

**Part 1            General**

**1.1               RELATED SECTIONS**

- .1        Section 01 35 43 - Environmental Procedures.

**1.2               REFERENCES**

- .1        Association canadienne de normalisation (CSA/CSA) International
  - .1        CSA S350-M1980(R2003), Code of Practice for Safety in Demolition of Structures.

**1.3               DOCUMENTS / SAMPLES / SUBMITTALS FOR APPROVAL / INFORMATION**

- .1        Submit documents and samples in accordance with Section 01 33 00 Documents / Samples to be submitted.
- .2        Prior to beginning of Work on site submit detailed Waste Reduction Workplan in accordance with Section 01 74 21 – Management and disposal of construction / demolition. This plan should include the following:
  - .1        Descriptions of and anticipated quantities in percentages of materials to be salvaged reused, recycled and landfilled.
  - .2        The plan of selective demolition.
  - .3        The number and location of collection bowls.
  - .4        The frequency of scheduled collection.
  - .5        Name and address of haulers, waste facilities and waste receiving organizations.
- .3        Submit copies of certified weigh bills, bills of lading and receipts from authorized disposal sites and reuse and recycling facilities for material removed from site upon request of Departmental Representative.
  - .1        Written authorization from Departmental Representative is required to deviate from haulers, facilities and receiving organizations listed in Waste Reduction Workplan.

**1.4               QUALITY ASSURANCE**

- .1        Regulatory Requirements: Ensure Work is performed in compliance with applicable Provincial/Territorial and Municipal regulations.
- .2        Meetings:
  - .1        Prior to start of Work arrange for site visit with Departmental Representative to examine existing site conditions adjacent to demolition work.

**1.5               DELIVERY, STORAGE AND HANDLING**

- .1        Waste Management and Disposal
  - .1        Separate waste materials for reuse / reuse and recycling in accordance with Section 01 74 21 - Management and disposal of construction / demolition.

## **1.6 WASTE MANAGEMENT AND DISPOSAL**

- .1 Divert excess materials from landfill to site approved by Departmental Representative.

## **1.7 ENVIRONMENTAL PROTECTION**

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

## **1.8 EXISTING CONDITIONS**

- .1 Description of Marine structures relating to this project is the following:
  - .1 Protection rock fill Wharf (Berlin Wall). The north and south piers are constructed Berlin Wall with a beam system and reinforced concrete slab. The construction of the rock protection will be done without any equipment only runs on piers so as not to further reduce their structural stability.
  - .2 Protection rock fill Wharf (sheet pile wall): The inner harbour is constructed of two parallel sheet pile walls. These sheet-pile-walls are badly damaged in the tidal zone. Large gaps (see photos attached) in the pile significantly reduce their structural stability.
  - .3 Caution: Pay particular attention to the demolition of the pile near the boat ramp into the water. Use the equipment and methods needed to use and maintain the stability of adjacent structures.
- .2 The existing conditions are defined as state structures to demolish the date of acceptance of the bid.
  - .1 Remove, protect and store the recovered items, as directed by the Departmental Representative. Collect items designated by the Departmental Representative. Give them to the Departmental Representative as directed.

## **1.9 METHOD OF CONSTRUCTION**

- .1 Techniques and method of construction are the responsibility of Contractor.
- .2 The Contractor should obtain his own experts advice with regard to techniques and method of construction to use to demolish the work stipulated in this contract.
- .3 Contractor shall consider that existing structures to rebuild have no structural bearing strength to be functional for users, show a high level of deterioration and may cave in according to marine and climatic conditions.
- .4 So he shall evaluate the solidity of the structures to be demolished and choose a method of construction fitted for work requirements. Structural state change during work shall not be, on no account, a valid reason to sue for extra fees.
- .5 Caution : the contractor shall pay particular attention to the demolition of the sheet piling near the launching ramp. Use the equipment and methods necessary in order to keep the use and stability of adjacent structures.

- .6 Take note that the movement of equipment on piers North and South will be prohibited, and during the duration of the work to not reduce the structural stability of this part of the harbour. The contractor may need to use a work method adapted to this constraint.

## **Part 2 Products**

### **2.1 EQUIPMENT**

- .1 Equipment and heavy machinery to:
  - .1 On-road vehicles to meet applicable emission requirements as prescribed in CEPA-SOR/2003-2, On-Road Vehicle and Engine Emission Regulations.
  - .2 Off-road vehicles to meet applicable emission requirements as prescribed in EPA CFR 86.098-10 and EPA CFR 86.098-11.
- .2 Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.

## **Part 3 Execution**

### **3.1 PROTECTION**

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

### **3.2 PREPARATION**

- .1 Disconnect and re-route electrical and telephone service lines entering buildings to be demolished.
  - .1 Post warning signs on electrical lines and equipment which must remain energized to serve other properties during period of demolition.
- .2 Disconnect and cap mechanical services.
  - .1 Sewer and water lines on wharf.
  - .2 Other underground services: remove and dispose of as directed by Departmental Representative.
  - .3 Locate and protect utility lines. Do not disrupt active or energized utilities designated to remain undisturbed.

### **3.3 DEMOLITION**

- .1 Remove parts of existing Work to permit new construction. Sort materials into appropriate piles for reuse and recycling.
- .2 Refer to demolition drawings and specifications for items to be salvaged for reuse.
- .3 Remove items to be reused, store as directed by Departmental Representative and re-install under appropriate section of specification.
- .4 Dispose of removed materials to appropriate recycling facilities or reuse facilities except where specified otherwise, in accordance with authority having jurisdiction.
- .5 Demolish the structures up to the limits indicated in the RM13008C plan.
- .6 At the end of each work's day, ensure that the work is safe and stable.

### **3.4 STOCKPILING**

- .1 Label stockpiles, indicating material type and quantity.
- .2 Designate appropriate security resources/measures to prevent vandalism, damage and theft.

### **3.5 REMOVAL FROM SITE**

- .1 Transport material designated for alternate disposal to approved facilities or receiving organizations listed in waste reduction workplan and in accordance with applicable regulations. Do not deviate from facilities or receiving organizations listed in waste reduction workplan without prior written authorization from Departmental Representative.
- .2 Dispose of materials not designated for alternate disposal in accordance with applicable regulations. Disposal facilities must be approved of and listed in waste reduction workplan. Do not deviate from disposal facilities listed in waste reduction workplan without prior written authorization from Departmental Representative.
- .3 If they hinder the progress of the work, deposit materials must be evacuated according to the instructions of the departmental representative.
- .4 Evacuate deposit materials of a similar nature and must be disposed of according the same ecological method, once the collection of these finished materials.

### **3.6 WORK**

- .1 Demolition material mainly, include but not limited : the steel sheet piling, steel plates, iron C, ladders, rods and moises of steel, concrete, concrete reinforcement, non treated wood, gravel, PIN, bolts and drift bolts, etc.

### **3.7 CLEANING AND RESTORATION**

- .1 Keep site clean and organized throughout demolition procedure.

- .2 Upon completion of project, reinstate areas, parking surfaces, walkways, light standards, affected by Work to match condition of adjacent, undisturbed areas.

**END OF SECTION**