



HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Sandra I. Heiler
Chairman

Date: February 25, 2021

MEMORANDUM

TO: Mitra Pedoeem
Department of Permitting Services

FROM: Michael Kyne
Historic Preservation Section
Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit #871851: 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** at the May 7, 2019 Historic Preservation Commission meeting, with revisions approved by staff on February 25, 2021.

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: Jack Buffon
Address: 20529 Riggs Hill Way, Brookeville

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 Michael Kyne at 301.563.3400 or michael.kyne@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 *Michael Ky...* on _____. The approval memo and stamped drawings follow.



**APPLICATION FOR
HISTORIC AREA WORK PERMIT**
HISTORIC PRESERVATION COMMISSION
301.563.3400

FOR STAFF ONLY:
HAWP# _____
DATE ASSIGNED _____

APPLICANT:

Name: Jack Bufton E-mail: jbufton@gst.com
Address: 20529 Riggs Hill Way City: Brookeville Zip: 20833
Daytime Phone: 202-853-6735 Tax Account No.: 03225365

AGENT/CONTACT (if applicable):

Name: Miche Booz E-mail: mbooz@michebooz.com
Address: 208 Market Street City: Brookeville Zip: 20833

REVIEWED

Phone: 301-774-6911

By Michael Kyne at 7:48 pm, Feb 25, 2021

Contractor Registration No.: _____

of Historic Property Master Plan Site #23/148

Is the Property Located within an Historic District? Yes/District Name Brookeville Woolen
 No/Individual Site Name Mill Worker's House

APPROVED
Montgomery County
Historic Preservation Commission

Is there an Historic Preservation/Land Trust/Environmental Easement on the Property? If YES, include a map of the easement, and documentation from the Easement Holder supporting this application.

Are other Planning and/or Hearing Examiner Approvals /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?) If YES, include information on these reviews as supplemental information.

Sandra K. Kester

Building Number: 20529 Street: Riggs Hill Way

Town/City: Brookeville Nearest Cross Street: Bordly Drive

Lot: 10 Block: _____ Subdivision: 501 Parcel: _____ District: 08

TYPE OF WORK PROPOSED: See the checklist on Page 4 to verify that all supporting items for proposed work are submitted with this application. Incomplete Applications will not be accepted for review. Check all that apply:

- | | | |
|---|--|--|
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Deck/Porch | <input type="checkbox"/> Shed/Garage/Accessory Structure |
| <input type="checkbox"/> Addition | <input type="checkbox"/> Fence | <input checked="" type="checkbox"/> Solar |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Hardscape/Landscape | <input type="checkbox"/> Tree removal/planting |
| <input type="checkbox"/> Grading/Excavation | <input type="checkbox"/> Roof | <input type="checkbox"/> Window/Door |
| | | <input type="checkbox"/> Other: _____ |

I hereby certify that I have the authority to make the foregoing application, that the application is correct and accurate and that the construction will comply with plans reviewed and approved by all necessary agencies and hereby acknowledge and accept this to be a condition for the issuance of this permit.

Jack L. Bufton
Signature of owner or authorized agent

February 1, 2021
Date

Property Description:

The Mill Worker's Stone House is a restored 2 and 1/2 story dwelling representative of mid-1700s to mid-1800s plantation environment in central Maryland. It may have held more than one mill worker families and has been renovated in the last Century as our private residence. It is located 300 yards southwest of the Brookeville Woolen Mill, a structure on the National and Maryland historic registers. The Mill Worker's Stone House has access from Riggs Hill Way and has neighbors to the North and West from that county paved road. This historic resource is located on a 25-acre lot that has two multi-acre sheep pastures. The stone house is at the southern edge of the front-field pasture along Riggs Hill Way. The back-field pasture is bordered on the northeast and east by the Hawlings Stream Valley Park and on the southwest by a separate 25-acre woodland. Shipe Road, a gravel access road to adjacent properties who addresses are on Brighton Dam Road, is the southeast border of the back-pasture. This pasture has rolling terrain above the Hawlings Stream Valley Park and is bordered on its southern edge by a 100-year flood-plain and wooded conservation area separating it from adjacent housing along Brighton Dam Road.

PROPOSAL:

We propose to add 18 panels of a ground-mount solar array to the existing 36-panel ground-mount array that was approved by Park & Planning in 2019 and completed in December of that year. Rationale for this proposal is that our experience with the existing array in 2020 shows that 50% more panels at that remote site could cover a significant fraction of our electricity needs per year in our all-electric historic resource home. The proposed addition of 18 panels will max-out our underground cable connection to our home and its grid-tie electrical network. The proposed addition of panels will be directly adjacent to the East side of our existing panels with essentially no change in the visual appearance or neighbor's view of our back pasture and its sheep occupants.

REVIEWED

By Michael Kyne at 7:48 pm, Feb 25, 2021

Applicant:



Page 2

Work Item 1: _____ Addition of solar panel array	
Description of Current Condition: Existing solar panel array of 36 panel in a ground-mount in the back sheeppasture of 20529 Riggs Hill way in Brookeville, MD 20833 District 08 Map JV13	Proposed Work: Installation of addition of ground-mount solar array consisting of 18 panels. to the east of existing panels. New panels are REC Alpha Series 370W (see attached data sheet)

Work Item 2: _____	
Description of Current Condition:	Proposed Work:

REVIEWED
 By Michael Kyne at 7:48 pm, Feb 25, 2021

Work Item 3: _____	
Description of Current Condition: <div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> <p style="text-align: center;">APPROVED</p> <p style="text-align: center;">Montgomery County Historic Preservation Commission</p> <p style="text-align: center;"><i>Sandra L. Heiler</i></p> </div>	Proposed Work:

Applicant: Jack Buffon

**HISTORIC AREA WORK PERMIT
CHECKLIST OF
APPLICATION REQUIREMENTS**

	Required Attachments						
Proposed Work	1. Written Description	2. Site Plan	3. Plans/Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/Parking Area	*	*		*	*	*	*
Grading/Excavation/Landscaping	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs		*	*	*	*		*

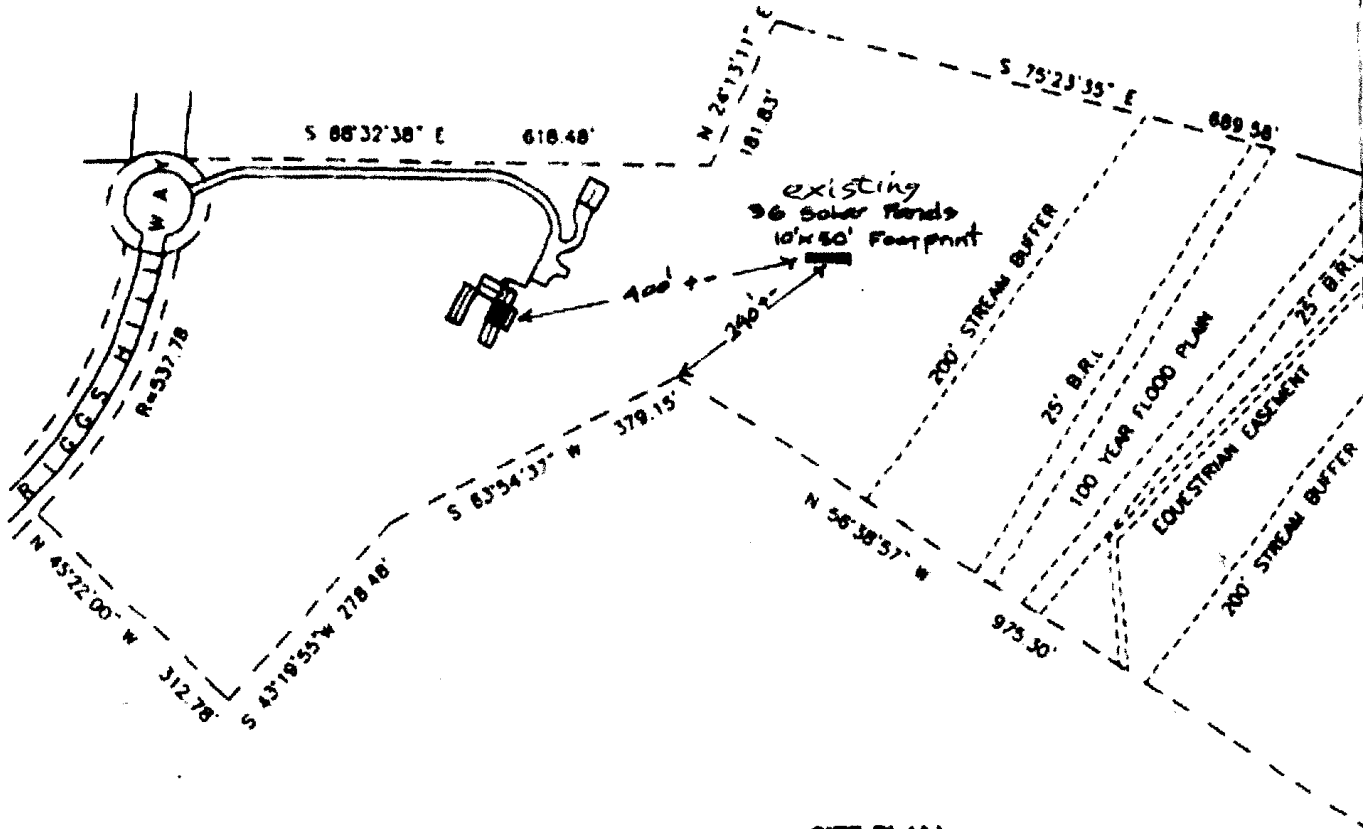
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Sandra L. Heiler

Applicant: Jack Bufton

Page 4

Site Plan



SITE PLAN
 1" = 200'-0"

SUBDIVISION RECORD PLAT
 LOT 10
 HAWLINGS RIVER ESTATES, SUBDIVISION 50
 ELECTION DISTRICT NO.8, MAP 13,
 MONTGOMERY COUNTY, MARYLAND

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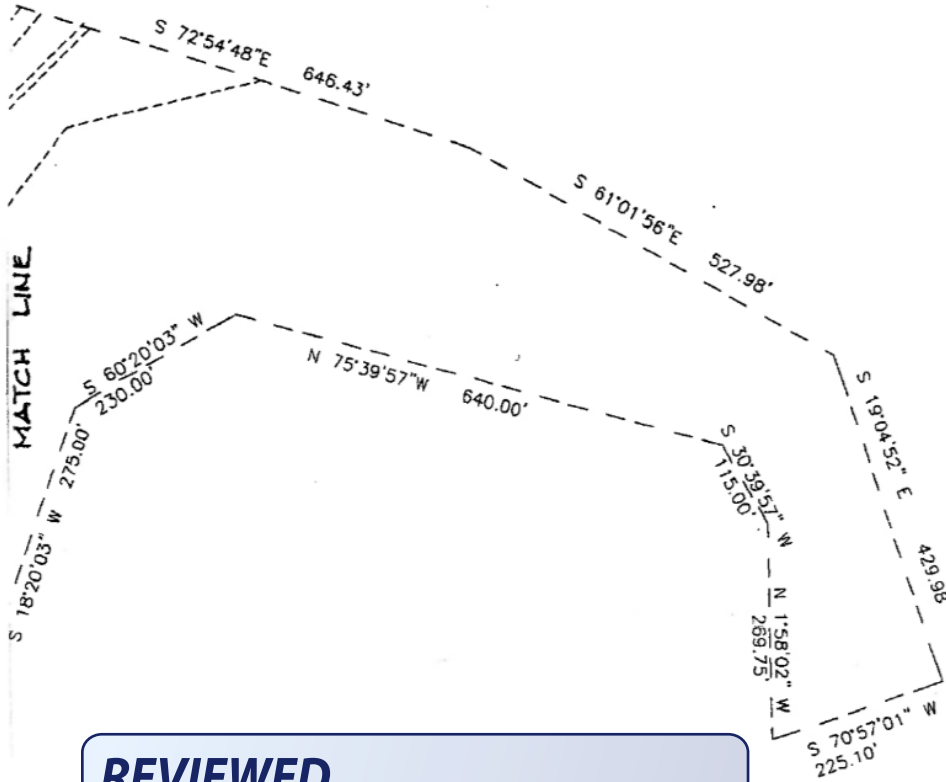
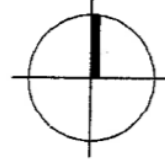
Shade portion to indicate North

Applicant: Jack Difton

Page: 5

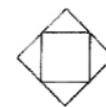
Site Plan

MICHE BOOZ	
ARCHITECT	
CS	208 Market St Brookville Maryland 20833 (301)774 6911 fax: 774 1908
Drawings: Site plan	
Consultants:	
B&A	
BENNING & ASSOCIATES, INC.	
8933 Shady Grove Court Gaithersburg, MD 20877 (301) 948 0940	



MATCH LINE

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By Michael Kyne at 7:48 pm, Feb 25, 2021



Shade portion to indicate North

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Applicant:

Jack Bufton

Proposed Solar Panels: Rec Alpha Series 370W panels

1	2	3	4	5	6		1	2	3
7	8	9	10	11	12		4	5	6
13	14	15	16	17	18		7	8	9
19	20	21	22	23	24		10	11	12
25	26	27	28	29	30		13	14	15
31	32	33	34	35	36		16	17	18

EXISTING ARRAY PANELS

Panasonic HIT 335W panels

**PROPOSED ADDITIONAL
PANELS**

REC Alpha Series 370W panels

North

East

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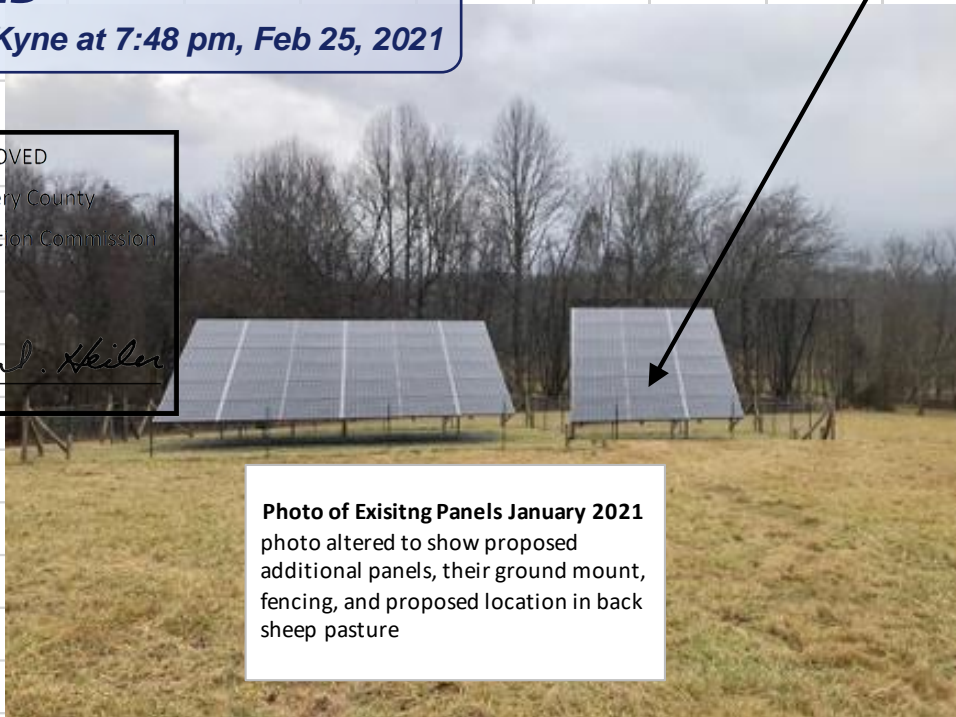
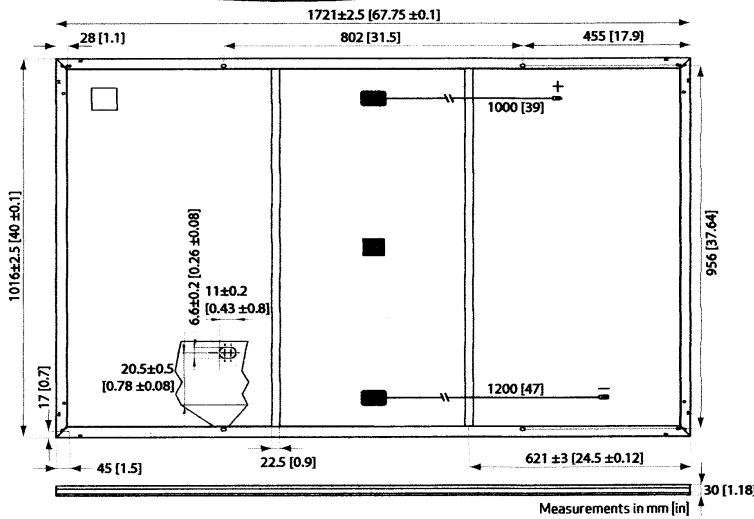


Photo of Existing Panels January 2021
photo altered to show proposed additional panels, their ground mount, fencing, and proposed location in back sheep pasture

REC ALPHA SERIES

PRODUCT DATASHEET



GENERAL DATA

Cell type:	120 half-cut cells with REC heterojunction cell technology 6 strings of 20 cells in series	Connectors:	Stäubli MC4PV-KBT4/KST4, 12AWG (4mm ²) in accordance with IEC 62852 IP68 only when connected
Glass:	0.13 in (3.2 mm) solar glass with anti-reflection surface treatment	Cable:	12AWG (4mm ²) PV wire, 39+47 in (1+1.2m) in accordance with EN 50618
Backsheet:	Highly resistant polymeric construction	Dimensions:	678 x 40 x 1.2 in (1721 x 1016 x 30 mm) 18.8 sq ft (1.75 m ²)
Frame:	Anodized aluminum (black)	Weight:	43 lbs (19.5 kg)
Junction box:	3-part, 3 bypass diodes, IP67 rated in accordance with IEC 62790	Origin:	Made in Singapore

ELECTRICAL DATA

Product Code*: RECxxxAA

	360	365	370	375	380
Power Output - P _{MAX} (Wp)	360	365	370	375	380
Watt Class Sorting - (W)	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5
Nominal Power Voltage - V _{MPP} (V)	36.7	37.1	37.4	37.8	38.1
Nominal Power Current - I _{MPP} (A)	9.82	9.85	9.9	9.94	9.98
Open Circuit Voltage - V _{OC} (V)	43.9	44	44.1	44.2	44.3
Short Circuit Current - I _{SC} (A)	10.49	10.52	10.55	10.58	10.61
Power Density (W/sq ft)	19.15	19.41	19.68	19.94	20.21
Panel Efficiency (%)	21.7				
Power Output - P _{MAX} (Wp)	274	278	282	286	289
Nominal Power Voltage - V _{MPP} (V)	34.6	35.0	35.2	35.6	35.9
Nominal Power Current - I _{MPP} (A)	7.93	7.96	8.00	8.03	8.06
Open Circuit Voltage - V _{OC} (V)	41.4	41.5	41.6	41.6	41.7
Short Circuit Current - I _{SC} (A)	8.47	8.50	8.52	8.55	8.57

Values at standard test conditions (STC: air mass AM1.5, irradiance 1000 W/m², temperature 77°F (25°C) based on a production spread with a tolerance of P_{MAX}, V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM1.5, irradiance 800 W/m², temperature 68°F (20°C), windspeed 3.3 ft/s (1 m/s). * Where xxx indicates the nominal power class (P_{MAX}) at STC above.

STC

NMOT

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CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 1703, UL 61730	
IEC 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
UL 1703	Fire Type Class 2
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
AS4040.2 NCC 2016	Cyclic Wind Load
ISO 14001:2004, ISO 9001:2015, OHSAS 18001:2007, IEC 62941	



WARRANTY

Standard	REC ProTrust	
	No	Yes
Installed by an REC Certified Solar Professional	No	Yes
System Size	All	<25 kW 25-500 kW
Product Warranty (yrs)	20	25
Power Warranty (yrs)	25	25
Labor Warranty (yrs)	0	10
Power in Year 1	98%	98%
Annual Degradation	0.25%	0.25%
Power in Year 25	92%	92%

See warranty documents for details. Conditions apply.

MAXIMUM RATINGS

Operational temperature:	-40...+85°C
Maximum system voltage:	1000 V
Design load (+): snow	4666 Pa (97.5 lbs/sq ft)*
Maximum test load (+):	7000 Pa (146 lbs/sq ft)*
Design load (-): wind	2666 Pa (55.6 lbs/sq ft)*
Maximum test load (-):	4000 Pa (83.5 lbs/sq ft)*
Max series fuse rating:	25 A
Max reverse current:	25 A

* Calculated using a safety factor of 1.5

See installation manual for mounting instructions

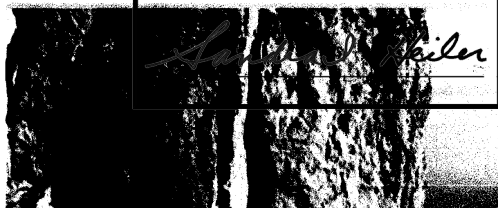
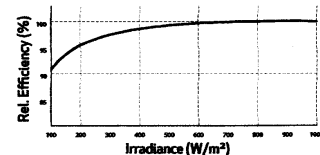
TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P _{MAX} :	-0.26 %/°C
Temperature coefficient of V _{OC} :	-0.24 %/°C
Temperature coefficient of I _{SC} :	0.04 %/°C

* The temperature coefficients stated are linear values

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



Founded in Norway in 1996, REC is a leading vertically integrated solar energy company. Through integrated manufacturing from silicon to wafers, cells, high-quality panels and extending to solar solutions, REC provides the world with a reliable source of clean energy. REC's renowned product quality is supported by the lowest warranty claims rate in the industry. REC is a Bluestar Elkem company with headquarters in Norway and operational headquarters in Singapore. REC employs around 2,000 people worldwide, producing 1.5 GW of solar panels annually.

REC

www.recgroup.com



Existing Property Condition Photographs:



Detail: View to the north of existing Solar Panel Array (36 panels) in back pasture of 20529 Riggs Hill Way
January 2021



REVIEWED
By Michael Kyne at 7:48 pm, Feb 25, 2021

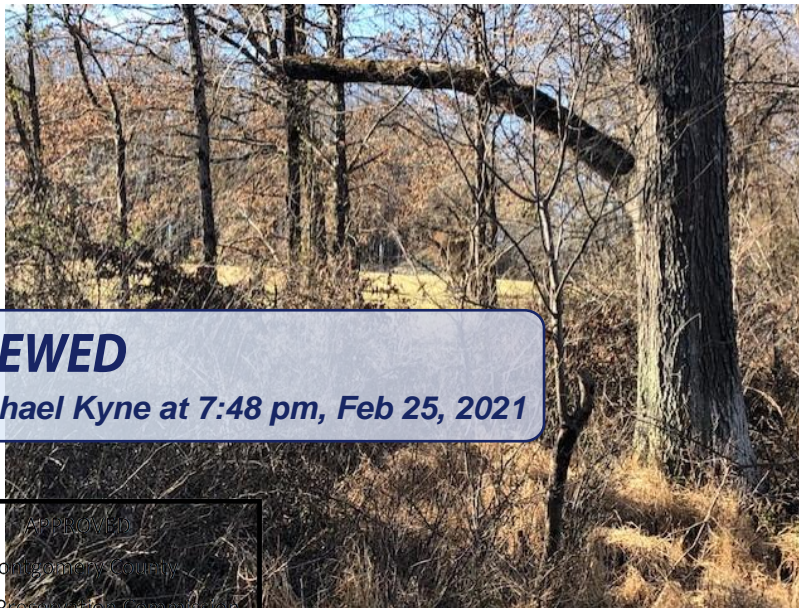
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Detail: View towards 20529 Historic structure resource from existing solar panel array
January 2021

Existing Property Condition Photographs:



Detail: View of existing Solar Panel Array from 1901 Brighton Dam Road neighbor
January 2021

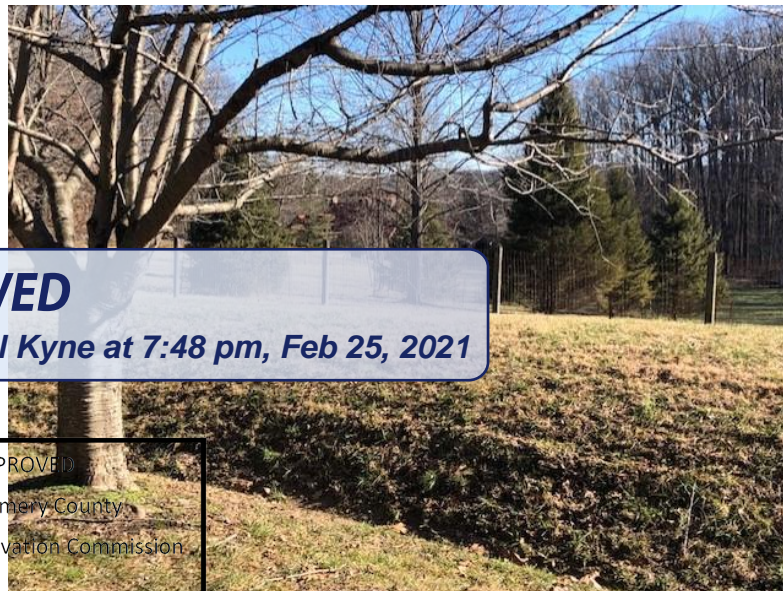


Detail: View of existing solar panel array from 1909 Brighton Dam Road neighbor_January 2021

Existing Property Condition Photographs:



Detail: View towards existing solar panel array from 20525 Riggs Hill Way neighbor
January 2021



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Sandra J. Keller

Detail: View towards existing solar panel array from 2032 Riggs Hill Way neighbor
January 2021

Existing Property Condition Photographs:



Detail: View to the south and southwest from existing solar panel array in back pasture of 20529 Riggs Hill Way

January 2021



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Detail: View to the east and southeast from existing solar panel array in back pasture of 20529 Riggs Hill Way
January 2021

Applicant: Jack Bufton

Neighbor's Addresses:

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFYING [Owner, Owner's Agent, Adjacent and Confronting Property Owners]	
Owner's mailing address Jack Bufton PO Box 7 Brookeville, MD 20833	Owner's Agent's mailing address Michele Booz, Architect 208 Main Street Brookeville, MD 20833
Adjacent and confronting Property Owners mailing addresses	
Adjacent	Confronting
John Kinzer 2025 Riggs Hill Way Brookeville, MD 20833	Laura & Bill Hauser 20522 Riggs Hill Way Brookeville, MD 20833
Chris Stetel & Patsy Thornton 1909 Brighton Dam Rd. Brookeville, MD 20833	Chris Newcomer & Pam Phyllis 1901 Brighton Dam Rd. Brookeville, MD 20833
Jeff & Susan Jones 1921 Brighton Dam Rd. Brookeville, MD 20833	

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