

1.0 GENERAL

1.1 Scope

- 1.1.1 This specification is to be used for restoration of existing lawns behind sidewalks or on boulevards when completing roadway repairs or restoration. Not to be used for parks or open spaces. For parks and other open spaces refer to Open Space Specifications.
- 1.1.2 Following the completion of all related construction activities, backfilling, topsoil placement and seeding of areas as shown in the plans or as directed by the Engineer or his representative shall be completed.
- 1.1.3 Reuse of existing stripped topsoil shall not be permitted.

1.2 Related Sections

- 1.2.1 Section 2190 – Grading of Boulevards
- 1.2.2 Section 2212 – Planting Soil and Finish Grading
- 1.2.3 Section 2282 – Chemical Vegetation Control
- 1.2.4 Section 2934 - Hydraulic Seed Mulch
- 1.2.5 Section 2930 – Seeding - Irrigated
- 1.2.6 Section 2931 – Seeding – Native

2.0 PRODUCTS

2.1 Grass Seed Mixtures

- 2.1.1 Use a grass seed mixture or grass sod equivalent to the one growing on site or as follows:
 - .1 Mix No. 3 in Section 2930 – Seeding – Irrigated
 - .2 Mix No. 7 in Section 2930 – Seeding - Irrigated
- 2.1.2 An alternate mixture may be substituted with the written permission of the Engineer, in areas where regular maintenance is doubtful.
- 2.1.3 All seed specified as Canada Certified No. 1 Grade or Common No. 1 Grade shall be as per Government of Canada Seeds Act Grade Standards.
- 2.1.4 All seed must be obtained from a recognized seed house or supplier.

2.2 Planting Soil

- 2.2.1 Planting soil (for seeded or sodded areas): as per Section 2212 Planting Soil and Finish Grading

2.3 Peat Moss

- 2.3.1 Refer to Section 2212 Planting Soil and Finish Grading

2.4 Fertilizer

2.4.1 Fertilizer shall be 16-32-6 controlled release, sulphur coated urea (SCU) or ammonia sulphate fertilizer.

2.5 Hydraulic Seed Mulch

2.5.1 In accordance with Section 2934 Hydraulic Seed Mulch.

2.6 Grass Sodding

2.6.1 In accordance with Section 2938 Sodding.

2.7 Delivery and Storage

2.7.1 All materials are to be delivered to the site and stored in an appropriate manner.

2.7.2 All grass seed shall be stored in a dry weatherproof place and shall be protected from damage by heat, moisture, rodents or other causes until time of seeding. Deliver grass seed in original containers taking care that all labels and identification remain legible and intact.

2.7.3 Topsoil, soil mixes or manure shall not be spread or otherwise handled while in a frozen or muddy condition.

2.7.4 All fertilizers shall be stored in a dry, weatherproof place to prevent a loss of effectiveness. Deliver fertilizer in original containers taking care that all labels and identification remain legible and intact.

2.8 Submittals

2.8.1 Submit 500 g sample of each seed mixture intended for use. Submit samples in clean containers with label identifying project, seed sample and lot number, supplier and date. Seed mix sample shall match tested seed lots.

2.8.2 Certificate(s) of analysis of each seed sample. Seed analysis report shall be current (i.e. within last 6 months) and show specie and variety of seed, date and results of all tests.

2.8.3 All original seed labels and seed bags at completion of seeding to confirm amount of seed used on site.

2.8.4 Submit other required information and documents as requested or specified.

3.0 EXECUTION

3.1 Procedures

3.1.1 Determining the priority of specific job sites will be the responsibility of the Contractor or his representative and shall be made in consultation with the Engineer with respect to logistical concerns and cost effectiveness.

- 3.1.2 The area to be repaired will be as shown in the plans or as directed by the Engineer.
- 3.2 Preparation
 - 3.2.1 Protect from damage sidewalks, trees, utilities, underground sprinklers, fences, cars and all public and private property.
 - 3.2.2 Loosen and fine grade subgrade, eliminating uneven and low areas by rototilling and raking or other suitable means.
 - 3.2.3 Remove from property all deleterious materials, undesirable plants and their roots, stones and debris. Do not bury deleterious materials beneath the area to be landscaped.
 - 3.2.4 A minimum of 185 mm of planting soil is to be placed on the graded subgrade for sodded areas and 200 mm of planting soil on seeded areas.
 - 3.2.5 The finished grade shall be smooth, loose textured and free of stones, roots, branches or other foreign materials, and flush with the curb or back of walk and blend into the contours of the existing lawn in an aesthetically pleasing manner. Positive drainage toward the street must be achieved or maintained.
 - 3.2.6 All soil and debris shall be cleaned up daily and sidewalks should be cleaned immediately and left "broom clean" daily.
- 3.3 Seeding
 - 3.3.1 Seeding shall be done manually or mechanically at a specified rate.
 - 3.3.2 Incorporate the seed immediately by raking or other suitable means and roll the seeded areas immediately afterwards with a light turf roller.
 - 3.3.3 Seeding of unirrigated areas shall be completed between May 1st and August 30th or, in the fall if approved by the Engineer.
 - 3.3.4 Seeding shall be done during calm weather, on ground which is free of frost, snow and water.
 - 3.3.5 The homeowner/occupant shall be notified in writing upon completion of seeding.
 - 3.3.6 The area shall be given a final cleaning removing all soil and debris and leaving sidewalks free of soil or other materials.
 - 3.3.7 The proper germination of all specified grass species is the responsibility of the Contractor.
- 3.4 Fertilizer
 - 3.4.1 Fertilizer shall be spread at a rate of 2.5 kg per 100 m² or as recommended by soils test.

- 3.5 Maintenance
 - 3.5.1 During the warranty period, the Contractor shall monitor seeded areas and repair all areas that fail to develop into a healthy, vigorous growing stand of grass. Areas that are dead, unhealthy or in unsatisfactory growing condition, or that do not meet the requirements of the specifications during the warranty period shall be corrected.
 - 3.5.2 Provide weed control in newly seeded areas. Mow, cultivate, or physically remove weeds. Use only approved chemical methods once seed areas are fully established.
 - 3.5.3 Cut lawn grass at regular intervals and maintain minimum height of 70 mm. Cut forage or native type grass no lower than 125 mm and only when necessary or directed by Engineer. Do not cut more than 30% of grass blade at any one mowing. Remove excessive clippings from site.
 - 3.5.4 Repair seeded areas which show root growth failure, deterioration, bare or thin spots, or which have been damaged by any means or cause, including replacement operations. Overseed areas that show inadequate or improper sowing of seed from brillion or other methods.
 - 3.5.5 Correct any erosion and settlement that results from faulty workmanship and/or material. Restore areas by placing topsoil as necessary and spreading new seed. Repair ruts resulting from maintenance equipment and personnel. Maintain a uniformly smooth seed bed surface.
 - 3.5.6 Apply second application of slow release granular turf fertilizer five to six weeks after seeding. Spread evenly at rate of 2.5 kg per 100 m² and water in well after application. Postpone fertilizing until spring if application will occur after August 15th.
- 3.6 Maintenance Inspections:
 - 3.6.1 During progress of the maintenance period, the Contractor shall conduct site inspections every 60 days or less to determine whether ongoing maintenance activities have been performed in accordance with specifications.
 - 3.6.2 Maintain and complete a maintenance log for each day of maintenance activity throughout maintenance period.
 - 3.6.3 Contractor shall ensure maintenance log data is true and accurate. Site supervisor must complete and sign maintenance log.
 - 3.6.4 Record all maintenance activities including date/time of activities, quantity of water applied on site, materials used and quantity during maintenance of seeded areas, location where activities were carried out, number of employees and name of supervisor on site.
 - 3.6.5 The Contractor shall ensure that the seeded areas are properly maintained

until such time as the turf is properly established as specified.

- 3.6.6 Maintenance shall be the responsibility of the Contractor until final acceptance by the Engineer and rectification of any deficiencies.

4.0 ACCEPTANCE

4.1 Initial Inspection

- 4.1.1 Shall occur within 48 hours of completion of work and will be concerned with workmanship and grades.
- 4.1.2 The Engineer shall prepare an inspection report confirming acceptance of the work.

4.2 Final Inspection and Acceptance

- 4.2.1 Engineer may accept work at end of warranty period provided:
- .1 Seeding or sodding work meets requirements of specifications.
 - .2 Seeded areas are properly, uniformly, well established and reasonably free of noxious weeds as determined by the following:
 - .1 The areas shall be mowed or cut to a height of 70 mm.
 - .2 The Contractor and the Engineer will select and measure at least three representative one metre square areas per site.
 - .3 All noxious weeds including foxtail barley shall be removed from the representative area.
 - .3 Bare areas shall be estimated by measuring at least two, 1 m x 1 m plots in the presence of the Engineer. The total bare areas after weeds are removed shall not exceed a total of 10% of the total area.
 - .3 Sodded grass areas are free of dead, unhealthy or deteriorated areas; bare, burnt or thin spots; and rutted or eroded areas.
 - .4 Maintenance logs have been provided.
 - .6 Seeded grass areas have been fertilized as specified.
 - .7 Seeded and sodded grass areas are clean and free of all debris, litter and other foreign matter.
- 4.2.2 Contractor shall use specified materials to re-establish seed installations that do not comply with requirements for acceptance and continue with specified maintenance/establishment until deemed acceptable by Engineer.