

907 - SODDING

907.1 DESCRIPTION

This work shall consist of furnishing and placing sod at those locations indicated on the plans or as designated by the Engineer in accordance with Section 907 of the Standard Specifications except as modified herein.

907.2 MATERIALS

a. Sod Types

The type of sod to be used will be Turf Type Fescue sod, except where Zoysia sod or Kentucky Bluegrass sod is identified under the property owners name and address on the plans, or designated by the Engineer. In the case of mixtures of Bluegrass and Zoysia sod, Zoysia shall be used unless otherwise directed by the Engineer.

b. Sod Material

All materials shall conform to the requirements of these Specifications and to Section 2104 of the Standard Specifications. The Contractor shall retain a person knowledgeable of the different types of sod to ascertain prior to bidding, the location and types of existing sods. Sod shall be of best quality Bluegrass, Zoysia, or Turf Type Fescue, not more than two years old, shall conform to the quality standards of Nursery Grown Sod as defined by the American Sod Producers Association, and shall meet the following standards:

- (1) Thickness of Cut: Sod shall be machine cut at a uniform soil thickness of 5/8 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness shall exclude top growth and thatch.
- (2) Pad Size: Individual pieces of sod shall be cut to the suppliers's standard width and length as approved by the Engineer. Maximum allowable deviation from standard widths and lengths shall be plus or minus 1/2 inch on width and plus or minus 5 percent on length. Broken pads and torn or uneven ends will not be acceptable.
- (3) Strength of Sod Sections: Standard size sections of sod shall be strong enough to support their own weight and should retain their size and shape when suspended vertically from a firm grasp on the upper 10 percent of the section.
- (4) Moisture Content: Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) will adversely affect its survival.
- (5) Mowing Height: Before stripping, sod shall be mowed uniformly at a height of 2 to 3 inches.
- (6) Thatch: Sod shall be relatively free of thatch, up to 1/2 inch allowable (uncompressed).
- (7) Diseases, Nematodes, and Insects: Sod shall be reasonably free of diseases, nematodes, and soil-borne insects. State nursery and/or plant materials' laws require that all sod entering inter-state commerce be inspected and approved for sale. The same applies to sod being shipped intra-state. The inspections and approval must be made by the state agricultural department, office of the state entomologist.
- (8) Weeds: Sod shall be free of objectionable grassy and broad leaf weeds. Sod shall be considered free of such weeds if less than 5 such plants are found per 200 square feet of area. Sod will not be acceptable if it contains any of the following weeds: quackgrass, Johnson grass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, wild garlic, ground ivy, perennial sorrel, bromegrass, bentgrass, and Bermuda grass.

c. Fertilizer

Fertilizer shall conform to the State fertilizer laws, and shall conform to Section 2108 of the Standard Specifications.

Furnishing and placing fertilizer shall be in accordance with Section 903 of the Standard Specifications. Fertilizer shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original unopened containers, each bearing the manufacturer's guaranteed analysis.

Certification shall be submitted to the city on the fertilizer. Any fertilizer which becomes caked or otherwise damaged, making it unsuitable for use, will not be accepted. Fertilizer shall be placed prior to sodding at not less than 1 lb. of pure nitrogen per 1000 square feet of sodding area unless otherwise determined by a soil test. Fertilizer shall be subsidiary to sodding bid items.

907.3 CONSTRUCTION REQUIREMENTS

a. Sod Season

Bluegrass and Fescue sod may be planted during the periods of March 1 to May 15 and September 1 to November 15. Bluegrass and Fescue sod may be planted during the period, November 15 to March 1, when the soil and sod is workable and with the approval of the Engineer. If sod is planted between November 15 and March 1, the Contractor will maintain the sod until 20 days after the beginning of the spring sodding season. The Engineer reserves the right to delay the sodding of all types of sod or to vary the permissible sodding seasons, due to weather, soil conditions, or for other causes.

Zoysia sod may be planted during the period April 1 to October 15.

b. Bed Preparation and Moisture Requirements

Where the width of the disturbed area to be sodded exceeds 18 inches, the area shall be widened to a uniform size by removing enough existing turf from behind the disturbed area, creating an area whose width is a multiple of 18 inches (width of sod roll). A clean edge should be established at the outer limits of the area to be sodded, so that good contact can be made between the new sod and the established turf.

Where the width of the disturbed area is less than 18 inches, enough existing turf shall be removed to create an area of uniform width, no less than six (6) inches.

All backfill shall consist of soil suitable for vegetation. The area shall be prepared such that sodding can be placed on bare soil. This will consist of cultivating, smoothing, removing of clods, surface stones 1 inch in diameter or larger, and weeds. All backfilling shall be subsidiary to other bid items.

Area to be sodded shall consist a minimum of 6 inches of top soil, free from clods, rocks, trash, and other debris. Any fertilizer applied shall be incorporated into the top soil. If the area has been severely compacted by heavy trucks or other equipment, it shall be cultivated to a depth of 6 to 8 inches by tilling or disking. Backfill areas shall be compacted to a sufficient density to prevent excessive settling after placement of sod. If footprints left by an adult walking across the area are more than 1/2 inch deep, the compaction is not sufficient.

Grade of the area shall be approximately 1 inch below desired final grade, to allow for the thickness of the sod.

c. Water

Water used in this work shall be furnished by the Contractor and will be suitable for irrigation and free from ingredients harmful to plant life. All watering equipment required for the work shall be furnished by the Contractor. Under no circumstances shall the Contractor use water except that metered from adjacent fire hydrants or public water lines.

d. Placing Sod

Sod strips shall be laid parallel with the ends staggered in a running bond pattern. Each successively laid strip shall be pressed firmly up against the one next to it or up against the edge of the existing turf, to ensure good contact with no overlapping. Sod shall be staked in places where the slope exceeds 3:1. Sod shall be staked with a minimum of two to four stakes per square yard or roll, as determined by the Engineer. Stakes shall be of lath or similar materials and shall be driven six inches into the ground, leaving approximately 1/2 inch of the top above the sod line.

After placing sod, the area shall be tamped with a hand tamp or rolled with a lawn roller half filled with water. Rolling shall be done in a direction perpendicular to the direction in which the sod lengths were laid.

e. Sod Watering and Maintenance

After each days sod is placed, it shall be watered sufficiently to wet the sod pads and at least 2 inches of the sod bed. Thereafter in the absence of adequate rainfall, watering shall be performed daily and as often as necessary to keep the sod pads moist at all times. Watering by the Contractor shall continue until the roots of the sod are anchored in placed, and the sod is growing and accepted.

All sodded areas shall be mowed immediately prior to the Engineer's inspection for acceptance. Mowing is required to facilitate visual assessment and acceptability of the work. Mowing shall not be attempted until the sod is firmly rooted and secure in place. Not more than 1/3 of the grass leaf shall be removed. Any debris that would interfere with mowing shall be collected and removed.

f. Sod Acceptance

All sodded areas shall be kept free of weeds until the sod has been accepted.

All sodded areas shall be kept thoroughly watered by the Contractor for a period of 20 days after laying and as often as required thereafter, until completion of all other items of work in the contract. If sodding is the last item of work to be performed, the Contractor shall continue watering until all sod is growing and accepted.

The Contractor shall be fully responsible for the condition of the sod work until written notification that his obligation to maintain the sod is terminated, and the sod has been accepted. At that time the property owners shall be notified by the Engineer that further maintenance of the sod is their responsibility.

907.4 MEASUREMENT AND PAYMENT

The Engineer will measure sod of specified type by the square yard.

Payment for "Sod" at the contract unit price bid is full compensation for the specified work, including bed preparation, transporting, placing, firming, watering, cultivating, and maintaining the sod.