

DIVISION 9

RESTORATION OF GRADED AND DISTURBED AREAS

9-1 DESCRIPTION:

The Contractor as specified on the Drawings shall furnish all labor, materials and equipment required to complete the work described herein in strict accordance with the Specifications. When all construction-related activities are completed, upland permanent seeding shall be accomplished by the contractor on all graded and disturbed areas in accordance with these Specifications. The responsibility of the Contractor is to accomplish the complete seeding operation within 14 days after completion of the fill and grading work. Once the finished upland seeding operation has been approved by the Owners or Owners' Representative, the Owners shall be responsible for initial watering and subsequent maintenance of the seeded area. The Contractor will not be required to re-seed any areas which do not show the proper density of vegetation. The Contractor shall submit to the Owners or Owners' Representative, evidence of the type of seed used.

9-2 FINISHED SEEDING:

- A. Site Preparation: Grade as necessary and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring.
- B. Seedbed Preparation: Apply 4,360 lbs. per acre or 100 pounds per 1,000 sq. ft. of pulverized dolomitic limestone and 1,100 to 1,300 pounds. per acre or 25 to 30 pounds per 1,000 sq. ft. of 10-10-10 or equivalent fertilizer. The lime and fertilizer shall be worked into the top two inches of topsoil by raking.
- C. Seeding:
 - 1) Apply 6 lbs. per 1,000 sq. ft. of Kentucky #31 tall fescue.
 - 2) Apply seed uniformly with cyclone seeder, drill, cultipacker, seeder or hydroseeder (slurry includes seed, fertilizer, lime, cellulose fibers with binder and water) preferably on a firm, moist seedbed. Maximum seed depth shall be ¼" in clayey soil and not more than ½" in sandy soil, when using other than hydroseeder method.
 - 3) Where feasible, except when a cultipacker seeder is used, the seedbed shall be firmed following seeding operations with a light roller.
- D. Mulching:
 - 1) Mulch Materials: Mulch materials shall be unweathered, unchopped small grain straw (preferably wheat) at the rate of 1-1/2 to 2 tons per acre, or 70 to 90 lbs. per 1,000 sq. ft. Oat straw may contain viable seeds which may provide serious competition for grass and legume seedlings unless clipped and will therefore not be allowed.
 - 2) Spreading: Spread uniformly by hand or mechanically so that approximately 85% of the soil surface will be covered.
 - 3) Anchoring: Mulch anchoring shall be accomplished immediately after placement of mulch to minimize loss by wind and water. The chemical binder, "Terra Tack MP" (without fiber) as manufactured by Grass Growers of Plainfield, New Jersey,

or an approved equal product shall be applied to all mulched areas at the rate of 100 pounds of dry chemical material to one (1) acre. The dry chemical material shall be mixed with water prior to application, at the rate of one pound per two (2) gallons. Mixing procedures and method of application shall be in accordance with the manufactures latest technical bulletins.

- E. Planting Season: Temporary seedbed preparation and seeding shall be accomplished between February 1 and April 30 and August 15 and November 1 for the rye and between May 1 and August 15 for millet within 14 days after the completion of the fill, grading and topsoiling operations, except when the ground is frozen. When the ground is frozen, the seeding shall be postponed until seedbed preparation can be accomplished as described.

9-3 TEMPORARY SEEDING (If Necessary)

- A. Site Preparation: Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding and mulch application and anchoring.
- B. Seedbed Preparation: Apply 15 pounds of 10-10-10 or equivalent fertilizer and 100 pounds of dolomitic limestone per 1,000 sq. ft. The fertilizer and limestone shall be worked into the top two inches of earth by raking.
- C. Seeding:
 - 1. Apply 0.92 pounds per 1,000 sq. ft. of rye or millet.
 - 2. Apply seed uniformly with cyclone seeder, drill, cultipacker seeder or hydro-seeder (slurry includes seed, fertilizer, lime, cellulose fibers with binder and water) preferably on a firm, moist seedbed.
- D. Mulching and Mulching Anchoring: Mulching and mulch anchoring shall be accomplished in accordance with Division 9-2D of these Specifications.
- E. Planting Season: Seedbed preparation and seeding shall be accomplished at any time of the year, within 14 days after the completion of the fill and grading operations, except when the ground is frozen. When the ground is frozen, the seeding shall be postponed until seedbed preparation can be accomplished as described.

9-4 MEASUREMENT

No measurement for payment for this item of work will be made since the cost shall be included in the lump sum base bid.

-END OF SECTION-