

Amend **Section 618 - Grassed Surfaces** to read as follows:

"SECTION 618 - GRASSED SURFACES

618.01 Description. This work includes preparing the areas designated in the contract and planting with grass according to the contract.

618.02 Materials. The grass that will be placed shall be Bermuda (*Cynodon dactylon*) except giant varieties. Get the grass by digging up luxuriant growths from areas that are free of seeds, roots, plants, and other types of grasses. The Engineer will not accept the grass unless the Contractor plants and waters the grass within 24 hours after digging the grass out from its original growing position.

Other materials shall conform to the following:

Planting Soil	712.17
Commercial Fertilizer	712.18(A)
Mulch and Soil Amendments	712.45

618.03 Construction Requirements.

(A) Ground Preparation. Before planting, clear the areas that will be grassed:

- (1) of unwanted plants (including their root system),
- (2) stones over 3 inches in diameter,
- (3) papers,
- (4) trash, and
- (5) debris.

Grade the planting areas to the dimension and elevations shown in the contract or as specified by the Engineer.

When the existing soil in the areas to be grassed is suitable for use as planting soil, scarify the soil to a depth of not less than 6 inches from the finished surface shown in the contract. Work the soil until the soil is of a uniform and loose texture, free from stones greater than 0.5 inch in diameter and appropriate for planting. When requiring additional material, spread and grade the planting soil to conform to finish surface shown in the contract.

Excavate the areas unsuitable for planting to a depth of not less than 6 inches from the finished surface and backfill with planting soil. Spread and grade the planting soil to conform to the finish grade shown in the contract.

The Contractor shall be responsible for the disposal of excavated material.

Add a soil conditioner to surfaces to be grassed. Rototill a 2 inch thick layer of soil amendment into the soil to a depth of not less than 6 inches until:

- (1) the soil is loose and fine textured and
- (2) free from stones greater than 0.5 inch in diameter.

(B) Planting. Planting shall be by sprigging, matting, seeding, mulch or seeding. When planting is by sprigging or matting, roll the surface with a suitable lawn roller after completing the planting.

Apply the water within the same day of planting in such quantities to moisten the soil to the depth of the planter grass. Make additional application to keep the planted areas continually damp to the grass depth and until the commencement of plant establishment work.

Apply the fertilizer at not less than the rate of 300 pounds per acre. Apply the fertilizer 23 to 30 days after planting the grass.

A planting period shall begin immediately after planting the areas. During the planting period, provide 95 percent coverage with 5 inch tall, healthy grass within 60 days. When attaining satisfactory coverage before 60 days, the Contractor may submit a written request to the Engineer asking for an earlier end to the planting period. During this period, the Contractor shall be responsible for the grassed areas. This shall include watering, fertilizing, removal and disposal of trash and debris, insects and disease control and protection.

The Engineer will extend the planting period at no cost to the State if the grass planting does not conform to the contract.

After planting along a 0.25 mile section of road or smaller areas satisfactorily according to the contract, the Contractor shall care for the planted area upon written notice from the Engineer as specified under Subsection 618.03(C) - Plant Establishment.

Complete the planting by the end of the contract time.

(C) Plant Establishment. Only State projects require a plant establishment period. A plant establishment period is when the Contractor takes care of the planted area for 3 acceptable months from the accepted completion date of the planting period. The plant establishment period shall be excluded from the completion time noted on page P-1 of the proposal.

During the plant establishment period, the Contractor shall water, fertilize, weed, replace unsuitable grass and mow the grassed areas. Mow the grass whenever the averaged height of the grass becomes 3 inches.

The Engineer will credit the Contractor plant establishment days when the Contractor does the planted area according to the contract even if not doing work daily.

The Engineer will not credit the Contractor plant establishment days when the Contractor fails to adequately do plant establishment work according to the contract.

Weeding is when removing undesirable plants and their root systems except nut grass.

Remove and dispose of surplus earth, papers, trash and debris that accumulates in the planted areas. Care for the planted areas to present a neat and clean condition.

Watering equipment shall be of a type that will not cause damage to the planted area or its surroundings. Correct the water systems that cause erosion or runoff and deemed unacceptable by the Engineer. When the planted area or its surroundings are eroding due to the watering method, immediately remove the runoff material and restore the area to the original grade and condition.

Besides the initial application during the planting period, apply fertilizer:

- (1) at least two times during the plant establishment period,
- (2) at intervals not closer than 30 days, and
- (3) at a rate of not less than 300 pounds per acre per application.

Replant the areas that does not show a thorough "catch".
Replant and grow the area according to the contract.

The Engineer will decide the acceptability of the planted areas when the plant establishment period ends. Promote the grass to healthy growth condition. Final acceptance will be upon providing 98 percent coverage with 3 inch tall, healthy grass. No 100 square feet area shall have more than a total of 2 square feet of bare spot.

The Contractor shall be responsible for protecting the planted areas until final acceptance of this work. Repair damages by pedestrians or vehicular traffic or other causes at no cost to the State except conditions as covered in Subsection 107.20 - Contractor's Responsibility for Work.

618.04 Method of Measurement. The Engineer will not measure the grassed surfaces for payment.

618.05 Basis of Payment. The Engineer will pay for the accepted grassed surfaces on a contract lump sum basis.

The price includes full compensation for clearing, excavating and grading the planted areas, watering, preparing the ground, adding soil amendments, furnishing plants, placing and/or planting materials, plant establishment, furnishing equipment, materials, tools, labor, and incidentals necessary to complete this work.

The Engineer will make payment under:

Pay Item	Pay Unit
Grassed Surfaces	Lump Sum

(A) Partial Payment Schedule For Planting Period And Plant Establishment Period. The Engineer will pay the accepted quantities for:

- (1) 40 percent of the contract bid price upon completion of planting;
- (2) 20 percent of the contract bid price upon completion of the planting period;
- (3) 40 percent of the contract bid price at final acceptance of the plant establishment period.

The Engineer will pay for planting soil according to Section 617 - Planting Soil.

END OF SECTION