Zoning Compliance Application

Town of Biltmore Forest

Name

Stanley Ezquerro

Property Address

22 Cedarcliff Rd

Phone

(828) 357-7486

Parcel ID/PIN Number

964762675600000

ZONING INFORMATION

Email

Lot Size

1012

1.25999999 acres

permits@sugarhollowsolar.com

Proposed Roof Coverage Total

Proposed Impervious Surface Coverage

Current Zoning

R-1

Maximum Roof Coverage

5,500 square feet (Up to 1.5 acres)

Maximum Impervious Surface Coverage Up to 1 acre (27.5 percent of lot area)

Front Yard Setback

60 feet (R-1 District)

Rear Yard Setback

25 feet (R-1 District)

Description of the Proposed Project

addition of 12 Solar PV modules to an existing system as well as adding battery backup

Estimated Start Date

5/1/2023

Estimated Completion Date

Side Yard Setback

20 feet (R-1 District)

Building Height

5/5/2023

25

Estimated Cost of Project

\$10,000.00

Supporting Documentation (Site Plan, Drawings, Other Information)

OLESKY.SAM.ONE.pdf

OLESKY.ADDMOD.SP.pdf

OLESKY addition str letter.pdf

OLESKY.ADDMOD.AR1.PDF

Gravitt Engineering, PLLC.

March 20, 2023

Mr. Harrison Sytz Sugar Hollow Solar 2 Miller Rd East Asheville, NC 28805 Re: Solar PV System at the OLESKY Residence 22 Cedarcliff Rd.
Asheville, NC 28803

Dear Mr. Sytz,

Pursuant to your request, I have examined the structure at the address listed above regarding its suitability for the additional (12) solar photovoltaic (PV) panels specifically proposed by Sugar Hollow Solar. The (12) additional panels are to be installed on the shed-dormer of the house. I've observed that the roof structure of the shed-style dormer is composed of 2x10 stick-framed rafters at 2'-0" on center with an OSB roof deck and standing-seam metal roof. The roof is approximately 2 years old and appears to be in good condition.

It is my opinion that the existing roof structure will safely support the additional loading incurred by the additional (12) solar panels and racking system and that the structure will continue to meet the minimum live loading standards defined in the **2018 North Carolina Residential Building Code**.

Opinion-supporting data is as follows:

Elevation 2172 ft

ASCE 7-10 values: wind speed 115 mph, risk II, exposure category B Additional / Total rooftop system weight: 670 lb / 2184 lb

Additional / Total number of attachments: 24 / 88
Distributed weight: 2.6 psf

The modules, roof attachment feet, rail and associated hardware shall be installed in accordance with the manufacturer's instructions. Specifically, (24) Snapnrack Wide Base standing seam clamps shall be installed according to the manufacturer's instructions with a typical clamp spacing of 4'-0" and a maximum spacing of 6'-0".

The scope of this report is limited to the matters discussed herein. No opinion is offered, and none should be inferred regarding either the watertightness of the rooftop attachments, the functionality of electrical equipment, or the structure as a whole.

Please feel free to contact me with any questions.

Sincerely,

John Gravitt, P.E. Gravitt Engineering, PLLC 828.606.6963 jkgravit@gmail.com



ROOF INFO			FRAMING INFO		ATTACHMENT INFORMATION				DESIGN CRITERIA	
Name	Туре	Height	Туре	OC Spacing	Detail	Max Landscape OC Spacing	Max Portrait OC Spacing	Configuration	MAX DISTRIBUTED LOAD: 3 PSF SNOW LOAD: 15 PSF	
AR-1	S.S. METAL	2-STORY			SNAP N RACK ULTRA RAIL UR-40	6'-0"	4'-0"	STAGGERED	WIND SPEED: 115 MPH QCELL 400: 41.1" X 74"	
AR-1 PITCH: 23°										
AZIMUTH: 265°										
		12'-	0 1/4"		-19'-10 1/2"		10'-11 1/2			
		27'-9" 12'-	4 3/4"						SUGAR HOLLOW SOLAR Sweetening the current 2 Miller Rd. E Asheville, N.C. 28805 Phone: 828.776.9161 SITE ADDRESS: 22 CEDARCLIFF RD. BILTMORE FOREST, N.C. 28803	
		3	'-4" 2	1-3"	20'-10 1/4' 25'-4"	·		2'-2 3/4"	PHONE: 828.215.1692 PROJECT MANAGER: CHARLIE NIMITZ DRAWN BY: HARRISON SYTZ SHEET LAYOUT PROJECT: SAMUEL OLESKY	



