

A2.1 Lawns & Grasses Specification

NOTE TO SPECIFIERS: This specification is to be incorporated into the contract documents on all projects which require lawns or grasses for the University of Kansas, reformatted to match numbering system of other spec sections.

SECTION 02920 – LAWNS AND GRASSES

PART 1 – GENERAL

1.01 Scope of Work

- A. All disturbed areas, fills and embankments shall be seeded and fertilized.
- B. Verify seeding rate with University Landscape Architect prior to beginning work, and adjust as deemed necessary for site and climatic conditions.
- C. Seeding and fertilization shall be done between the period of August 15 and September 30 or February 15 and May 1, unless otherwise approved by the University Landscape Architect.

PART 2 - PRODUCTS

2.01 Grass Seed

- A. General: Provide fresh, clean, new-crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America. Provide seed mixture composed of grass species, proportions and minimum percentages of purity, germination, and maximum percentage of weed seed, as specified.
 1. 90% Fine Leaf Fescue (*Festuca arundinacea*): Rebel, Rebel II, Wrangler, Bonanza and Mojave (or approved equal).
 2. 10% Kentucky Bluegrass (*Poa pratensis*): Midnight, Rugby II, Midiron varieties or equal.
 3. Required Minimum Test Results: 98% purity and 85% germination.
 4. Blend of varieties to be approved by the Landscape Architect.

2.02 Sod

- A. General: All grass sod shall be a nursery-grown native mixture of Rebel, Rebel II, Wrangler, Bonanza and Mojave Tall Turf-type Fescue, or approved equal, with 10 percent Bluegrass Blend that is free of objectionable grassy and broadleaf weeds.
- B. Sod shall be considered free of such weeds if less than five such plants are found per 100 square feet of area.

1. Sod will not be acceptable if it contains any of the following weeds: common bermudagrass (wiregrass), quackgrass, johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and bromegrass.
 - C. Thickness of Cut: Sod shall be machine cut at a uniform soil thickness of 5/8" plus or minus 1/4" at the time of cutting. Measurement for thickness shall exclude top growth and thatch.
 - D. Pad size: Individual pieces of sod shall be cut to the supplier's standard width and length. Maximum allowable deviation from standard width and length shall be +/- 1/2" on width and +/- 5 percent on length. Broken pads and torn or uneven ends will not be accepted.
 - E. Strength of Sod Sections: Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when supported vertically from a firm grasp on the upper 10 percent of the section.
 - F. Moisture Content: Sod shall not be harvested or transplanted when moisture content is excessively wet or dry and may adversely affect the sod's survival.
 - G. Time Limitations: Sod shall be harvested, delivered and transplanted within a 36 hour period unless suitable preservation method is approved prior to delivery.
 - H. Mowing Height: Before stripping, sod shall be mowed uniformly at a 2" height.
- 2.03 Mulch And Erosion Control
- A. Anti-Erosion Mulch: Lawn and seeding mulch manufactured from recycled paper or secondary ground wood fibers.
 1. Acceptable Products: Mulch manufactured by Central Fiber Corporation, 4814 Fiber Lane, Wellsville, Kansas 66092, known as Second Nature Paper Fiber Hydroseeding Mulch, or approved equal.
 2. Mulch specifications:
 - a. Moisture content = $12\% \pm 3\%$; pH range = 6.5 ± 1 .
 - b. Organic matter content (over dry weight): 98% minimum.
 - c. Inorganic matter content: 2% maximum.
 - d. Dye of materials shall be biodegradable and shall not inhibit plant growth.
 - e. Color: Green.
 3. Mulch is to be mixed in a hydraulic application machine (hydroseeder) and applied as a liquid slurry which contains the recommended rates of seed and fertilizer.
 4. Apply at rate of 1,500-2,000 lbs/acre mixed with seed and fertilizer at recommended rates.
 - B. Tacking material shall be "Taccpac GT 100% Pure Guar Gum Tackifier" as manufactured by Central Fiber Corporation, an organic derivative, negative gum material containing no toxic chemicals or harmful substances. The product is safe to plant and animal life.
 1. Apply fiber mulch "Tackifier" on slopes of 2:1 or less at a rate of 20 lbs./acre.

2. Apply as a soil stabilizer at the rate of 40-60 lbs./acre mixed in 800-1,000 gallons of water.

PART THREE - EXECUTION

3.01 Seeding New Lawns

- A. For areas less than 20,000 SF or where hydro-seeding is impracticable, sow seed with a spreader or a seeding machine. Wheat drills are not acceptable. Do not broadcast or drop seed when wind velocity exceeds 5 mph. Evenly distribute seed by sowing equal quantities in 2 directions at right angles to each other.
 1. Rake seed lightly into top 1/8 inch (3 mm) of topsoil, roll lightly, and water with fine spray.
- B. For areas larger than 20,000 SF, hydro-seeding is the preferred seeding method. Mix specified seed, fertilizer and pulverized mulch in water, using equipment specifically designed for hydro-seed application. Continue mixing until uniformly blended into homogenous slurry suitable for hydraulic application. Apply slurry uniformly to all areas to be seeded. Rate of application shall be as required to obtain specified seed sowing rate.
 1. Don't use seed that is wet, moldy or otherwise damaged in transit or storage.
- C. Sow seed and fertilizer at the following rates:
 1. 400 pounds per acre for seed mix
 2. 500 pounds per acre for 5-10-5 dry, commercial-grade fertilizer
- D. Protect seeded slopes of 4:1 or greater against erosion with methods acceptable to the University Landscape Architect.
- E. Protect seeded areas against erosion by spreading specified lawn mulch after completion of seeding operations.
 1. The preferred mulch material for all lawn seeding is recycled paper or secondary ground wood fibers.
 2. Other mulch materials for lawn seeding that may be used with the approval of the Landscape Architect include:
 - a. Burlap fabric, 7 oz./square yard. Standard width is 40"; secure with 6" staples manufactured for that purpose.
 - b. Jute erosion mesh, with an open 1" x 1" weave, provided in 4' width. Secure with 6" staples manufactured for that purpose.
 - c. Other materials as approved by the Landscape Architect.

3.02 Sodding New Lawns

- A. Lay sod within 24 hours from time of stripping. Do not plant dormant sod or if ground is frozen.

- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent grass.
 - 1. Anchor sod on slopes with wood pegs to prevent slippage.
 - C. Water sod thoroughly with a fine spray immediately after planting.
- 3.03 Maintenance
- A. Begin maintenance immediately after planting.
 - B. Maintain fescue lawns for not less than the period stated below, and longer as required to establish an acceptable lawn.
 - 1. Seeded lawns: Not less than 2 weeks after germination.
 - a. If seeded in fall and not given full 45 days of maintenance, or if not considered acceptable at that time, continue maintenance the following spring until acceptable lawn is established.
 - 2. Sodded lawns: Maintenance period shall extend for two weeks or until sod is well rooted and cannot be lifted out of place.
 - C. Maintain lawns by watering, fertilizing, weeding, mowing, trimming, and other operations such as rolling, re-grading and re-planting as required to establish a smooth lawn free of eroded or bare areas, acceptable to Landscape Architect.
- 3.04 Cleanup And Protection
- A. During landscaping, keep pavements clean and work area in orderly condition.
 - B. Protect landscaping from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.
- 3.05 Inspection And Acceptance
- A. Fescue seeding will be considered acceptable when all specified requirements, including maintenance period, have been complied with and a healthy, uniform, close stand of grass has been established, free of weeds, surface irregularities and bare spots larger than 1-1/2" diameter.
 - B. Fescue sod will be acceptable when all specified criteria, including maintenance, have been complied with and a healthy, uniform, close stand of grass has been established, free of weeds, bare spots, open joints, and surface irregularities.

End of Section