

1 GENERAL

1.1 WORK INCLUDED

- .1 To complete demolition of existing site structures and surfaces as shown, specified or required, and summarized but not restricted to:
 - .1 Removal of asphalt paving, concrete, walks and curbs or other surfaces and structures as shown on Drawings and as specified.
 - .2 Salvage of existing site signage and other features indicated.
 - .3 Removal of existing storm sewer, sanitary sewer, waterlines and other site services as shown on Drawings and as specified.
- .2 Protection of existing vegetation to remain.
- .3 Supply and installation of perimeter safety fencing. Note: Some perimeter fencing will already be in place on the property. Work of this Contract will include any and all additional fencing requirements.

1.2 RELATED WORK

- .1 Section 01 35 43 Environmental Procedures
- .2 Section 31 10 00 Clearing and Grubbing
- .3 Section 31 23 11 Excavation, Trenching and Backfilling
- .4 Site Services Drawings and Specifications

1.3 REFERENCES

- .1 Canadian Standards Association (CSA).
 - .1 CSA S350-M1980 (R2003), Code of Practice for Safety in Demolition of Structures.

1.4 EXISTING CONDITIONS

- .1 Items to be demolished and removed are to be based on their condition on date that Tender is accepted.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21.
- .2 Place materials defined as hazardous or toxic waste in designated containers.
- .3 Seal emptied containers and store safely for disposal.
- .4 Use sealers, form release and stripping agents that are non-toxic, biodegradable and have zero or low VOC's.

1.6 LEED DOCUMENTATION

- .1 Submit a LEED material submittal form as specified in Section 01 35 21 - LEED Requirements, to identify recycled and/or regional content of materials for inclusion by the Owner/Consultant in a submission for LEED certification.
- .2 Conform to the requirements outlined in Section 01 74 21 - Construction Waste Management.

1.7 STORAGE AND PROTECTION

- .1 Prevent movement, settlement or damage of adjacent structures and services. Provide bracing, shoring as required. Repair damage caused by demolition as directed by the Departmental Representative.
- .2 Support affected structures and, if safety of structure being demolished or adjacent structures or services appears to be endangered, cease operations and notify the Departmental Representative.
- .3 Keep noise, dust and inconvenience to occupants to a minimum.
- .4 Fires and burning of waste or materials is not permitted on site.
- .5 Do not bury waste or materials on site.
- .6 Cover or wet down dry materials and waste to prevent blowing dust and debris.

- .7 Protect trees, plants and foliage on site and adjacent properties where indicated.

1.8 REGULATORY REQUIREMENTS

- .1 Performed all work in compliance with applicable provincial and municipal regulations.

1.9 SITE ACCESS

- .1 Maintain unobstructed access along public roadways and sidewalks throughout work of project. Coordinate any required temporary closures with Departmental Representative with minimum 48 hours notice.

1.10 DEFINITIONS

- .1 Grubbing: Excavation and disposal of stumps, roots, boulders, and rock fragments to not less than a specified depth below original ground surface.

1.11 PROTECTION

- .1 Protect existing items designated to remain and materials designated for reuse. In event of damage, immediately replace such items or make repairs to approval of Departmental Representative at no additional cost to Owner.
- .2 Prevent damage to fencing, trees, landscaping, natural features, bench marks, existing buildings, existing pavement, utility lines, site appurtenances, etc. which are to remain. Make good any damage.
- .3 Do not damage root systems of existing trees, plants and shrubs which are to remain, by piling of surplus soil or debris over them, or by cutting when clearing.

1.12 SAFETY

- .1 Contractor to undertake any and all measures to ensure safety of the public from work of the Contract, including but not limited: supply and installation of barricades required and traffic control measures.
- .2 Observe construction safety measures of Provincial Government, including but not limited to the Occupational

Health and Safety Act, Workplace Health, Safety and Compensation Commission provided that in any case of conflict or discrepancy the more stringent requirement shall apply.

- .3 At the end of each day's work, leave work in safe and stable condition.

2 PRODUCTS

2.1 FENCE BARRICADES:

- .1 For Site Protection: minimum 1850mm high temporary chainlink fencing secured to ground as required by Regulations and to approval of Departmental Representative.

2.2 BARRICADES FOR TREE PROTECTION

- .1 For select mature trees in excess of 200mm dia.: Concrete jersey barricades - 1800mm long and 1000mm height.
- .2 For Tree and Shrub Protection: Standard plastic snow fencing, 1200mm height, or equivalent, with Rolled steel Tee-section fence posts.

3 EXECUTION

3.1 GENERAL

- .1 Provide detailed schedule of all removals for review and approval by Departmental Representative.
- .2 Inspect site and verify with Departmental Representative items designated for removal and items to be preserved.
- .3 Locate and protect existing utility lines and services. Preserve in operating condition all active utilities traversing site.
- .4 Notify utility companies and obtain approval before starting demolition.
- .5 Notify authorities and obtain all proper permits before commencing work.

3.2 PROTECTION OF VEGETATION TO REMAIN

- .1 Before commencing Work, ensure in examination of the site that all possible factors required for tree preservation are investigated.
- .2 Obtain written approval of the Departmental Representative prior to any removal of trees.
- .3 Do not damage root systems within the dripline of existing trees, plants, and shrubs which are to remain, by piling of surplus soil or debris over them, or by cutting when clearing.
- .4 Protect existing plant material which is to remain, and is located close to construction areas, to approval of Departmental Representative by:
 - .1 Selective placement of precast concrete jersey barricades and/or
 - .2 Encircling snow fence barricades erected on posts in a substantial manner a minimum of 3000mm from trunk of tree to approval of Departmental Representative.
- .5 Keep heavy equipment away from trees to remain. Take any necessary steps to prevent excessive soil compaction around existing plant material to remain. Cordon off areas near mature trees to remain and alert equipment operators to minimize compaction damage.
- .6 Immediately repair damage to trees, structures, buried and above-ground services, bench marks, and survey monuments should it occur as a result of Work of this Section. Completely cover wounds of over 25mm in diameter suffered by trees and shrubs with wound paint.
- .7 Apply approved tree paint to cuts or scars suffered by vegetation designated to remain.
- .8 Do not disturb soil area within the dripline of any tree to remain without approval of Departmental Representative.
- .9 Cut off unsound branches and cut down dangerous trees overhanging area cleared as directed by the Departmental Representative.

- .10 Cut damaged roots of trees to remain cleanly with sharp tools retaining as much root as possible.
 - .1 Do not leave roots of trees to remain reposed to air. Cover with minimum 150mm of topsoil and water thoroughly.

3.3 SITEWORK REMOVALS - GENERAL

- .1 Remove items indicated and do not disturb or damage adjacent items designated to remain in place. Repair damaged items at no extra cost to Contract.
- .2 Dispose of materials not designated for reuse in Work, off site.
- .3 When removing pavements:
 - .1 Square up adjacent surfaces to remain in place by saw cutting or other approved method.
 - .2 For asphalt pavement: Square up and create keyways adjacent surfaces to remain in place by saw cutting and milling as per the Section 32 12 16 - Asphalt Paving.
 - .3 Protect adjacent joints.
 - .4 Remove underlying granular materials unless temporary, or permanent paving is to be installed.
- .4 Deliver and unload salvaged material in organized manner to location as directed by Departmental Representative.

3.4 DEMOLITION

- .1 At end of each day's work, leave work in safe condition so that no part is in danger of topping or falling. Protect interiors and parts not to be demolished from exterior elements at all times.
- .2 Demolish to minimize dusting. Keep materials wetted as directed by Departmental Representative.
- .3 Do not sell or burn materials on site.
- .4 Environmental: Remove contaminated or dangerous materials as 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.

- .5 Stockpiling of demolition debris shall not be permitted.
- .6 Removal of temporary stockpiled material will be required, if it is deemed by the Departmental Representative, to interfere with operations of the Owner.
- .7 Pay all costs and fees associated with the removal from site and disposal.

3.5 GRUBBING

- .1 Grub out material to not less than 450mm below original ground surface.
- .2 Do not disturb soil area within the dripline of any tree to remain without approval of Departmental Representative.
- .3 Grub out visible rock fragments and boulders, greater than 150mm in greatest diameter.

3.6 BACKFILL

- .1 Backfill in accordance with Section 31 23 11 Excavation, Trenching and Backfilling

3.7 RESTORATION

- .1 Reinstate areas and existing works outside areas of demolition to conditions that existed prior to commencement of work.

3.8 CLEANUP

- .1 Upon completion of work, remove debris, trim surfaces and leave work site clean.

END OF SECTION