

**Part 1            General**

**1.1                REFERENCES**

- .1        Canadian Standards Association (CSA International)
  - .1        CSA S350-M1980(R1998), Code of Practice for Safety in Demolition of Structures.

**1.2                SUBMITTALS**

- .1        Submit shop drawings in accordance with Sections 01 33 00 - Submittal Procedures.
- .2        Before proceeding with demolition of load bearing walls or of other walls and where required by authority having jurisdiction submit for review by Consultant shoring and underpinning drawings prepared by qualified professional engineer registered or licensed in the Province of NB, showing proposed method.

**1.3                SITE CONDITIONS**

- .1        Review "Designated Substance Report" and take precautions to protect environment.
- .2        Should material resembling spray or trowel-applied asbestos or other designated substance listed as hazardous be encountered, stop work, take preventative measures, and notify Consultant immediately.
  - .1        Do not proceed until written instructions have been received from Consultant.
- .3        Notify Consultant before disrupting building access or services.

**Part 2            Products**

**2.1                NOT USED**

- .1        Not used.

**Part 3            Execution**

**3.1                PREPARATION**

- .1        Inspect building 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 Consultant and utility company concerned in case of damage to any utility or service, designated to remain in place.
- .2 Immediately notify the Engineer should uncharted utility or service be encountered, and await instruction in writing regarding remedial action.

### **3.2 PROTECTION**

- .1 Prevent movement, settlement, or damage to adjacent structures, utilities, 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.
- .5 Do Work in accordance with Section 01 35 29.06 - Health and Safety Requirements.

### **3.3 SALVAGE**

- .1 Refer to demolition drawings and specifications for items to be salvaged for reuse.
- .2 Remove items to be reused, store as directed by Consultant, and re-install under appropriate section of specification.

### **3.4 DEMOLITION**

- .1 Remove parts of existing building to permit new construction. Sort materials into appropriate piles for reuse and recycling (where applicable).
- .2 Trim edges of partially demolished building elements to tolerances as defined by Consultant to suit future use.

### **3.5 DISPOSAL**

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

**END OF SECTION**

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**Part 1            General**

**1.1                REFERENCES**

- .1        Canadian Environmental Protection Act, 1999 (CEPA 1999).
  - .1        Export and Import of Hazardous Waste Regulations (SOR/2002-300).
- .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 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 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 that is intended for recycling, treatment or disposal.
- .4        Workplace Hazardous Materials Information System (WHMIS): Canada-wide system designed to give employers and workers information about hazardous materials used in workplace. Under WHMIS, information on hazardous materials is provided on container labels, material safety data sheets (MSDS), and worker education programs. WHMIS is put into effect by combination of federal and provincial laws.

**1.3                SUBMITTALS**

- .1        Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2        Product Data:
  - .1        Submit product data in accordance with Section 01 33 00 - Submittal Procedures.
    - .1        Submit to Consultant current Material Safety Data Sheet (MSDS) for each hazardous material required prior to bringing hazardous material on site.
    - .2        Submit hazardous materials management plan to Consultant that identifies hazardous materials, their use, their location, personal protective equipment requirements, and disposal arrangements.

#### **1.4 DELIVERY, STORAGE, AND HANDLING**

- .1 Co-ordinate storage of hazardous materials with Consultant and abide by internal requirements for labelling 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.
  - .1 Store flammable and combustible liquids in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval.
  - .2 Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Consultant.
- .5 Transfer of flammable and combustible liquids is prohibited within buildings.
- .6 Do not transfer of flammable and combustible liquids in vicinity of open flames or heat-producing devices.
- .7 Do not use flammable liquids having flash point below 38 degrees C, such as naphtha or gasoline as solvents or cleaning agents.
- .8 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated area. Keep quantities to minimum.
- .9 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.
- .10 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.
  - .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 Segregate incompatible materials and wastes.
  - .5 Ensure that different hazardous materials or hazardous wastes are not mixed.
  - .6 Store hazardous materials and wastes in secure storage area with controlled access.
  - .7 Maintain clear egress from storage area.
  - .8 Store hazardous materials and wastes in location that will prevent them from spilling into environment.
  - .9 Have appropriate emergency spill response equipment available near storage area, including personal protective equipment.

- .10 Maintain inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.
- .11 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.
- .12 Report spills or accidents immediately to Departmental Representative and Consultant. Submit a written spill report to Departmental Representative and Consultant within 24 hours of incident.

## **1.5 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 on site:
  - .1 Coordinate transportation and disposal with Departmental Representative Consultant.
  - .2 Ensure compliance with applicable federal, provincial and municipal 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 Consultant.
  - .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide a photocopy of completed manifest to Departmental Representative Consultant.
  - .9 Report discharge, emission, or escape of hazardous materials immediately to Consultant and appropriate provincial authority. Take reasonable measures to control release.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Only bring on site quantity of hazardous materials required to perform work.

- .2 Maintain MSDS in proximity to where 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 in accordance with applicable federal and provincial acts, regulations, and guidelines.
- .2 Recycle hazardous wastes for which there is approved, cost effective recycling process available.
- .3 Send hazardous wastes 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, or in municipal solid waste landfills is prohibited.
- .6 Dispose of hazardous wastes in timely fashion in accordance with applicable provincial regulations.
- .7 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.
- .8 Identify and evaluate recycling and reclamation options as alternatives to land disposal, such as:
  - .1 Hazardous wastes recycled in manner constituting disposal.
  - .2 Hazardous waste burned for energy recovery.
  - .3 Lead-acid battery recycling.
  - .4 Hazardous wastes with economically recoverable precious metals.

**END OF SECTION**