

Amend Section 641 – HYDRO-MULCH-SEEDING to read as follows:

**"SECTION 641 – HYDRO-MULCH SEEDING**

**641.01 Description.** This work includes furnishing and applying hydro-mulching, hulled Bermuda seed, fertilizer and mulch areas according to the contract or ordered by the Engineer.

**a. Materials.**

**(A) Seed.** Seed shall be hulled Bermuda (Cynodon Dactylon) except giant varieties, certified, according to following:

Pure Seed	95% minimum
Crop Seed	1% maximum
Weed	0.5% maximum
Inert Material	5% maximum
Germination	85% minimum

The Contractor shall apply the seeds at the rate of one hundred (100) pounds per acre (minimum) and within twelve (12) months of the date of the certified germination test.

**(B) Fertilizer.** The Contractor shall be responsible in determining the proper fertilizer required in the hydro-mulch mix for the existing soil condition. The Contractor shall decide the quantity, analysis and ratio to insure sufficient nutrients for the sustained growth of the grass.

**(C) Mulch.** Mulch shall be specifically processed fiber containing no growth or germination inhibiting factors. After addition and agitation in the hydraulic equipment with seed, fertilizer, water and other additives not detrimental to plant growth, the fibers will form a homogeneous slurry. When hydraulically sprayed on the soil, the fibers shall form a blotter-like ground cover that readily absorbs water and allows infiltration to the underlying soil. In every application, the Contractor shall attain complete coverage of the soil. The Contractor shall apply mulch at minimum rate of one thousand five hundred (1,500) pounds per acre.

**641.03 Construction Requirements.**

**(A) Seeding.** The Contractor shall apply the seeded mulch within two (2) days after completion of slopes or portions of slopes when the exposed face becomes fifteen (15) feet in height. The Contractor shall notify the Engineer not

less than twenty-four (24) hours ahead of hydro-mulch seeding operation. The Contractor shall not hydro-mulch until the Engineer accepts the area(s). Acceptance includes inspection of slopes to provide for the collection and disposal of surface and subsurface water and to protect planting areas against unnecessary erosion. Acceptance shall not relieve the Contractor of responsibility to restore damages to the slope until the Engineer accepts the planted areas. Following the Engineer's acceptance of the area(s), the Contractor shall begin hydro-mulch seeding the accepted slopes promptly.

The hydro-mulch equipment shall mix the necessary ingredients to a uniform mixture and apply the slurry to provide uniform coverage. The Contractor shall apply the seed, mulch, and fertilizer mix on one (1) operation by an accepted hydraulic equipment. The equipment shall have a built-in agitation system with an operating capacity sufficient to keep the mix in uniform distribution until pumped from the tank. Distribution and discharge lines shall be large enough to prevent stoppage. The Contractor shall equip the distribution and discharge lines with hydraulic discharge spray nozzles that provide a uniform distribution of the slurry.

The Contractor shall apply water immediately following mulching to moisten the soil and mulch. Watering shall continue to insure proper germination and growth. The Contractor shall water in a way that will prevent erosion. Watering equipment shall be of a type that will not cause damage to the planted areas. The Contractor shall correct the water systems that cause erosion of runoff. The Contractor shall provide water for hydro-mulching at no additional cost to the state.

If the slope erodes or silt moves, the Contractor shall remove the eroded material immediately. The Contractor shall restore areas eroded to a depth greater than two (2) inches or to a width greater than three (3) inches to the original grade.

**641.04 Method of Measurement.** The Engineer will not measure hydro-mulching seeding for payment.

**641.05 Basis of Payment.** The Engineer will pay for the accepted quantities of hydro-mulch seeding at the contract lump sum price complete in place.

The price includes full compensation for clearing and grading the planted areas, watering, fertilizing, seeding, hydro-mulching, and furnishing equipment, tools, materials, labors and incidentals necessary to complete the work.

The Engineer will make payment under:

**Pay Item**

Hydro-Mulch Seeding

**Pay Unit**

Lump Sum"

**END OF SECTION**