

- 1.1 DESCRIPTION OF WORK
- .1 The work under this contract involves the supply of all labour, materials and equipment required to construct a rubble mound breakwater extension off an existing rubble mound/steel sheet pile breakwater structure as detailed on the plan and in this specification.
- .2 The work includes but is not limited to:
- .1 Site work including mobilization, demobilization, excavation, and disposal.
 - .2 Excavation below LNT as required.
 - .3 Haul and placement of excavated material to/in cell at harbour
 - .4 Maintenance and rework of cell walls as required to contain excavated material.
 - .5 Supply and installation of geotextile as indicated on the drawings and in the specification.
 - .6 Supply and installation of the rubble mound breakwater including core stone, filter stone and armour stone layers as detailed on the drawings and in the specification.
- .3 Site of Work is at: Skidders Pond, Structure #303, Prince Co, PE.
- .4 Borehole data provided for information only. Data for bore hole BH-01(2009) as per report by Stantec Engineering Limited Job. No. 1048577 - File no. 2858 dated July 28, 2009 and for bore holes BH-1(2015) and BH-2(2015) as per report by EXP Services Inc. Project number FRE-00228386-A0 dated December 14, 2015.
- 1.2 FAMILIARIZATION WITH SITE
- .1 As noted on the drawings, Structures 406 and 411 (the bridge) are not to be used for construction loads, as both are posted for cars only.
- .2 Before submitting a bid, it is recommended that bidders visit the site to review and verify the form, nature and extent of the work, materials needed, the means of access and the temporary facilities required to perform the

work.

.3 Obtain prior permission from the Departmental Representative and Harbor Authority before carrying out such site inspection.

.4 In advance of site visit, the Contractor is to review hazards as indicated in Section 01 35 29 and submit a Site Specific Safety Plan (SSSP) for the purpose of viewing the site.

1.3 CODES AND STANDARDS

.1 Perform work in accordance with any code of provincial or local application, including all amendments up to bid closing date, provided that in any case of conflict or discrepancy, the more stringent requirement shall apply.

.2 Materials and workmanship must meet or exceed requirements of specified standards, codes and referenced documents.

1.4 INTERPRETATION OF DOCUMENTS

.1 The Division 01 sections take precedence over the technical specification sections in other Divisions of the Specification Manual.

1.5 TERM ENGINEER

.1 Unless specifically stated otherwise, the term Engineer where used in the Specifications and on the Drawings shall mean the Departmental Representative as defined in the General Conditions of the Contract.

1.6 SETTING OUT WORK

.1 Assume full responsibility for and execute complete layout of work to locations, lines and elevations indicated.

.2 Provide devices needed to lay out and construct work.

.3 Supply survey markers required for laying out work.

1.7 MEASUREMENT FOR
PAYMENT

- .1 Notify Departmental Representative sufficiently in advance of operations to permit required measurements for payment.
- .2 Items included under "Measurement for Payment". All lump sum and all unit price items shall include all materials, labour, equipment and all other items necessary to complete the work.

Item 1: Mobilization and Demobilization:
Mobilization and demobilization shall constitute a lump sum for measurement purposes.

Item 2: Siteworks, Demolitions and Removals:
Siteworks, removals and replacement of miscellaneous items shall constitute a lump sum for measurement purposes.

Item 3: Armour Stone:
Supply and install of Armour Stone shall constitute a price per tonne for measurement purposes.

Item 4: Filter Stone:
Supply and install of Filter Stone shall constitute a price per tonne for measurement purposes.

Item 5: Core Stone:
Supply and install of Core Stone shall constitute a price per tonne for measurement purposes. Core stone quantity includes 90 tonnes of material allowed for a temporary working surface (see section 35 31 23.13).

Item 6: Geotextile:

Supply and install of Geotextiles shall constitute a price per square meter for measurement purposes.

Item 7: Survey Control:

Layout and survey control, including cross sections during placement, shall constitute a lump sum for measurement purposes.

Item 8: Reuse of Existing Stone:

Reuse of existing 4.0 to 6.0 tonne armour stone, shall constitute a lump sum for measurement purposes (estimated ±275 tonnes).

Item 9: Toe Excavation Below LNT:

Toe Excavation below Low Normal Tide shall constitute a price per cubic meter for measurement purposes. This quantity includes the volume of marine sediments and till bounded by the lines defining the bottom and sloped sides of the toe. A pre-sounding survey will establish soundings prior to construction for purposes of verifying quantities to be removed in combination with the contractors cross sections of as-built soundings.

Item 10: Excavation to -1.0m in Advance of the Work Below LNT

Excavation of Marine Sediments below LNT shall constitute a price per cubic meter for measurement purposes. This quantity includes the volume of marine sediments down to elevation -1.0m for the width of the filter stone. A pre-sounding survey will establish soundings prior to construction for purposes of verifying quantities to be removed.

Item 11: Silt Curtain

Silt curtain shall constitute a lump sum for measurement purposes.

1.8 DOCUMENTS
REQUIRED

- .1 Maintain at job site, one copy each of the following:
 - .1 Contract Drawings
 - .2 Specifications

- .3 Addenda
- .4 Reviewed Shop Drawings
- .5 List of outstanding shop drawings
- .6 Change Orders
- .7 Other modifications to Contract
- .8 Field Test Reports
- .9 Copy of Approved Work Schedule
- .10 Health and Safety Plan and other safety related documents
- .11 Other documents as stipulated elsewhere in the Contract Documents.

1.9 PERMITS

- .1 Obtain and pay for building permit, certificates, licenses and other permits as required by municipal, provincial and federal authorities.
- .2 Provide appropriate notifications of project to municipal and provincial inspection authorities.
- .3 Obtain compliance certificates as prescribed by legislative and regulatory provisions of municipal, provincial and federal authorities as applicable to the performance of work.
- .4 Submit to Departmental Representative, copy of application forms and approval documents received from above referenced authorities.

1.10 ACCOMMODATE HARBOUR OPERATIONS

- .1 Execute work with least possible interference or disturbance to Harbour operations and normal use of premises. Arrange with Departmental Representative to facilitate execution of work.
- .2 Provide barriers and warning signs in locations where work is adjacent to areas which will be operative during such work.
- .3 Provide and maintain temporary bouys to delineate the new work or temporary

structures.

- .1 0.4m yellow spar bouys complete with a flashing yellow light having a nominal range of 2 nm and a flash of FI 0.5 seconds, Eclipse 3.5 seconds and retro reflective tape are to be placed and maintained at the outward, seaward limit of the work (and silt curtain).
- .4 All bouys and equipment used in the construction must be visible at all times and must be marked in accordance with the collision regulations of the Canada Shipping Act.
- .5 Advise Departmental Representative 4 days in advance of the installation of any temporary structure so that a notice to shipping can be submitted.