1.0 GENERAL

- 1.1 Related Work
 - 1.1.1 Section 02210 Site Grading Rough
 - 1.1.2 Section 02212 Planting Soil and Finish Grading
- 1.2 Quality Assurance
 - 1.2.1 The Contractor must have experience at performing this type and scale of work and be willing to provide proof of this experience.
- 1.3 Scope of Work
 - 1.3.1 The Contractor shall furnish all labour, materials, equipment, and services necessary to complete the work as specified herein and as shown on the drawings. Areas to be sodded shall be as indicated on the landscape plans which accompany the specifications as directed on the site by the Consultant.
- 1.4 Delivery and Storage
 - 1.4.1 Sod is to be cut by approved methods in accordance with recommendations of the CNTA.
 - 1.4.2 Roll or fold sod prior to lifting, in such a manner as to prevent tearing or breaking.
 - 1.4.3 Deliver sod to site within 24 hours of being lifted and lay sod within 36 hours of being lifted.
 - 1.4.4 During dry weather protect sod from drying and water sod as necessary to ensure its vitality and prevent the dropping of soil during handling. Dry sod will be rejected.
 - 1.4.5 Deliver fertilizer in waterproof bags showing weight, chemical analysis and name of manufacturer. Store in weatherproof building to prevent loss of effectiveness.
- 1.5 Inspection
 - 1.5.1 Make all materials available for inspection, upon arrival on the site, or at source of supply when requested.
 - 1.5.2 Submit name of sod supplier.
 - 1.5.3 Give Consultant 48 hours notice when materials are available for inspection.
 - 1.5.4 Obtain approval by Consultant of finished topsoil surface before sodding.
 - 1.5.5 Consultant reserves the right to reject sod, after it has been installed, if sod does not conform to the specifications and/or drawings.
 - 1.5.6 Remove all rejected materials immediately from the site.

- 1.5.7 Notify Consultant as soon as sodding has been completed. All sodding work is to be inspected upon completion.
- 1.6 Maintenance and Acceptance
 - 1.6.1 Maintain sodded areas from the time of installation to expiration of the maintenance period according to the following schedule:
 - .1 Mowing at regular intervals to maintain height of between 40 and 60 mm. Do not cut more than 1/3 of the grass height at any one mowing. Trim and clip edges.
 - .2 Water sodded areas in sufficient quantities and at required frequency to maintain sub-soil immediately under sod continuously moist for a depth of 100 mm.
 - .3 Control weeds when required and/or directed. Use only herbicides approved by Agriculture Canada, and only in accordance with the manufacturer's recommendations. Comply with all herbicide control regulations of locality in which operation is to be carried out. Apply only during calm weather when air temperature is above 10°C. Make good all damage resulting from the use of herbicides at no extra cost.
 - .4 Make good any erosion that results from faulty workmanship and/or material at no extra cost.
 - .5 Replace any dead, damaged, slipping, or washed out sod with new sod during the maintenance period. Proper root growth shall be the responsibility of the Contractor.
 - .6 Roll sodded areas where necessary, to remove depressions and irregularities.
 - .7 Provide adequate protection of the sodded areas against damage. Remove protection after lawn areas have been accepted.
 - .8 Sodded areas will be accepted at final inspection provided that:
 - .1 Sodded areas are properly established.
 - .2 Sod is free of bare and dead spots and without weeds.
 - .3 No surface soil is visible when grass has been cut to a height of 40 mm.
 - .4 Sodded areas have been cut a minimum of two times.

2.0 PRODUCTS

- 2.1 Materials
 - 2.1.1 Sod: All sod shall be Certified No. 1 grade cultivated turf grass, grown in accordance with CNTA classifications. At time of sale it must have a strong, fibrous root system and be free of stone and burned or bare spots. It shall be composed of a minimum of 60% Kentucky Bluegrass (Poa pratensis). Field or pasture sod shall not be accepted. The sod shall not contain more than ten (10) broadleaf weeds per 45 square meters and shall be free of disease. The sod shall be of sufficient density that no surface soil

will be visible when mowed to a height of 40 mm. The sod shall be cut a minimum of 25 mm in thickness and in no cases shall it exceed 40 mm in thickness. All sod supplied shall be mowed to a height of 50 mm prior to delivery.

- 2.1.2 Fertilizer: shall be high in phosphorus (eg. 11-48-0). Exact formulation ratio and application rates to be as directed by Consultant. Fertilizer shall be uniform in composition, dry and free-flowing, and shall be delivered to the site in the original unopened containers, each bearing the manufacturer's guaranteed analysis. Any fertilizers which become caked or otherwise unsuitable for use, will not be accepted.
- 2.1.3 Water: shall be potable and free of minerals which may be detrimental to plant growth.
- 2.1.4 Wooden Pegs: (when required) shall be 25 x 25 x 230 mm in length. Ensure pegs are long enough to securely anchor sod.

3.0 EXECUTION

- 3.1 Preparation
 - 3.1.1 Contractor is responsible for checking the locations of all underground services, and is responsible for any damages his actions occur.
 - 3.1.2 Fine grade subgrade, eliminating uneven areas and low spots.
 - 3.1.3 Legally dispose from property all foreign materials, undesirable plants and their roots, stones and debris. Do not bury foreign material beneath areas to be landscaped.
 - 3.1.4 Legally dispose of subsoil that has been contaminated with oil or gasoline.
 - 3.1.5 During the final grading operation, and directly before sodding, apply fertilizer at the following rates:
 - .1 16-20-0 at 300 kg/ha $(.03 kg/m^2)$
 - .2 11-48-0 at 400 kg/ha (.04kg/m²)
 - 3.1.6 The above rates are subject to adjustment upon receipt of a topsoil analysis report. The fertilizer shall be evenly spread and incorporated into the top 50 mm of topsoil.

3.2 Installation

- 3.2.1 Sod shall be laid with tight butt joints. Do not leave any open joints or overlap adjacent pieces of sod. Ensure that adjacent rows are laid in a staggered sequence.
- 3.2.2 Ensure finished sod surface is flush with adjoining grass areas, pavement or top surface of curbs.
- 3.2.3 On slopes steeper than 4:1 lay sod across the face of the slope and peg each row at intervals of not more than 600 mm. Drive pegs flush with surface of sod.

- 3.2.4 In swales, lay sod perpendicular to direction of swale, unless otherwise noted on drawings.
- 3.2.5 A full row of sod not less than 450 mm in width shall be laid along the perimeter of the sodded area, parallel to the planted areas or walkways. The sod shall be edged to form neat openings at the base of trees and the edge of shrub bed areas.
- 3.2.6 Immediately after installation of sod, water area with sufficient amounts to saturate sod and underlying topsoil to a minimum depth of 100 mm.
- 3.2.7 After sod and soil have dried sufficiently to prevent damage, roll area with equipment as approved by Consultant to ensure good bond between sod and soil and to remove minor irregularities. Clean up and remove from site all waste and extra sod at the end of each day or as directed.