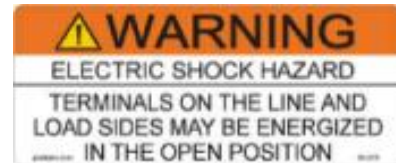
- A SECOND FACILITY GROUNDING ELECTRODE IS NOT REQUIRED PER [NEC 690.47(C)(3)]
- PV INVERTER IS UNGROUNDED, TRANSFORMER-LESS TYPE.
- DC GEC AND AC EGC TO REMAIN UNSPLICED, OR SPLICED TO EXISTING ELECTRODE
- ANY EXISTING WIRING INVOLVED WITH PV SYSTEM CONNECTION THAT IS FOUND TO BE INADEQUATE PER CODE SHALL BE CORRECTED PRIOR TO FINAL INSPECTION.
- JUNCTION BOX QUANTITIES, AND PLACEMENT SUBJECT TO CHANGE IN THE FIELD - JUNCTION BOXES DEPICTED ON ELECTRICAL DIAGRAM REPRESENT WIRE TYPE TRANSITIONS.
- AC DISCONNECT NOTED IN EQUIPMENT SCHEDULE OPTIONAL IF OTHER AC DISCONNECTING MEANS IS LOCATED WITHIN 10' OF SERVICE DISCONNECT.
- SOLAREGE INVERTERS WHEN USED WILL INCLUDE RS-485 OR ETHERNET COMMUNICATIONS PORT.

EQUIPMENT SCHEDULE			
TYPE	QTY	DESCRIPTION	RATING
PV Modules	(12)	Solaria PowerXT 360R-PD	360W
DC Optimizers	(12)	P370	15Adc
Inverter	(1)	SolarEdge SE3800H-US (240V)	3800W

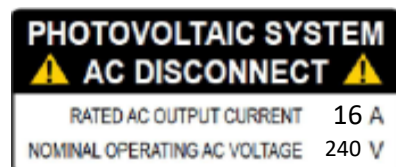
ADDRESS: Adam Wendell 10111 Meadowneck Court Silver Spring MD 20910	CONTRACTOR: GAF Energy LLC (MD) 973-628-3411 14629	EQUIPMENT: 125 Mitchell Blvd, Suite D San Rafael CA 94903	DATE 11/22/2021 REV 0
4.32 KW (DC) 3.8 KW (AC) 12 Solaria PowerXT 360R-PD (1) SolarEdge SE3800H-US (240V)			BY: CBennett



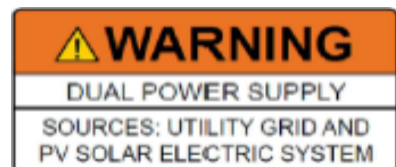
LABEL 1
AT EACH JUNCTION BOX, COMBINER BOX, DISCONNECT, AND DEVICE WHERE ENERGIZED UNGROUNDED CONDUCTORS MAY BE EXPOSED DURING SERVICE. NEC. 690.35(F)



LABEL 2
FOR PV DISCONNECTING MEANS WHERE ALL TERMINALS OF THE DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION. NEC 690.17(E), NEC 705.22



LABEL 3
AT POINT OF INTERCONNECTION, MARKED AT AC DISCONNECTING MEANS. NEC 690.54, NEC 690.13 (B)



LABEL 4
AT POINT OF INTERCONNECTION FOR EQUIPMENT CONTAINING OVERCURRENT DEVICES IN CIRCUITS SUPPLYING POWER TO A BUSBAR OR CONDUCTOR SUPPLIED FROM MULTIPLE SOURCES, EACH SERVICE EQUIPMENT AND ALL ELECTRIC POWER PRODUCTION SOURCE LOCATIONS. NEC 705.12(D)(3)



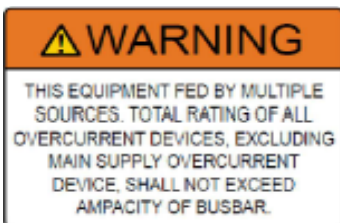
LABEL 5
AT DIRECT-CURRENT EXPOSED RACEWAYS, CABLE TRAYS, COVERS AND ENCLOSURES OF JUNCTION BOXES, AND OTHER WIRING METHODS; SPACED AT MAXIMUM 10FT SECTION OR WHERE SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS. NEC 690.31(G)(3&4)



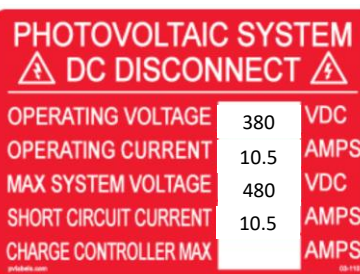
LABEL 6
PLACED ADJACENT TO THE BACK-FED BREAKER FROM THE INVERTER IF TIE IN CONSISTS OF LOAD SIDE CONNECTION TO BUSBAR. NEC 705.12(D)(2)(3)(B)



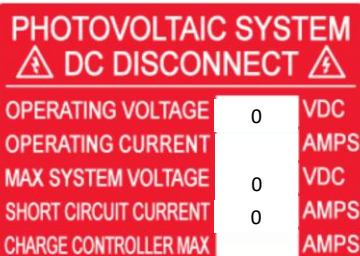
LABEL 7
SIGN LOCATED AT UTILITY SERVICE EQUIPMENT. NEC 690.56(C)



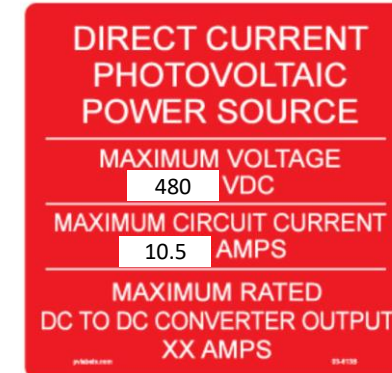
LABEL 8
(ONLY IF 3 OR MORE SUPPLY SOURCES TO A BUSBAR) SIGN LOCATED AT LOAD CENTER IF CONTAINING 3 OR MORE POWER SOURCES. NEC 705.12(D)(2)(3)(C)



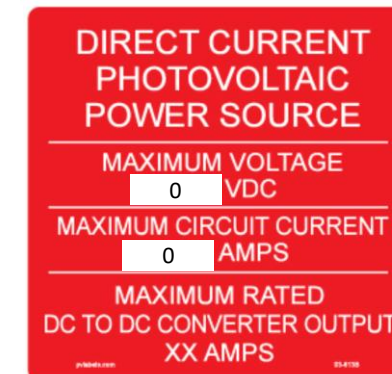
LABEL 9 - INVERTER 1
AT PV DISCONNECTING MEANS. TO BE USED IF NEC 2014 APPLIES. NEC 690.53



LABEL 9 - INVERTER 2
AT PV DISCONNECTING MEANS. TO BE USED IF NEC 2014 APPLIES. NEC 690.53



LABEL 10 - INVERTER 1
AT PV DISCONNECTING MEANS. TO BE USED IF NEC 2017 APPLIES. NEC 690.53

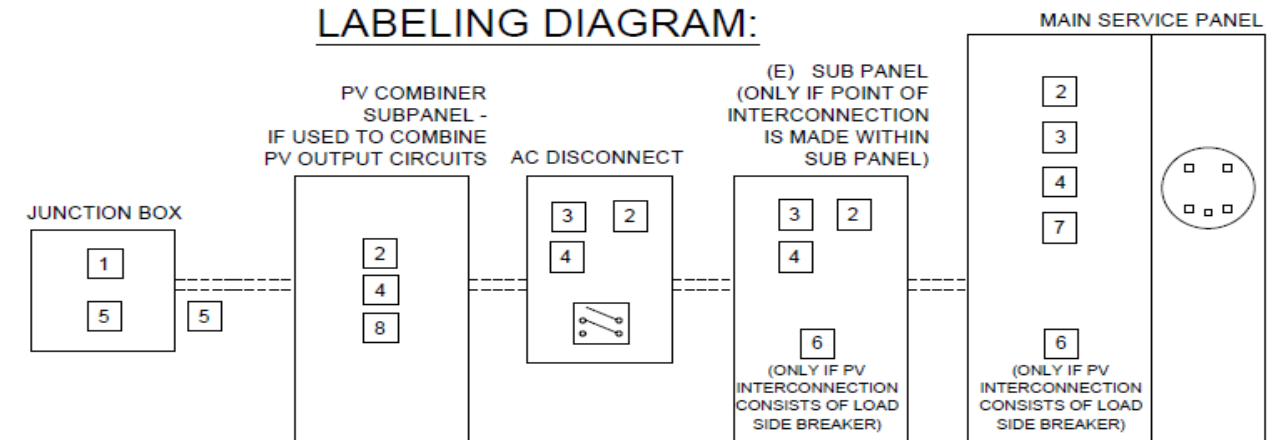


LABEL 10 - INVERTER 2
AT PV DISCONNECTING MEANS. TO BE USED IF NEC 2017 APPLIES. NEC 690.53

APPROVED
Montgomery County
Historic Preservation Commission
[Signature]
REVIEWED
By Dan.Bruechert at 11:04 am, Nov 30, 2021

- LABELING NOTES:**
1. LABELS CALLED OUT ACCORDING TO ALL COMMON CONFIGURATIONS. ELECTRICIAN TO DETERMINE EXACT REQUIREMENTS IN THE FIELD PER CURRENT NEC AND LOCAL CODES AND MAKE APPROPRIATE ADJUSTMENTS.
 2. LABELING REQUIREMENTS BASED ON THE (NFPA 70) 2017 National Electric Code
 3. MATERIAL BASED ON THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
 4. LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED [NEC 110.21]
 5. LABELS TO BE A MINIMUM LETTER HEIGHT OF 3/8", WHITE ON RED BACKGROUND; REFLECTIVE, AND PERMANENTLY AFFIXED [IFC 605.11.1.1]

LABELING DIAGRAM:

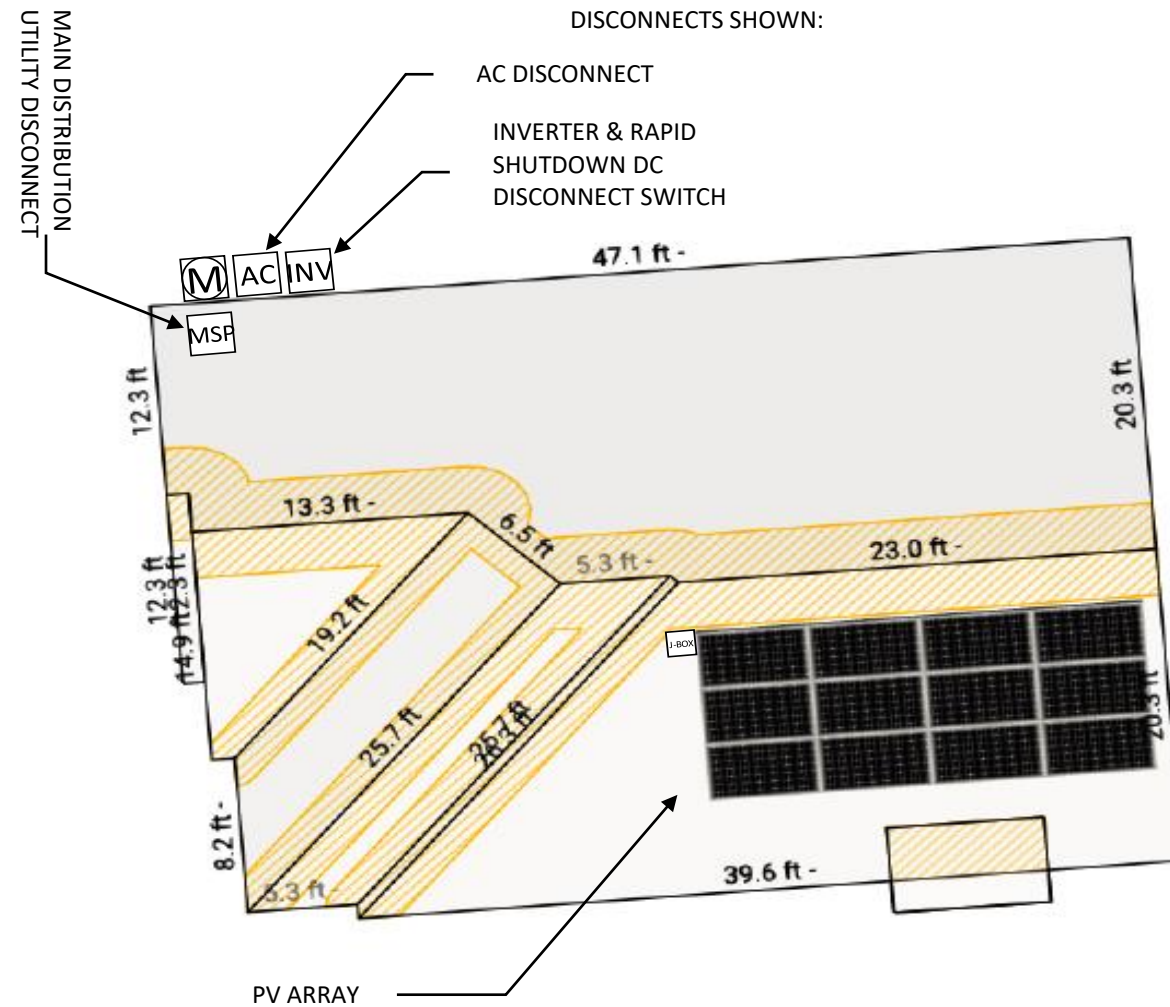


** ELECTRICAL DIAGRAM SHOWN ABOVE IS FOR LABELING PURPOSES ONLY. NOT AN ACTUAL REPRESENTATION OF EQUIPMENT AND CONNECTIONS TO BE INSTALLED. LABEL LOCATIONS PRESENTED MAY VARY DEPENDING ON TYPE OF INTERCONNECTION METHOD AND LOCATION PRESENTED ELECTRICAL DIAGRAM PAGE. **

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4.32 KW (DC) 3.8 KW (AC) 12 Solaria PowerXT 360R-PD (1) SolarEdge SE3800H-US (240V)			BY: CBennett

CAUTION

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



10111 Meadowneck Court, Silver Spring MD 20910

APPROVED
 Montgomery County
 Historic Preservation Commission

[Signature]

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JOB #: 00001910

Nearest Medical Facility:

Emergency Contact:

Identified Hazards:

Fall Comp:

Elec Comp:

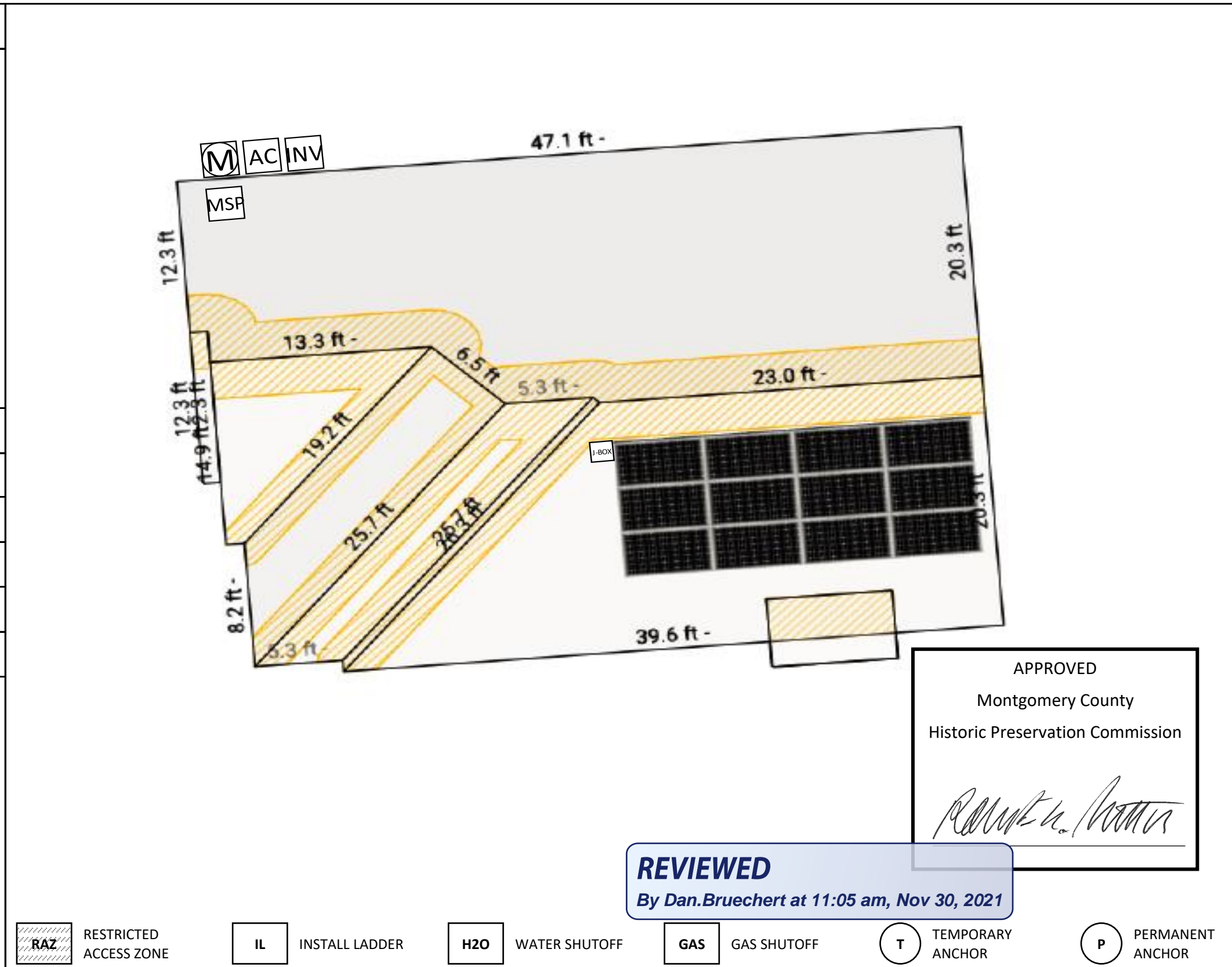
DATE

ROOFING PARTNER

ELECTRICAL CONTRACTOR

On Site Personell:

Sprinkler System: Y / N



APPROVED
 Montgomery County
 Historic Preservation Commission
[Signature]

REVIEWED
 By Dan.Bruechert at 11:05 am, Nov 30, 2021

- RAZ RESTRICTED ACCESS ZONE
- IL INSTALL LADDER
- H2O WATER SHUTOFF
- GAS GAS SHUTOFF
- T TEMPORARY ANCHOR
- P PERMANENT ANCHOR

MP#1 Pitch: 8.5 /12
Azimuth: 175 °

MP#2 Pitch: 0 /12
Azimuth: 0 °

MP#3 Pitch: 0 /12
Azimuth: 0 °

MP#4 Pitch: 0 /12
Azimuth: 0 °

MP#5 Pitch: 0 /12
Azimuth: 0 °

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

↑
NORTH

EQUIPMENT LEGEND

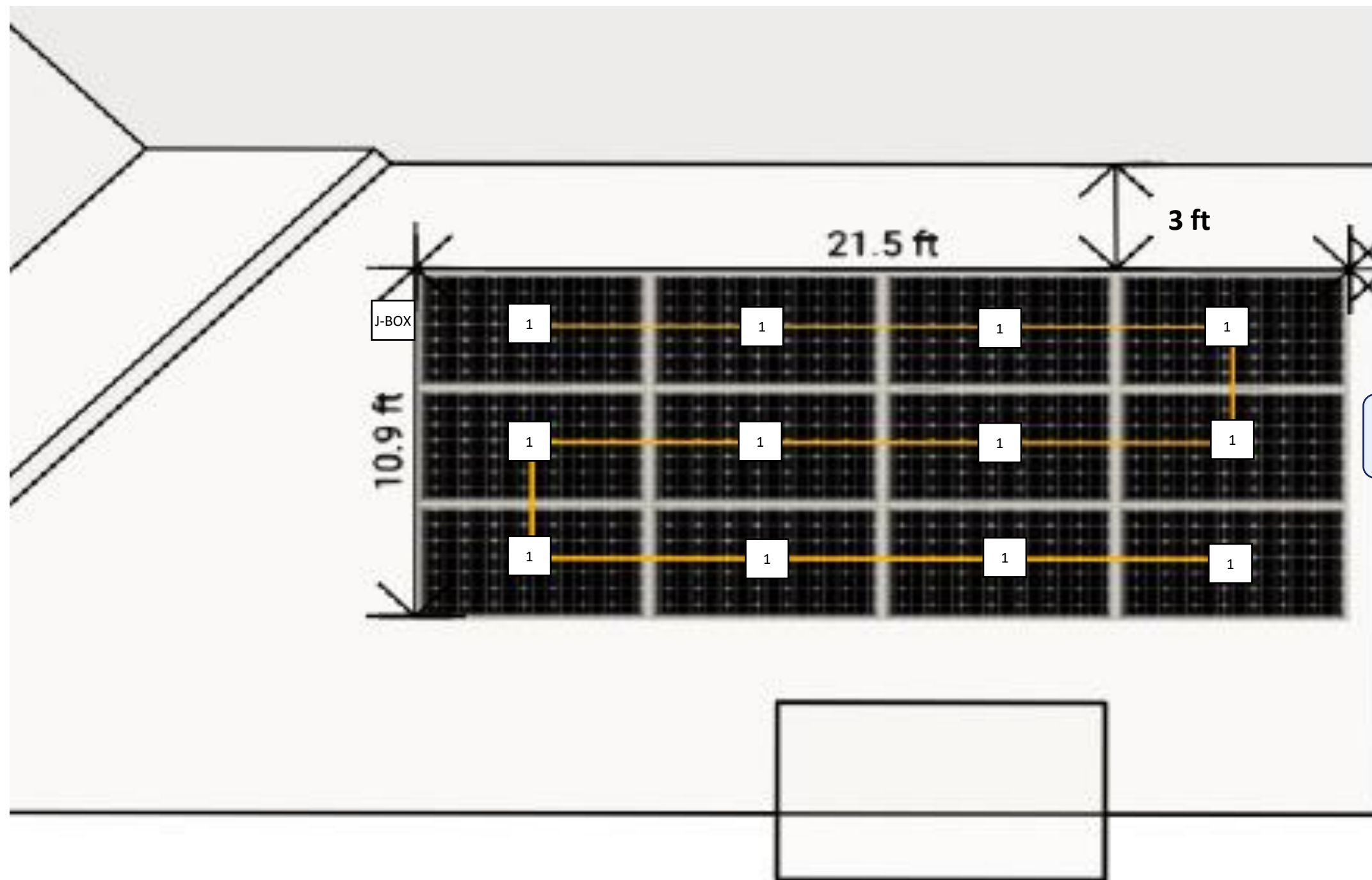
- M UTILITY METER
- MSP MAIN SERVICE PANEL
- LC LOAD CENTER
- AC AC DISCONNECT
- PV METER SOCKET (FOR UTILITY PV METER)
- INV INVERTER
- J-BOX JUNCTION BOX
- BAT BATTERY(IES)
- / / / / / FIRE ACCESS PATHWAY (3' TYP.)

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 Silver Spring MD 20910

CONTRACTOR:
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 973-628-3411 125 Mitchell Blvd, Suite D
 14629 San Rafael CA 94903

EQUIPMENT:
 4.32 KW (DC) 3.8 KW (AC)
 12 Solaria PowerXT 360R-PD (1) SolarEdge SE3800H-US (240V)

DATE 11/22/2021 **REV** 0
 CD0
 SAFETY PLAN
BY: CBennett



APPROVED
 Montgomery County
 Historic Preservation Commission

Robert H. [Signature]

REVIEWED
 By Dan.Bruechert at 11:05 am, Nov 30, 2021

- NOTE:**
1. ADD 22 INCHES TO ARRAY HEIGHT TO ACCOUNT FOR TOP FLASHING.
 2. USE 3 FASTENERS PER FOOT FOR PLYWOOD OR 6 FASTENERS PER FOOT FOR OSB.
 3. USE 5 FEET PER MODULE IN FLORIDA.

INSTALLATION NOTES	
Breaker tie-in	

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			CD1	
			CONSTRUCTION DOCUMENTS PAGE 1	
			BY: CBennett	