



## **PROPOSAL**

The applicant proposes to install 28 (twenty-eight) roof-mounted solar panels.

## **APPLICABLE GUIDELINES**

The Historic Preservation Office and Historic Preservation Commission (HPC) consult several documents when reviewing alterations and new construction within the Takoma Park Historic District. These documents include the historic preservation review guidelines in the approved and adopted amendment for the *Takoma Park Historic District (Guidelines)*, *Montgomery County Code Chapter 24A (Chapter 24A)*, and the *Secretary of the Interior's Standards for Rehabilitation (Standards)*, and the HPC's *Policy No. 20-01 ADDRESSING EMERGENCY CLIMATE MOBILIZATION THROUGH THE INSTALLATION OF ROOF-MOUNTED SOLAR PANELS*. The pertinent information in these four documents is outlined below.

### ***Takoma Park Historic District Guidelines***

There are two broad planning and design concepts which apply to all categories. These are:

- The design review emphasis will be restricted to changes that are all visible from the public right-of-way, irrespective of landscaping or vegetation (it is expected that the majority of new additions will be reviewed for their impact on the overall district), and
- The importance of assuring that additions and other changes to existing structures act to reinforce and continue existing streetscape, landscape, and building patterns rather than to impair the character of the historic district.

A majority of the buildings in the Takoma Park Historic District have been assessed as being "Contributing Resources." While these buildings may not have the same level of architectural or historical significance as Outstanding Resources or may have lost some degree of integrity, collectively, they are the basic building blocks of the Takoma Park district. They are important to the overall character of the district and the streetscape due to their size, scale, and architectural qualities, rather than for their particular architectural features.

Contributing Resources should receive a more lenient level of design review than those structures that have been classified as Outstanding. This design review should emphasize the importance of the resource to the overall streetscape and its compatibility with existing patterns rather than focusing on a close scrutiny of architectural detailing. In general, however, changes to Contributing Resources should respect the predominant architectural style of the resource.

The following guidance which pertains to this project are as follows:

- All exterior alterations, including those to architectural features and details, should be generally consistent with the predominant architectural style and period of the resource and should preserve the predominant architectural features of the resource; exact replication of existing details and features is, however, not required.
- Minor alterations to areas that do not directly front on a public right-of-way -such as vents, metal

stovepipes, air conditioners, fences, skylights, etc. should be allowed as a matter of course; alterations to areas that do not directly front on a public right-of-way which involve the replacement of or damage to original ornamental or architectural features are discouraged but may be considered and approved on a case-by-case basis.

- Alterations to features that are not visible at all from the public right-of-way should be allowed as a matter of course.
- All changes and additions should respect existing environmental settings, landscaping, and patterns of open space.

***Montgomery County Code, Chapter 24A-8***

The following guidance which pertains to this project are as follows:

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to ensure conformity with the purposes and requirements of this chapter, if it finds that:
  - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
  - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter;
- (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

***Secretary of the Interior's Standards for Rehabilitation***

The Secretary of the Interior defines rehabilitation as “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values.” The applicable *Standards* are as follows:

- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- 9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- 10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

***Historic Preservation Commission Policy No. 20-01: Addressing Emergency Climate Mobilization Through the Installation of Roof-Mounted Solar Panels***

Now, THEREFORE:

WHEREAS, Historic Area Work Permit decisions are guided by the criteria in Section 24A, The Secretary of the Interior’s Standards for Rehabilitation, and pertinent guidance from applicable master plan amendments and/or site or district-specific studies;

WHEREAS, The Secretary of the Interior’s Standards for Rehabilitation as interpreted by the National Park Service limit the placement of rooftop solar panels under Standards 2, 9, and 10 to less conspicuous locations;

WHEREAS, the County Council has established a Climate Emergency;

WHEREAS, the Historic Preservation is a body established by the County Executive and County Council;

WHEREAS, Section 24-8(b)(6) states, “In balancing the interest of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit;”

WHEREAS, the widespread use of solar panels, both for hot water and for electricity production, will reduce greenhouse gases in the county, in accordance with the aims of the Emergency Climate Mobilization resolution (Resolution No.: 18-974), it shall be the policy of the Historic Preservation Commission that:

1. The preferred locations for solar panel installation(s) on a designated historic site or an historic resource located within an historic district is a) on the rear of the property, b) on non-historic building additions, c) on accessory structures, or d) in ground-mounted arrays;
2. If it is not feasible to install solar panels in one of the identified preferred locations due to resource orientation or other site limitations; and,
3. The roof is determined to be neither architecturally significant, nor a character-defining feature of the resource, nor is it a slate or tile roof, that unless it can be demonstrated that the solar array will be installed without damaging the historic character of the resource or historic fabric; then
4. The public welfare is better served by approving a Historic Area Work Permit for solar panels on all visible side or front roof slopes under Section 24A-8(b)(6).

A Historic Area Work Permit (HAWP) is required for all work referenced in this policy.

**STAFF DISCUSSION**

The subject property is a one-story Craftsman bungalow with a partial width front porch and a small, non-historic, rear addition with two small gable roofs. The applicant proposes to install 28 (twenty-eight) roof-mounted solar panels on the south and north roof slopes. The conduit and inverter box will be installed next to the existing utility meter on the right elevation near the front corner. Staff finds the proposed solar array will not detract from the character of the house or surrounding district and recommends the HPC approve the HAWP.

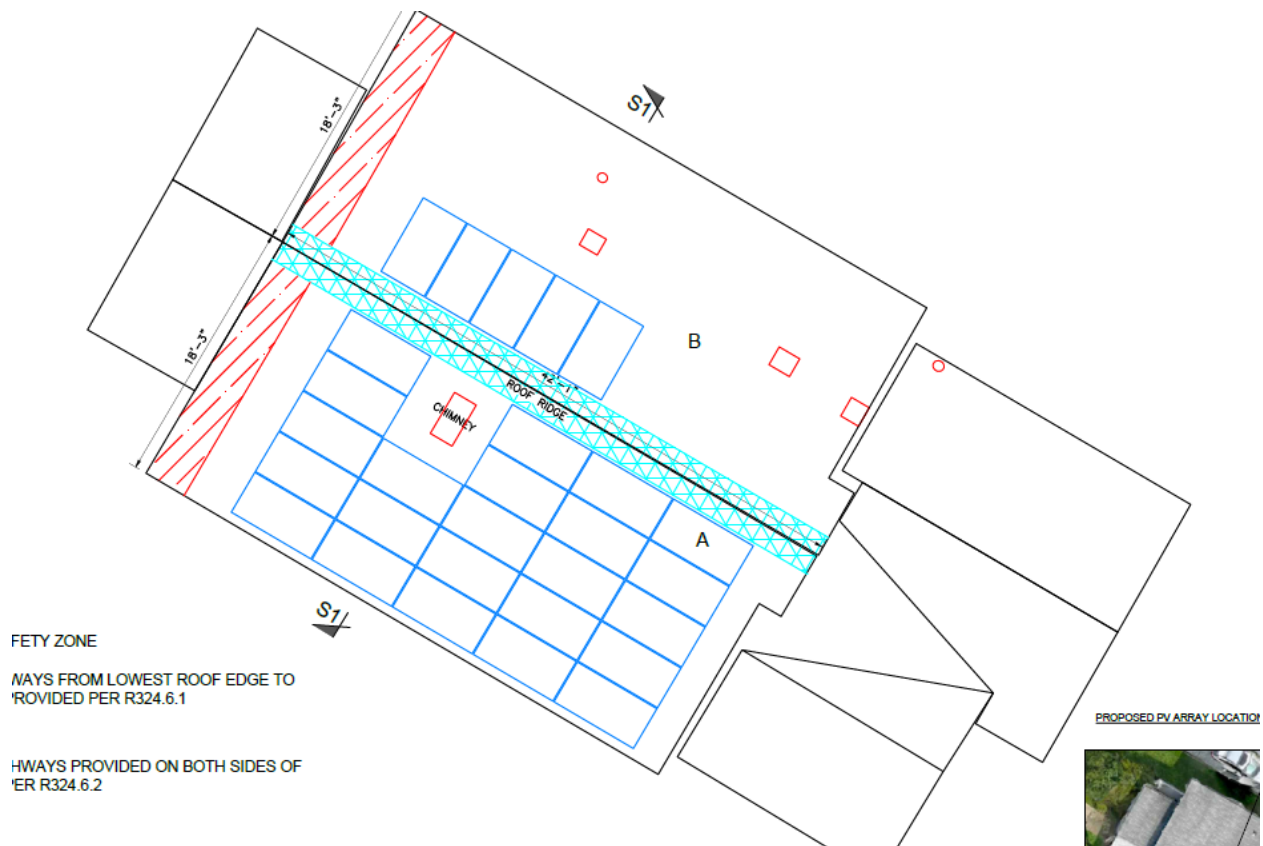


Figure 2: Proposed solar array.

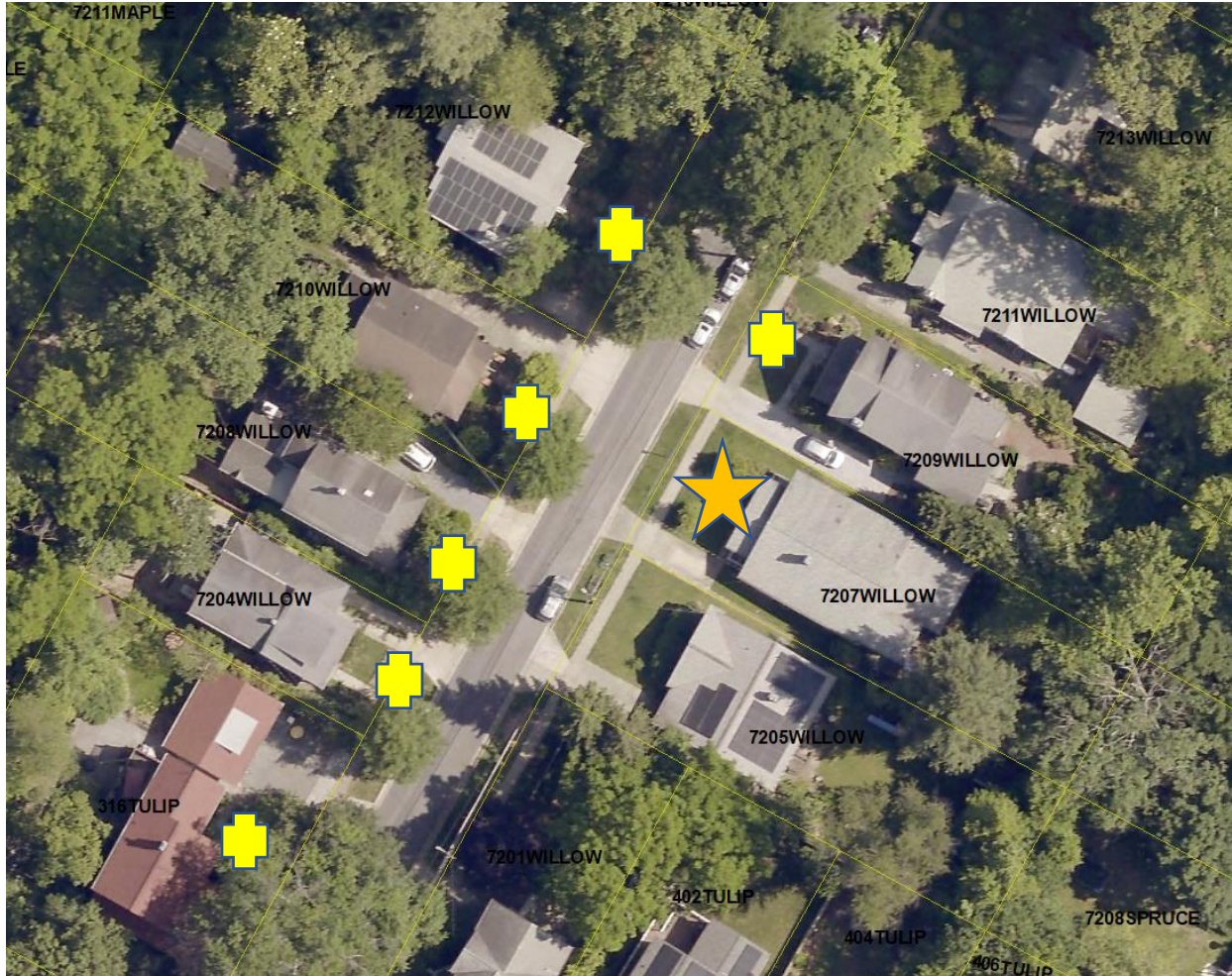
The HPC's adopted policy for roof-mounted solar panels directs Staff on how to evaluate proposed solar arrays. First, none of the preferred locations are available at the subject property. There is not enough room on the property for a free-standing array, nor is there an accessory structure. The additions at the rear do not have enough square footage to accommodate more than a couple panels and, as shown in the aerial photo (*Fig. 1*), the rear is in the shade of several mature trees. Additionally, because the house has a front gable roof, there is no 'rear' where the solar array could go.

Second, Staff finds the roof neither architecturally nor materially significant. The front gable roof covered in three-tab shingles is common in the Takoma Park Historic District and, should the applicant wish, the roof could be returned to its historic configuration without impairing its integrity, per Standard 10.

At Staff's first review of the proposal, Staff was unsure if 28 (twenty-eight) solar panels was an excessive number and if it would be possible to meet the needs of the property owners while limiting the panels to the south roof slope. The letter submitted by the applicant's contract shows that depending on the exact placement of the panels, 26 or 27 (twenty-six or twenty-seven) panels could provide 100% of the current electrical usage, but the additional panel or two would provide a buffer for additional usage. Staff finds this additional production will not result in a windfall for the owners by selling electricity back to the utility.

An additional consideration is the number of Outstanding resources in the vicinity of the subject property and how their view will be impacted by the proposed solar installation. The map, shown below, identifies

six Outstanding Resources, including 7212 Willow Ave., an Outstanding resource with solar panels on its roof. The house at 7205 Willow Ave., directly to the south of the subject property, is a Non-Contributing Resource with solar panels on its front and rear roof slopes. While there are a significant number of Outstanding Resources near the subject property, Staff does not find that the proposed array will have a substantial impact on the character of the surrounding block.



*Figure 3: The subject property (shown with a star) and adjacent Outstanding resources (shown with a plus symbol).*

Based on these considerations, Staff finds the public welfare is better served by granting the HAWP under 24A-8(b)(6) and (d), and Standards 2, 9, and 10.

### **STAFF RECOMMENDATION**

Staff recommends that the Commission **approve** the HAWP application: under the Criteria for Issuance in Chapter 24A-8(b)(1), (2), and (d), having found that the proposal will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the *Secretary of the Interior's Standards for Rehabilitation #2, #9, and #10*;

and with the general condition that the applicant shall present an electronic set of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301-563-3400 or [dan.bruechert@montgomeryplanning.org](mailto:dan.bruechert@montgomeryplanning.org) to schedule a follow-up site visit.



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

FOR STAFF ONLY:

HAWP# 1046207

DATE ASSIGNED \_\_\_\_\_

**APPLICANT:**

Name: Ryan Doyle

E-mail: rdoyle@solarenergyworld.com

Address: 7207 Willow Avenue

City: Takoma Park Zip: 20912

Daytime Phone: 410-579-5172

Tax Account No.: \_\_\_\_\_

**AGENT/CONTACT (if applicable):**

Name: Ryan Doyle

E-mail: rdoyle@solarenergyworld.com

Address: 14880 Sweitzer Lane

City: Laurel Zip: 20707

Daytime Phone: 410-579-5172

Contractor Registration No.: 127353

**LOCATION OF BUILDING/PREMISE:** MIHP # of Historic Property \_\_\_\_\_

Is the Property Located within an Historic District?  Yes/District Name \_\_\_\_\_  
 No/Individual Site Name \_\_\_\_\_

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.

Building Number: 7207 Street: Willow Avenue

Town/City: Takoma Park Nearest Cross Street: Tulip Avenue

Lot: 8 Block: 8 Subdivision: 0025 Parcel: N/A

**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.

Ryan Doyle  
Signature of owner or authorized agent

9/27/2013  
Date



**HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFYING**  
 [Owner, Owner's Agent, Adjacent and Confronting Property Owners]

<p><b>Owner's mailing address</b>                  Barry Pauls                  7207 Willow Avenue                  Takoma Park MD 20912</p>	<p><b>Owner's Agent's mailing address</b>                  Ryan Doyle                  14880 Sweitzer Lane                  Laurel MD 20707</p>
<p align="center"><b>Adjacent and confronting Property Owners mailing addresses</b></p>	
<p>Scott Smallwood &amp; Amanda                  Lenhart                  7205 Willow Avenue                  Takoma Park MD 20912                  Adjacent</p>	<p>Judith Appelbaum &amp; Elizabeth Cohn                  7209 Willow Avenue                  Takoma Park MD 20912                  Adjacent</p>
<p>7212 Spruce Avenue, Takoma Park MD 20912                  7210 Spruce Avenue, Takoma Park MD 20912                  7208 Spruce Avenue, Takoma Park MD 20912</p>	<p>7212 Willow Avenue, Takoma Park MD 20912                  7210 Willow Avenue, Takoma Park MD 20912                  7208 Willow Avenue, Takoma Park MD 20912</p>



# SolarEnergyWorld

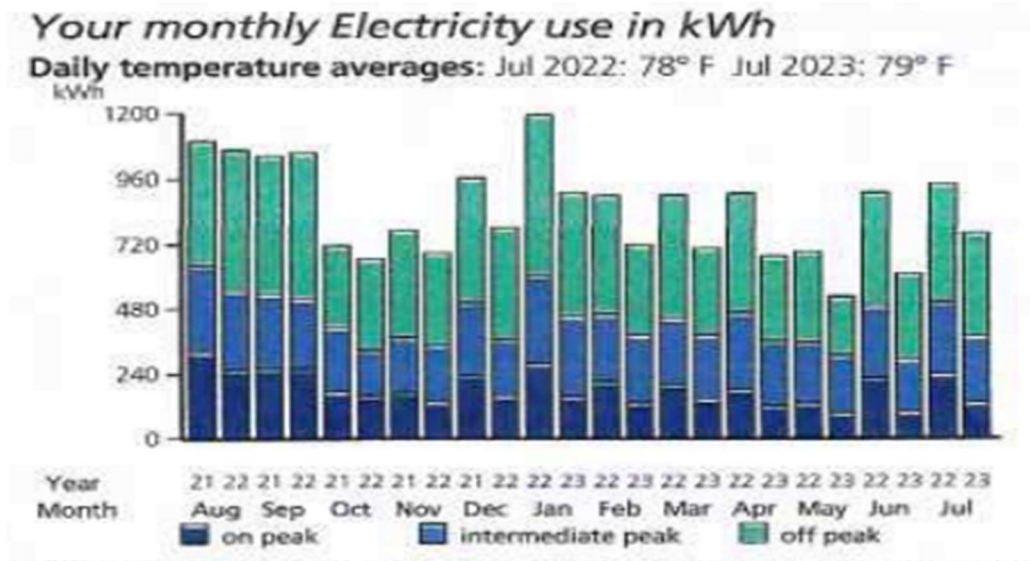
*Because Tomorrow Matters*

10/27/23

To whom it may concern,

- Explain how many solar panels are required to support the home vs. how many are there to sell power back to the grid.

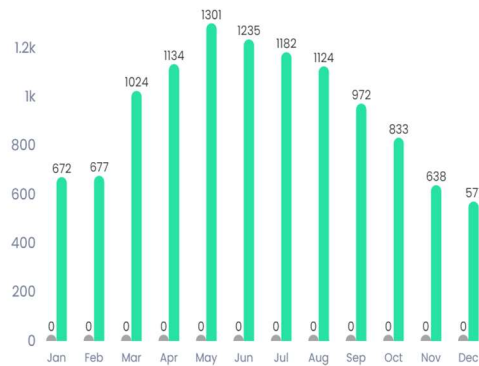
Monthly energy consumption for 7207 Willow AVE, Silver Spring, MD 20912 vs the proposed system monthly production



Average Monthly Solar Access



Monthly Consumption and Production (kWh)



Segments

Segment	Modules	Size (DC STC)	Production	ASA	Azimuth	Tilt	Roof Area	Roof Coverage
Segment A	23 (400W)	8.2 kW	9,757 kWh	77%	20°	23°	808 ft²	63.07%
Segment B	5 (400W)	2 kW	1,804 kWh	85%	30°	23°	807 ft²	13.73%



# SolarEnergyWorld

*Because Tomorrow Matters*

- The home had an annual usage of roughly 10,880 kWh in 2022. Our proposed system is estimated to have 11,361 kWh in annual production.

The panels will vary in production based on their location on the structure, but this estimated production for a 28-panel system breaks down to roughly 406 kWh per panel annually. The system production estimate of 11,361 kWh is 481 kWh larger than the consumption for the household. This means that a 26 or 27 panel system (depending on the placement of the panels) would be enough to support the household's current rate of energy consumption. The 28 panel system helps provide a buffer for slightly higher energy consumption.

### **Justification for the Placement of the panels.**

- Both faces of the main gable were used for the design of this system due to significant shading from the trees at the back of the property. The lower roof planes located at the rear of the home experience significant shading from previously noted trees.
- The roof planes on the main gable are 18" from the roof ridge since the system is under 33% of the total roof area.
- The size of the small porch roof at the front of the residence eliminated the possibility of placing panels on these roof planes due to fire pathway requirements.

Thank you,

Frank Greco  
Design Engineer.

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

Single Family home built in 1918.

Description of Work Proposed: Please give an overview of the work to be undertaken:

- Install (28) roof mounted solar panels
- Micro-Inverters to be installed under each panel
- Utility disconnect to be installed next to utility meter along with electrical combiner box for micro-inverters
- Galvanized Steel Conduit to run from equipment along & tucked into attic.

Historic Area Work Permit Application for Roof Mounted Solar  
Barry Pauls, 7207 Willow Avenue Takoma Park MD 20912

Existing Property Conditions



Front View



East View



West View



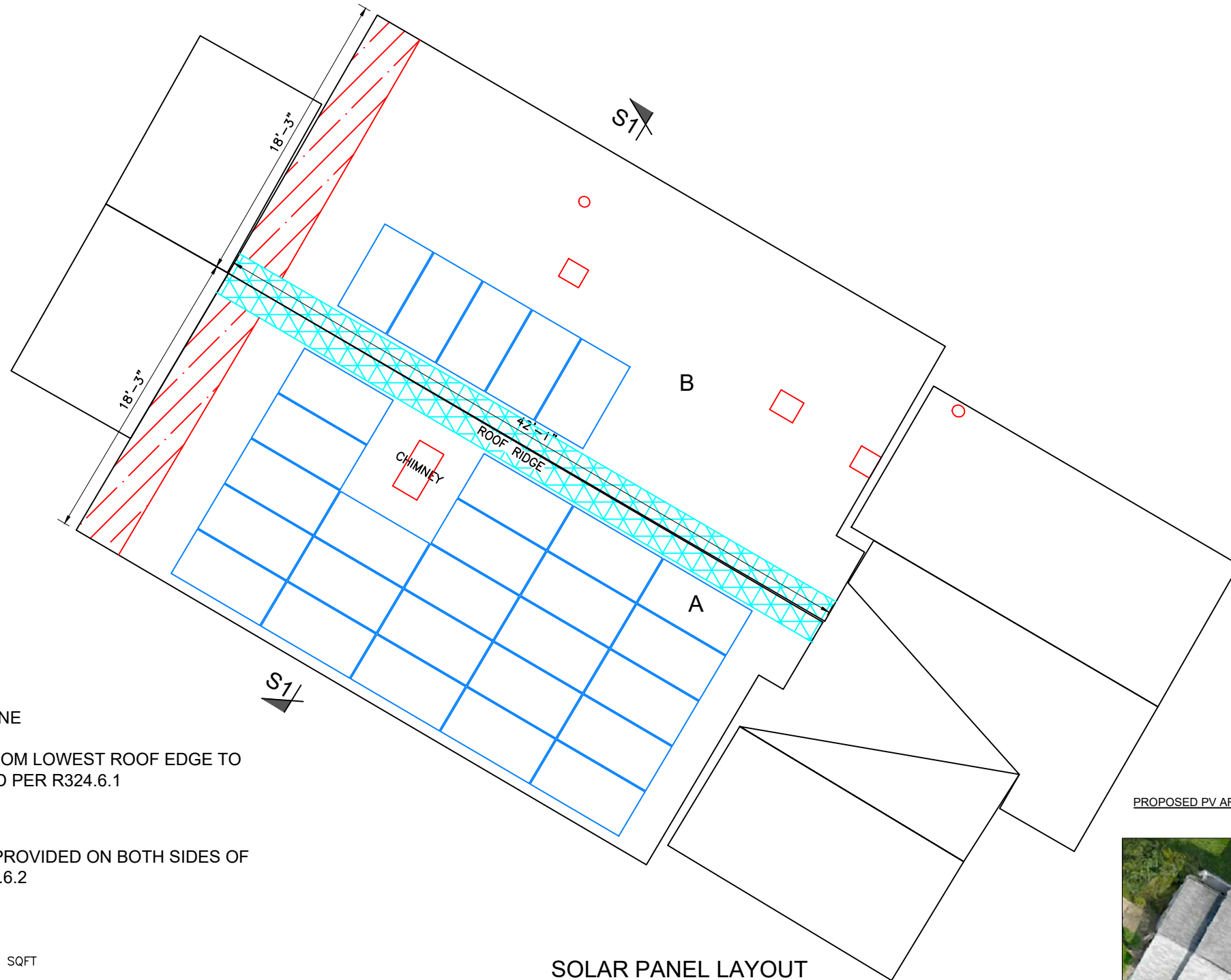
Utility Side Example Before Installation



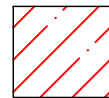
Utility Side Example After Installation

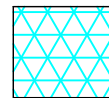
**IQ8+**

Segment Name	Tilt	Azimuth	Module Count
Segment A	22.7	210.4	23
Segment B	23.2	30.3	5



**KEY** FIRE SAFETY ZONE

 3' PATHWAYS FROM LOWEST ROOF EDGE TO RIDGE PROVIDED PER R324.6.1

 1'6" PATHWAYS PROVIDED ON BOTH SIDES OF RIDGE PER R324.6.2

PLAN VIEW TOTAL ROOF AREA: 2408 SQFT  
 SOLAR ARRAY AREA: 597.24 SQFT  
 THE SOLAR ARRAY IS 24.8% OF THE PLAN VIEW TOTAL ROOF AREA

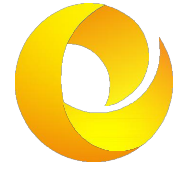
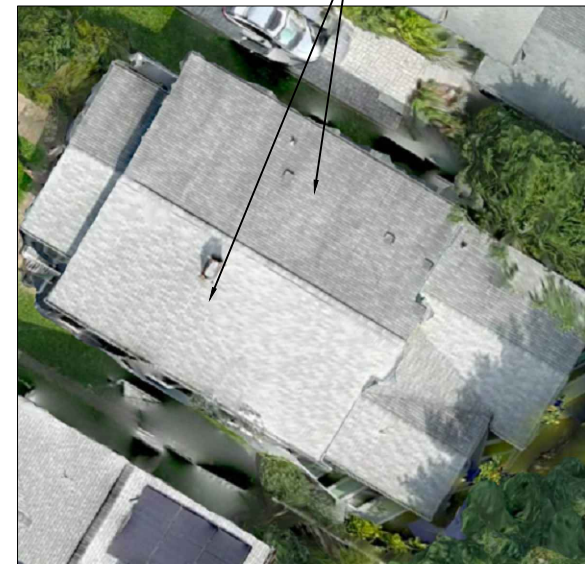
**NOTES:**

1. THE SYSTEM SHALL INCLUDE [28] SILFAB PRIME SIL-400 HC+.
2. SNAPRACK TOPSPEED WILL BE INSTALLED IN ACCORDANCE WITH SNAPRACK INSTALLATION MANUAL.
3. REFER TO STRUCTURAL DRAWING FOR SECTIONS MARKED AND ADDITIONAL NOTES.

**SOLAR PANEL LAYOUT**

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

PROPOSED PV ARRAY LOCATION



**Solar Energy World**  
 Because Tomorrow Matters

Solar Energy World LLC.  
 14880 Sweitzer Lane  
 Laurel, MD 20707  
 (888) 497-3233

Disclaimer:  
 This drawing is the property of Solar Energy World Inc. The information herein contained shall be used for the sole benefit of Solar Energy World. It shall not be disclosed to others outside the recipient's organization, in whole or in part, without the written permission of Solar Energy World, except in connection with the sale and use of the respective Solar Energy equipment.

Stamp



Exp. 12/31/23

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 49993, EXP. 12/31/2024.

**David C. Hernandez**  
 Digitally signed by David C. Hernandez  
 Date: 2023.09.19 16:19:48 -04:00  
 \*STAMPED AND SIGNED FOR STRUCTURES ONLY

REV	DESCRIPTIONS	BY	DATE
01	-----	--	--

Plotted By: Garrett Connors on 9/19/2023 1:47 PM

Project Name and Address  
**Barry Pauls**  
 7207 Willow Ave.  
 Takoma Park, MD 20912  
 11.2 kW  
 MD15684

Drawn by <b>JMP</b>	Sheet <b>A001</b>
Date <b>15-SEPT-2023</b>	<b>14</b>
Scale <b>AS NOTED</b>	

# City of Takoma Park

Housing and Community Development Department

Main Office 301-891-7119  
Fax 301-270-4568  
www.takomaparkmd.gov



7500 Maple Avenue  
Takoma Park, MD 20912

## MUNICIPALITY LETTER

October 02, 2023

**To:** Barry Pauls  
7207 Willow Avenue Takoma Park MD 20912  
permitting@solarenergyworld.com 410-579-5172

**To:** Department of Permitting Services  
2425 Reddie Drive, 7<sup>th</sup> floor  
Wheaton, Maryland 20902

**From:** Planning and Development Services Division

### **THIS IS NOT A PERMIT – For Informational Purposes Only**

VALID FOR ONE YEAR FROM DATE OF ISSUE

The property owner is responsible for obtaining all required permits from Montgomery County and the City of Takoma Park. If this property is in the **Takoma Park Historic District**, it is subject to Montgomery County Historic Preservation requirements.

**Representative Name:** Ryan Doyle  
**Location of Project:** 7207 Willow Avenue Takoma Park MD 20912  
**Proposed Scope of Work:** Install (28) roof mounted solar panels, 11.2 kW

permitting@solarenergyworld.com 410-579-5172

The purpose of this municipality letter is to inform you that the City of Takoma Park has regulations and city permit requirements that may apply to your project. This municipality letter serves as notification that, in addition to all Montgomery County requirements, you are required to comply with all City permitting requirements, including:

- Tree Impact Assessment/Tree Protection Plan
- Stormwater management
- City Right of Way

Failure to comply with these requirements could result in the issuance of a Stop Work Order and other administrative actions within the provisions of the law. Details of Takoma Park's permit requirements are attached on page 2.

The issuance of this letter does not indicate approval of the project nor does it authorize the property owner to proceed with the project. The City retains the right to review and comment on project plans during the Montgomery County review process.

# City Of Takoma Park

## The City of Takoma Park permits for the following issues:

### Tree Impact Assessment/Tree Protection Plan/Tree Removal Application:

Construction activities that occur within 50 feet of any urban forest tree (7 and 5/8" in trunk diameter or greater), located on the project property or on an adjacent property, may require a Tree Impact Assessment and possibly a Tree Protection Plan Permit. Make sure to submit a request for a Tree Impact Assessment and schedule a site visit with the City's Urban Forest Manager if any urban forest tree is in the vicinity of proposed construction activities. See the Tree Permits section of the City website for the specific conditions in which a Tree Impact Assessment is required. Depending on the Urban Forest Manager's conclusion following the Tree Impact Assessment, you may need to prepare a full Tree Protection Plan and apply for a Tree Protection Plan Permit as well. Separately, the removal of any urban forest tree will require a Tree Removal Permit application. The tree ordinance is detailed in the City Code, section 12.12. For permit information check: <https://takomaparkmd.gov/services/permits/tree-permits>. The City's Urban Forest Manager can be reached at 301-891-7612 or [urbanforestmanager@takomaparkmd.gov](mailto:urbanforestmanager@takomaparkmd.gov).

### Stormwater Management:

If you plan to develop or redevelop property, you may be required to provide appropriate stormwater management measures to control or manage runoff, as detailed in City Code section 16.04. All commercial or institutional development in the city must apply for a Stormwater Management Permit regardless of the size of the land disturbance. Additions or modifications to existing detached single-family residential properties do not require a Stormwater Management permit if the project does not disturb more than 5,000 square feet of land area. For more information on visit: <https://takomaparkmd.gov/government/public-works/stormwater-management-program/>. The City Engineer should be contacted to determine if a City permit is required. The City Engineer can be reached at 301-891-7620.

### City Right of Way:

- To place a **construction dumpster or storage container** temporarily on a City right of way (usually an adjacent road), you will need to obtain a permit. A permit is not required if the dumpster is placed in a privately-owned driveway or parking lot.
- If you plan to install a new **driveway apron**, or enlarge or replace an existing driveway apron, you need a Driveway Apron Permit.
- If you plan to construct a **fence** in the City right of way, you need to request a Fence Agreement. If approved, the Agreement will be recorded in the Land Records of Montgomery County.

For more information and applications for City permits, see: <https://takomaparkmd.gov/services/permits/> or contact the Department of Public Works at 301-891-7633.

**Failure to comply with the City's permitting requirements could result in the issuance of a Stop Work Order and other administrative actions within the provisions of the law.**

eSigned via SeamlessDocs.com  
*Ryan Doyle*  
Key: 38bf2056e22713c0b979ea7ee94776a

Ryan Doyle

09-27-2023

eSigned via SeamlessDocs.com  
*Takoma Park Planning Division*  
Key: 19fe84f123e98a3ff4576219059d5fba

10-02-2023