

PART E
SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. GENERAL

E1.1 These Specifications shall apply to the Work.

E2. GOODS

E2.1 The Contractor shall supply and deliver soils, as per the top dressing mixture listed in Clause E5. and in accordance with the requirements hereinafter specified.

E2.2 Item No. 1 - Soil required shall consist of a screened clay-textured or loam-textured dark topsoil, a fertile, friable material neither of heavy clay nor of very light sandy nature containing by volume, a minimum of 4% for clay loams and 2% for sandy loams to a maximum 25% organic matter (peat, rotted manure or composted material) and capable of sustaining vigorous plant growth. Topsoil shall be free of subsoil contamination, roots, stones over 25 mm in diameter or subsoil clay lumps over 25 mm in diameter and other extraneous matter. Topsoil shall not contain quack grass rhizomes, Canada thistle roots or other noxious weeds. Salinity rating shall be less than 2.5 mmhos/cm. The pH range shall be between 6.0 - 8.0. Soil shall not be blow dirt taken from wind erosion sites and shall not be taken from fields abandoned to corn production where such soils may contain soil incorporated herbicides with lasting residual effects such as eradican and atrazine.

E2.3 Item No. 2 - Soil mixture for flower beds, planters, gardens, rock gardens and top dressing shall be a fertile, friable, well mixed and screened combination of:

- (i) 1/3 clay-textured or clay loam-textured dark topsoil;
- (ii) 1/3 sand-textured or sand loam-textured topsoil; and
- (iii) 1/3 well rotted manure.

E2.3.1 Soil shall be free of subsoil contamination, roots, stones or clay lumps over 25 mm in diameter and other extraneous matter. Salinity rating shall be less than 1.5mmhos/cm. The pH range shall be between 6.0 - 8.0. Soil shall not contain quack grass rhizomes, Canada Thistle roots or other noxious weeds.

E2.4 Item No. 3 - Topdressing mix containing 60% Sand and 40% well decomposed peat moss, as specified in clause E5.1.

E2.5 Item No. 4 - Potting Soil shall be a fertile, friable, well mixed and screened combination of:

- (i) 1/4 clay-textured or clay loam-textured dark topsoil;
- (ii) 1/4 coarse sand (0.5 - 1.0 mm particle diameter);
- (iii) 1/4 well rotted manure; and
- (iv) 1/4 well decomposed peat moss.

E2.5.1 Potting soil shall be free of subsoil contamination, roots, stones or clay lumps over 25 mm in diameter and other extraneous matter. Salinity rating shall be less than 1.5mmhos/cm. The pH range shall be between 6.0 - 8.0. Potting soil shall not contain quack grass rhizomes, Canada Thistle roots or other noxious weeds.

E3. DELIVERY

E3.1 Goods shall be delivered and/or picked up on an "as required" basis during the term of the Contract, f.o.b. destination, freight prepaid, to various locations within the City.

E3.1.1 Goods shall be delivered within twenty-four (24) Hours of the placing of an order, except where otherwise agreed at the time of ordering.

E3.1.2 The City will order soil in lots of not less than 11 cubic metres (15 cubic yards) per order.

E3.2 Goods shall be delivered between 7:30 a.m. and 5:30 p.m. on Business Days.

E3.3 The Contractor shall off-load goods as directed at the delivery location.

E4. ACCEPTANCE

E4.1 The acceptance of and payment for any soil supplied under this Bid Opportunity shall be conditional that the soil shall be in strict accordance in all respects with the specifications as described herein. Any or all soils that do not meet the specification shall be removed from the place of unloading at the Contractor's expense, at no cost to the City of Winnipeg, and no payment shall be made for such soil.

E5. TOP DRESSING

E5.1 Topdressing mix shall consist of sixty (60%) sand and forty (40%) well decomposed peat moss meeting the following requirements:

E5.1.1 Sand: top dressing mix shall contain sixty percent (60%) sand, meeting the requirements shown in the particle size distribution chart below;

E5.1.2 Peat Moss: top dressing mix shall contain forty (40%) well decomposed peat moss containing no more than twenty-five (25%) burned ash as determined by loss on ignition (ASTM D 2974-87 Method D); and

E5.1.3 Final Screening of Top dressing mix: final topdressing mix shall be screened to a particle size of 9 mm or less.

PARTICLE SIZE DISTRIBUTION OF SAND FOR TOP DRESSING MIX

Name	Particle Diameter	Recommendation (by weight)
Fine Gravel	2.0 - 3.4 mm	Not more than 10% of the total particles in this range, including a maximum of 3% fine gravel (preferably none)
Very coarse sand	1.0 - 2.0 mm	
Coarse sand	0.5 - 1.0 mm	Minimum of 60% of the particles must fall in this range
Medium sand	0.25 - 0.50 mm	
Fine sand	0.15 - 0.25 mm	Not more than 20% of the particles may fall within this range
Very Fine Sand	0.05 - 0.15 mm	Not more than 5%
Silt	0.002 - 0.05 mm	Not more than 5%
Clay	less than 0.002 mm	Not more than 3%
Total Fines	Very fine sand + silt + clay	Less than or equal to 10%