

SECTION 02921

SEEDING AND MULCHING

1 DESCRIPTION

The work shall consist of seeding and mulching the road shoulders and ditches behind the edge of pavement.

2 GRADING

Rough grading shall be done as soon as all excavation required in the area has been backfilled. The necessary earthwork shall be accomplished to bring the existing ground to the desired finish elevations shown on the Contract Drawings or otherwise directed.

Fine grading shall consist of shaping the final contours for drainage and removing all clumps of earth and waste construction material. It shall also include thorough loosening of the soil to a depth of 6 inches by plowing, disking, harrowing or other approved methods until the area is acceptable for subsequent seeding operations.

3 TOPSOIL

After the subgrade has been fine graded to the satisfaction of the Engineer, topsoil shall be spread over the area to a uniform depth and density. The soil shall be uniformly compacted by a light roller to a depth not less than 4 inches, unless other depths are shown on the plans. When finished, the surface shall conform to the finished grade shown or required and shall have a smooth pulverized surface at the time of seeding. Any irregularities shall be corrected before the fertilizer or seed is placed. Any settlement or displacement of the topsoil shall be restored to the established lines and grades at the Contractor's own expense.

Topsoil removed from the excavations, which is approved by the Engineer for use, shall be placed in the locations, and to the depth shown, specified or directed. In the event the topsoil removed during excavation is unsatisfactory or is inadequate to cover the requested areas, the Contractor shall furnish the required quantity of satisfactory topsoil from approved sources off the site. Such topsoil shall pass a 1/4 inch screen. Topsoil shall not be delivered or placed in a frozen muddy condition.

4 FERTILIZER

The quality of fertilizer and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Fertilizer Law and regulations adopted by the North Carolina Board of Agriculture.

Fertilizer shall be 8-8-8 grade (8 parts nitrogen, 8 parts phosphoric acid, 8 parts potash). Upon written approval of the Engineers, a different grade of fertilizer may be used, provided the rate of application is adjusted to provide the same amounts of plant food.

5 LIME

The quality of lime and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Lime Law and regulations adopted by the North Carolina Board 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 agriculture grade ground dolomitic limestone. It shall not contain less than 85% of the calcium and magnesium carbonates and shall be of such fineness that at least 90% will pass a No. 10 sieve and at least 50% will pass a No. 100 sieve.

6 APPLICATION RATES

The rates of application of seed, fertilizer and limestone shall be as stated below. All rates are in pounds per acre.

1,200 lbs Fertilizer

2,000 lbs Lime

100 lbs Kentucky 31

50 lbs Rye (Winter only)

30 lbs Hulled Bermuda

10 lbs Centipede

7 SEEDING

Immediately following preparation of the seed bed, the seed, as outlined, shall be uniformly applied by a mechanical spreader. The seed shall be raked lightly into the surface and rolled with a light hand roller weighing not more than 100 lbs. per foot of width. Seeded areas shall be sprinkled with a fine spray in such a manner as not to wash out the seed. Seeding shall be done on a still day and only with the approval of the Engineer.

The Contractor shall be responsible for establishing a good lawn over the entire area seeded and shall maintain these areas in an approved condition until final acceptance of the contract.

8 MULCHING

Straw mulch shall be threshed straw of oats, rye or wheat free from matured seed of obnoxious weeds or other species which would grow and be detrimental to the specified grass. It shall be spread uniformly at a rate of two tons per acre in a continuous blanket over the areas specified.

Thickness of the covering shall be adequate to hold the soil but sufficiently loose and open to favor the development of grass. Pine straw mulch shall consist of fresh longleaf pine straw free from matured seed of obnoxious weeds or other species which would grow and be detrimental to the surrounding area. Area shall be mulched at a rate of 400 bales per acre with a maximum payment width not to exceed the clearing limits.

9 METHOD OF MEASUREMENT

Seeding and mulching will be measured in acres as measured in the field by the Engineer. Seeding and mulching will be measured to the nearest one-tenth of an acre.

10 PAYMENT

Payment for seeding and mulching will be made at the unit price per acre bid for seeding and mulching measured as described above. Payment shall be full compensation for materials, labor, equipment, tools, maintenance and other incidentals necessary to complete the work.