

**Part 1 General**

**1.1 SUMMARY**

- .1 This Section includes requirements for selective demolition and removal of heating, ventilation and air conditioning systems, controls and automated automation components, and related mechanical components and incidentals required to complete work described in this Section.

**1.2 REFERENCE STANDARDS**

- .1 CSA Group (CSA):
  - .1 CSA S350 M1980 (R2003), Code of Practice for Safety in Demolition of Structures.

**1.3 DEFINITIONS**

- .1 Demolish: Detach items from existing construction and legally dispose of items off site, unless indicated as removed and salvaged, or removed and reinstalled.
- .2 Remove: Planned deconstruction and disassembly of HVAC items from existing construction including removal of ductwork, piping, valving and hangers from building taking care not to damage adjacent assemblies designated to remain; legally dispose of items off site, unless indicated as removed and salvaged, or removed and reinstalled.
- .3 Remove and Salvage: Detach items from existing construction and deliver them to Departmental Representative ready for reuse.
- .4 Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- .5 Existing to Remain: Existing items of construction that are not removed and that are not otherwise indicated as being removed and salvaged, or removed and reinstalled.
- .6 Hazardous Substances: Dangerous substances, dangerous goods, hazardous commodities and hazardous products may include asbestos, mercury and lead, PCB's, poisons, corrosive agents, flammable substances, radioactive substances, or other material that can endanger human health or wellbeing or environment if handled improperly as defined by the Federal Hazardous Products Act (RSC 1985) including latest amendments.

**1.4 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Action Submittals: Provide the following in accordance with Section 01 33 00 – Submittal Procedures before starting work of this Section:
  - .1 Construction Waste Management Plan (CWM Plan): Submit plan addressing opportunities for reduction, reuse, or recycling of materials

prepared in accordance with Section 01 74 19 – Waste Management and Disposal.

- .2 Landfill Records: Indicate receipt and acceptance of selective demolition waste and hazardous wastes by a landfill facility licensed to accept hazardous wastes.

## **1.5 ADMINISTRATIVE REQUIREMENTS**

- .1 Coordination: Coordinate work of this Section to avoid interference with work by other Sections.
- .2 Scheduling: Account for Departmental Representative's continued occupancy requirements during selective demolition with Section 02 41 19.13 and schedule staged occupancy and worksite activities as a defined Critical Path item in accordance with Section 01 32 16.19 – Demolition Progress Schedules – Bar (GANTT) Chart.

## **1.6 QUALITY ASSURANCE**

- .1 Regulatory Requirements: Perform work of this Section in accordance with the following:
  - .1 Nova Scotia Worker's Compensation Board.
- .2 Provincial/Territorial Occupational Health and Safety Standards and Programs.

## **1.7 SITE CONDITIONS**

- .1 Existing Conditions: Condition of materials identified as being salvaged or demolished are based on their observed condition at time of site examination before tendering.
- .2 Existing Hazardous Substances: Departmental Representative performed a hazardous substances assessment and it is not expected that hazardous substances will be encountered in the Work.
  - .1 Hazardous substances will be removed by a hazardous abatement specialist engaged by the Departmental Representative before start of the Work.
- .3 Existing Hazardous Substances: Departmental Representative has performed a hazardous substances assessment and identified materials requiring abatement as follows:
  - .1 Hazardous substances are as defined in the Hazardous Products Act
  - .2 Hazardous substances will be removed by the Departmental Representative as a part of a separate Contract before starting Work in accordance with work results described in Related Requirements listed above.
- .4 Discovery of Hazardous Substances: It is not expected that Hazardous Substances will be encountered in the Work; immediately notify Departmental

Representative if materials suspected of containing hazardous substances are encountered and perform the following activities:

- .1 Refer to Section 01 41 00 – Regulatory Requirements for directives associated with specific material types.
- .2 Hazardous substances will be as defined in the Hazardous Products Act.
- .3 Stop work in the area of the suspected hazardous substances.
- .4 Take preventative measures to limit users' and workers' exposure, provide barriers and other safety devices and do not disturb.
- .5 Hazardous substances will be removed by Departmental Representative under a separate contract or as a change to the Work.
- .6 Proceed only after written instructions have been received from Departmental Representative.

## **Part 2 Products**

### **2.1 REPAIR MATERIAL**

- .1 General Patching and Repair Materials: Refer to Section 02 41 19.13 for listing of patching and repair materials incidental to removal or demolition of components associated with work of this Section.
- .2 HVAC Repair Materials: Use only new materials required for completion or repair matching materials damaged during performance of work of this Section; new materials are required to meet assembly or system characteristics as existing systems indicated to remain and carry CSA approval labels required by the Authority Having Jurisdiction.
- .3 Firestopping Repair Materials: Use firestopping materials compatible with existing firestopping systems where removal or demolition work affects rated assemblies, restore to match existing fire rated performance.

### **2.2 SALVAGE AND DEBRIS MATERIALS**

- .1 Material Ownership: Demolished materials become Contractor's property and will be removed from Project site; except for items indicated as being reused, salvaged, or otherwise indicated to remain Departmental Representative's property.
- .2 Salvaged Materials: Carefully remove materials designated for salvage and store in a manner to prevent damage or devaluation of materials.

## **Part 3 Execution**

### **3.1 EXAMINATION**

- .1 Verification of Existing Conditions: Visit site, thoroughly examine and become familiar with conditions that may affect the work of this Section before tendering the Bid; Departmental Representative will not consider claims for extras for work

or materials necessary for proper execution and completion of the contract that could have been determined by a site visit.

### **3.2 PREPARATION**

- .1 Protection of Existing Systems to Remain: Protect systems and components indicated to remain in place during selective demolition operations and as follows:
  - .1 Prevent movement and install bracing to prevent settlement or damage of adjacent services and parts of existing buildings scheduled to remain.
  - .2 Notify Departmental Representative and cease operations where safety of buildings being demolished, adjacent structures or services appears to be endangered and await additional instructions before resuming demolition work specified in this Section.
  - .3 Prevent debris from blocking drainage inlets.
  - .4 Protect mechanical systems that must remain in operation.
- .2 Protection of Building Occupants: Sequence demolition work so that interference with the use of the building by the Departmental Representative and users is minimized and as follows:
  - .1 Prevent debris from endangering the safe access to and egress from occupied buildings.
  - .2 Notify Departmental Representative and cease operations where safety of occupants appears to be endangered and await additional instructions before resuming demolition work specified in this Section.

### **3.3 EXECUTION**

- .1 Demolition: Coordinate requirements of this Section with information contained in Section 02 41 19.13 – Selective Building Demolition and as follows:
  - .1 Disconnect and cap gas supply and electrical services in accordance with requirements of local Authority Having Jurisdiction.
  - .2 Do not disrupt active or energized utilities without approval of the Departmental Representative.
  - .3 Erect and maintain dust proof and weather tight partitions to prevent the spread of dust and fumes to occupied building areas; remove partitions when complete.
  - .4 Demolish parts of existing building to accommodate new construction and remedial work as indicated.
  - .5 At end of each day's work, leave worksite in safe condition.
  - .6 Perform demolition work in a neat and workmanlike manner:
    - .1 Remove any tools or equipment after completion of work, and leave site clean and ready for subsequent renovation work.
    - .2 Repair and restore damages caused as a result of work of this Section to match existing materials and finishes.

**DEMOLITION**

**3.4 CLOSEOUT ACTIVITIES**

- .1 Demolition Waste Disposal: Arrange for legal disposal and remove demolished materials to accredited provincial landfill site or alternative disposal site (recycle centre) except where explicitly noted otherwise for materials being salvaged for re use in new construction.
- .2 Hazardous Substances Disposal: Arrange for disposal of hazardous substances in accordance with requirements of Section 02 82 00.02.

**END OF SECTION**