

SECTION 8

WATER MAIN CONSTRUCTION

SEEDING AND MULCHING

1. SCOPE: This section shall include the furnishing of all labor, materials, equipment and incidental items to seed and establish a turf on all areas disturbed by the pipe laying operation.

All materials shall be of the best commercial quality available for the purposes specified.

2. SEEDING: Seed shall be furnished and sowed at the rates per acre in accordance with the South Carolina Department of Transportation seed schedule.

3. LIME: The quality of lime and all operations in connection with the furnishing of this material shall comply with the requirements of the South Carolina Department of Agriculture.

During the handling and storing, the lime shall be cared for in such a manner that it will be protected against hardening and caking. Any hardened or caked lime shall be pulverized to its original condition before being used.

Lime shall be applied at the rate of 4000 lbs. per acre and mixed thoroughly with the topsoil as the seed bed is prepared.

4. FERTILIZER: Applying Fertilizer - Fertilizer shall be distributed at the rate to provide 1,000 pounds per acre (Complete mix fertilizer - 10 parts nitrogen, 10 parts phosphoric acid and 10 parts potash), after topsoil is returned to the area and thoroughly mixed with the topsoil immediately before planting.

5. ESTABLISHING TURF: The establishment period shall continue for six (6) months from the date of seeding. The Contractor shall be responsible for maintenance, protection, repairing and resulting re-seeding and re-fertilization for six (6) months after initial seeding.

6. MULCHING: Where indicated on the plans or as described in encroachment agreements, mulch shall be applied as described herein.

A. Materials:

1. Mulch Material: Acceptable mulch shall be the materials listed below or any approved locally available material that is similar to those specified. Low grade, musty, spoiled, partially rotted hay, straw, or other materials unfit for animal consumption will be acceptable. Mulch materials, which contain matured seed of species, which would volunteer and be detrimental to the proposed over-seeding or to surrounding farmland, will not be acceptable. Straw or other mulch material which is fresh and/or excessively brittle,

or which is in such an advance stage of decomposition as to smother or retard the planted grass, will not be acceptable.

2. Straw: Straw shall be the threshed plant residue of oats, wheat, barley, rye or rice from which grain has been removed as approved by the District Inspector.

3. Asphalt Binder: Asphalt binder material shall conform to the requirements of AASHTO M140, Type SS-1, or RS-1 as appropriate.

B. Mulching: Before spreading mulch, all large clods, stumps, stones, brush, roots, and other foreign material shall be removed from the area to be mulched. Mulch shall be applied immediately after seeding. The spreading of the mulch shall be by hand methods, blower, or other mechanical methods, provided a uniform covering is obtained.

Mulch material shall be furnished, hauled and evenly applied on the area shown on the plans or designated by the Engineer. Straw shall be spread over the surface to a uniform thickness at the rate of three (3) tons per acre to provide a loose depth of not less than 1-1/2 inches nor more than three (3) inches. Mulch may be blown on the slopes and the use of cutters in the equipment for this purpose will be permitted to the extent that at least 95% of the mulch in place on the slope shall be 6 inches or more in length. When mulches applied by the blowing method are cut, the loose depth in place shall be not less than one (1) inch or more than two (2) inches.

C. Securing Mulch: The mulch shall be held in place by asphalt binder. Where mulches have been secured by either of the asphalt binder methods, it will not be permissible to walk on the slopes after the binder has been applied.

D. Care and Repair:

1. The Contractor shall care for the mulched area until final acceptance of the project.

2. The Contractor shall be required to, at its expense, repair or replace any mulching that is defective or becomes damaged until the project is finally accepted.

3. If the "Asphalt Spray" method is used, all mulched surfaces shall be sprayed with asphalt binder material so that the surface has a uniform appearance. The binder shall be uniformly applied to the mulch at the rate of approximately 8.0 gallons per 1,000 square feet, or as directed by the District Inspector, with a minimum of 6.0 gallons and a maximum of 10 gallons per 1,000 square feet, depending on the type of mulch and the effectiveness of the binder securing it. Bituminous binder material may be sprayed on the mulched slope areas from either the top or the bottom of the slope. An approved spray nozzle shall be used. The nozzle shall be operated at a distance of not less than four (4) feet from the surface of the mulch and uniform distribution of the bituminous material shall be required.

A pump or an air compressor of adequate capacity shall be used to ensure uniform distribution of the bituminous material.

7. MOWING: No mowing will be required.