

## **SECTION 603**

### **SEEDING**

#### **I. GENERAL**

##### **1.1 DESCRIPTION OF WORK**

The Contractor shall furnish all labor, supervision, material (except as herein provided), tools, equipment, supplies, and services; and, shall perform all Work necessary for providing and applying fertilizer, lime, seed and mulch in the quantities specified for areas designated on the Drawings or selected by the Owner.

##### **1.2 SUBMITTALS**

Prior to use or placement, the Contractor shall submit certifications in the form of affidavits from the material suppliers, together with supporting data, attesting that the composition of lime, fertilizer, seed and mulch meet specification requirements.

#### **II. EXECUTION**

##### **2.1 PROCEDURES**

- A. Seeding operations shall not be performed when the ground is frozen or when soil or weather conditions would prevent proper soil preparation and subsequent operations. When hydroseeding is performed, nozzles or sprays shall not be directed toward the ground in a manner that will cause erosion or runoff. The Contractor shall notify the Owner at least 48 hours prior to beginning seeding operations.
- B. Lime shall be uniformly applied to areas to be seeded at the rate of 2 tons per acre (unless specified otherwise by soil tests). Any approved method may be used.
- C. After lime has been applied, areas to be seeded shall be prepared as follows: Slopes 3:1 or flatter shall be loosened to a depth of approximately 3-inches by disking, harrowing, or other approved methods. Loosening of soil on excavated slopes steeper than 3:1 will not be required except to eliminate hard or crusted surfaces. Shoulders and embankment slopes steeper than 3:1 shall be loosened to a depth of approximately 1-inch. Clods, loose stones, and other foreign material larger than 1-inch in any dimension shall be removed and properly disposed of as approved by the Owner. Gullies, washes, and disturbed areas that develop subsequent to final stabilization shall be repaired before they are seeded.
- D. When dry fertilizer is used, it shall be applied uniformly to the seeding areas at the time of seeding at the rate of 600 pounds of 15-30-15 fertilizer, or an equivalent 1-2-1 fertilizer, per acre (unless specified otherwise by soil tests). The method of application shall be approved by the Owner before fertilizer is applied.
- E. When in a liquid form or mixed with water, fertilizer shall provide the same value of nutrients per acre as specified for dry fertilizer. Fertilizer applied in liquid form shall be agitated during application.

- F. Seed shall be uniformly applied on prepared areas with fertilizer and mulch and shall conform to the following:
1. For hydroseeding, seed shall be put in the mixture slowly to result in a uniform mixture before application. Hydroseeding mixtures shall be constantly agitated from the time of mixing until application on the seed bed and used within 8 hours from the beginning of mixing.
  2. Overseeding shall consist of applying seed and fertilizer on areas prepared as directed by the Owner.
- G. Mulch shall be applied within 48 hours after completion of the seeding operation. When straw mulch is used, it shall be applied on seeded areas at the rate of approximately 2 tons per acre. When wood cellulose fibre mulch is used, it shall be uniformly applied at the rate of approximately 1,500 pounds (net dry weight) per acre. Mulch will not be required on overseeded areas.
- H. Straw mulch shall be applied to a uniform thickness in such a manner that not more than 10 percent of the soil surface will be exposed. Wet straw shall not be used. Straw mulch shall be anchored to the seeded surface by spraying with wood cellulose fiber mulch at the rate of 750 pounds per acre; spraying with an emulsified asphalt at the rate of at least 100 gallons per ton of mulch in a manner that will protect adjacent property and pedestrian traffic areas; disking or punching the mulch partially into the soil; using approved netting; or, using other materials or methods approved by the Owner. The Contractor may use more than one method on the same project.

## 2.2 ESTABLISHMENT AND MAINTENANCE

- A. Areas not showing signs of grass growth shall immediately be reseeded. Protection shall be provided against traffic or other use by erecting barricades immediately after treatment is completed, and by placing warning signs, as directed. The Contractor shall assume responsibility for proper care of seeded areas while grass is becoming established for three months after completion of treatment on the entire project, unless desired cover is established in a shorter period of time. When any portion of the surface becomes gullied or otherwise damaged or treatment is destroyed, the affected portion shall be repaired to re-establish condition and grade of soil and treatment prior to injury, as directed. Repair work required because of faulty operations or negligence on the part of the Contractor shall be performed without additional cost.
- B. Mulched areas shall be maintained until all work or designated portions thereof have been completed and accepted. Any damage shall be repaired, and mulch material that has been removed by wind or other causes shall be replaced and secured.

## 2.3 CLEANUP AND PROTECTION

- A. The Contractor shall keep pavements clean and work area in an orderly condition.
- B. The Contractor shall protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades and trespassers; and, shall maintain protection during installation and maintenance periods.

### **III. MEASUREMENT FOR PAYMENT**

- A. Lime, fertilizer, seed and mulch shall be measured in acres or square yards as indicated on the Bid form, complete-in-place.
- B. Incidental items are identified in Section 109.1.1 and also include the following:  
Maintaining seeded areas until final acceptance.

End of Section