

## **1 GENERAL**

### **1.01 RELATED REQUIREMENTS**

- .1 Division 1 - General Requirements
- .2 Section 09 03 61 Historic Repainting.
- .3 Section 03 01 32 Concrete Removal Percussive Methods
- .4 Section 02 41 13 Selective Structural Demolition
- .5 Section 02 81 01 Hazardous Materials

### **1.02 REFERENCES**

- .1 CSA International
  - .1 CSA S350-M1980(R2003), Code of Practice for Safety in Demolition of Structures.
- .2 U.S. Environmental Protection Agency (EPA)/Office of Water
  - .1 EPA 832/R-92-005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.
- .3 Limited Hazardous Building Materials Assessment, Cape Sable Island Lighthouse, Halifax County dated March 9, 2016.
- .4 Canadian Environmental Assessment Act, 2012 (CEAA).
- .5 Canadian Environmental Protection Act, 1999 (CEPA 1999)
- .6 Consolidated Transportation of Dangerous Good Regulations including Amendment SOR/2015-100.
- .7 National Building Code of Canada 2010, including Safety Measures at Construction and Demolition Sites.
- .8 New Brunswick Department of Tourism, Heritage and Culture, Permit Guidelines

### **1.03 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures and 01 74 21 - Construction/Demolition Waste Management Disposal.
- .2 Hazardous Materials:
  - .1 Provide description of Hazardous Materials and Notification of Filing with proper authorities prior to beginning of Work as required.
- .3 Archeological Impact Assessment
  - .1 Prior to the start of work submit schedule for Archeological monitoring of all excavation work.

- .2 Upon completion of the work submit Archeological Impact Assessment Report documenting
  - .1 Dates and time spent onsite.
  - .2 Findings with archeological significance as defined by the New Brunswick Department of Tourism, Heritage and Culture, Permit Guidelines.
- .5 Waste Reduction Workplan:
  - .1 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 indicate:
    - .1 Description of an anticipated quantiles of materials to be salvaged reused, recycled and landfilled.
    - .2 Number and location of dumpsters.
    - .3 Number and location of dumpsters.
    - .4 Anticipated frequency of tipping.
    - .5 Name and address of haulers, waste facilities and waste receiving organizations.

#### 1.04 MOCK-UP

- .1 Remove the existing exterior concrete wall coating as described in structural specification. Request architectural approval and review prior to proceeding with the work. Mock-up must demonstrate retention of existing board-formed finish.
- .2 ~~N.I.C: Remove the existing interior concrete floor coating on a 1500mm x 1500mm panel of substrate to demonstrate the methodology of work required to fully remove the existing coating in accordance with specification section 09 03 61 Historic Repainting.~~
- .3 ~~N.I.C: Remove the existing steel lantern paint on a 500mm x 500mm panel of substrate to demonstrate the methodology of work required to fully remove the existing coating in accordance with specification section 09 03 61 Historic Repainting.~~
- .4 ~~N.I.C: Remove the existing interior ladder paint on a 500mm x 500mm panel of substrate to determine the methodology of work required to fully prepare the surface for new work in accordance with specification section 09 03 61 Historic Repainting.~~
- .5 Repeat the listed mock-ups using different removal methods on up to three separate panels until acceptable to Departmental Representative.
- .6 Submit written and method statement and photographs documenting procedures undertaken.
- .7 Acceptable panels will become the standard for work of this Section.

- .8 Do not commence full scale production removal work until reviewed and approved by the Departmental Representative.

## 1.05 SITE CONDITIONS

- .1 Existing Conditions
  - .1 Remove contaminated or hazardous materials as defined by the Departmental Representative from site, prior to start of demolition Work, and dispose of in safe manner in accordance with the Hazardous Materials Specification.
- .2 Site Environmental Requirements.
  - .1 Perform work in accordance with Section 01 35 43
  - .2 Ensure that selective demolition work does not adversely affect adjacent watercourse, groundwater and wildlife, or contribute to excess air and noise pollution.
  - .3 Do not dispose of waste of volatile materials including but not limited to, mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourse, storm or sanitary sewers.
    - .1 Ensure that proper disposal procedures are maintained throughout the project.
  - .4 Do not pump water containing suspended materials into watercourse, storm or sanitary sewers or onto adjacent properties.
  - .5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.
  - .6 Protect trees, plants and foliage onsite and adjacent properties.

## 2 PRODUCTS

- .1 Jackhammer size is specified in Section 03 01 32 and 02 41 13.
- .2 Chemical cleaning and hand tools as specified in Section 09 03 61 Historic Repainting.

## 3 EXECUTION

### 3.01 EXAMINATION

- .1 Inspect site with Departmental Representative and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.
- .2 Locate and protect utilities. Preserve active utilities traversing site in operating condition.

### 3.02 PREPARATION

- .1 Protection of In-Place Conditions:
  - .1 Prevent movement, settlement, or damage to adjacent structures and parts of building to remain in place. Provide bracing and shoring

- required.
- .2 Keep noise, dust, and inconvenience to occupants to minimum.
- .3 Protect building systems, services and equipment.
- .4 Provide temporary dust screens, covers, railings, supports and other protection as required.

### 3.03 REMOVAL OPERATIONS

- .1 Remove items as indicated on the drawings.
- .2 Do no disturb items designated to remain in place.
- .3 Removal of pavements, concrete,
  - .1 Square up adjacent surface to remain in place by saw cutting or other method approved by Departmental Representative.

### 3.04 COATING REMOVAL EQUIPMENT

- .1 Abrasive cleaning or other approved non-impact equipment is to be used to remove exterior wall coating system.
- .2 Equipment should be capable of efficiently removing the coating in its entirety while ensuring all reasonable precautions are taken to avoid damaging the concrete surface. The existing board form concrete textured is to be protected.

### 3.05 DEMOLITION

- .1 Remove and dispose of material and debris resulting from the removal of delaminated and sound concrete from the walls and floor slabs.
- .2 Remove and dispose of material and debris resulting from the removal of the wall coating. Existing wall coating shall be totally removed leaving a clean, sound, smooth, concrete surface suitable for the installation of a new elastomeric to the satisfaction of the Departmental Representative. All efforts shall be made to protect the existing board form finished in place.
- .3 Remove and dispose of material and debris resulting from the removal of soils and granular subgrades as per Contract Documents.
- .4 Remove existing mechanical and electrical services associated with the areas of the slab to be demolished. The removal of these services is to be accomplished prior to the commencement of the demolition work outlined in the Contract Documents.
- .5 Jack hammer demolition of concrete shall be used where existing slab reinforcement is to be preserved intact.
  - .1 Jackhammer size is specified in Section 03 01 32.
- .6 Demolition procedures and equipment shall meet all applicable noise-control by-laws and regulations of the location of the work.
- .7 The Contractor is to take care not to damage the surface of sound concrete

which is to remain through his removal operation. Where any such damage is done to sound material, it is to be repaired by the Contractor at his own expense to the approval of the Departmental Representative.

- .8 Where new concrete is to be applied to existing concrete, the surface is to be left clean and sound.
- .9 All required re-painting due to damage, overspray, etc. is the Contractor's responsibility.
- .10 At end of each day's work, leave work in safe condition so that no part is in danger of causing injury or damage.

### 3.06 RESTORATION

- .1 Restore areas and existing works outside areas of demolition to conditions that existing prior to beginning of Work.
- .2 Use soil treatments and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water course or ground water.

### 3.07 FIELD QUALITY CONTROL

- .1 Verification requirements in accordance with Section 01 74 21, include
  - .1 Materials and resources.
  - .2 Storage and collection of recyclables.
  - .3 Construction Waste Managements.
  - .4 Resource use.
  - .5 Recycled content.
- .2 Verification requirements for exterior concrete surface preparation in accordance with Section 09 92 53 Elastomeric Acrylic Wall Coatings.

### 3.08 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .3 Refer to demolition drawings and specifications for items to be salvaged for reuse.
- .4 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
  - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

### 3.09 PROTECTION

- .1 Repair damage to adjacent materials or property caused by selective site demolition.

END OF SECTION