

Part 1 General**1.1 RELATED REQUIREMENTS**

- .1 Section 02 41 16 – Demolition of Structural Members.

1.2 REFERENCES

- .1 CSA International
 - .1 CSA S350-M1980(R2003), Code of Practice for Safety in Demolition of Structures.
- .2 National Research Council Canada (NRC)
 - .1 National Building Code of Canada 2015 (NBC).
 - .2 National Fire Code of Canada 2015 (NFC).

1.3 ADMINISTRATIVE REQUIREMENTS

- .1 Scheduling:
 - .1 Employ necessary means to meet project time lines without compromising specified minimum rates of material diversion. In event of unforeseen delay notify Departmental Representative in writing.

1.4 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Sort and reuse wastes in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .3 Submit for review and approval by Departmental Representative shoring and underpinning drawings stamped and signed by professional engineer registered or licensed in the Province of Quebec in Canada, showing proposed method

1.5 QUALITY ASSURANCE

- .1 Qualifications: provide adequate workforce training through meetings and demonstrations. Have someone on site with deconstruction experience throughout project for consultation and supervision purposes.
- .2 Regulatory Requirements:
 - .1 Ensure Work is performed in compliance with applicable Provincial/Territorial regulations.
- .3 Site Meetings: conduct project meetings every week.
 - .1 Arrange for site visit with Departmental Representative to examine existing site conditions adjacent to demolition work, prior to start of Work.
 - .2 Ensure key personnel attend.

1.6 ENVIRONMENTAL REQUIREMENTS

- .1 Ensure deconstruction work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air noise pollution.
- .2 Fires and burning of waste or materials is not permitted on site.
- .3 Do not dispose of waste or volatile materials into watercourses, storm or sanitary sewers.
 - .1 Ensure proper disposal procedures in accordance with applicable Provincial/Territorial regulations.
- .4 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers, or onto adjacent properties in accordance with authorities having jurisdiction.
- .5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with authorities having jurisdiction.
- .6 Protect trees, plants and foliage on site and adjacent properties where indicated.
- .7 Prevent extraneous materials from contaminating air beyond deconstruction area, by providing temporary enclosures during Work.
- .8 Cover or wet down dry materials and waste to prevent blowing dust and debris. Control dust on temporary roads.
- .9 Employ reasonable means necessary to protect salvaged materials from vandalism, theft, adverse weather, or inadvertent damage by heavy machinery.
- .10 Use natural lighting to do Work where possible.
 - .1 Shut off lighting except those required for security purposes at end of each day.
- .11 Organize site and workers in manner which promotes efficient flow of materials through disassembly, processing, stockpiling, and removal.

1.7 SITE CONDITIONS

- .1 Check Hazardous Substances Report and take measures needed to preserve environment.
- .2 If material resembling spray or trowel-applied asbestos or other designated substance listed as hazardous be encountered, stop work, take preventative measures, and notify Departmental Representative immediately.
 - .1 Proceed only after receipt of written instructions have been received from Departmental Representative.
- .3 Notify Departmental Representative before disrupting access or services.

1.8 GENERAL INDICATIONS - DEMOLITION

- .1 Scope of demolition work described on plans is for information only and should not be considered restrictive or limiting.
- .2 Examine carefully the drawings of all specialties involved in order to measure the exact scope of work.
- .3 Plans should serve as a guide to the Contractor, which has overall responsibility with specialized contractors, to establish the size and scope of the demolition work required to complement and complete the work of the plans

- .4 Proceed with caution so as not to damage the works to be preserved, to minimize the work of subsequent occasions and never leave unprotected building elements.

1.9 HANDLING AND MATERIAL PROTECTION

- .1 Protect existing structures to remain in place and those to be recovered. If they are damaged, replace or repair them immediately to the satisfaction of the Departmental Representative at no cost.

Part 2 Products

2.1 ÉQUIPEMENT

- .1 Leave equipment and machinery running only while in use, except where extreme temperatures prohibit shutting down.
- .2 Where possible use water efficient wetting equipment/trucks/attachments when minimizing dust.
- .3 Demonstrate that tools are being used in manner which allows for salvage of materials in best condition possible.

Part 3 Execution

3.1 EXAMINATION

- .1 Inspect building 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 Notify and obtain approval of utility companies before starting demolition.
- .4 Disconnect, cap, plug or divert, as required, existing public utilities within the property where they interfere with the execution of the work, in conformity with the requirements of the authorities having jurisdiction. Mark the location of these and previously capped or plugged services on the site and indicate location (horizontal and vertical) on the record drawings. Support, shore up and maintain pipes and conduits encountered.
 - .1 Immediately notify Departmental Representative and utility company concerned in case of damage to any utility or service, designated to remain in place.
 - .2 Immediately notify the Departmental should uncharted utility or service be encountered, and await instruction in writing regarding remedial action.
 - .3 Ensure the alarm system and other services are operational at all times following recommendations of Departmental Representative.

3.2 PREPARATION

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

DEMOLITION - LARGE SCALE WORKS

- .2 Keep noise, dust, and inconvenience to occupants to minimum.
 - .1 Disconnect and cap ventilation ducts to prevent dust propagation throughout the interior system or other sectors of the building.
- .3 Protect building systems, services and equipment.
- .4 Provide temporary dust screens, covers, railings, supports and other protection as required.
- .5 Do Work in accordance with Section 01 35 29.06 - Health and Safety Requirements.

3.3 DEMOLITION WORK / REMOVAL

- .1 Removed materials are property of Departmental Representative.
- .2 Dismantle parts of the existing building where removal is necessary for new construction
- .3 Remove and store materials to be salvaged, in manner to prevent damage.
- .4 Trim edges of partially demolished building elements to tolerances.
- .5 Maintain structural integrity of structure.
- .6 Systematically remove finishes, furnishings, and mechanical and electrical equipment as indicated by Departmental Representative..
- .7 Wherever possible, transfer material assemblies from heights to ground level for easier disassembly. Take appropriate measures to ensure safety.
- .8 Source separate for recycling materials that cannot be salvaged for reuse.
- .9 Remove materials that cannot be salvaged for reuse or recycling and dispose of in accordance with applicable codes at licensed facilities.
- .10 Removal of windows and doors or openings in the exterior walls and roofs will be gradual, so as to be rebuilt on the same day, otherwise, the Contractor shall establish a perfect temporary weather tightness. The Contractor shall be responsible for damage due to inadequate protection. Do not undertake this work in rain, snow or cold weather.
- .11 It is prohibited to sell or burn down demolition materials on site.
- .12 Workers must utilize adequate fall protection and certified harness and belay systems where Departmental Representative considers it necessary.

3.4 HIDDEN OR UNKNOWN CONDITIONS

- .1 The Contractor shall perform all the required checks so as not to cut water supply pipes, gas, electricity, telephone or other similar services. This includes and should not be restrict or limit to consulting:
 - .1 Mechanical, electrical and telephony existing plans, but also the Departmental Representative's plans;
 - .2 Information from maintenance team that have a special knowledge of the area;
 - .3 Suppliers or companies and installations owners, if they are aware of exact location of supply conduits at work site.
 - .4 Should there be a lack of specific information, Contractor must track the conduits with a detector in the affected slabs or walls.

- .5 Should the Contractor neglect to perform all these verifications, he will be accountable for every service sectioning and will be bound to the fixing costs in case of damage, or additional degradation of the building.

3.5 CLEANING AND REPAIR

- .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 recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management
 - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.
- .5 Restore areas and existing works outside areas of demolition to match condition of adjacent, undisturbed areas.

END OF SECTION