

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 29 00 – Payment procedures
- .2 Section 01 35 43 – Environmental procedures
- .3 Section 01 74 21 – Construction / Demolition waste management and disposal
- .4 Section 01 74 25 – Solid wastes and dry materials

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00- Submittal Procedures.
- .2 Prior to beginning of Work on site submit detailed Waste Reduction Workplan in accordance with Section 01 74 21- Construction/Demolition Waste Management and Disposal and section 01 74 25 – Solid wastes and dry materials. This plan must indicated as follow;
 - .1 Descriptions of and anticipated quantities in percentages of materials to be salvaged reused, recycled and landfilled.
 - .2 Schedule of selective demolition.
 - .3 Number and location of dumpsters.
 - .4 Anticipated frequency of tippage.
 - .5 Name and address of waste facilities haulers waste receiving organizations.
- .3 Submit copies of certified bills of lading receipts weigh bills from authorized disposal sites and reuse and recycling facilities for material removed from site upon request of Departmental Representative basis.
 - .1 Written authorization from Departmental Representative is required to deviate from facilities haulers receiving organizations listed in Waste Reduction Workplan.
- .4 Shop Drawings:
 - .1 Submit for review and approval demolition drawings, diagrams or details showing sequence of demolition work and supporting structures and underpinning.

1.3 QUALITY ASSURANCE

- .1 Regulatory Requirements: Ensure Work is performed in compliance with applicable Provincial/Territorial and Municipal regulations.

1.4 SITE CONDITIONS

- .1 Environmental protection:
 - .1 Ensure Work is done in accordance with Section 01 35 43- Environmental Procedures.

- .2 Ensure Work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
- .3 Fires and burning of waste or materials is not permitted on site.
- .4 Do not bury rubbish waste materials.
- .5 Do not dispose of waste or volatile materials including but not limited to: mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers.
 - .1 Ensure proper disposal procedures are maintained throughout project.
- .6 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers, or onto adjacent properties.
- .7 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with authorities having jurisdiction as directed by Departmental Representative.

1.5 EXISTING CONDITIONS

- .1 Structures to be demolished are based on their condition on date that tender is accepted.
 - .1 Remove, protect and store salvaged items as directed by Departmental Representative. Salvage items as identified by Departmental Representative. Deliver to Departmental Representative as directed.
 - .2 A brief description of marine structure for this project is as follows :
 - .1 Wharf is made of eight (8) cells built with flat sheet piles and one dolphin built to the same principles. All steel parts are highly corroded and perforated in the tidal zone.
 - .2 Inside each cell, we find ballast stone and a cribwork casing that is used for the construction of each cell.
 - .3 The dolphin is collapsed and is no longer visible at low tide. His copwall and slab have toppled. To the sea bottom and remain attached to the steel sheet piles. Steel sheet piles and steel piles are twisted, curved and torn in some places. Inside this cell, we find a cribwork. In order to obtain an acceptable draft for the navigation, the parts above level – 4.5 meters relative to chart datum must be removed.
 - .4 Cells 6-7-8 are collapsed but there a visible at the low tide. We can see a part of the copewall and slab which have toppled to the sea bottom. Those concrete pieces can be reverse again to the bottom sea but following certain restrictions described at the article 1.7 – Concrete pieces, or removed completely according to the contractor's method.
 - .5 Cells 1-2-3-4-5 are in place but they are deteriorated due to the level of perforation of steel sheet piles. The structural capacity of these cells can not be assessed.
 - .6 Inside cell 1-2-3-4, the first layer of soil (500 mm) is contaminated and must be removed, sifted and disposed to an authorized technical site. The contractor has to sift that volume of stone to separate coarse particules (greater than 25 mm) with fine particules. Fine particules are contaminated and not the largest caliber. The stone mixture consists of 40% fine particules.

- .7 This approach is a stone dyke on which it can found a concrete slab and concrete walls at the crest. From chaining 0+260 to 0+355, armour steel is placed on the concrete slab.
Under that concrete slab, a layer of soil (350 mm) is contaminated and must be removed and disposed to an authorized technical site.
- .8 The riprap is made up of various categories of stone and dolos (concrete units).
- .9 Service building located near the approach must be demolished including underground electrical conducts.

1.6 CONCRETE PIECES

- .1 Dolphin
The parts to be removed as copewall and slab to obtain the acceptable level for the navigation could be deposited to sea bottom. On the other hand, steel pieces and wood must be removed and disposed to an authorized technical site.
- .2 Cells 6-7-8
The part made of reinforced concrete could be reversed and deposited to the sea bottom without exceeding the outer limit of the filter stone. Contractor has the choice to reverse completely them or in part or to remove all out of site.
The top of the flooring of the slab should be on the seabed and each concrete segment shall not be overlapped or intermingled with each other.
Contractor shall submit his method of work for Departmental Representative's approved.
- .3 Others
All others concrete pieces shall be removed and disposed to an authorized technical site. This includes : cells 1-2-3-4-5, dolos, concrete walls, slab and service building.

1.7 QUANTITY OF EXCAVATION

- .1 The following quantities shall be used by the contractor to establish the flat prices for the various measuring stations. These quantities per cubic meter represent the uncontaminated soil materials of stone of different caliber and the dollozes located within the demolition limits indicated on the plan :
 - Chainage 0+015 à 0+120 : Quantities 2870 m³
 - Chainage 0+120 à 0+355 : Quantities 20050 m³
 - Chainage 0+355 à 0+454 : Quantities 7500 m³
 - Chainage 0+434 à 0+540 : Quantities 570 m³

Part 2 Products

2.1 EQUIPMENT

- .1 Equipment and heavy machinery:
 - .1 On-road vehicles to: CEPA-SOR/2003-2, On-Road Vehicle and Engine Emission Regulations CEPA-SOR/2006-268, Regulations Amending the On-Road Vehicle and Engine Emission Regulations.
 - .2 Off-road vehicles to: EPA CFR 86.098-11 and EPA CFR 86.098-10.
- .2 Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.
- .3 Floating equipment :
 - .1 The Contractor shall provide sufficiently large equipment with sufficient space to carry out the work described in the plans and specifications.
 - .2 In the course of the contract, all machines must be in good working condition and instantly repaired at all times. All equipment used must be able to withstand the sea and be in good condition. Their dimensions, characteristics and draught should make it possible for them to effectively do the job.
 - .3 Equip floating equipment with navigation lights, in accordance with the *Canada Shipping Act*.
 - .4 Ensure marine radio is monitored on ships.
 - .5 Place and keep functional buoys and traffic lights throughout the duration of the contract.
 - .6 The Contractor must, at his own expense, provide, install, and maintain all the buoys or marks required to effectively carry out works. If, by chance or by accident, one or more buoys/marks got stuck or went adrift, they would be bailed out and/or recovered at the expense of the Contractor to the satisfaction of the Departmental Representative. The Contractor shall be responsible for any accident caused as a result of poor visibility or disposal of buoys/marks in the day to their poor lighting at night, or for any other reason.
 - .7 All marks and lights mounted on floating equipment required for work should remain functional, in accordance with "Collision Regulations" and "Navigation Safety Regulations". All the equipment needed for work must therefore be properly identified and/or visible at all times.
 - .8 Pay wharfage dues if required.

Part 3 Execution

3.1 PREPARATION

- .1 Temporary Erosion and Sedimentation Control:
 - .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to: sediment and erosion control plan,

specific to site, that complies with EPA 832/R-92-005 or requirements of authorities having jurisdiction, whichever is more stringent.

- .2 Inspect, repair, and maintain erosion and sedimentation control measures during demolition.
- .3 Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal after completion of demolition work.

.2 Protection of in-place conditions:

- .1 Work in accordance with Section 01 35 43- Environmental Procedures.
- .2 Prevent movement, settlement or damage of adjacent properties, paving, structures, and adjacent grades services.
 - .1 Provide bracing, shoring and underpinning as required.
 - .2 Repair damage caused by demolition as directed by Departmental Representative.
- .3 Support affected structures and, if safety of structure being demolished appears to be endangered, take preventative measures, stop Work and immediately notify Departmental Representative.

3.2 DEMOLITION

- .1 Do demolition work in accordance with Section 01 56 00- Temporary Barriers and Enclosures.
- .2 Blasting operations not permitted during demolition.
- .3 Remove contaminated or dangerous materials as defined by authorities having jurisdiction, relating to environmental protection, from site and dispose of in safe manner to minimize danger at site or during disposal.
- .4 To permit as indicated and.
- .5 Crush concrete generated due to demolition to suitable for recycling.
- .6 At end of each day's work, leave Work in safe and stable condition.
- .7 Remove and dispose of demolished materials except where noted otherwise and in accordance with authorities having jurisdiction.

3.3 CLEANING

- .1 Waste Management: separate waste materials for recycling reuse in accordance with 01 74 21- Construction/Demolition Waste Management and Disposal.
- .2 Divert excess materials from landfill to site approved Departmental Representative.
- .3 Designate appropriate security resources / measures to prevent vandalism, damage and theft.
- .4 Locate stockpiled materials convenient for use in new construction. Eliminate double handling wherever possible.

END OF SECTION