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

Janet T. Mills
GOVERNOR

Bruce A. Van Note
COMMISSIONER

January 21, 2025
Subject: Breakwater
State WIN: 026824.00
Location: **Lubec**
Amendment No. 4

Dear Sir/Ms.:

The following questions have been received:

Question: SP 107 states " The Contractor will be allowed to commence work when all plans required under this contract have been approved and pre-construction meeting has been held".
Multiple project plans will have long lead times, thus delaying the start of the project. Can a list be provided of the plans that are required to be approved prior to the start of specific construction activities?

Response: Please refer to the Standard Specifications for what is required to begin construction. If a plan or shop drawing is required for additional or specific work that is specified in the Special Provision for that work.

Question: SP 610.0331 states that construction of the rubble-mound breakwater is anticipated to take 24 months. Is the contractor required to wait 24 months before constructing the concrete roadway on top of the rubble-mound breakwater? If settlement occurs after the concrete roadway is constructed and the concrete roadway is damaged, how will repair work to the concrete roadway be paid for?

Response: No, there is no requirement to wait 24 months. Once approximate final elevations of the rubble mound are constructed, it is estimated that the majority of the consolidation settlement would be completed within 12 months, during the construction process. Please refer to the geotechnical report section 9.1.1 and 9.1.2 for detailed information on the slope stability and settlement of the rubble mound breakwater. The assumption is that the entire breakwater, including the concrete roadway, would be constructed within 24 months.
Settlement monitoring is required per the contract to verify settlements. That information will be used to determine when to construct the roadway. This process is designed to minimize the risk of settlement impacts during and after construction.

Question: Referencing the details on S-271 for the platform to wave screen connection, are the L5x5x1/2 embed angles & C10x20 wave screen connection channels required in the C.I.P. portions of the platform cap fascia or only in the precast caps and precast panels?

Response: The L5x5x1/2 embedded angle is required for both the precast and CIP pile cap splice for the temporary connection to the wave screen during construction. Similarly, the C10x20 is required for the full length of wave screen as well.

Question: SP 501 (Foundation Piles) states that pipe piles shall be cut using an abrasive cut-off wheel. Can piles be flame cut as long as a mechanical guide is used when cutting the piles

Response: Yes, flame cutting is acceptable, as long as a mechanical guide is used while cutting.

Question: SP 501 (Foundation Piles) states that "Top of competent rock shall be determined at each socket installation by a Professional Engineer licensed in the state of Maine with sufficient geotechnical expertise and serving as a representative of the Resident." Will this representative be provided by the Department or will this representative need to be employed by the contractor?

Response: This representative will be provided by the Department.

Question: SP 501 (Foundation Piles) states that "The Resident may direct the Contractor to perform additional SPT borings to aid in determining top of competent rock." How will the cost associated with these additional borings be paid for? Can a bid item be added for confirmatory borings?

Response: Bedrock will be determined based on the driving of the steel pipe piles and the depth where refusal was established. If additional borings are required those shall be paid for as outlined under MaineDOT Standard Specifications, Section 109.7.5 Force Account Work.

Question: The project plans indicate that some of the pier platform piles, and guide piles require protective casings, however the plans do not indicate the required length or thickness for these casings. Additionally, S-341 calls for steel casings to be installed around the 12" dia. fender piles. S-341 does not indicate the required diameter or wall thickness for these casings.
Can this information be added to the plans?

Response: The contractor shall determine the required casing thickness that suits their operations. The length of the protective casings is dependent on the location of the steel pipe pile being protected. If the top of rubble mound is greater than MHHW, then the top of casing shall be a minimum 1 ft and a maximum of 5 ft above the top of rubble mound at that specific pile location. If MHHW is greater than the top of rubble mound at a specific pipe pile location being protected, the top of casing shall be a minimum of 1 ft and a maximum of 5 ft above MHHW.

All of the diameters for the protective casings are included in the special provisions and SP 501. SP 501.72 and SP 501.721 are the pay items for furnishing and installing the 12" diameter fender pile casing for constructing the 15" rock socket. The casing diameter is 18".

Question: The pipe pile tremie concrete fill will leave laitance at the top of the placement. Does the laitance need to be removed prior to placement of the concrete plug in the pipe pile?

Response: Yes, the laitance needs to be removed.

Question: The plans specify AZ18-800 sheet pile be used for the wave screen. This section is not readily available domestically. Can sheets of equal or higher section modulus be used as long as they conform to ASTM A572, Grade 50 standards?

Response: Yes, domestic sheet pile sections of equal or greater section modulus will be accepted for the wave screen. The domestically available proposed steel sheet piles shall meet or exceed the section modulus requirements of an AZ18-800 and conform to ASTM A572 and grade 50.

Question: Referencing plan sheet S-271, the partial wale plan at wave screens calls for 1" dia. F3125 gr. A490 bolts to be installed between the web of the MC18x58 wale. Section B on the same sheet calls for the bolts to be 1" dia. A325? What grade bolts are to be used to connect the wave screen wale to the sheet pile?

Response: The wave screen's 1" diameter bolts shall be F3125 gr A490.

Question: Centralizers will be required to ensure the core beams are properly centered in the pipe pile / rock sockets. Will the contractor be allowed to weld centralizers to the core beams?

Response: Yes, welding the centralizers to the core beam would be acceptable.

Question: Do the pile core HP / W beams need to be hot dipped galvanized per material note 4 on sheet G-002?

Response: No, the rock socket core beams should not be hot dipped galvanized. This exception only applies to the rock socket core beam sections.

Question: Referring to item 531.91, Floats, can the locations of the guide piles be adjusted to accommodate the contractor designed system? Additionally, some manufacturers offer floats with metric units. Will longer and/or wider float units be acceptable to accommodate this?

Response: The guide pile locations have some flexibility; however, the number of guide piles must be met. Changes to the guide pile arrangement would require review and approval by the Department.

Similarly, the float size may very slightly, however, changes must be reviewed and approved by the Department.

Question: Regarding 634.055 New Lighting Poles is this application considered a roadway or bridge when applying the 2020 Standard Specifications for EPA, weights and deflections?

Response: When applying the 2020 Standard Specifications for EPA, light poles located on the breakwater shall be treated as for bridges over bodies of water. Light poles around the parking lot shall be treated as for approach ramps.

Question: On sheet S226, detail 1, what is the thickness of the ring plate? What is the length of the 1/2" diameter headed studs?

Response: The steel ring plate shall be 1/2" thick and the 1/2" studs shall be 4" long.

Question: In reference to Amendment 3 and the question and response contained therein, see below, could you please submit the follow up question below:

"Question: *Can precast concrete pieces be manufactured and supplied by companies based in Canada, provided that the reinforcing steel is melted / manufactured in the USA?*
Response: *Under the Buy American requirements, Yes; Under the BABA requirements, No. Refer to SPECIAL PROVISION, SECTION 105, GENERAL SCOPE OF WORK (Buy American - Build America, Buy America)."*

Per MadeinAmerica.gov factsheet attached. The Buy America acts **requires:** 1) the end product must be **manufactured** in the United States **and** 2) 65% of the components must be of domestic origin. This requirement is per Federal Acquisition Regulation Chapter 25.003 definitions which is also attached and corroborates the factsheet. Please clarify how per the Buy American act precast concrete can be made in Canada in contrast with Federal Law.

Response: The prior response was incorrect. Buy American does not allow foreign precast concrete products. A waiver from MARAD would be required to allow foreign precast to be used in this project.

Consider these changes and information prior to submitting your bid on **January 29, 2025**

Sincerely,

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