

SECTION 02920 - GRASSING

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SECTION 02920 - GRASSING

PART 1 - GENERAL

1.01 Section Includes:

- A. This specification covers the site preparation, furnishing and applying agricultural limestone, fertilizer, seed, and mulch, labor and equipment necessary for grassing unimproved areas encountered during construction.
- B. A representative, at a "walk-through" preconstruction conference, will designate which yard, of those shown, on the enclosed drawings, will receive overseeding or solid sod. The representative will also designate the width/length of area to be performed. In addition, the Owner may include additional yards in the immediate vicinity (same neighborhood) should it desire.

1.02 Unit Prices:

- A. Payment for over seeding shall be as shown in the bid schedule.
- B. Payment for sodding shall be as shown in the bid schedule. Any area to be sodded shall be as directed by the Engineer.
- C. Payment shall include preparing area for seeding, including but not limited to furnishing and applying top soil, agricultural limestone, fertilizer, seeding and mulching, water as required, and all labor and equipment necessary for complete application and maintenance.

1.03 Performance Requirements:

- A. The acceptance of designated seeded areas will be based on verification of a satisfactory stand of grass in the season for each seed species required by the mix designated for use. If a satisfactory stand of grass is not established, the area shall be re-seeded without additional cost to the Owner. Such re-seeding shall be repeated as many times as necessary to establish a satisfactory stand of grass.
- B. A satisfactory stand is defined as a cover of healthy, living plants, after true leaves are formed, of the seed species required by the mix designated for use in which gaps larger than five (5) inches square do not occur with uniform density.
- C. The sod shall be placed on smooth and firm soil and shall be fertilized and watered thoroughly after placement.

1.04 Maintenance:

- A. The CONTRACTOR shall maintain the seeded area until final acceptance of the work which shall include mowing to release grass.
- B. All costs associated with application of water by any and all necessary means, methods, techniques during this construction and maintenance period shall be the responsibility of the CONTRACTOR. Contractor may make arrangements with homeowner for watering, but this in no way releases contractor from the obligations of this contract.

PART 2 - PRODUCTS

2.01 Materials:

- A. Seed: All seed shall meet the requirements of these specifications and comply with the current Seed Law, Act No. 424, General Acts 1963, and rules and regulations promulgated thereunder and any revision of the Act. Seed shall be certified by an Official Seed Certifying Agency, Alabama Crop Improvement Association, to meet high quality standards. Each bag shall bear a “Certified Seed” tag or label bearing the seal of the Official Seed Certifying Agency. They shall be tested within nine months prior to use in accordance with the latest edition of Rules for Seed Testing, approved by the Association of Official Seed Analysis. The information on the seed tag of each bag of seed will be inspected and reviewed by the ENGINEER prior to planting and as requested. A representative sample of seed will be furnished for testing to determine the correctness of labeling. No seed shall contain more than 1% weed seed. Limitations of noxious weed seeds will be as specified by rules and regulations for administration of the current State Seed Law.

2.02 Permanent Seeding:

- A. Seed mixes shall be mixtures of the types of seeds on tables in Section 2.02 Part B. The required weight shown in the chart is the actual seed weight as delivered and takes into account the minimum required percentage of pure seeds and minimum required germination rates. Seeding mixtures shall be classed according to the time of year when seeding will take place.
- B. Areas subject to frequent mowing are roadway shoulders, medians and front slopes flatter than 3:1 extending 60 feet beyond the edge of pavement or to the toe of the front slope whichever is less. All other areas designated for seeding shall be considered to be areas not subject to frequent mowing.
- C. The following mixtures and application rates shall apply for permanent seeding mixtures:

AREAS SUBJECT TO FREQUENT MOWING			
REQUIRED POUNDS PER ACRE OF PURE LIVE SEED			
TYPE/DESCRIPTION	DATE OF PLANTING		
	Aug. 16 to Feb. 29	Mar. 1 to April 15	April 16 to August 15
Annual Ryegrass	10		
Hulled Bermudagrass		18	24
Unhulled Bermudagrass	30	12	
Centipede	25		
Required Permanent Plant	Bermudagrass/Centipede		

2.03 Sodding:

- A. Existing lawns disturbed during all construction shall be replanted with solid sodding equal to the existing sod. Sod shall be the species to match existing lawn species.
- B. The area to be sodded shall be prepared before delivery so that the sod can be installed immediately. Leaving sod stocked or rolled can cause severe damage and loss of plant material.
- C. Prior to laying sod, clear the soil surface of thrash, debris, roots, branches, stones, and clods larger than 2” in diameter.
- D. Do not lay sod on gravel, frozen soils, or soils that have been recently sterilized or treated with herbicides.

- E. As sodding of clearly defined areas is completed, use a weighted roller on the sod to provide firm contact between roots and soil.

2.04 Fertilizer:

- F. The fertilizer shall be a commercial grade, complying with the current State Fertilizer Laws. Fertilizer shall be of a commonly accepted analysis and conform to the following table:

Type	PERCENT BY WEIGHT		
	Nitrogen	Phosphorus	Potash
15-0-15	15.....	0.....	15.....
13-13-13	13.....	13.....	13.....
10-10-10	10.....	10.....	10.....
8-8-8	8.....	8.....	8.....
0-14-14	0.....	14.....	14.....
4-12-12	4.....	12.....	12.....
4-16-8	4.....	16.....	8.....
Super Phosphate		18.....	
Ammonium Nitrate	33.5		
Ammonium Sulphate	20.5		
Nitrate of Soda	16		
Muriate of Potash			60

- G. An allowance of five percent variation or tolerance of the above proportions will be permitted based on relative commercial value.
- B. Cottonseed meal shall contain 41 percent protein or 6.56 percent nitrogen
- C. If the fertilizer is furnished from bulk storage, the contractor shall furnish the supplier certification of analysis and weight. A representative sample of the fertilizer shall be furnished for chemical analysis at the discretion of the Engineer.

2.05 Agricultural Limestone:

The limestone shall have a neutralizing value of 90% calcium carbonate or better and meet the following gradation requirements:

Sieve Size #10, 90% by weight passing.

Sieve Size #60, 50% by weight passing.

PART 3 - EXECUTION

3.01 Preparation:

- A. The contractor shall break all lumps, clods, and crusty surfaces by tillage, discing or other methods approved by the Engineer. All boulders, stumps, roots and other particles that would interfere with a mowing operation shall be removed.
- B. Gravel and/or crushed stone shall not be present in the top 4-inches of soil to be seeded or sodded.

3.02 Application:

- A. Fertilizer shall be spread uniformly in sufficient quantity to provide at least 120 pounds of nitrogen, 120 pounds of available phosphoric acid, and 120 pounds of total potash per acre as computed from the nominal contents of fertilizing ingredients.
- B. Agricultural lime shall be uniformly and evenly applied at a rate of 4,000 pounds per acre.
- C. The fertilizer and lime shall be thoroughly mixed into the soil by discing, tilling or other methods approved by the Engineer.
- D. The contractor shall take precautionary measures when applying fertilizer and lime around buildings, sidewalks and drives.
- E. Seed shall be uniformly and evenly spread over the disturbed area at rates specified by the charts in Section 2.02 Permanent Seeding and 2.03 Temporary Seeding.
- F. Dry blown mulch shall be applied at the rate of not less than 4,000 lbs per acre and shall be done within 48 hours after seeding. On slopes steeper than 3H:1V, an adhesive applied at the manufacturer's recommended rate shall be used on the mulch. On slopes 3H:1V or flatter, a mulch crimper may be used instead of the adhesive as explained in 2.07.D of this specification.
- G. Hydraulic mulch as specified in Paragraph 2.07.D of this specification shall be applied at the rate of 1,500 lbs per acre and shall be done concurrently with hydroseeding. In no case shall the applied rate be less than 1 ton per acre for hydraulically applied mulches.
- A. Bonded fiber matrix as specified in Paragraph 2.07.E of this specification shall be applied at the rate of 4,000 lbs per acre and shall be done concurrently with hydroseeding. Bonded fiber matrix shall only be applied as directed by the Engineer.
- I. The Contractor shall present documentation satisfactory to the Engineer demonstrating that the required rates of fertilizer, lime, seed, mulch, adhesive, and/or tackifier have been applied.

3.03 Cleaning:

The contractor shall clean drives, buildings, sidewalks and other areas of all construction debris and equipment, including seed, fertilizer, lime, mulch, etc.

END OF SECTION 02920