

1. General

1.1 Section Includes

- 1.1.1 This Section specifies the requirements for Clearing and Grubbing operations required throughout the Site as indicated in the Contract Documents.

1.2 Related Sections

- 1.2.1 Section 01 74 21 – Construction/Demolition Waste Management and Disposal.
- 1.2.2 Section 31 00 00 – Earthwork and Related Work.
- 1.2.3 Section 32 91 19 – Topsoil Placement and Grading.

1.3 References

- 1.3.1 Forestry Act, Department of Natural Resources, Government of Newfoundland and Labrador.

1.4 Definitions

1.4.1 Clearing:

- Shall consist of the cutting and removal or shredding of trees and brush and the removal, piling and disposal of all trees, brush and logs from within areas designated on the Contract Documents and as directed by the Departmental Representative. Trees are to be cut within 200 mm of the ground surface. This Section does not cover clearing that would be required within areas selected as borrow pits and quarries.

1.4.2 Grubbing:

- Shall consist of the removal and disposal of all stumps, roots, surface boulders, embedded logs, debris, matted roots and other vegetation from areas designated in the Contract Documents. Grubbing shall be completed in areas of excavation and embankment stabilization and sloping as shown in the Contract Documents or as directed by the Departmental Representative. Grubbing shall also include areas where trees, stumps and brush shall be cut even with the ground in order to not disturb the natural matting as directed by the Departmental Representative. This close cutting will be paid for as grubbing. This Section does not include grubbing that would be required within areas selected as borrow pits and quarries.

1.5 Regulatory Permits

- 1.5.1 The Contractor shall obtain all necessary permits from Regulatory Agencies and Government Departments, both Provincial and Federal as applicable, prior to the commencement of any operations covered under this Section.

- 1.5.2 Additional supplementary permits, if required, shall also be obtained by the Contractor prior to the commencement of any operations under this section.
- 1.5.3 The contractor shall submit 2 copies of each permit prior to the commencement of any operations under this section.
- 1.5.4 Under no circumstances is burning operations permitted as a method of disposal for any areas of this site.

1.6 Submittals

- 1.6.1 All submittals in accordance with Section 01 33 00 – Submittal Procedures.
- 1.6.2 Submit all required permits as per this document at least 2 weeks prior to the start of construction.

1.7 Waste Management and Disposal

- 1.7.1 Separate waste materials for reuse and recycling.
- 1.7.2 Divert excess materials from landfill to site approved by Departmental Representative.

2. Products

2.1 Topsoil Material

- 2.1.1 All topsoil stripping and stockpiling shall be completed in accordance with Section – 31 00 00, Earthwork and Related Work.
- 2.1.2 Excavated topsoil material: free from debris, roots, wood, scrap material, vegetable matter or other refuse to be removed and stored at a location approved by the Departmental Representative for reuse elsewhere on the project.

3. Execution

3.1 Temporary Erosion and Sedimentation Control

- 3.1.1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent lands and watercourses according to the sediment and erosion control plan, specific to this site, or requirements of authorities having jurisdiction, whichever is more stringent.
- 3.1.2 Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- 3.1.3 Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.2 Clearing Operations

- 3.2.1 Areas in which clearing is to be completed shall first be staked on the ground by the Contractor as per the Contract Documents or as otherwise directed by the Departmental Representative.
- 3.2.2 No trees shall be cut down outside the limits indicated on the Contract Documents with the exception of a tree or trees considered unsafe in their present condition by the Departmental Representative. These trees shall be clearly marked by the Contractor.
- 3.2.3 All merchantable timber is to be harvested and disposed of in a manner consistent with the permit requirement as per the Department of Natural Resources. Merchantable timber characteristics and guidelines as per the Department of Natural Resources standards.
- 3.2.4 The Contractor shall dispose of all brush, underbrush and otherwise un-merchantable material by utilizing shredder/chipper machinery. All shredded or chipped material to be disposed of in an approved waste disposal area provided by the Owner unless otherwise directed by the Departmental Representative.
- 3.2.5 The Contractor shall take all necessary precautions to protect the surrounding timber outside the contract limits during these operations and shall assume all liability for any claims which may arise from any damages incurred.

3.3 Grubbing Operations

- 3.3.1 Areas in which grubbing is to be completed shall first be staked on the ground by the Contractor as per the Contract Documents or as otherwise directed by the Departmental Representative.
- 3.3.2 Grubbing shall be disposed of off-site daily to disposal areas acceptable to authority having jurisdiction.

4. Measurement and Basis for Payment

4.1 Measurement for Payment

- 4.1.1 Measurement for Payment for Clearing and Grubbing will be made in hectares (ha) of the actual horizontal area Cleared and Grubbed as per the areas pre-agreed upon by the Contractor and the Departmental Representative.
- 4.1.2 Clearing beyond the limits pre-agreed upon with the Departmental Representative will not be measured for payment.
- 4.1.3 For payment purposes the depth of grubbing is defined as being 300 mm.

4.2 Basis for Payment

- 4.2.1 Payment at the Contract Unit Price as entered in the Schedule of Quantities and Prices is deemed to be payment in full for work carried out under this Section and shall include all costs associated with labour, equipment, materials, permits, haulage and disposal.