

Section 27.0

Knoxville, Tennessee March 2022

TECHNICAL SPECIFICATIONS FOR SEEDING

1. <u>Description</u>

Seeding shall consist of placing seed commercial fertilizer, agricultural limestone, and mulch material as specified on prepared ground in accordance with the Plans and these Specifications. All newly graded earthen areas that are not to be paved, stabilized, or sodded shall be seeded unless otherwise indicated on the Plans or as directed by the Engineer.

2. Materials

Materials shall conform to Subsection 801.02 of TDOTSS, January 1, 2021 and all Supplemental Specifications thereto pertaining issued prior to the advertisement for this contract.

3. <u>Construction Requirements</u>

- (a) General The Contractor shall notify the Engineer at least 48 hours in advance of the time he intends to begin sowing seed and shall not proceed with such work until permission to do so has been granted by the Engineer. Before starting seeding operations on any area, final dressing and placing of topsoil shall have been completed in accordance with the applicable Specifications.
- (b) Preparation for Seeding The seed bed shall be prepared in the following manner and sequence:
 - 1) Each area to be seeded shall be scarified, disked, harrowed, raked or otherwise worked until it has been loosened and pulverized to a depth of one inch and brought to the lines and grades indicated on the Plans or directed by the Engineer.
 - This operation shall be performed only when the soil is in a tillable and workable condition. Fertilizer, at the rate of not less than 20 pounds of grade 10-10-10 or equivalent, per 1,000 square feet, and agricultural limestone at the rate of not less than 100 pounds per 1,000 square feet, shall be uniformly incorporated in the soil for a depth of approximately ½ inch. Fertilizer need not be incorporated in the soil as specified above when mixed with seed in water and applied with power sprayer equipment.
- (c) Time for Seeding The seeding dates for each seed group shall be as shown in Subsection 802.14 of the TDOTSS, January 1, 2021 and all Supplemental Specifications thereto pertaining issued prior to the advertisement for this contract.
- (d) Seeding Seed of the specified group shall be sown as soon as preparation of the seed bed has been completed. It shall be sown uniformly by means of a rotary seeder, hydraulic equipment, or other satisfactory means. Seed shall be sown at the rate of 2.5 pounds per 1,000 square feet for Groups "A," "B," and "C," 0.6 pounds

per 1,000 square feet for Group "B1" and at a rate of 1.5 per 1,000 square feet for all other groups. Group "C" seed and seed of legumes when sown alone shall be inoculated before sowing in accordance with the recommendations of the manufacturer of the inoculant and as directed by the Engineer.

No seeding shall be done during windy weather or when the ground surface is frozen, wet or otherwise nontillable.

No seeding shall be performed during December and January unless otherwise permitted.

(e) Mulching - When the mulching material is hay or straw, it shall be spread evenly over the seeded area at an approximate rate of 100 pounds per 1,000 square feet for straw and 150 pounds per 1,000 square feet for hay immediately following the seeding operations. This rate may be varied by the Engineer depending on the texture and condition of the mulch material and the characteristics of the area seeded.

Hay or straw mulch shall be held in place by emulsified asphalt applied at the approximate rate of 6 gallons per 1,000 square feet as required to hold the mulch in place. The Contractor shall cover bridges, guardrails, signs and appurtenances if the mulch binder is applied in such a way that it would come in contact with or discolor the structures.

(f) Maintenance - All seeded areas shall be cared for properly to the Engineer's satisfaction until acceptance of the work. Areas which have been previously seeded and mulched in accordance with this Section but which have been damaged or failed to successfully establish an acceptable stand of grasses or legumes shall be repaired as directed by the Engineer. All material and labor required to repair seeded areas made necessary by negligence on a part of the Contractor will be furnished by the Contractor at no cost.

After an acceptable stand of grass has been attained, seeded areas shall be uniformly topdressed with not less than 10 pounds of fertilizer of grade 10-10-10, or equivalent, per 1,000 square feet at approximately six month intervals, unless otherwise specified or directed.

(g) Final Cleaning Up - After the completion of seeding, the area shall be cleaned of all rubbish, excess material, and any other items that will mar the appearance of the projects as in accordance with the General Specifications.

4. Method of Measurement

The area of seeding to be measured for payment shall be the number of square yards seeded in accordance with these Specifications and accepted by the Engineer.

5. Basis of Payment

Seeding will be paid for at the Contract unit price per square yard for Seeding, complete in place, which payment shall be full compensation for preparing the seed bed; for furnishing and placing all materials including fertilizer, agricultural limestone, seed, water, mulch, mulch binder, and inoculants if specified; and for maintenance of the area after the materials have been placed.