

#### HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert Sutton Chairman

Date: May 2, 2023

#### **MEMORANDUM**

TO: Rabbiah Sabbakhan

Department of Permitting Services

FROM: Michael Kyne

Historic Preservation Section

Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit #1021913: 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 with two (2) conditions** at the April 12, 2023 HPC meeting.

- 1. The final set of drawings shall show the removal of three solar panels from the southern slope of the front-gable roof on the original one-story house for a total of thirty-two (32) panels. The solar panels shall be father setback from the rake (edge) of the roof as illustrated in staff's model on page 8, Figure 7, of the staff report.
- 2. Approval of up to sixteen (16) solar panels on the northern slope of the two-story addition is hereby delegated to staff if the applicant submits a revision to this HAWP or a separate HAWP.

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: Ryan Doyle (Agent)

Address: 7214 Spruce Avenue, Takoma Park

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.





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County Executive

Robert Sutton
Chairman

Once work is complete the applicant will contact Michael Kyne at 301.563.3403 or Michael.Kyne@montgomeryplanning.org to schedule a follow-up site visit.



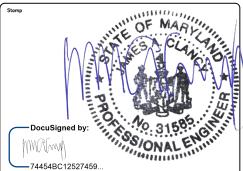
**IQ7+ REVIEWED** By Michael Kyne at 12:48 pm, May 02, 2023 ROOF:#3 PITCH: 11° AZIMUTH:31° 3' PATHWAY IN ACCORDANCE -WITH IRC2018 SECTION R324.6.1 **APPROVED Montgomery County Historic Preservation Commission** ST PITCH: 17 AZIMUTH:211 3' PATHWAY IN ACCORDANCE WITH IRC2018 SECTION R324.6.1 18" RIDGE SETBACK IN ACCORDANCE WITH IRC2018 SECTION R324.6.2 **KEY** PROPOSED PV ARRAY LOCATION ROOF:#1 PITCH: 28° AZIMUTH:211° FIRE SAFETY ZONE 57 PLAN VIEW TOTAL ROOF AREA: 2326 SQFT SOLAR ARRAY AREA: 676 SQFT THE SOLAR ARRAY IS 29.1% OF THE PLAN VIEW TOTAL ROOF AREA **NOTES: SOLAR PANEL LAYOUT** 1. THE SYSTEM SHALL INCLUDE [35] HANWHA Q.PEAK DUO BLK-G10+ 365W MODULES. Scale: 1/8" = 1'-0"2. SNAPNRACK UR-40 RAIL WILL BE INSTALLED IN ACCORDANCE WITH SNAPNRACK INSTALLATION MANUAL. 3. DIMENSIONS MARKED (\*) ARE ALONG ROOF SLOPE.



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STAMPED AND SIGNED FOR STRUCTURES ONLY

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AS NOTED

A001

4. REFER TO STRUCTURAL DRAWING FOR SECTIONS MARKED AND ADDITIONAL NOTES.

5. PANELS MOUNTED TO FOLLOW SLOPE OF THE ROOF

## **REVIEWED**

By Michael Kyne at 12:49 pm, May 02, 2023

**APPROVED Montgomery County Historic Preservation Commission** 

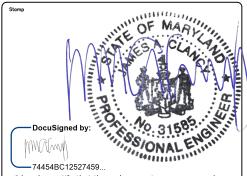
PROPOSED PV ARRAY LOCATION



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REV	DESCRIPTIONS	BY	DATE
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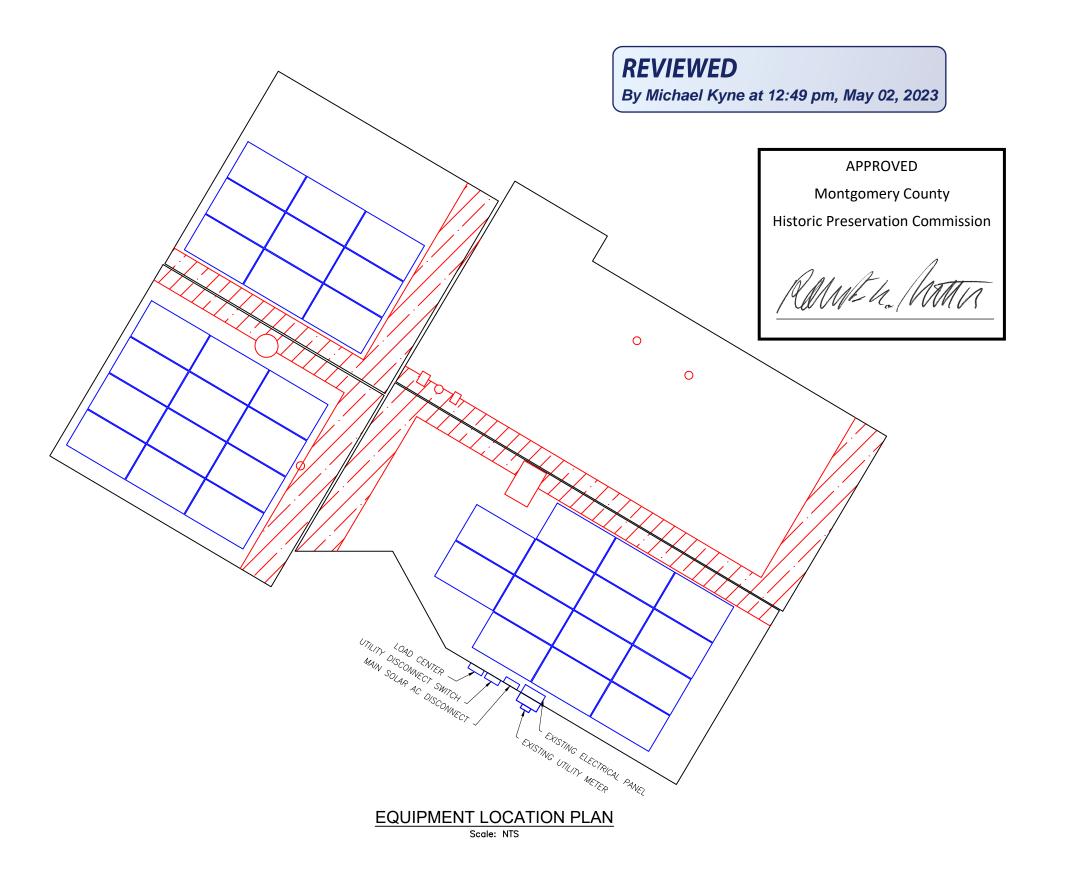
AS NOTED

A002



#### **NOTES:**

- 1. THE SYSTEM SHALL INCLUDE [35] HANWHA Q.PEAK DUO BLK-G10+ 365W MODULES.
- 2. SNAPNRACK UR-40 RAIL WILL BE INSTALLED IN ACCORDANCE WITH SNAPNRACK INSTALLATION MANUAL.





EQUIPMENT LOCATION PLAN IS APPROXIMATE, EXACT LOCATION TO BE VERIFIED WITH INSTALLATION CREW AND HOME OWNER AT THE TIME OF INSTALLATION.



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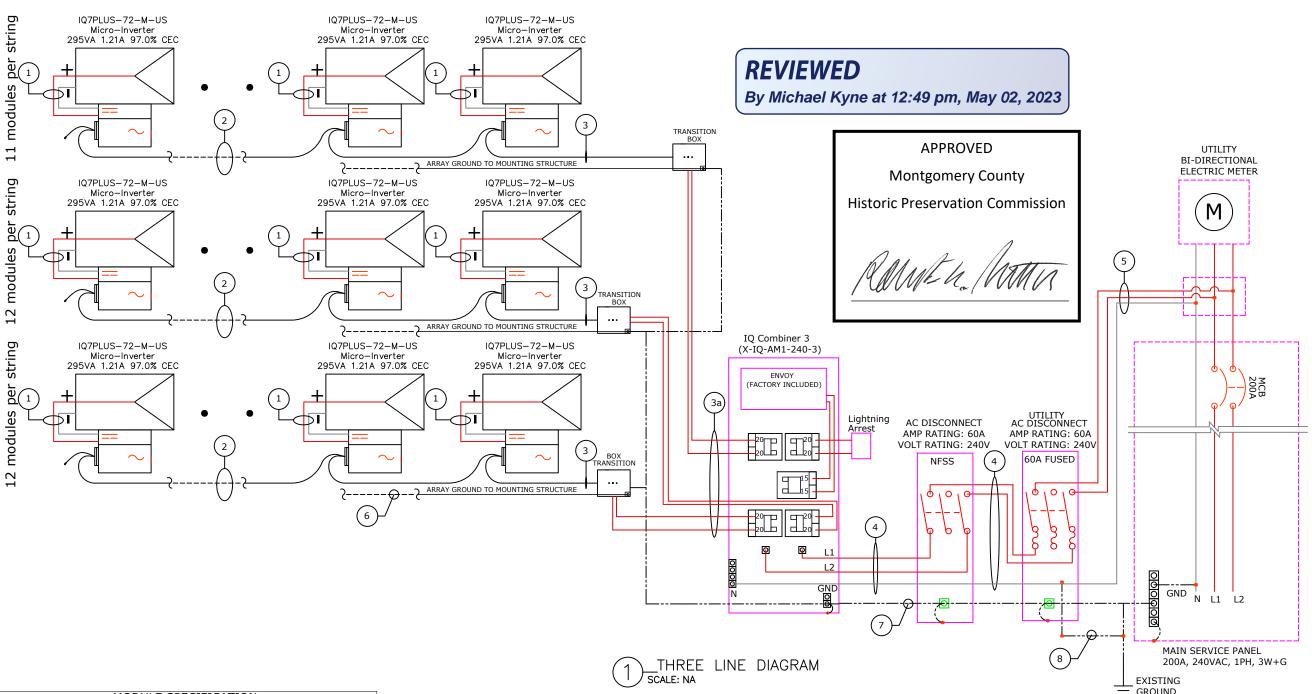
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AS NOTED



MODULE SPEC	CIFICATION	1	
MODEL NO.	Q.PEA	K DUO B	LK-G10+365
PEAK POWER			365 W
RATED VOLTAGE (Vmpp)			34.58 V
RATED CURRENT (Imp)			10.56 A
OPEN CIRCUIT VOLTAGE (Voc)			41.21 V
SHORT CIRCUIT CURRENT (Isc)			11.07 A
MAXIMUM SYSTEM VOLTAGE			1000VDC
Inverter Spe	cifications		
INVERTER MODEL		IQ7PL	.US-72-M-US
MAXIMUM DC VOLTAGE			60 V
MAXIMUM POWER OUTPUT			295VA
NOMINAL AC VOLTAGE			240 VAC
MAXIMUM AC CURRENT			1.21 A
ARRAY D	ETAILS		
NO. OF MODULES PER STRINGS	11	12	12
NO. OF STRINGS	1	1	1
ARRAY WATTS AT STC	4015	4380	4380
MAX. VOLTAGE	240	240	240

	WIRE/CO	NDUIT SCHEDULE ARRAY	
TAG	DESCRIPTION	WIRE SIZE/TYPE	NOTES
1	Panel to Micro invter	PV-WIRE (Factory Made)	Integrated
2	Micro Inverter to Micro Inverter	Pre-Manufactured Cable	
3	Micro Inverter to Transition Box	Pre-Manufactured Cable	
3A	Transition Box to Load Center	#10 Cu THHN/THWN-2	
4	Load Center to AC disconnect	#6 Cu THHN/THWN-2	
5	AC disconnect to AC disconnect	#6 Cu THHN/THWN-2	
6	AC disconnect to Interconnection Point	#6 Cu THHN/THWN-2	
7	Equipment Grounding Conductor	#8 Cu Bare Copper Wire	
8	Equipment Grounding Conductor	#8 Cu THHN/THWN-2	
9	Grounding Electrode Conductor	#8 Cu	

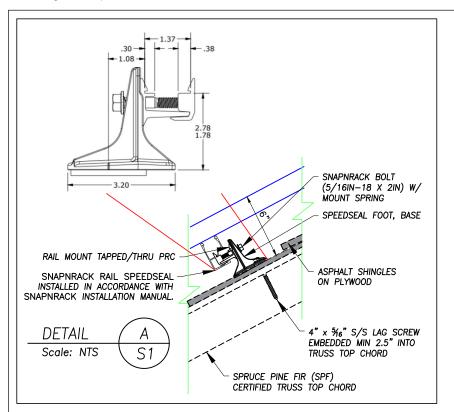
#### **GENERAL ELECTRICAL NOTES:** NEC2017

- EQUIPMENT USED SHALL BE NEW, UNLESS OTHERWISE NOTED.
- EQUIPMENT USED SHALL BE UL LISTED, UNLESS OTHERWISE NOTED.
   EQUIPMENT SHALL BE INSTALLED PROVIDING ADEQUATE PHYSICAL WORKING SPACE AROUND THE EQUIPMENT AND SHALL COMPLY WITH NEC.
- 4. COPPER CONDUCTORS SHALL BE USED AND SHALL HAVE INSULATION RATING 600V, 90°C, UNLESS OTHERWISE NOTED.
- 5. CONDUCTORS SHALL BE SIZED IN ACCORDANCE TO NEC. CONDUCTORS AMPACITY SHALL BE DE-RATED FOR TEMPERATURE INCREASE, CONDUIT FILL AND VOLTAGE DROP.
- ALL CONDUCTORS, EXCEPT PV WIRE, SHALL BE INSTALLED IN APPROVED CONDUITS OR RACEWAY. CONDUITS SHALL BE ADEQUATELY SUPPORTED AS PER NEC. AC DISCONNECT SHOWN IS REQUIRED IF THE UTILITY REQUIRES VISIBLE-BLADE SWITCH.
- 8. EXPOSED NON-CURRENT CARRYING METAL PARTS SHALL BE GROUNDED AS PER NEC.
  9. LINE SIDE INTER-CONNECTION SHALL COMPLY WITH NEC
- 10. SMS MONITORING SYSTEM AND IT'S CONNECTION SHOWN IS OPTIONAL. IF USED, REFER TO SMS
- INSTALLATION MANUAL FOR WIRING METHODS AND OPERATION PROCEDURE.

  11. ASHRAE FUNDAMENTAL OUTDOOR DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE U.S. (PHOENIX, AZ or PALM SPRINGS, CA)
- 12. FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF MOUNTED SUNLIGHT CONDUIT USING THE OUTDOOR TEMPERATURE OF 47°C
- 12.1. 10AWG CONDUCTOR ARE GENERALLY ACCEPTABLE FOR MODULES WITH AN Isc OF 9.6 AMPS WITH A

Ex(Isc\*(1.25)(1.25)(# of strings in parallel) = wire ampacity or using NEC 690.8

			Tomorrow's Energy Today		SOLAR ENERGY WORLD L	5681 Main Street 888-497			
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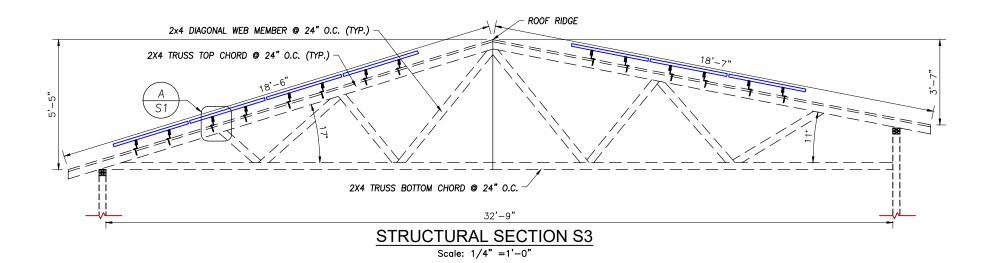
By Michael Kyne at 12:49 pm, May 02, 2023

APPROVED

Montgomery County

Historic Preservation Commission

Rameta homen



#### NOTES:

- ALL WORK SHALL COMPLY WITH REQUIREMENTS OF INTERNATIONAL RESIDENTIAL CODE (IRC 2018), LOADING CODE (ASCE 7-16), WOOD DESIGN CODE (NDS 2015), AND LOCAL REQUIREMENTS.
- 2. LOAD CRITERIA PER
  - EXPOSURE CATEGORY "B"
  - GROUND SNOW LOAD, Pg = 30 PSF
  - LATERAL LOAD RISK CATEGORY "II"
  - ULTIMATE DESIGN WIND SPEED = 115 MPH
- 3. SOLAR PANELS AND RACKING SYSTEMS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION.
- 4. FOLLOW ALL LOCAL AND FEDERAL SAFETY REQUIREMENTS.
- 5. PANELS MOUNTED TO FOLLOW SLOPE OF THE ROOF

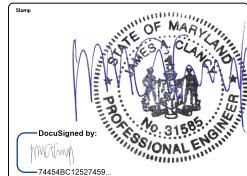


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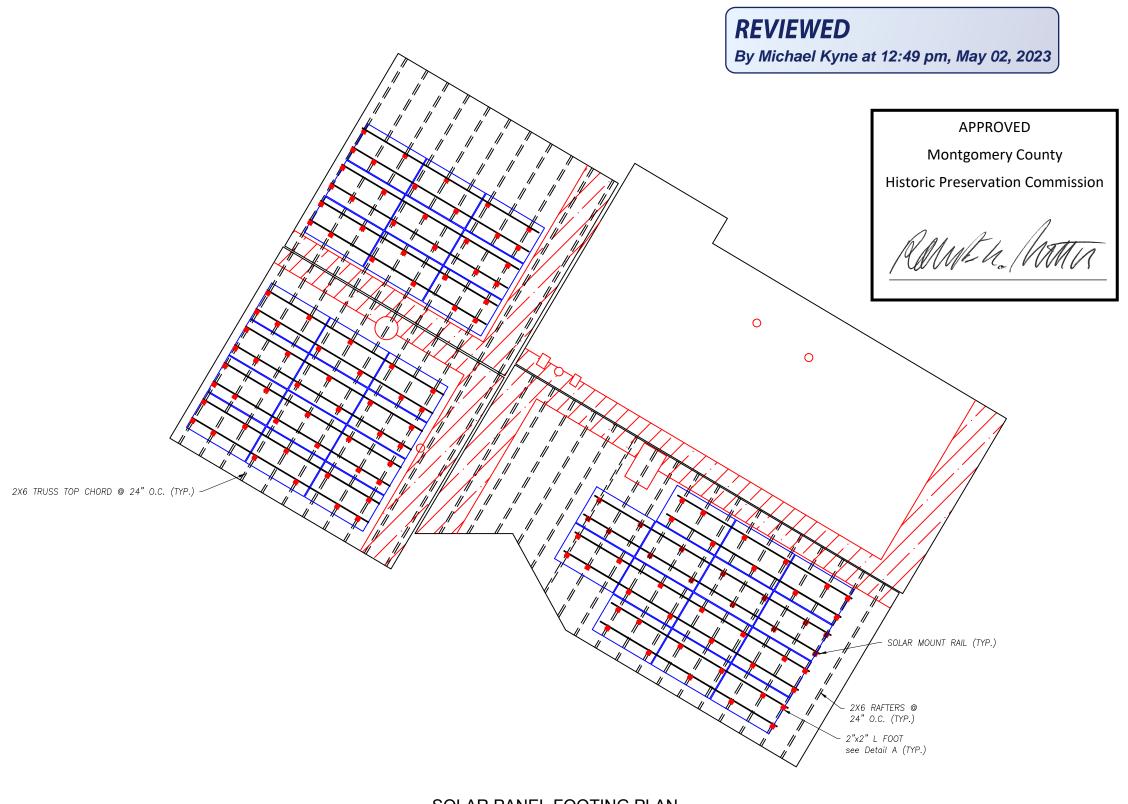
oject Name and Address

Nina & Ormond Seavey 7214 Spruce Ave Takoma Park, MD 20912 12.775 kW MD13822

Cody Brehm

18-APR-2023
Scale AS NOTED

S001



## SOLAR PANEL FOOTING PLAN

Scale: 1/8" = 1'-0"

#### NOTES:

- 1. SNAPNRACK SOLAR MOUNT RAIL SHALL BE INSTALLED IN ACCORDANCE WITH SNAPNRACK INSTALLATION MANUAL.
- 2. "L" FEET SHALL BE SPACED AT A MAXIMUM OF 4' O/C.
- 3. AN "L" FOOT SHALL BE PLACED WITHIN 25% OF MAXIMUM "L" FOOT SPACING (16" MAX.) AT THE CANTILEVERED END OF EACH SECTION OF RAIL.



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