SECTION 02485

LAWN AND GRASS LANDSCAPING

PART 1 GENERAL

1.01 WORK INCLUDED

A. Preparation of landscape area including loosening, pulverizing and fertilizing.

B. Placement of seed, sprigging, sod and topsoil including mulch, where required.

C. Watering of landscaping.

1.02 RELATED WORK

A. Section 02110: Clearing and Grubbing

B. Section 2200: Erosion Control

PART 2 PRODUCTS

2.01 SEED MATERIALS

A. Inspect and test seed for germination and purity prior to mixing.

Table 4.4 – Permanent Seeding Recommendations
Shoulders, Side Ditches, Slopes *(Maximum slope 3:1)*

Date2	Type	Planting Rate
Aug 15 – Nov 1	Tall Fescue or Hard Fescue	300 lb/acre
Nov 1 – Mar 1	Tall Fescue & Abruzzi Rye or Annual Rye	300 lb/acre
Mar 1 – Apr 15	Tall Fescue or Hard Fescue	300 lb/acre
Mar 1 – Jul 15	Hulled Common Bermuda grass OR Hybrid Bermuda grass OR Centipede grass OR Zoysia grass OR St. Augustine grass	200 lb/acre
Apr 15 – Jun 30	Weeping Love Grass OR Bahia grass	25 lb/acre
Jul 15 – Aug 15	Tall Fescue and Browntop Millet or Sorghum-Sudan Hybrid	35 lb

1. Temporary Reseed according to optimum season for desired vegetation. Do not allow temporary cover to grow over 12 inches in height before mowing to keep fescue from being shaded out.
2. Seeding dates will vary depending on weather conditions (e.g. temperature, rainfall, etc.)

Note on maintenance: refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

B. Inoculants for Legumes:

1. Nitrogen fixing bacteria cultures adapted to the particular seed to be treated.
2. Furnish in container of a size sufficient to treat the specified quantity of seed to be planted.

2.02 MULCH MATERIALS

A. Hay composed of approved stalks from grasses, sedges, or legumes; or straw composed of stalks from rye, oats, wheat, or other approved grains.

B. Air dried and reasonably free from noxious weeds, weed seeds, and other detrimental plant growth.

C. Suitable for spreading with mulch blower machinery.

D. Wood fiber mulch, when used, shall meet the following specifications:

Moisture Content	10% ± 2%
Organic Matter	99.4% ± 0.2%
Ash Content	0.6% ± 0.2%

Water Hold Capacity (per hundred…1050 grams minimum grams of oven dry fiber)

E. Mulch Binders:

1. Cut back asphalt, Grade RC-70 or RC-250 conforming to AASHTO M-81, M-82 or M-141, for the type and grade specified.
2. Emulsified asphalt, Type SS-1 conforming to AASHTO M-140. In addition to Type SS-1, a special mixing material AE-3 or a special priming material AE-P may be specified.

2.03 JUTE MESH

A. Open plain weave of single jute yarn and non-toxic to vegetation.

B. Tag jute rolls for identification with 58 warp ends per yard, 41 weft ends per yard and weighing approximately 0.9 pounds per square yard with an acceptable tolerance of 5 percent.

2.04 STAPLES

A. New and unused, machine made of No. 11 gauge steel wire formed into a “U” shape.

2.05 SOD MATERIALS

A. Live dense, well-rooted growth of permanent grasses, free from Johnson grass, nut grass, and other undesirable grasses or weeds and well-suited for the proposed application to particular soils.

B. Cleanly cut in strips having a reasonably uniform thickness of not less than 2-1/2 inches, a uniform width and a minimum length of 12 inches.

C. Sod type to match existing or as directed by Town Engineer.

2.06 COMMERCIAL FERTILIZERS

A. Unless otherwise specified, inorganic 10-20-10 nitrogen, phosphoric acid, arid potash for seeding and 15-15-15 or 1-1-1 for sodding.

B. Furnish in standard containers with the brand name, weight and guaranteed analysis of the contents clearly marked.

C. Comply with Federal, State and local laws.

D. Ammonium Nitrate shall be a standard commercial product, having a minimum of 33.5 percent nitrogen.

E. Agricultural limestone shall contain a minimum of 85% of calcium carbonate and magnesium carbonate combined, and be of particular size that 85% will pass a No. 10 mesh sieve.

2.07 WATER

A. Free from harmful organisms or other objectionable materials.

2.08 TOPSOIL

A. Natural, friable fertile, fine sandy loam possessing characteristics of representative topsoils in the vicinity, which produce heavy growths of vegetation.

B. Free from subsoil, noxious weeds, stones larger than one inch in diameter, lime, cement, ashes, slag, or other deleterious matter.

C. Well drained in its original position and free from toxic quantities of acid or alkaline elements.

PART 3 EXECUTION

3.01 SEEDING

A. Scarify, disc, harrow, rake, or otherwise work each area to be seeded until it has been loosened and pulverized to a depth as directed by the Engineer.

B. Uniformly incorporate fertilizer into the soil for a depth of approximately ½" at the rate of:

1. Not less than 20 lbs. per 1000 square feet for grade 10-10-10 or equivalent.
2. Not less than 100 lbs. per 1000 square feet for agricultural limestone.

C. Fertilizer need not be incorporated in the soil as specified above when mixed with seed in water and applied with power sprayer equipment.

D. Sow seed of the specified group as soon as preparation of the seedbed has been completed.

E. Sow uniformly by means of a rotary seeder, hydraulic equipment, or other satisfactory means at the rate of 1-1/2 pounds per 1,000 square feet, unless otherwise specified.

F. Inoculate Group "C" seed and seeds of legumes, when sown alone, before sowing in accordance with the recommendations of the manufacturer of the inoculants.

G. Do not perform seeding during windy weather, or when the ground surface is frozen, wet or otherwise non-tillable. No seeding shall be performed during December through February unless otherwise permitted.

H. When specified, provide seeding with mulch:

1. Spread hay or straw mulch evenly over the seeded area at an approximate rate of 75 pounds per 1,000 square feet 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.
2. Hold hay or straw mulch in place by the use of a mulch binder applied at the approximate rate of 4 gallons per 1000 square feet as required.
3. 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.
4. When wood fiber mulch is used, uniformly apply at the rate of 28 to 35 pounds per 1,000 square feet with hydraulic mulching equipment.

3.02 SPRIGGING

A. Lightly incorporate fertilizer into the soil for a depth ½" at the rate of:

1. 12 lbs. per 1000 square feet for grade 0-20-20 or equivalent.
2. 100 lbs. per 1000 square feet for agricultural limestone.

B. Perform sprigging during September-November or April-May and only when the soil is in tillable or workable condition.

C. Do not set crowns during windy weather or when the ground surface is frozen.

D. Set crowns as soon as preparation of the sprig bed has been completed.

E. Set crowns at the rate of three sprigs per square yard by means of a tree-planting bar or equal.

F. When specified, perform mulching before sprigging:

1. Spread mulch material evenly over the area to be planted at the rate of 100 lbs. per 1000 square feet. This rate may be varied by the Engineer depending upon the texture and condition of the mulch material and the ground surface.
2. Cover with a uniform layer of mulch so that 20 to 25 percent of the ground is visible. The mulch shall be loose enough to allow sunlight to penetrate and air to circulate slowly, but thick enough to partially shade the ground and to reduce erosion.
3. Hold the mulch in place with mulch binders applied at the rate directed by the Engineer, not to exceed 0.1 gallon per square yard, as required to hold the mulch in place.

3.03 SODDING

A. Place sod at all locations shown on the Plans or where directed.

B. Loosen the surface of the ground to be sodded to a depth of not less than one inch with a rake or other device.

C. If necessary, sprinkle with water until saturated for a minimum depth of one inch and keep moist until the sod is placed.

D. Immediately before placing the sod, fertilize the prepared surface uniformly at the rate of:

1. 12 lbs. per 1000 square feet for grade 10-10-10 or equivalent.
2. 100 lbs. per 1000 square feet for agricultural limestone.

E. Place sod as soon as practical after removal from the point of origin, and keep in a moist condition during the interim.

F. Carefully place, by hand, on the prepared ground surface with the edges in close contact and, as far as possible, in a position to break joints.

G. Each strip of sod laid shall be fitted and pounded into place using 10 inch by 10 inch wood tramps, or other satisfactory implements.

H. Immediately after placing, thoroughly wet and roll with an approved roller or hand-stamp as approved by the Engineer.

I. On slopes of two to one or steeper, pinning or pegging may be required to hold the sod in place.

3.04 TOPSOIL

A. Prepare landscape area to receive topsoil in close conformity to the lines and grades shown on the drawings.

B. Place topsoil at depths and locations shown on the drawings.

END OF SECTION