

April 19, 2023

TO ALL TENDERERS

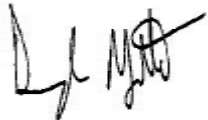
**MUNICIPALITY OF THE COUNTY OF ANTIGONISH – NET ZERO BUILDINGS –
SOLAR PROJECT 22-82-C**

We attach herewith a copy of Addendum No. 3 to the tender documents. Please take note of the contents and amend your copy of the documents accordingly.

General Contractors are responsible for ensuring that all sub contractors are provided with a copy of the addendum.

Please acknowledge receipt of this information accordingly on page 1 of the Tender Form.

Very truly your,
Strait Engineering Limited



Darryl Myette, P. Eng, PMP

Atch.
Addendum No. 3 (17 Pages)

Addendum No. 3
Municipality of the County of Antigonish
Net Zero Buildings – Solar Project
Project No. 22-82-C

April 19, 2023

QUESTION 1: Please confirm whether helical pile foundations can be utilized in place of the ballasted foundations as specified in Section 26 31 00 Division 2.2.1.3?

Helical piles are acceptable with the understanding that the contractor is responsible for ensuring that the structural support requirements are met.

QUESTION 2: Please clarify in Section 26 31 00 Division 2.2.2.2.1, do you mean data sheets for modules, inverters, racking instead of shop drawings? Modules and inverters do not have shop drawings as such and it would not be possible to procure data sheets for racking systems specific to the project in the allotted tender period.

Data sheets for the modules, inverters and racking would be the correct terminology and are to be submitted pretender closing.

QUESTION 3: Please provide the structural assessments that were conducted for the St. Andrews Community Centre, Locharber Community Centre, and Arisag Parish Hall.

Please see attached structural assessments for all buildings.

QUESTION 4: Please confirm the method of interconnection for Highlander Curling Club and St. Joseph's Community Centre has been verified with NSPI.

NSPI has yet to confirm the interconnection for these locations.

QUESTION 5: Please clarify whether Highland Community Centre and St Joseph's Community Centre can be interconnected through their respective buildings in lieu of a direct grid tie requiring the addition of a pole at each location listed above as seen in sheets E-101, E-102, E-107 and E-108.

An alternate scope of work then what has been provided in the document may be submitted as an alternate price within the tender submission.

QUESTION 6: Please advise on the row spacing for the Highland Community Centre and the Heatherton Community Centre, the current row spacing will result in excessive shading losses. Do you want us to propose a more optimal design or build as specified in sheets E-101 and E-105?

In discussions with the client alternate ground mount layouts for Heatherton and Highlander Curling Club are being determined.

QUESTION 7: Please confirm whether the projects are assumed to fall under NSPI's current net metering interconnection regime which is capped 27 kW-AC, or the anticipated new program expected to launch this summer?

All of the systems would comply with NSPI's current requirements at 27kW-AC for single phase sites and 100kW-AC for three phase sites.

QUESTION 8: Please confirm whose responsibility, contractor or client, it is to ensure there is no generator backfeed?

It is the winning proponent of this contract's responsibility to ensure that there is no generator backfeed; however, the design team coordinated with the generator installer to ensure that the PV interconnection point is to be on the utility side of the transfer switch at the Arisag and St. Josephs locations.

QUESTION 9: Please clarify whether the contractor or client will pay for the NSPI bi-directional meters?

The NSPI fees for the bi-directional meter are to go directly to the client/owner.

QUESTION 10: Please provide photos of St. Josephs Community Centre Electrical room.







January 4th, 2023

Strait Engineering
298 Reeves Street
Port Hawkesbury, NS
B9A 2B4

ATTENTION: Darryl Myette

**RE: ARISAIG COMMUNITY CENTER
5548 NS-245, ARISAIG, NS
SOLAR ARRAY ON EXISTING WOOD ROOF**

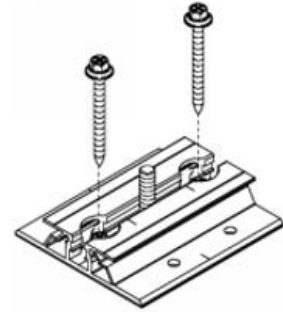
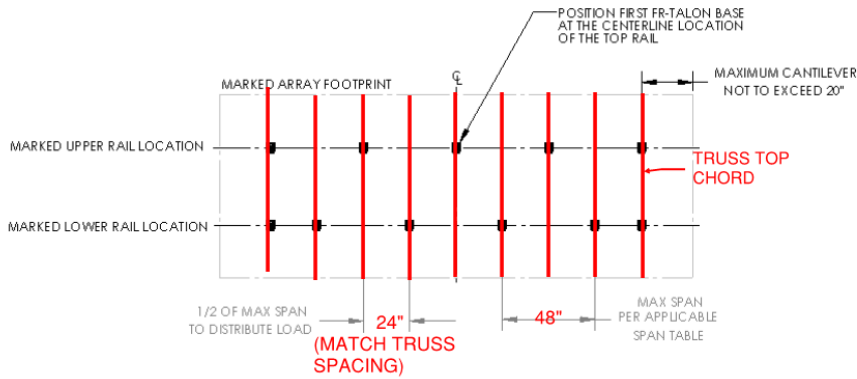
At the request of Strait Engineering, BMR was contacted to conduct a structural survey at Arisaig Community Center. The purpose of the survey was to measure the existing wood truss roof structure to determine if it is capable of supporting a new roof mounted solar array.

With regards to the installation of the proposed solar array on the roof of the facility at the address noted above, minor reinforcing of trusses for solar panel connection points will be required. This is due to the truss top chords not being able to accommodate the section loss as a result of the array fasteners directly. It is recommended that blocking between trusses or side mount blocking to the truss top chord be installed at the array fastener locations. The detailing of which should be developed by the solar panel installer to suit their proposed system and stamped by an engineer in the Province of NS as part of the submittal package.

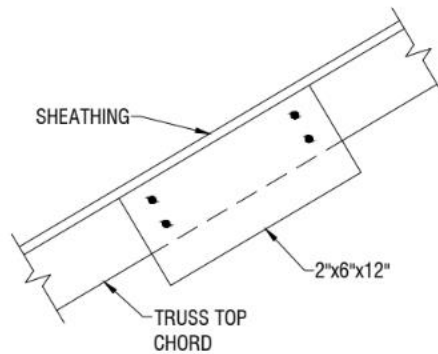


Summary of typical solar system requirements:

- Maximum solar panel and corresponding rail system weight not to exceed 3.5psf. This system is to be flush mounted to roof (to match existing roof slope).
- Rail connectors to be fastened to blocking mounted to the side of the existing truss top chord, shown schematically.



Schematic blocking detail for solar panel engineer to consider within shop drawing packages (below).



If you have any questions regarding the recommendations above please do not hesitate to contact us.

Regards,

BMR STRUCTURAL ENGINEERING LTD.

Mackenzie Connolly
Mackenzie Connolly, P.Eng.

Internal Project #2021-328



September 10th, 2021

Municipality of the County of Antigonish
285 Beech Hill Road
Antigonish, NS
B2G 0B4

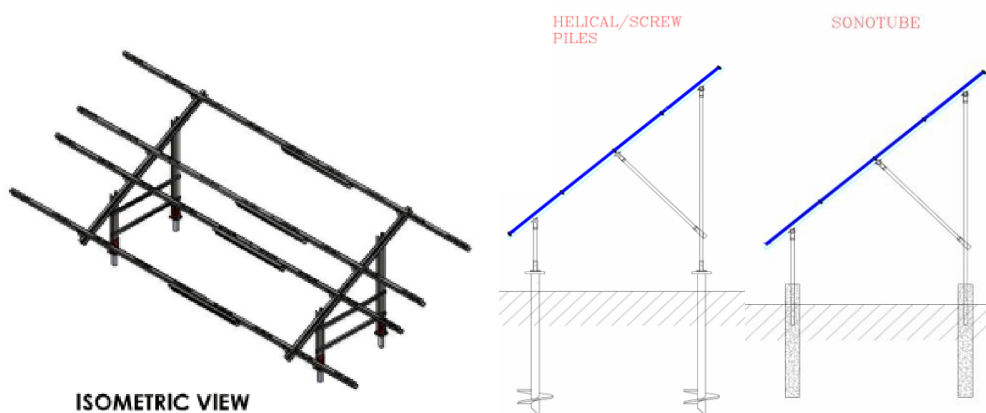
ATTENTION: Dave Brushnett, P.Eng

**RE: HEATHERTON COMMUNITY CENTER
42 SUMMERSIDE ROAD, HEATHERTON, NS
SOLAR ARRAY ON EXISTING STEEL ROOF**

In regards to the installation of the proposed solar array on the roof of the new facility at the address noted above, please accept this letter of confirmation that the roof structure is not capable of supporting the weight of a traditional flat roof solar panel array. Typical flat roof mounted solar arrays either utilize a ballast system to hold down the panels or the array is directly fastened to the structure. Both of these scenarios produce too much weight to be resisted by the existing structure below.



Instead of reinforcing the roof structure, it is recommended that a ground mounted solution is utilized elsewhere on the site. The selected manufacturer would be capable of providing design or the array and supporting foundation systems (options shown schematically below).



If you have any questions regarding the recommendations above please do not hesitate to contact us.

Regards,

BMR STRUCTURAL ENGINEERING LTD.


Mackenzie Connolly, P.Eng.

Internal Project #2021-328



March 6th, 2023

Strait Engineering
298 Reeves Street
Port Hawkesbury, NS
B9A 2B4

ATTENTION: Darryl Myette

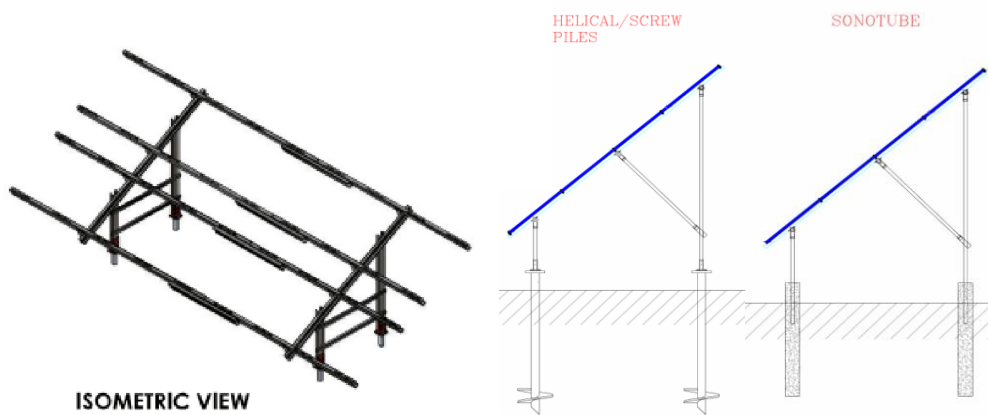
**RE: HIGHLAND CURLING CLUB
3916 NS-316, SAINT ANDREWS, NS
SOLAR ARRAY ON EXISTING ROOF**

At the request of Strait Engineering, BMR was contacted to conduct a structural survey at the Highland Curling Club. The purpose of the survey was to measure the existing wood truss roof structure to determine if it is capable of supporting a future roof mounted solar array direct fastened to the existing truss top chords.

With regards to the installation of the proposed solar array on the roof of the facility at the address noted above, please accept this letter of confirmation that the roof structure is not capable of supporting the weight of a traditional solar panel array. Reinforcing the roof would be cost prohibitive as all members of all existing trusses would need reinforcing.



Instead of reinforcing the roof structure, it is recommended that a ground mounted solution is utilized elsewhere on the site. The selected contractor would be capable of providing design or the array and supporting foundation systems (some options shown schematically below). The detailing of which should be developed by the solar panel installer to suit their proposed system and stamped by an engineer in the Province of NS as part of the submittal package.



If you have any questions regarding the recommendations above please do not hesitate to contact us.

Regards,

BMR STRUCTURAL ENGINEERING LTD.

Mackenzie Connolly
Mackenzie Connolly, P.Eng.

Internal Project #2021-328



September 10th, 2021

Municipality of the County of Antigonish
285 Beech Hill Road
Antigonish, NS
B2G 0B4

ATTENTION: Dave Brushnett, P.Eng

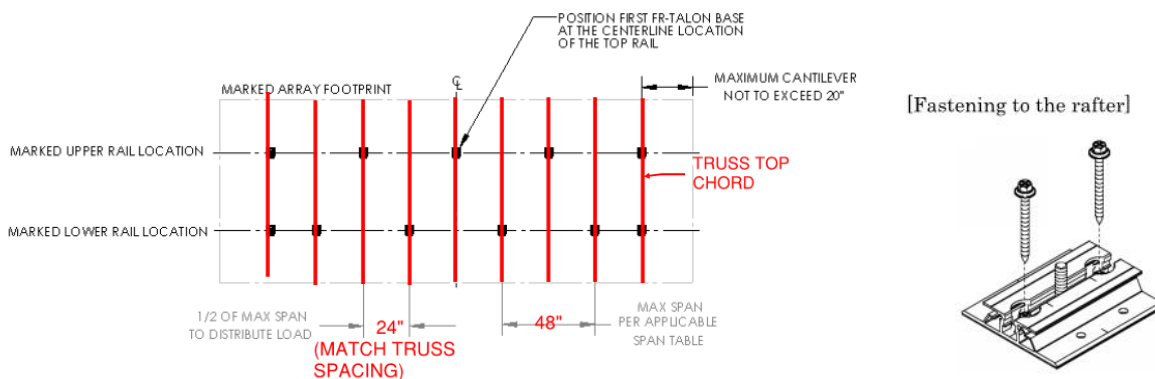
**RE: LOCHABER COMMUNITY CENTER
1555 NOVA SCOTIA TRUNK 7, ANTIGONISH, NS
SOLAR ARRAY ON EXISTING WOOD ROOF**

In regards to the installation of the proposed solar array on the roof of the new facility at the address noted above, please accept this letter of confirmation that the roof structure has been analyzed for a typical solar panel array installation (outlined below) and is capable of handling the imposed loads without reinforcing.



Summary of typical solar system requirements:

- Maximum solar panel and corresponding rail system weight not to exceed 3.5psf. This system is to be flush mounted to roof (to match existing roof slope).
- Rail connectors to be direct fastened to each truss top chord with structural screws shown schematically below, subject to manufacturer details.



the strength of experience

If you have any questions regarding the recommendations above please do not hesitate to contact us.

Regards,

BMR STRUCTURAL ENGINEERING LTD.


Mackenzie Connolly, P.Eng.

Internal Project #2021-328



January 4th, 2023

Strait Engineering
298 Reeves Street
Port Hawkesbury, NS
B9A 2B4

ATTENTION: Darryl Myette

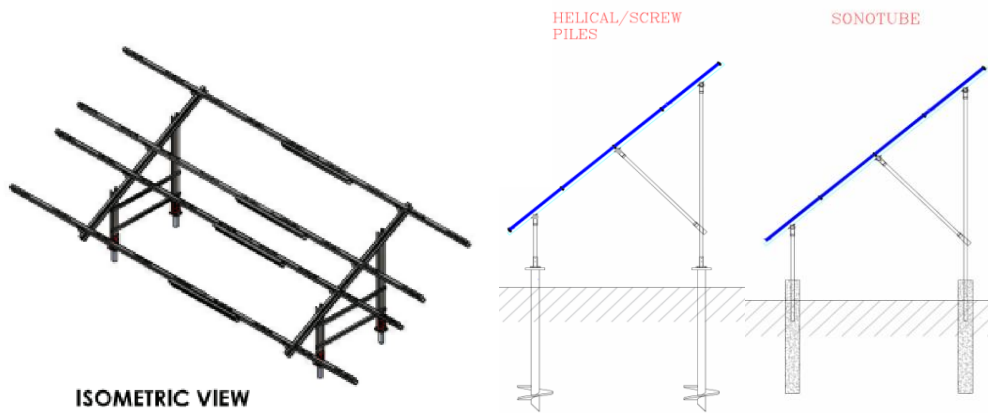
**RE: MINI-TRAIL COMMUNITY CENTER
4382, HIGHWAY 337, ANTIGONISH COUNTY, NS
SOLAR ARRAY ON EXISTING ROOF**

At the request of Strait Engineering, BMR was contacted to conduct a structural survey at Mini Trail Community Center. The purpose of the survey was to measure the existing steel roof structure to determine if it is capable of supporting a new roof mounted solar array.

With regards to the installation of the proposed solar array on the roof of the facility at the address noted above, please accept this letter of confirmation that the roof structure is not capable of supporting the weight of a traditional flat roof solar panel array. Typical flat roof mounted solar arrays either utilize a ballast system to hold down the panels or the array is directly fastened to the structure. Both of these scenarios produce too much dead weight and snow load redistribution to be resisted by the existing steel structure below. Reinforcing the roof would be cost prohibitive.



Instead of reinforcing the roof structure, it is recommended that a ground mounted solution is utilized elsewhere on the site. The selected contractor would be capable of providing design or the array and supporting foundation systems (some options shown schematically below). The detailing of which should be developed by the solar panel installer to suit their proposed system and stamped by an engineer in the Province of NS as part of the submittal package.



If you have any questions regarding the recommendations above please do not hesitate to contact us.

Regards,

BMR STRUCTURAL ENGINEERING LTD.

Mackenzie Connolly
Mackenzie Connolly, P.Eng.

Internal Project #2021-328



September 10th, 2021

Municipality of the County of Antigonish
285 Beech Hill Road
Antigonish, NS
B2G 0B4

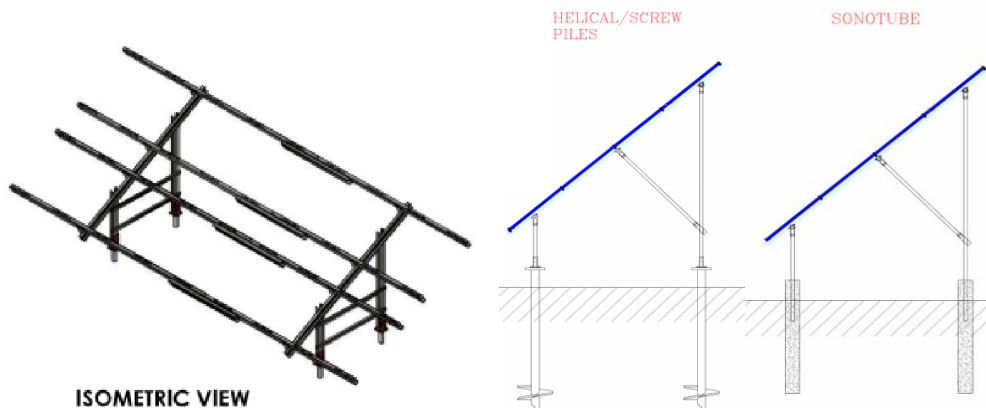
ATTENTION: Dave Brushnett, P.Eng

**RE: SAINT JOSEPH’S COMMUNITY CENTER
2752 OHIO EAST ROAD, SAINT ANDREWS, NS
SOLAR ARRAY ON EXISTING STEEL ROOF**

In regards to the installation of the proposed solar array on the roof of the new facility at the address noted above, please accept this letter of confirmation that the roof structure is not capable of supporting the weight of a traditional flat roof solar panel array. Typical flat roof mounted solar arrays either utilize a ballast system to hold down the panels or the array is directly fastened to the structure. Both of these scenarios produce too much weight to be resisted by the existing structure below.



Instead of reinforcing the roof structure, it is recommended that a ground mounted solution is utilized elsewhere on the site. The selected manufacturer would be capable of providing design or the array and supporting foundation systems (options shown schematically below).



If you have any questions regarding the recommendations above please do not hesitate to contact us.

Regards,

BMR STRUCTURAL ENGINEERING LTD.


Maekenzie Connolly, P.Eng.

Internal Project #2021-328



September 10th, 2021

Municipality of the County of Antigonish
285 Beech Hill Road
Antigonish, NS
B2G 0B4

ATTENTION: Dave Brushnett, P.Eng

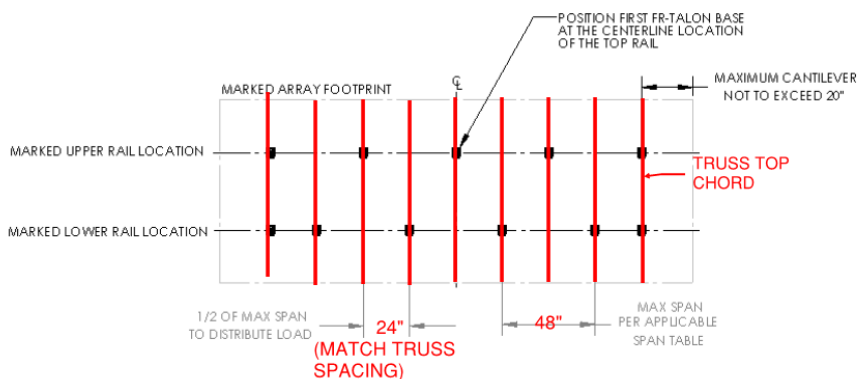
**RE: SAINT ANDREWS COMMUNITY CENTER
81 POMQUET RIVER ROAD, SAINT ANDREWS, NS
SOLAR ARRAY ON EXISTING WOOD ROOF**

In regards to the installation of the proposed solar array on the roof of the new facility at the address noted above, please accept this letter of confirmation that the roof structure has been analyzed for a typical solar panel array installation (outlined below) and is capable of handling the imposed loads without reinforcing.

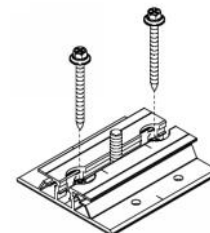


Summary of typical solar system requirements:

- Maximum solar panel and corresponding rail system weight not to exceed 3.5psf. This system is to be flush mounted to roof (to match existing roof slope).
- Rail connectors to be direct fastened to each truss top chord with structural screws shown schematically below, subject to manufacturer details.



[Fastening to the rafter]



If you have any questions regarding the recommendations above please do not hesitate to contact us.

Regards,

BMR STRUCTURAL ENGINEERING LTD.


Mackenzie Connolly, P.Eng.

Internal Project #2021-328