



**SPECIAL PROVISIONS
FOR
POLLINATOR SEEDING REQUIREMENTS**

**Johnson County
BROS-3715(664)--8J-52**

**Effective Date
September 21, 2021**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

156191.01 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 10 and September 10. In the Spring, commence seeding only when ground temperatures are 55°F or above. The seeding dates listed above are not eligible for extension.

156191.02 MATERIALS.

A. Seed.

Seed mixture shall be as follows:

<u>Grasses</u>	<u>% of Mix</u>	<u>Seeds/ft²</u>	<u>Total</u>
Sideoats Grama	25.00%	4.4	2.00 PLS lb
Blue Grama	1.50%	1.8	0.12 PLS lb
Canada Wild Rye	5.00%	0.8	0.40 PLS lb
June Grass	1.00%	5.9	0.08 PLS lb
Little Bluestem	15.00%	6.6	1.20 PLS lb
Prairie Dropseed	2.50%	1.2	0.20 PLS lb
<u>Forbs</u>	<u>% of Mix</u>	<u>Seeds/ft²</u>	<u>Total</u>
Anise Hyssop	0.50%	1.3	0.04 PLS lb
Prairie Onion	1.00%	0.3	0.08 PLS lb
Lead Plant	2.00%	0.9	0.16 PLS lb
Swamp Milkweed	1.50%	0.2	0.12 PLS lb
Common Milkweed	2.00%	0.2	0.16 PLS lb
Butterfly Milkweed	1.00%	0.1	0.08 PLS lb
Sky Blue Aster	0.50%	1.2	0.04 PLS lb
Smooth Blue Aster	1.00%	1.6	0.08 PLS lb
New England Aster	0.50%	1.0	0.04 PLS lb
Canada Milk Vetch	2.00%	1.0	0.16 PLS lb
White Wild Indigo	0.50%	0.0	0.04 PLS lb

Partridge Pea	10.00%	0.8	0.80 PLS lb
White Prairie Clover	2.00%	1.1	0.16 PLS lb
Purple Prairie Clover	3.00%	1.6	0.24 PLS lb
Showy Tick Trefoil	0.50%	0.1	0.04 PLS lb
Narrow-leaved Coneflower	1.50%	0.3	0.12 PLS lb
Ox-eye Sunflower	2.00%	0.4	0.16 PLS lb
Round-header Bush Clover	0.50%	0.1	0.04 PLS lb
Meadow Blazingstar	1.00%	0.3	0.08 PLS lb
Prairie Blazingstar	1.50%	0.5	0.12 PLS lb
Great Blue Lobelia	0.25%	3.7	0.02 PLS lb
Wild Lupine	0.50%	0.0	0.04 PLS lb
Wild Bergamot	1.00%	2.1	0.08 PLS lb
Mountain Mint	0.50%	3.2	0.04 PLS lb
Long-headed Coneflower	1.00%	1.2	0.08 PLS lb
Yellow Coneflower	2.00%	1.8	0.16 PLS lb
Prairie Wild Rose	0.50%	0.0	0.04 PLS lb
Black-eyed Susan	1.00%	2.7	0.08 PLS lb
Brown-eyed Susan	0.25%	0.2	0.02 PLS lb
Stiff Goldenrod	0.50%	0.6	0.04 PLS lb
Gray Goldenrod	0.25%	2.2	0.02 PLS lb
Showy Goldenrod	0.50%	1.4	0.04 PLS lb
Ohio Spiderwort	2.00%	0.5	0.16 PLS lb
Hoary Vervain	1.00%	0.8	0.08 PLS lb
Culver's Root	0.25%	5.9	0.02 PLS lb
Golden Alexanders	4.00%	1.3	0.32 PLS lb

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 (P_2O_5), and percent water soluble potassium (K_2O), 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 no 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 $\pm 1.0\%$ of that specified will be considered to be in substantial compliance.

C. Mulch.

Mulch materials shall be in accordance with Article 4169.07 of the Standard Specifications. Straw type mulch shall not be allowed.

A. Seedbed Preparation

Seedbed preparation shall be in accordance with Article 2601.03, B 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 3/4 inches in diameter or greater including clods, rocks, and other debris prior to the application of the seed.

B. Application of Fertilizer.

Application of the fertilizer shall be in accordance with Article 2601.03, 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 Article 2601.03, B of the Standard Specifications.

D. Application of Seed.

Seed application and sowing shall be in conformance with Article 2601.03, B of the Standard Specifications. 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 8 pounds per acre in a split application with a minimum of two passes.

E. Reseeding, Refertilizing, and Remulching.

Article 2601.03, F of the Standard Specifications shall apply to areas requiring reseeding, refertilizing, and remulching.

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. Additional watering may be required at the discretion of the Engineer. The project quantities include up to ten waterings. If watering is required beyond ten, they will be paid at the contract unit price.

G. Completion of the Work.

1. 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).
2. The Contractor shall clean up, removed, 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.

156191.04 METHOD OF MEASUREMENT.

- A. Measurement for seeding and fertilizing will be plan quantity on an area (acre) basis. No measurement will be made.
- B. Measurement for watering will be measured for payment by counting loads from a transporting tank of known volume or by metering.
- C. Measurement for mulching will be plan quantity on an area (acre) basis. No measurement will be made.

156191.05 BASIS OF PAYMENT.

- A.** For the plan quantity of seeding and fertilizing complete, 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.
- B.** For the quantity of water applied, the Contractor will be paid the contract unit price per 1000 gallons.
- C.** 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 treatments 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.
- D.** 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.
- E.** Area of complete 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.