**ITEM #0945005A - WILDFLOWER ESTABLISHMENT**

**Description:** The work included in this item shall consist of providing an accepted uniform stand of established wildflowers by furnishing and placing seed and mulch on all areas to be treated as shown on the plans, permits or as directed by the Engineer.

The work will also include the installation of bio-degradable erosion control matting, as shown on plans, permits or as directed by the Engineer, consisting of mulch and netting woven together as a unit.

**Materials:** All wildflower seed mixture sources shall be locally obtained within the Northeast USA including New England, New York, Pennsylvania, New Jersey, Delaware, or Maryland in order to preserve and enhance the diversity of native wildflower species.

Mulch shall meet the requirements of Article M.13.05.

Bio-degradable erosion control matting, if required, shall be from the Department’s Qualified Products List and shall meet the requirements of Article M.13.09.

All seed mixture sources, mulch and erosion control matting shall be approved by Engineer prior to application.

Three approved seed mixtures are detailed below.

1. **New England Wildflower Seed Mix: (NEWP) New England WetMix**, New England Wetland Plants, Inc. 800 Main Street Amherst, MA 01002, or equal. Rate shall be 1 pound PLS per 1900 sq.ft.
2. **XERCES Northeastern Pollinator Mix:** Ernst Conservation Seeds Inc. 8884 Mercer Pike, Meadville, PA, 16335, or equal. Rate shall be 8 pound PLS per 1 acre.
3. **Wildflower & Grass Mix**, Vermont Wetland Plant Supply, LLC, P.O. Box 153, Orwell, VT, 05760, or equal. Rate shall be 1 pound PLS per 1600 sq.ft.

All seed mixtures must be approved by the Environmental Scientist from the Office of Environmental Planning in advance of purchase. The materials certification for any proposed mixture shall be submitted a minimum of thirty (30) days prior to delivery on site by the Contractor. All seed material certifications must have seed mixtures that shall not include any invasive species pursuant to Connecticut General Statute Sec. 22a-381d or any State Threatened or State Endangered species known pursuant to Connecticut General Statute Sec. 26-303 which would be a violation of the Connecticut Endangered Species Act. The seed tags from the bags are to be removed by the Engineer upon delivery and attached to the Material Certification. A copy of the seed tag is to be provided to the Environmental Scientist. No seeding shall occur if the requirements are not met.

All approved seed mixtures shall be obtained in sufficient quantities to meet the pure live seed (PLS) application rates as determined by the seed analysis of the mixture.

**Construction Methods:** Construction methods shall be those established as agronomically acceptable and feasible and approved by the Engineer.

Preparation of Seedbed Areas:

1. Level areas, median areas, interchanges and lawns: These areas shall be made friable and receptive for seeding by discing or by other approved methods to the satisfaction of the Engineer. The final prepared surface which has been seeded shall meet the lines and grades for such surface areas as shown on the plans, or as directed by the Engineer.
2. Slope and embankment areas: These areas shall be made friable and receptive to seeding by approved methods which will not disrupt the line and grade of the slope surface. In no event, will seeding be permitted on hard or crusted soil surface.

All areas to be seeded shall be reasonably free from weeds taller than 3 inches. Removal of weed growth for the slope areas shall be those methods which do not rut or scar the slope surface or cause excessive disruption of the slope line or grade as approved by the Engineer. Seeding on level areas shall not be permitted until substantial weed growth is removed and approved by the Engineer.

Seeding Season: The calendar dates for seeding shall be:

Spring – March 1 to June 15

Fall – September 15 to November 15

Seeding Methods: The wildflower seed mixture shall be applied by an agronomically acceptable procedure approved by Environmental Scientist. The rate of application shall be as shown on the plans or directed by the Engineer.

(Germination Percentage X Purity Percentage)/ 100 = Percentage PLS

The Engineer shall verify that the seed is applied at a rate which will allow for 100 percent PLS.

**Method of Measurement:** The work will be measured for payment by the number of pounds of each size and kind of wildflower seed counted, planted and accepted.

**Basis of Payment:** This work will be paid at the contract unit price per pound for “Wildflower Establishment,” which price shall include all materials, maintenance, equipment tools, labor, transportation, operations, and all work incidental thereto. Partial payment of up to 50% may be made for work completed, but not accepted. Full payment shall not be made until the area has been accepted by the Engineer.

**Pay Item Pay Unit**

Wildflower Establishment lb.