MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**STRAW WATTLE**

UNIV:JMR 1 of 2 APPR:DMG:TWK:08-10-21

**a. Description.** This work consists of furnishing and installing straw wattles at the locations shown on the plans, as directed by the Engineer, in accordance with the standard specifications, this special provision and the manufacturer’s installation guidelines.

**b. Materials.** Furnish straw wattles manufactured from 100 percent weed seed free agricultural straw wrapped in a tight tubular HDPE netting which is knotted at both ends. Ensure the wattles are a nominal 12 inches in diameter and have a minimum density of 3.8 pcf. Size the length of rolls based on the intended use and manufacturer’s recommendations but generally in the range of 10 to 20 feet long.

Ensure the netting is resistant to chemical, biological and UV degradation. The netting must meet the requirements in Table 1.

**Table 1 Physical Properties**

|  |  |
| --- | --- |
| Property | Requirement |
| Material | HDPE |
| Weight | 0.35 ounces/foot |
| Hole size | 0.5 inch by 0.5 inch nominal |
| Tensile strength | 40 pounds/foot |
| Configuration | Cylindrical, totally encased |
| Functional life | 12 months (minimum) |

Use wooden stakes that are a nominal 3/4 inch by 3/4 inch by a minimum 36 inches long.

**c. Construction.** Install straw wattles in accordance with the manufacturer’s installation guidelines and as detailed herein. Install wattles in a two inch trench constructed perpendicular to the anticipated runoff flow direction. Turn ends of the wattles up to prevent release of water around the ends. Secure wattles to the ground with wooden stakes. Drive stakes through the center of the wattle and into the ground at least 24 inches with less than 2 inches protruding above the wattle. Drive a stake within two feet of each end of the wattle.

Transition from one wattle to the next by abutting or overlapping a minimum of 6 inches. If wattles are abutted together, fasten ends together with heavy twine or plastic ties.

Do not remove wattles unless directed by the Engineer.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

**Pay Item Pay Unit**

Straw Wattle Foot

**Straw Wattle** will be measured by the in place length not including the length of overlapped material including removal and disposal of the wattles as directed by the Engineer.