#### SECTION 02906 - MULCHING - NRCS PRACTICE CODE 484

#### PART 1 – GENERAL

## 1.1 <u>DESCRIPTION</u>:

- A. Mulching is the application of organic material to the soil to protect it from raindrop and sheet flow erosion. Mulching shall be used on cover crop planted areas and tree plantings when so directed by the engineer. In general, mulching shall include, but is not limited to:
  - 1. Procurement, storage and protection of all listed material
  - 2. Maintaining plantings installed by Contractor.
- B. Related Work in Other Sections:
  - 1. Excavating, Filling and Grading Section: Section 02102
  - 2. Channel Bank Vegetation: Section 02901

# C. Purpose:

1. This practice shall be used to reduce soil erosion, aid in seed germination and establishment of plant cover, and conserve soil moisture.

## 1.2 QUALITY ASSURANCE:

A. Qualification of Workmen: Provide at least one person who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct all work performed under this Section.

#### B. Standards:

1. All mulch materials shall be native prairie hay, brome hay, or wheat straw. All materials should be of good quality and free from mold or decay.

## 1.3 <u>JOB CONDITIONS</u>:

- A. Site preparations: Soil surface shall be prepared prior to the application of mulch in order to achieve optimum contact between soil and mulch. All areas to be mulched should be reasonably free from rills and gullies.
- B. Time of mulching: All mulching shall be performed during favorable weather conditions immediately following final grading.

## 1.4 <u>SUBMITTALS</u>:

- A. Materials list shall include, but not limited to, the following:
  - 1. Hay or straw quantities by weight with scale ticket, Signed and Dated by Supplier(s).

2. As-Installed Plan: During course of the installation, carefully record in red outline on a print of the planting drawings actual mulching location.

## 1.5 DELIVERY, STORAGE AND HANDLING:

- A. Pick up materials in accordance with any special handling instructions and deliver to project site in good condition.
- B. Use all means necessary to protect plant materials before, during, and after installation and to protect the installed work and materials of all other trades.

# 1.6 <u>SITE DISTURBANCES</u>:

- A. Take precautions to insure that equipment and vehicles do not disturb or damage existing grading, seeding, plantings or other site improvements.
- B. Repair and/or return to original condition any damage at no cost to Owner.

#### PART 2 – MATERIALS

## 2.1 MULCH MATERIALS.

- A. General: Materials shall consist of natural, biodegradable material such as plant residue to include, but not limited to, the following:
  - 1. Native Prairie Hay
  - 2. Brome Hay
  - 3. Wheat Straw
- B. All materials shall be free from diseased plant residue and noxious weed seed.
- C. Miscellaneous Materials: All other materials not specifically described but required for a complete and proper planting installation shall be as selected by the Contractor, subject to the approval of the Engineer

#### PART 3 – INSTALLATION

#### 3.1 SURFACE CONDITIONS:

# A. Inspection:

- 1. Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where these installations may properly commence.
- 2. Verify that planting, seeding and related construction work is completed in accordance with the original design and referenced standards.

# B. Discrepancies:

- 1. In the event of discrepancy, immediately notify the Engineer.
- 2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

## 3.2 GRADE SURFACE:

- A. Finish Grading: All finish grading will be performed according to Section 02002 of these Specifications, in areas that are graded.
- B. Fine Grading: Fine mechanical grading shall only be conducted on areas where it can be done safely without posing a danger or hazard to the equipment and operator.

# 3.3 <u>APPLICATION TIMING</u>:

A. Mulch shall be applied upon completion or within 24 hours of cover crop seeding.

# 3.4 <u>APPLICATION RATE</u>:

A. Mulch shall be applied at the rate of 4,000 pounds per surface acre.

# 3.5 <u>CRIMPING</u>:

A. If required by the engineer, mulch shall be crimped immediately after spreading with a mulch crimper or equivalent devise consisting of a series of dull flat blades with notched edges spaced approximately 8 inches apart. The mulch shall be crimped into the soil to a depth of 1 to 3 inches. Crimping shall only be performed in areas where it can be done safely, without posing a danger or hazard to the operator or equipment.

#### 3.6 INSPECTION:

- A. In addition to normal progress inspections, schedule and conduct the following formal inspections, giving the Engineer at least 24 hours prior notice of readiness for inspection:
  - 1. Final inspection after completion of seeding, planting and mulching; schedule this inspection sufficiently in advance, and in cooperation with the Engineer, so that final inspection may be conducted within 48 hours after completion of mulching.
  - 2. Final inspection at the end of the maintenance period provided that all previous deficiencies have been corrected.

# 3.7 MAINTENANCE:

A. General: The Contractor shall inspect the site within 48 hours of any precipitation event that produces 0.5 inches or more of rain in a 24 hour period. Mulch that is displaced shall be reapplied and anchored. Maintenance shall be completed as soon as possible with consideration of site conditions.

B. Maintain all seeding, planting, and mulching starting with the planting operations and continuing for 30 calendar days after all mulching is complete and approved by the Engineer.

## C. Work Included:

- 1. Protect all planted areas against damage, including erosion, and drought by providing and maintaining proper safeguards such as periodic watering.
- D. Extension of Maintenance Period: Continue the maintenance period at no additional cost to the Owner until all previously noted deficiencies have been corrected, at which time the final inspection shall be made.

# 3.8 <u>CLEAN-UP</u>:

A. During the progress of this work, and upon completion, thoroughly clean the project area and remove and properly dispose of all resultant dirt, debris and other waste materials.

END OF SECTION 02906