

**PART 1 - GENERAL****1.1 Related Work**

- |    |                            |               |
|----|----------------------------|---------------|
| .1 | Site Grading               | Section 02210 |
| .2 | Topsoil and Finish Grading | Section 02760 |
| .3 | Sodding                    | Section 02938 |

**1.2 Site Conditions**

- .1 Locate underground and surface utility lines and buried objects.

**1.3 Protection**

- .1 Prevent damage to fencing, trees, landscaping, natural features, bench marks, existing buildings, existing pavement, surface or underground utility lines which are to remain. Make good any damage.

**PART 2 - MATERIALS****2.1 Materials**

- .1 Fill: Selected material from excavation, grading, or other sources, approved by Contract Administrator for use intended, unfrozen and free from rocks larger than 50mm (2"), cinders, ashes, sods, refuse or other deleterious materials.
- .2 Use approved clay fill to expand tee surfaces and create tee surround contouring to elevations indicated on drawings and approved by the Contract Administrator.
- .3 Medium Sand: Non-calcareous, sub-rounded to rounded shape. Particle size distribution:

<u>Particle Size</u>	<u>% Allowable</u>
>3.4 mm	0% optimum
2.0 - 3.4 mm	less than 3%
1.0 - 2.0 mm	less than 10% of the total particles in this range, including a maximum of 3% fine gravel (preferably none)
0.25 - 1.0 mm	60% minimum of the particles may fall within this range
0.15 - 0.25 mm	less than 20% of the particles may fall within this range
0.05 - 0.15 mm	less than 5%
Silt	less than 5%
Clay	less than 3%

- .4 Reed/Sedge Peat Humus: Well decomposed. pH between 5.0 and 7.5 with a dry weight of 160 - 290 kg. per cubic metre (10 to 18 lbs. per cubic foot). Minimum 50% organic content.
- .5 Topsoil: Sandy Loam
- | <u>Type</u>    | <u>Acceptable Range</u> |
|----------------|-------------------------|
| Clay           | 10% to 20%              |
| Silt           | 10% to 20%              |
| Sand           | 40% to 60%              |
| Organic Matter | 10% to 20%              |
- .6 Tee Sod: Dwarf Bluegrass, mixture grown on mineral soil, suitable to the Contract Administrator. Refer to Section 02938.
- .7 Fertilizer: C.I.L. Turfstarter 16-32-6 (or approved alternate).
- .8 Protect approved materials from contamination.

## 2.2 Materials Testing

- .1 Provide the Contract Administrator with two (2) samples, each weighing 500 gm (1.1 lbs.) of promised tee mix for testing for particle size composition, bulk density and infiltration rate.
- .2 Testing will be conducted to determine:
- | <u>Test</u>               | <u>Acceptable Range</u>   |
|---------------------------|---|
| .1 Conductivity           | moderate salinity   |
| .2 pH                     | 5.5 to 7.5  |
| .3 Particle size analysis | (refer to 2.1.3 above)  |
| .4 Fertility analysis     | (determine amendment rate)  |
| .5 Bulk density           | 1.0 gm to 1.4 gm/cu. cm (1.25 to 1.3 gm/cm <sup>3</sup> is ideal) |
- .3 Provide samples a minimum of three (3) weeks prior to start of work or as directed by the Contract Administrator.
- .4 The Contract Administrator will determine acceptability of materials and conduct continuous testing on site during construction.

### **PART 3 - EXECUTION**

#### **3.1 Grading**

- .1 Fine grade subgrade at 0.5%, eliminating uneven areas and low spots. Remove debris, roots, branches, stones in excess of 25 mm (1") diameter. Remove subsoil that has been contaminated. Refer to layout drawings for dimensions and orientation of subgrade slope.

#### **3.2 Tee Mix Preparation**

- .1 Thoroughly mix medium sand, sedge peat and topsoil at a ratio of 50% sand, 25% organic matter, 25% topsoil (2:1:1 ratio by volume).
- .2 Deliver only off site mixed to site as required, coordinate with other work to prevent on-site storage.
- .3 Protect mixed soil from segregating or contamination while in transport.

#### **3.3 Placing Tee Mix**

- .1 Do not spread tee mix until the Contract Administrator has approved subgrade contour.
- .2 Place tee mix material onto tee and spread evenly over tee.
- .3 Apply tee mix to a compacted depth of 150 mm (6"). Compact using spreading machinery, traveling in a circular or oval pattern.
- .4 Place material to approximate finish grades as directed by the Contract Administrator. (Note: hand level all ridges).
- .5 Do not disturb approved subgrade while placing material.
- .6 Feather out soil mix on tee surrounds at a maximum slope of 1:10.

#### **3.4 Application of Fertilizer**

- .1 Spread C.I.L. Turfstarter fertilizer (or approved alternate) over entire tee surface at a rate of 3.7 kg. (8 lbs.) per 100 sq. m. (1,075 sq. ft.).
- .2 Till into top 75 mm (3") with low velocity rotary tiller.

#### **3.5 Finish Grading and Compaction**

- .1 Fine grade entire tee area to 0.5% slope unless otherwise noted on drawings or as directed by the Contract Administrator. Eliminate rough spots and low areas to ensure positive drainage. Tees less than 6 m (20') wide may be graded level.

- .2 Roll surface with minimum 45 kg. (100 lb.) roller, minimum 900 mm (3') wide, to compact and retain surface.
- .3 Hand level any ridges left by roller.
- .4 Leave surface smooth, uniform and firm against foot printing.
- .5 Following the Contract Administrator's approval of finished contours and compaction, thoroughly soak entire tee profile to enhance compaction.
- .6 Eliminate remaining low spots or undulations.
- .7 Repeat as necessary to produce a firm, evenly contoured surface prior to sodding.

### **3.6 Sodding**

- .1 Do not sod until surface contour has been approved by the Contract Administrator.
- .2 Lightly hand rake tee surface to prepare sod bed.
- .3 Place sod immediately after topsoil installation in order to prevent erosion and contamination of tee mix. Water as required.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.1 Method of Measurement**

- .1 Tees shall be measured on a lump sum basis for work completed in accordance with this specification, acceptable to the Consultant.

### **4.2 Basis of Payment**

- .1 Tees shall be paid for at the Contract Unit Price per tee for the "Items of Work" listed below, which price shall be payment in full for supplying and placing all materials herein described and all other items incidental to the work included in the specification.

Items of Work:

- i) Tee Construction