



Iowa Department of Transportation

SPECIAL PROVISIONS

FOR

SEEDING

Linn County

Project Numbers

NHSX-100-1(59)--3H-57 and

ESP-100-1(61)--2S-57

Effective Date

October 20, 2009

THE IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SERIES 2009, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS AND GENERAL SUPPLEMENTAL SPECIFICATIONS.

02601.01 DESCRIPTION.

This work includes preparation of the seedbed, furnishing and installing seed, fertilizer and mulch. This seed mixture shall only be sown between the dates of March 15 to May 31, and between August 1 and September 10. In the Spring, commence seeding only when ground temperatures are 55 degrees F. or above. The seeding dates listed above are not eligible for extension.

02601.02 MATERIALS.

A. Seed.

Seed mixture shall be as follows:

A. Type 1A, Lawn Mixture, Sunny Conditions

<u>Type of Seed</u>	Application Rate (lb/acre)
Kentucky Bluegrass Cultivar	35
Kentucky Blue Grass Cultivar (not same variety as above)	35
Kentucky Blue Grass Cultivar (not same variety as above)	35
Creeping Red Fescue	15
Certified Fine-leafed Perennial Rye Grass	35
Certified Fine-leafed Perennial Rye Grass (not same variety as above)	35
Certified Fine-leafed Perennial Rye Grass (not same variety as above)	35
TOTAL	225 lb

B. Type 1B, Lawn Mixture, Shady Conditions

<u>Type of Seed</u>	Application Rate (lb/acre)
Kentucky Blue Grass Cultivar	35
Kentucky Blue Grass Cultivar (not same variety as above)	35
Creeping Red Fescue	105
Certified Fine-leafed Perennial Rye Grass	25
Certified Fine-leafed Perennial Rye Grass (not same variety as above)	25
TOTAL	225 lb

	<u>Purity</u>	<u>Germination</u>
Blue Grass	95	85
Perennial Rye Grass	95	90

Permitted Bluegrass cultivars include the following (Certified varieties):

Absolute	Blue Chip	Glade	NuGlade
American	Blue Moon	Liberty	Nustar
Apex	Dellwood	Meret	Quantum
Award	Dragon	Midnight	Ram I
Barron	Eclipse	Nublu	Rugby II

Permitted Varieties of Fine-leaved Ryegrass include the following (Certified Varieties):

Accent	Calypso	Elf	Prizm
APM	Cocomo	Exacta	SR 4200
Blazer III	Cutter	Omega III	SR 4400
Caddy Shack	Dandy	Pennfine	

B. Fertilizer

Fertilizer shall comply with the rules of the Iowa Department of Agriculture and as follows:

1. The grade of fertilizer will be identified according to the percent nitrogen (N), percent of available phosphoric acid (P₂O₅), and percent water soluble potassium (K₂O), in that order, and approval will be based on that identification.
2. All fertilizer shall be furnished from an established fertilizer dealer and guaranteed percentage analysis shall be provided by the fertilizer supplier on each container with the proper scale weight records.
3. Fertilizer shall be of a type that can be uniformly distributed by the application equipment. Fertilizer may be furnished in a dry or liquid form.
4. when applied dry, the fertilizer shall be a granular, non-burning chemically combined product composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer. Granular or pellet form shall be uniform in composition, dry, and free flowing without caking or other damage not suitable for use.
5. When applied in a liquid form, fertilizer may be chemically combined or may be furnished as separate ingredients.
6. Upon request, the Contractor shall provide a test of the fertilizer for conformance with the required analysis at no additional compensation; a tolerance of 1.0 percentage point plus or minus of that specified will be considered to be in substantial compliance.

C. Mulch.

Mulch materials shall be in accordance with Section 4169.08 of the Standard Specifications.

02601.03 CONSTRUCTION.

A. Seedbed Preparation.

Seedbed preparation shall be in accordance with Section 2601.04.A of the Standard Specifications. A rotary tiller will be required for the preparation of the seedbed. The seedbed shall be firm, smooth, and reasonably free of any material $\frac{3}{4}$ inches in diameter or greater including clods, rocks, and other debris prior to the application of seed.

B. Application of Fertilizer.

Application of fertilizer shall be in accordance with Section 2601.04.B of the Standard Specifications. Fertilizer shall be applied prior to preparation of the seedbed.

C. Seed Preparation.

Preparation of seed shall be in conformance with Section 2601.4.E of the Standard Specifications.

D. Application of Seed.

Seed application and sowing shall be in conformance with Section 2601.04.F and G (for sowing applications) and/or 2601.04.H (for Hydraulic seeding). The contractor shall have the option to use either hydraulic or conventional seeding methods as outlined above. Seed shall be applied at a rate of 225 lb/acre in a split application with a minimum of two passes.

E. Reseeding, Re-fertilizing, and Re-mulching.

Section 2601.07 of the Standard Specifications shall apply to areas requiring reseeded, re-fertilizing, and re-mulching.

F. Watering of Seeded Areas.

The Contractor shall provide watering equipment and an approved water supply before seeding work is started. Following placement of the materials as specified, the area shall be watered not later than the day following placement. Three additional waterings shall be applied at approximately 1 week intervals at the discretion of the Engineer and subject to local weather conditions.

All waterings shall be sufficient to saturate thoroughly the seedbed to a depth of approximately 3 inches. Each watering may require a maximum of 100 gallons of water per square, and the water shall be applied as a spray or dispersion to prevent damage to the seedbed. Each watering shall be

completed within a 4 hour period, and more than one application for each watering may be necessary to provide adequate saturation without runoff.

G. Completion of the Work

The Contractor shall perform seeding operations along sections of the project as they become completed to stabilize areas with permanent seeding as soon as practical (this seeding must be done within the seeding dates specified herein).

The contractor shall clean up, remove, and dispose of any excess materials, debris, and rubbish generated by the seeding operations. Hose down and/or broom clean all paved surfaces. Repair any damage resulting from seeding operations including hydraulic slurry overspray from buildings, landscaping, mulch, sidewalks, pavement, and any areas not specified for application.

02601.04 METHOD OF MEASUREMENT.

Measurement for seeding and fertilizing will be plan quantity on an area (acre) basis. No measurement will be made.

Measurement for watering will be measured for payment by counting loads from a transporting tank of known volume or by metering.

Measurement for mulching will be plan quantity on an area (acre) basis. No measurement will be made.

02601.05 BASIS OF PAYMENT.

For the plan quantity of seeding and fertilizing completed, and the plan quantity of mulching completed, the Contractor will be paid the contract unit price per acre. This payment shall be full compensation for preparing the area and furnishing and applying each material. This payment shall also include any cleanup and other miscellaneous items listed in the Completion of Work section of this Special Provision.

For the quantity of water applied, the Contractor will be paid the contract unit price per 1,000 gallons.

Payment for all the above items shall be full compensation for furnishing all materials, equipment, tools, and labor necessary to complete the work according to the contract documents. It includes removal of rock and other debris from the area, filling gullies and washes, preparing the seedbed, furnishing and placing seed including any treatment required, rolling the seedbed, furnishing and placing fertilizer and mulch, tucking the mulched areas, furnishing and applying water and other care during the care period.

Payment will not be allowed for the seeding and fertilizing areas until the watering, as specified, has been completed. Areas which are damaged by weather or other causes before the specified initial watering has been completed shall be replaced or repaired, at the discretion of the Engineer, at the Contractor's expense.

Areas of completed work which are damaged by weather or other causes during the care period and which are repaired at the direction of the Engineer will be paid for at the contract unit prices for the respective types of work involved. Should the repair work not be done with reasonable promptness, payment for repair will be limited to the work described at the time of notification.