Michael S. Rezk

Engineer-PE

Pro Custom Solar LLC 3096B Hamilton Blvd South Plainfield, NJ 07080 732-902-6224 January 6, 2025

Re: Proposed Photovoltaic Solar Panel Installation

Victoria Lheureux 2656 SOUTHEAST COUNTY ROAD 252 LAKE CITY, FL 32025

Dear Plan Reviewer:

Certification: I have reviewed the engineering testing reports for the racking and attachments to be used on this project and I certify that the products are capable of supporting the code required loads and are suitable for this installation when installed in strict compliance with the manufacturers printed instructions.

Regarding the solar panel array installation on the above referenced project please note that an inspection was performed by a representative of the Architect/Engineer of Record and we recommend installation of the array in the following manner:

- 1. The array will be installed in the location as per the Site Plan prepared by the contractor.
- 2. The system shall consist of photovoltaic modules secured to the "Iron Ridge" ground mounting system. The system will be installed in strict compliance with the manufactureres printed instructions.
- 3. The layout and attachments are determined by the racking manufacturers specifications for installation in areas with wind speeds in excess of 130 miles per hour, three second gusts. Refer to manufacturers specifications.

Structural Design Loads per ASCE 7-16:

Dead Loads = 15 psf + 2.6 psf (new solar panels) = 17.6 psf; Ground Snow Load = 0 psf

Basic Wind Speed = 120 mph; Exposure = B

Wind Loads per ASCE 7-16, Ch. 30 method 1 & using an area of 10 SF (wind loads from Figure 30.5-1):

Zone 1 = -26.8 psf; Zone 2 = -34.8 psf; Zone 3 = -40.2 psf Uplift per attachment = 26.8 psf x 10 SF = 268 lbs

Iron Ridge XR Rail: Pull out strength of 5/16" bolt in rail = W' = 526 lbs > 268 lbs OK

- 4. Solar modules shall be UL-1703 rated. Refer to manufacturers specifications sheets.
- 5. All aspects of the installation shall comply with the Florida Administrative Code, 2023 Florida Building Code Residential 8th Edition, ASCE-7-22, 2023 Florida Building Code Energy Conservation, 8th Edition, 2020 National Electric Code, All Local Governing County and Municipal Ordinances adopted by reference or enacted by law. All components used meet the criteria of the Florida Solar Energy Center.

If you have any questions relating to this matter, please contact me at your earliest convenience. Thank you.

No. 95844

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* STATE OF CORIDA CHARLES STONAL EMPLIANCE STATE OF CORIDA CHARLES STONAL EMPLIANCE STONAL EMPLIANCE

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PE 95844, COA # 33404]
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