

PART 1 - GENERAL

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| 1.1 | Section Includes | .1 | This section specifies methods and procedures for demolishing, salvaging, recycling and removing items designated to be removed in whole or in part. |
| 1.2 | Methods of Measurement and Payment | .1 | In accordance with Section 01 29 01 – Methods of Measurement and Payment. |
| 1.3 | Related Sections | .1 | Section 01 74 11 – Site Cleaning |
| | | .2 | Section 01 35 43 – Environmental Procedures |
| | | .3 | Section 01 29 01 – Methods of Measurement and Payment |
| 1.4 | References | .1 | Canadian Federal Legislation |
| | | .1 | Canadian Environmental Protection Act (CEPA), 1999, c. 33. |
| | | .2 | Canadian Environmental Assessment Act (CEAA), 1995, c. 97. |
| | | .3 | Transportation of Dangerous Goods Act (TDGA), 1992, c. 34. |
| | | .4 | Motor Vehicle Safety Act (MVSA), 1995. |
| | | .5 | CSA S350-M1980(R2003), Code of Practice for Safety in Demolition of Structures. |
| 1.5 | Action and Informational Submittals | .1 | Prior to beginning work on site, submit detailed Waste Reduction Workplan and indicate: |
| | | .1 | Descriptions and anticipated quantities of materials to be salvaged, reused, recycled and landfilled, |
| | | .2 | Schedule of selective demolition, |
| | | .3 | Location of dumpsters. |
| 1.6 | Waste Management and Disposal | .1 | Separate materials for reuse and recycling. |
| 1.7 | Site Conditions | .1 | Review Hazardous Materials management Plan and take precautions to protect environment. |
| | | .2 | Notify Departmental Representative before disrupting site access or services. |
| | | .3 | Site Environmental Requirements: |
| | | .1 | Ensure that demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution. |
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- .2 Do not dispose of waste volatile materials such as mineral spirits, oil, petroleum based lubricants or toxic cleaning substances into watercourses, storm or sanitary sewers. 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.

PART 2 – EXECUTION

2.1 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.
- .2 Locate and protect utilities.
- .3 Disconnect, cap, plug or divert, as required, existing utilities within the property where they interfere with the execution of work as directed by departmental representative. Mark the locations of these and previously capped or plugged services on the site and indicate the 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 Departmental Representative and utility company should uncharted utility and service be encountered and await instruction in writing regarding remedial action.

2.2 Protection

- .1 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.
 - .2 Prevent movement, settlement or damage to adjacent structure and utilities to remain in place. Provide bracing and shoring as required.
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- .3 Protect site services and equipment.
- .4 Do work in accordance with Section 01 35 33 – Health and Safety Requirements.
- .5 Work shall be in accordance with all applicable Environmental Regulations and Section 01 35 43 Environmental Protection.

- 2.3 Salvage
 - .1 Remove items to be reused, store as directed by Departmental Representative and reinstall where specified.

- 2.4 Site Removals
 - .1 Remove and dispose of concrete, timber, and other debris located in the footprint of the Work.
 - .2 Removal of excavated material:
 - .1 Surfaces of excavated area should be neat, smooth and graded to appropriate construction slopes.
 - .2 Sort excavated materials into appropriate stockpiles.
 - .3 Protect underlying and adjacent granular materials.

- 2.5 Partial Demolition
 - .1 Remove existing damaged gabions as shown on the drawing to allow for installation of new bank erosion protection.
 - .2 Take precautions so that intact gabions and existing structures are not damaged.

- 2.6 Disposal
 - .1 Dispose of removed materials to appropriate recycling or waste facilities, except where specified otherwise, in accordance with authority having jurisdiction.

END OF SECTION

PART 1 - GENERAL

- 1.1 References .1 Canadian Environmental Protection Act, 1999 (CEPA 1999).
- .1 Export and Import of Hazardous Waste Regulations (ETHW Regulations), SOR/2002-200.
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
- .1 Material Safety Data Sheets (MSDS)
- .3 National Fire Code of Canada 2005.
- .4 Transportation of Dangerous Goods Act (TDG Act) 1999, (c.34).
- .5 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2003-400).
- 1.2 Definitions .1 Dangerous Goods: Product, substance, or organism that is specifically listed or meets the hazard criteria established in Transportation of Dangerous Goods Regulations.
- .2 Hazardous Material: Product, substance, or organism that is used for its original purpose; and that is either dangerous goods or a material that may cause adverse impact to the environment or adversely affect health of persons, animals, or plant life when released into the environment.
- .3 Hazardous Waste: Any hazardous material that is no longer used for its original purpose and intended for recycling, treatment, or disposal.
- 1.3 Submittals .1 Submit product data in accordance with Section 01 33 00, Submittal Procedures.
- .2 Submit to Departmental Representative current MSDSs for each hazardous material required prior to bringing it/them onsite.
- .3 Submit a hazardous materials management plan to Departmental Representative that identifies all hazardous materials, their use, their location, personal protective equipment requirements, and disposal arrangements.
- 1.4 Measurement Procedures .1 No separate payment for work identified under Hazardous Materials.
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- 1.5 Storage and Handling
- .1 Coordinate storage of hazardous materials with Departmental Representative and abide by internal requirements for labeling and storage of materials and wastes.
 - .2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.
 - .3 Store and handle flammable and combustible materials in accordance with current National Fire Code of Canada requirements.
 - .4 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene, and naphtha for ready use. Store all flammable and combustible liquids in approved safety cans bearing the Underwriter's Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Departmental Representative.
 - .5 Transfer of flammable and combustible liquids will not be carried out in the vicinity of open flames or any type of heat-producing devices.
 - .6 Flammable liquids having a flash point below 38 degrees Celsius, such as naphtha or gasoline will not be used as solvents or cleaning agents.
 - .7 Store flammable and combustible waste liquids for disposal in approved containers located in a safe, ventilated area. Keep quantities to an absolute minimum.
 - .8 Observe smoking regulations at all times. Smoking is prohibited in any area where hazardous materials are stored, used, or handled.
 - .9 Abide by the following storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids and 5 litres for liquids:
 - .1 Store hazardous materials and wastes in closed and sealed containers which are in good condition.
 - .2 Label containers of hazardous materials and wastes in accordance with WHMIS.
 - .3 Store hazardous materials and wastes in containers compatible with that material or waste.
 - .4 Ensure that different hazardous materials or hazardous wastes are not mixed.
 - .5 Store hazardous materials and wastes in a secure storage area with controlled access.
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- .6 Segregate incompatible materials and wastes.
 - .7 Maintain a clear egress from storage area.
 - .8 Store hazardous materials and wastes in a manner and location which will prevent them from spilling into the environment.
 - .9 Have appropriate emergency spill response equipment available near the storage area, including personal protective equipment.
 - .10 Maintain an inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.

 - .10 Ensure personnel are trained in accordance with WHMIS requirements.

 - .11 Report spills or accidents involving toxic wastes immediately to Departmental Representative and to appropriate regulatory authorities within 24 hours of incident. Take all reasonable measures to contain the release while ensuring health and safety is protected.

 - 1.6 Transportation
 - .1 Transport hazardous materials and wastes in accordance with federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.

 - .2 If exporting hazardous waste to another country, ensure compliance with federal Export and Import of Hazardous Waste Regulations.

 - .3 If hazardous waste is generated onsite:
 - .1 Coordinate transportation/disposal with Departmental Representative.
 - .2 Ensure compliance with applicable municipal, provincial and federal laws and regulations for generators of hazardous waste.
 - .3 Use licensed carrier authorized by provincial authorities to accept subject material.
 - .4 Prior to shipping material obtain written notice from intended hazardous waste treatment or disposal facility that it will accept material and that it is licensed to accept this material.
 - .5 Label containers with legible, visible safety marks as prescribed by federal and provincial regulations.
 - .6 Ensure that trained personnel handle, offer for transport, or transport dangerous goods.
 - .7 Provide photocopy of shipping documents and waste manifests to Departmental Representative.
 - .8 Track receipt of completed manifest from consignee after
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shipping dangerous goods. Provide a photocopy of completed manifest to Departmental Representative.

- .9 Report discharge, emission, or escape of hazardous materials immediately to Departmental Representative and appropriate provincial authority. Take reasonable measures to control release.

PART 2 - PRODUCTS

2.1 Materials

- .1 Only bring onsite the quantity of hazardous materials required to perform Work.
- .2 Maintain MSDSs in proximity to where the materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

PART 3 – EXECUTION

3.1 Disposal

- .1 Dispose of hazardous waste materials off site in accordance with applicable federal and provincial acts, regulations, and guidelines.
- .2 Recycle hazardous wastes for which there is an approved recycling process available.
- .3 Send hazardous wastes only to authorized hazardous waste disposal or treatment facilities.
- .4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.
- .5 Disposal of hazardous materials in waterways, storm or sanitary sewers, the environment in general, or in municipal solid waste landfills is prohibited.
- .6 Dispose of hazardous wastes in a timely fashion in accordance with applicable provincial regulations.

END OF SECTION
