

ITEM #0950202A - SHORELINE GRASS ESTABLISHMENT

Description: This item includes furnishing and placing a seed mixture to establish shoreline grasses within the Tidal Wetland Mitigation Site(s) or other locations shown on the Plans and directed by the Engineer.

Materials: All shoreline grass seed mixture sources shall be local to the northeast (New England, New York, Pennsylvania, New Jersey, Delaware, or Maryland).

Three qualified shoreline grass seed mixtures are detailed below. An equal seed mixture may be submitted to the Engineer for approval.

1. **New England Coastal Salt Tolerant Grass Mix**, New England Wetland Plants, Inc. 820 West Street Amherst, MA 01002. Rate shall be 1 pound PLS per 1,250 square foot.
2. **NJ Salt Tolerant Basin Mix**, Ernst Conservation Seeds, Inc. 8884 Mercer Pike, Meadville, PA 16335. Rate shall be 1 pound PLS per 2,180 square foot.
3. **Shore Mix®**, Sylva Native Nursery & Seed Company, 3815 Roser Road, Glen Rock, PA 17327. Rate shall be 1 pound PLS per 1,100 square foot.

The placement of fertilizer, mulch or erosion control matting will not be allowed within any Tidal Wetland Mitigation Site(s).

All shoreline seed mixture sources shall be approved by the Engineer prior to application.

The Materials Certificate for all seed mixtures shall state that the seed mixture does not include any invasive species pursuant to CGS Sec. 22a-381d or any State-Threatened or State Endangered species pursuant to CGS Sec. 26-303. The seed tags from the bags are to be removed by the Engineer upon delivery and attached to the Materials Certificate. Seeding shall not occur if these 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 as approved by the Engineer.

Seeding for establishment of shoreline grasses in the Tidal Wetland Mitigation Site(s) shall occur after the completion of the Tidal Wetland Mitigation Site(s) and after 7 to 14 days of exposure to tidal cycles.

For establishment of shoreline grass in locations that are not in the Tidal Wetland Mitigation Site(s), seeding shall occur during the dates specified in Article 9.50.03-2.

If seed is purchased in bulk rather than PLS, the rate of application must be adjusted to meet the required PLS seeding rate. This seeding rate shall be increased by the appropriate percentage as determined by the following formula based on information on the seed tags at delivery:

$$(\text{Germination Percentage} \times \text{Purity Percentage}) / 100 = \text{PLS}$$

The Engineer will verify that the seed is applied at a rate that will allow for 100 percent PLS. Mowing will not be allowed within Site(s) that are seeded with shoreline grass seed mix.

Method of Measurement: This work will be measured for payment by the number of square yards of surface area of accepted established shoreline grasses as specified.

Basis of Payment: This work will be paid for at the Contract unit price per square yard for "Shoreline Grass 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 will be made when the work has been accepted by the Engineer.

Pay Item	Pay Unit
Shoreline Grass Establishment	s.y.