



Janet T. Mills
GOVERNOR

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Bruce A. Van Note
COMMISSIONER

May 23, 2019
Subject: Fabric Storage Buildings
State WINs: 023762.00 & 024368.00
Location: **Rockwood & West Forks**
Amendment No. 1

Dear Sir/Ms.:

Please make the following changes to the Bid Documents:

In the Bid Book:

ADD the following in pen and ink, to SPECIAL PROVISIONS-SECTION 815 – General Requirements:

ENGINEERING DESIGN CRITERIA

The structure shall be designed in accordance with appropriate building code standards using methodology from ASCE 7-05. Primary and secondary framing shall comply with current issues of AISC, AISI, NEMA and ASTM specifications, as applicable. Structural members shall be designed using Allowable Stress Design (ASD) or Load Resistance Factored Design (LRFD) for the design loads given below. Appropriate safety factors to yield and ultimate shall be maintained. Wind load factors and coefficients used in design of structural members must be in accordance with ASCE 7-05 guidelines.

Roof Loads: The structure shall be designed based upon a ground snow load of 100 pounds per square foot (psf) plus a 3 psf collateral load. At minimum, the structure shall be capable of supporting a roof live load of 12 pounds per square foot and a collateral load of 3 pounds per square foot projected over the entire roof area or a portion of the roof area, and any probable arrangement of loading resulting in the highest stress in the members.

1. **Wind Loads:** The structure shall be capable of withstanding 3 second gusts wind loads from any direction of 100 ---+miles per hour. The structure shall be designed using exposure category "C" for determining design wind pressure of the structure. The methodology is to be taken from ASCE 7-05.
2. **Rainfall:** The structure shall be capable of withstanding the effects of rainfall up to 4 inches per hour for at least 2 hours.
3. **Deflection:** The maximum allowable deflection of any point on the steel framework shall be no more than 1/180 of the clear span width of the structure when subjected to

the design loads described herein.

4. Design Loads: The design shall be based as a minimum on the following load cases:
(ASCE 7-05 (ASD) Listed)

On page 64, SPECIAL PROVISION – SECTION 03300 – CAST-IN-PLACE CONCRETE, under Section 3.2 Formwork, A., **DELETE** the last sentence, which begins “3/4-inch chamfer strips shall...”. Make this change in pen and ink.

The following questions have been received:

Question: There is no specified wind and snow load rating listed in the book to base building designs on. Are we to assume 100MPH wind and 100 PSF snow similar to last year’s projects that were similar in nature?

Response: Please see the added ENGINEERING DESIGN CRITERIA-SPECIAL PROVISIONS-SECTION 815 – General Requirements.

Question: Can you tell me the required snow loads that the sand storage structures need to be designed to? Both locations fall within a case study area. The towns are unincorporated, and I was unable to get loading.

Response: See previous response.

Question: Spec states the following about precast foundation blocks:

All exposed edges to have 3/4” chamfer

Cannot strip formwork until verified 80% strength has been reached

Air entrainment testing for every load

I can see needing to verify air for every load for the blocks. However, requiring chamfer on all exposed edges and not being able to strip and remove forms until a verified 80% design strength will result in project costs to be much higher than needed. These constraints seem to have been copied and pasted and are not the intent.

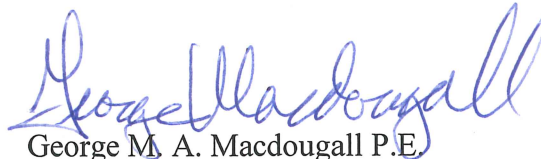
Response: See above changes to 3.2 Formwork.

Question: HMA spec states full roller train for inside the buildings. This is not practical for this application. Trying to move that type of equipment around on a mat that small and confined will ruin the mat. There should no rubber tired rollers in there and a 10-ton double drum is borderline. Any insight on how you planned to make this work will help. Again, seems beyond the intended scope of work.

Response: The Department will not require a pneumatic roller inside the building. The 10-ton roller will be required to insure proper compaction.

Consider these changes and information prior to submitting your bid on **May 29, 2019**.

Sincerely,

A handwritten signature in blue ink, appearing to read "George Macdougall". The signature is fluid and cursive, with the first name "George" and last name "Macdougall" clearly distinguishable.

George M. A. Macdougall P.E.
Contracts & Specifications Engineer