

PART 1 GENERAL

1.01 RELATED REQUIREMENTS

- .1 Section 08 03 52.71 – Historic - Wood Window Rehabilitation.
- .2 Section 08 03 80 – Historic - Glazing.
- .3 Section 09 03 91 – Historic - Painting.

1.02 REFERENCES

- .1 Definitions:
 - .1 Demolition: rapid destruction of building following removal of hazardous materials.
 - .2 Hazardous Materials: dangerous substances, dangerous goods, hazardous commodities and hazardous products, may include but not limited to: asbestos PCB's, CFC's, HCFC's poisons, corrosive agents, flammable substances, ammunition, explosives, radioactive substances, or other material that can endanger human health or well-being or environment if handled improperly.
- .2 Reference Standards:
 - .1 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
 - .2 Transport Canada (TC)
 - .1 Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.

1.03 ADMINISTRATIVE REQUIREMENTS

- .1 Site Meetings.
 - .1 Convene pre-demolition meeting one week prior to beginning work of this Section in accordance with Section 01 32 16.06 - Construction Progress Schedule - Critical Path Method (CPM) to:
 - .1 Verify project requirements.
 - .2 Review installation and substrate conditions.
 - .3 Co-ordination with other building subtrades.
 - .4 Review manufacturer's installation instructions and warranty requirements.
 - .2 Arrange for site visit with Departmental Representative to examine existing site conditions adjacent to demolition work, prior to start of Work.
 - .3 Ensure site supervisor project manager subcontractor representatives attend.
 - .4 Departmental Representative will provide written notification of change of meeting schedule established upon contract award 24 hours prior to scheduled meeting.
- .2 Scheduling: meet project time lines without compromising specified minimum rates of material diversion.
 - .1 Notify Departmental Representative in writing when unforeseen delays occur.

1.04 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Shop Drawings:
 - .1 Submit drawings stamped and signed by professional engineer registered or licensed in Province of Ontario, Canada.
 - .2 Submit for approval drawings, diagrams or details showing sequence of demolition work and supporting structures and underpinning, where required by authorities having jurisdiction.
- .3 Hazardous Materials:
 - .1 Provide description of Hazardous Materials and Notification of Filing with proper authorities prior to beginning of Work as required.
- .4 Certificates:
 - .1 Submit copies of certified weigh bills receipts from authorized disposal sites and reuse and recycling facilities for material removed from site upon request of Departmental Representative.
- .5 Photographic Documentation:
 - .1 Submit within three (3) working days after of Notice to Proceed, minimum one hundred (100) photographs prior to commencing work.
 - .1 Where work is performed in groups, submit with the advancement of each group of work.
 - .2 Photographs, showing existing conditions of work areas and materials, taken from both the interior and exterior to include:
 - .1 General views of work areas.
 - .2 Detailed images for each window unit showing condition and appearance of all facets, and any unique conditions.
 - .3 Clearly identify unit number and date of exposure on each photo. Use of an erasable portable whiteboards is recommended.
 - .3 Submit printed and digital format sample to Departmental Representative for review, prior to commencing work.
 - .1 Submit 227 x 184 mm printed photographs in archival mountings, assembled into a binder.

1.05 QUALITY ASSURANCE

- .1 Regulatory Requirements: ensure Work is performed in compliance with applicable Provincial regulations.
- .2 Qualifications: provide adequate workforce training through meetings and demonstrations. Have someone on site with deconstruction experience throughout project for consultation and supervision purposes.

1.06 DELIVERY, STORAGE AND HANDLING

- .1 Store and manage hazardous materials in accordance with Section 02 81 01 - Hazardous Materials.

- .2 Storage and Protection.
 - .1 Store materials salvaged for reuse in locations as directed by Departmental Representative.
 - .2 Maximum permitted duration of material storage on site determined in consultation with Departmental Representative.
 - .3 Protect existing items designated to remain and items designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of Departmental Representative and at no cost to Departmental Representative.
 - .4 Remove and store materials to be salvaged, in manner to prevent damage.
 - .5 Store and protect in accordance with requirements for maximum preservation of material.
 - .6 Handle salvaged materials as new materials.
 - .7 Prevent movement, settlement or damage of adjacent structures, services, walks, paving, trees, landscaping. Provide bracing shoring underpinning as required. Repair damage caused by deconstruction as directed by Departmental Representative.
 - .8 Prevent debris from blocking surface drainage system, elevators, mechanical and electrical systems.
- .3 Packaging Waste Management: remove for reuse and return of pallets, crates, padding, and packaging materials in accordance with Section 01 00 10 – General Instructions, Waste Management.

1.07 SITE CONDITIONS

- .1 Site Environmental Requirements.
 - .1 Ensure that selective demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.
 - .2 Do not dispose of waste of 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 the project.
 - .3 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers or onto adjacent properties.
 - .4 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities as directed by Departmental Representative.
 - .5 Protect trees, plants and foliage on site and adjacent properties where indicated.
- .2 Existing Conditions.
 - .1 Remove contaminated or hazardous materials as defined by authorities having jurisdiction as directed by Departmental Representative from site, prior to start of demolition Work, and dispose of at designated disposal facilities in safe manner in accordance with applicable regulatory requirements and Section 02 81 01 - Hazardous Materials.
 - .2 List of hazardous materials:
 - .1 Asbestos.

- .2 Bird excrement.
- .3 Lead.
- .3 List items to be salvaged for reuse:
 - .1 Wood window sashes.
 - .2 Wood sash stops.
 - .3 Window glazing.
 - .4 Metal door leafs.
 - .5 Hardware and fasteners.

PART 2 PRODUCTS

2.01 EQUIPMENT

- .1 Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.
- .2 Demonstrate that tools are being used in manner which allows for salvage of materials in best condition possible.

PART 3 EXECUTION

3.01 SITE VERIFICATION OF CONDITIONS

- .1 Employ necessary means to assess site conditions and structures to determine quantity and locations of hazardous materials.
- .2 Investigate site and structures to determine dismantling, processing and storage logistics required prior to beginning of Work.
- .3 Develop strategy for deconstruction to facilitate optimum salvage of reusable and recyclable materials.

3.02 PREPARATION

- .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.

3.03 REMOVAL OF HAZARDOUS WASTES

- .1 Remove contaminated or dangerous materials 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.

3.04 REMOVAL OPERATIONS

- .1 Remove items as indicated.
- .2 Do not disturb items designated to remain in place.
- .3 Salvage:

- .1 Dismantle items containing materials for salvage and stockpile salvaged materials at locations as indicated.
- .4 Disposal of Material:
 - .1 Dispose of materials not designated for salvage or reuse on site as instructed by Departmental Representative at authorized facilities.

3.05 DISASSEMBLY

- .1 Materials removed from designated structures for disposal and for salvage are property respectively of Contractor and Departmental Representative.
- .2 Throughout course of deconstruction pay close attention to connections and material assemblies. Employ workmanship procedures which minimize damage to materials and equipment.
- .3 Ensure workers and subcontractors are trained to carry out work in accordance with appropriate deconstruction techniques.
- .4 Project supervisor with previous deconstruction experience must be present on site throughout project.
- .5 Workers must utilize adequate fall protection where necessary.
- .6 Remove and store materials to be salvaged, in manner to prevent damage.
 - .1 Store and protect in accordance with requirements for maximum preservation of material.
 - .2 Handle salvaged materials as new materials.
- .7 Source separate for recycling materials that cannot be salvaged for reuse including wood and metal.
- .8 Remove materials that cannot be salvaged for reuse or recycling and dispose of in accordance with applicable codes at licensed facilities.
- .9 Where existing materials are to be re-used in Work, use special care in removal, handling, storage and re-installation to assure proper function in completed work.

3.06 PROCESSING

- .1 Designate location for processing of materials which eliminates double handling and provides adequate space to maintain efficient material flow.
- .2 Separate materials to ensure best possible condition of salvaged materials.
- .3 Keep processing area clean and free of excess debris.
- .4 Separate processed materials into organized piles for stockpiling. Provide collection area for materials processed. Pile materials on pallets to facilitate transport off-site or to storage areas.

3.07 STOCKPILING

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

- .3 Locate stockpiled materials convenient for use in new construction to eliminate double handling wherever possible.
- .4 Stockpile materials designated for alternate disposal in location which facilitates removal from site and examination by potential end markets, and which does not impede disassembly, processing, or hauling procedures.

3.08 REMOVAL FROM SITE

- .1 Remove stockpiled material as directed by Departmental Representative, when it interferes with operations of project.
- .2 Remove stockpiles of like materials by alternate disposal option once collection of materials is complete.
- .3 Transport material designated for alternate disposal using approved haulers facilities receiving organizations and in accordance with applicable regulations.
- .4 Dispose of materials not designated for alternate disposal in accordance with applicable regulations.

3.09 RESTORATION

- .1 Restore areas and existing works outside areas of demolition to conditions that existed prior to beginning of Work.
- .2 Restore lawn and paving damaged due to use and storage of lifting devices and other equipment used for work.
- .3 Use treatments and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.

3.10 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 00 10 – General Instructions, Cleaning.
 - .1 Leave Work area clean at end of each day.
 - .2 Remove debris, trim surfaces and leave work site clean, upon completion of Work
 - .3 Use cleaning solutions and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 00 10 – General Instructions, Cleaning.

3.11 PROTECTION

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

END OF SECTION