

December 4, 2020

Evan Becka
President
Pisgah Energy Inc.
53 Asheland Ave, Ste 103,
Asheville, NC 28801

BLACK MOUNTAIN CARVER COMMUNITY CENTER– 101 CARVER AVE, BLACK MOUNTAIN, NC 28711

Dear Mr. Becka:

At your request, Summit visited the subject property on December 1, 2020. The purpose of the site visit was to observe the existing structural framing systems and their overall condition for support of proposed solar panel assemblies as specified by Pisgah Energy Design & Development.

Original building plans for the subject property were not made available to assist in the evaluation. The existing structure is a single-story masonry building. The original construction date was not made available to the inspection team. The existing roof structural system consists of a flat roof. At the time of inspection, the framing was not visible. However, ceiling finishes and edges at bearing walls were observed and did not indicate distress or deterioration of the supporting structure. Based on our observations and previous experience with roof framing of these types of buildings, it is comfortably assumed the existing structure is in good condition. The proposed solar panels are to be supported on ballasted racks with a total assembly weight of approximately 6 pounds per square foot.

The assumed existing structural framing was evaluated based on Section 402.3 of the *2018 NCSBC Existing Building Code*. Calculations showed that the proposed loading condition does not increase the design gravity load by more than 10 percent. Therefore, the gravity load-carrying structural elements are not required to be strengthened, supplemented, replaced, or altered.

The content of this report represents our professional opinion based on the areas observed at time of inspection. Based on the assessments noted in the previous section, it is our professional opinion that the proposed solar panel assemblies may be installed without any modifications to the existing structural system.

We appreciate the chance to assist you. Please feel free to contact us if you have any questions or require additional information.

Respectfully,

Uchenna Onwuemene, PE
Summit Design and Engineering
Structural Project Engineer

