

PLAN DETAILED REPORT PL-ADR-2024-0030 FOR CITY OF CONCORD

Plan Type: PLAN - Architectural Design Review Project: 2024-035 41 S Main St ADR App Date: 05/29/2024

Work Class: Architectural Design Review District: City of Concord, NH Exp Date: NOT AVAILABLE

Status: In Review Square Feet: 0.00 Completed: NOT COMPLETED

Valuation:\$0.00Assigned To:Alec BassApprovalExpire Date:

Description: We are Adding a solar array to the roof of the office. I am submitting this, as a just in case. The

building and Solar will also be submitted. I do not have some of the forms you asked for. I also do not know if they are needed. I gave you everything we have.

Parcel: 2166 Main Address: 41 S Main St Main Zone: CBP(Central Business Performance Distri

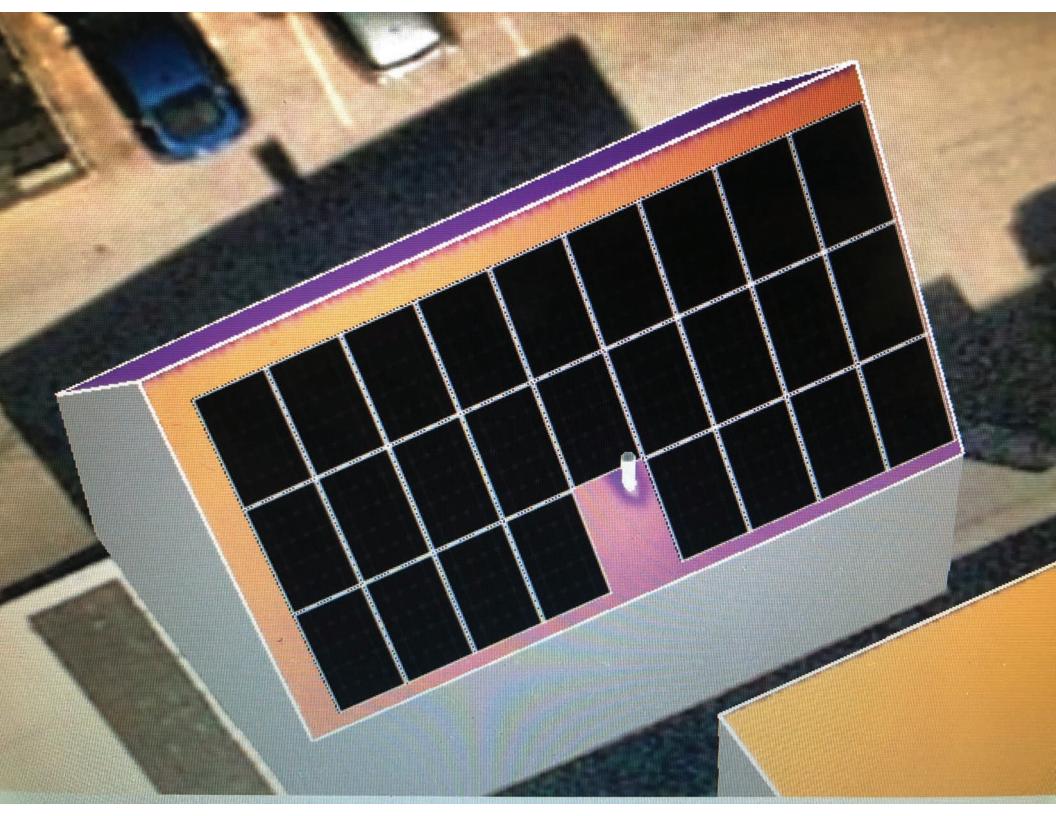
Concord, NH

Applicant/Agent Owner
Josh Koehler Mike Abbott

P.O. BOX 470 Home: (603) 491-1435

Candia, NH 03034 Business: (603) 540-4243 Mobile: (603) 540-4243

Invoice No.	Fee		Fee Amount	Amount Paid
INV-00009192	PD - Application Fee - \$150		\$150.00	\$150.00
		Total for Invoice INV-00009192	\$150.00	\$150.00
		Grand Total for Plan	\$150.00	\$150.00





May 22, 2024

SRSolarNH

PO Box 470 Candia, NH 03034

RE The Abbott Bennett Group LLC Residence 41 South Main st, Concord, NH 03301 Client Project #:41THE PFE Project #: 242006

On behalf of SRSolarNH, Penn Fusion Engineering LLC (PFE) performed a structural analysis of the roof at the above referenced location. The purpose of our analysis was to determine if the existing roof system is structurally sufficient to support the new photovoltaic modules in addition to the code required design loads. Our analysis is based on the information provided by SRSolarNH and is limited only to the areas where the modules are intended to be placed.

System Specifications

Panel Specs: (26) Hanwha - Q Cells Racking System: IronRidge - Rails

The modules are to be located on the following roof planes:

Roof Planes						
Mounting Plane	Member Size	Member Spacing	Horizontal Span	Sheathing	Roofing Type	Roofing Layers
1	2x8	16"	9'-9"	CDX 1/2"	Asphalt Shingles	1

Design Criteria				
Building Code(s)	Ground Snow Pg	Wind Speed V		
• ASCE 7-16	70 psf	115 mph		
Residential Code of New Hampshire				

Analysis Results					
Mounting	Attachment Hardware	Max Attachment	Rafter		
Plane	Attachment Hardware	Spacing	Pass/Fail		
1	5/16" lag bolts	48"	Pass		

This office has determined that the existing roof as specified above will meet the structural requirements of the above referenced codes in addition to the PV load when installed in accordance with the manufacture's instructions.

If you have any questions regarding this analysis, please feel free to contact us.

Best Regards, Penn Fusion Engineering, LLC

Andrew D. Leone, P.E. Principal











