



Pêches et Océans
Canada

Fisheries and Oceans
Canada

STEEL PIPE BREAKWATER DEMOLITION AND DISPOSAL

SCOPE OF WORK

**FISHERIES AND OCEANS CANADA
SMALL CRAFT HARBOURS - PACIFIC REGION**

August 2021

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Section 2	General Instructions
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Section 4	Environmental Procedures
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APPENDIX NO.	APPENDIX TITLE
A	PR-BW-001 Site Layout
A	PR-BW-002 General Arrangement
A	PR-BW-003 Standard Steel Pipe Section and Connection Details

END OF SECTION



Section 1 Summary of Work

1.1 Definitions

- .1 **Contractor**: The party accepted by the Owner with whom a formal contract is entered to complete the work of this project.
- .2 **Departmental Representative**: Employee(s) that represents the Owner who act as the Engineer and Technical Authority for the project.
- .3 **Owner**: Small Craft Harbours Program of the Department of Fisheries and Oceans, 200-401 Burrard Street Vancouver B.C. V6C 3S4.

1.2 Background

- .1 Small Craft Harbours (SCH) requires the demolition of old steel pipe breakwater and disposal to appropriate disposal/recycling facility.
- .2 The steel pipe breakwater is approximately 36" in diameter and 1600' long filled with Styrofoam floatation.
- .3 See approximate assembly and arrangement drawings for bidding purposes in Appendix A. Please note that these are not as-built drawings and are not to scale.

1.3 Location of the Steel Breakwater Pipe

- .1 The steel pipe breakwater is tied up outside the newer catamaran breakwater at Fairview Small Craft Harbour in Price Rupert, BC (Marine access only. Require 7 day written notice to Department Representative prior to access to the breakwater).

1.4 Description of Work

- .1 Removal and Demolition of 512m long 914mm dia. Steel Pipe Breakwater Filled with Styrofoam
 - .1 This is a lump sum item for the following:
 - .1 Mobilization and Demobilization
 - .2 Deconstruction of the breakwater which includes material separation, sorting, and placement in disposal bins or trucks.
 - .1 Refer to Appendix A for breakwater physical information for bidding purposes.



- .2 Materials must be sorted prior to delivery to disposal or recycling facility at an appropriate location secured by the Contractor.
- .3 No historical drawings of the breakwater is available.
- .3 The Contractor must provide proof that the breakwater is being demolished and being disposed to appropriate disposal/recycling facilities. Example of proofs are:
 - .1 Photos of the demolition work
 - .2 Provide demolition address to Site Representative for inspection
 - .3 Weigh slip, and tipping fees from the facilities must be provided to the Owner.
- .4 Styrofoam and or any other construction debris must be contained and is not allowed to escape into marine environment.
- .2 Disposal Fee
 - .1 This is cost plus line item that covers the following:
 - .1 Supply of disposal bins and/or dump trucks
 - .2 Hauling of sorted materials to approved disposal/recycling facilities
 - .3 Disposal and tipping fees generated from the breakwater demolition.
 - .2 Material shall be disposed by the Contractor in strict accordance with provincial, local, and municipal regulations and Part 8 of the National Building Code and with the Canadian Construction Safety Code.
 - .3 Invoice(s) from vendors or disposal facilities must be provided to the Owner as a proof of actual cost and will be used as a measure of payment under this line item.

1.5 Submittal Required

- .1 Submittal required after award and must be approved by the Owner prior to site mobilization.
 - .1 Health and Safety and work safe plan.



- .2 General work methodology for removal and disposal of the breakwater. Include proposed equipment used.
- .3 Proposed disposal site for each material (steel pipe and Styrofoam floatation).
- .2 Proof must be provided that deconstructed materials are disposed or recycled at the approved disposal/recycling facilities for payment.

1.6 Commencement and Completion

- .1 Work may commence upon contract award. Work must be completed by December 17, 2021.

1.7 Methodology Limitations

- .1 Contractor must not cut any Styrofoam floatation.
- .3 Contractor must not sink any portion of the breakwater.
- .4 Contractor must not salvage and is not allowed to re-use any of the breakwater.
- .5 Contractor must contain Styrofoam debris and prevent it from entering any drainage system, water course or marine environment.

END OF SECTION



Section 2 General Instructions

2.1 Notification

- .1 The Contractor must give the Departmental Representative minimum 7 calendar days' notice prior to mobilization and demobilization.

2.2 Health and Safety

- .1 See Section 3

2.3 Environmental Procedures

- .1 See Section 4

2.4 Regulatory Requirements

- .1 The Contractor must, at their own expense, procure all permits, certificates and licenses required of them by law for the execution of their work under this contract.
- .2 The Contractor shall comply with all Federal, Provincial or Municipal laws, ordinances or rules and regulations relating to the performance of their work and in force during the duration of this contract.
- .3 All work to be done in accordance with Work Safe BC regulations.

2.5 Execution Requirements

- .1 The Contractor's representative on site shall be completely familiar with the method of work to be employed. Such personnel shall remain on site for the duration of the work.
- .2 The site shall be left in a safe condition at the completion of each work day.
- .3 Structural Demolition - See Section 5

2.6 Construction Area

- .1 The Contractor shall confine their operations on the site to those areas actually required for the work including routes and regulations approved by the Owner for haulage of materials.

2.7 Interference with Operation

- .1 The Contractor shall obey all navigation regulations and conduct operations so as to interfere as little as possible with the use of berthing spaces, fairways and passages. Install and maintain any and all protection



to navigation as may be required by any properly constituted authority or by the Engineer. During the course of construction and clean up, do not dispose of surplus, waste or demolished materials in navigable waters.

- .2 The Contractor shall upon instruction of the Owner or Engineer, promptly remove any of the Contractor's equipment located outside the specified work area and obstructing any harbour operation.

2.8 Barriers, Lights and Watching

- .1 The Contractor shall provide all requisite barriers, fences, warning signs, lights and watching for the protection of persons and property on or adjacent to the site.

END OF SECTION



Section 3 Health and Safety Requirements

3.1 Health and Safety Responsibilities

- .1 Assume responsibility as the Prime Contractor under this Contract.
- .2 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .3 Report all safety and environmental incident to the Department Representative as soon as it happened.
- .4 Perform site specific safety hazard assessment and conduct a safety meeting to discuss about the assessed hazard with all personnel onsite prior to start of construction.

3.2 Submittals

- .1 Results of site specific safety hazard assessment.
- .2 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations
- .3 Submit copies of incident and accident reports when requested.

3.3 Compliance with Regulations

- .1 It is Contractor's responsibility to ensure that all workers are qualified, competent, and certified to perform the work as required by the Compensation Act or the Occupational Health and Safety Regulations.
- .2 The Contractor and the Subcontractors shall have accounts in good standing with the Workers' Compensation Board. Proof of current status shall be provided upon request.

3.4 Site Security/Public Safety

- .1 Ensure that non-authorized persons are not allowed to circulate in designated construction or demolition areas of the work site.
- .2 Secure site at night time as deemed necessary to protect site against entry.

END OF SECTION



Section 4 Environmental Procedures

4.1 Environmental Responsibilities

- .1 Take all reasonable and necessary measures in the performance of the work to avoid causing negative impacts to the environment.
- .2 Maintain key pollution control systems in working condition throughout the project and undertake all works such that there are no unauthorized discharges of liquids or solids to the marine environment, or of gas to the atmosphere.
- .3 Maintain a neat work area free of unnecessary debris, tools, equipment, or materials; dispose of sewage, refuse, and chemical wastes and remove all tools, equipment, supplies, and wastes from the site upon completion of the work.

4.2 Pollution Control

- .1 Maintain temporary erosion and pollution control features installed under this Contract.
- .2 Control emissions from equipment and plant to local authorities emission requirements.
- .3 Provide dust control during all truck transport activities.

END OF SECTION



Section 5 **Structural Demolition**

5.1 **Submittals**

- .1 Submit photos of the steel pipe breakwater being demolished to the Owner which will be used as a proof that the breakwater was not given away, sold, or used in other ways. Photos of proof is required for full payment.

5.2 **Demolition and Processing**

- .1 Prevent debris (including Styrofoam debris), dust, and any sediment laden waters from entering any drainage system, water course or marine environment.
- .2 Ensure that selective demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- .3 Carry out demolition in accordance with CAN/CSA S350 and other applicable safety standards.

END OF SECTION

