#### **SPSRW-XX, EROSION CONTROL MATTING**

Version Date: 8/02/2024 Revision Date: MM/DD/YYY by XXX

**1.0 DESCRIPTION**

The work covered in this special provision includes all elements of work covered in Section 1631, “Rolled Erosion Control Products” and applicable Charlotte Land Development Standards of the Standard Specifications with the following exceptions pertaining to Materials, Installation, and Payment.

**2.0 MATERIALS**

All matting shall be 100% biodegradable, containing organic fibers such as cotton, jute, or coconut only. Netting that contains any plastic or nylon is not allowed. The following material specifications shall be met:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Material** | **Description** | **Tensile Strength (lbs/ft) (MD)** | **Duration (mos)** | **Unveg Velocity (ft/s)** | **Weight (oz/sy)** |
| Straw | Biodegradable w/ organic netting | 100 - 200 | 12 | 5.0 - 7.0 | 8 - 9.5 |
| Straw/Coconut | Biodegradable w/ organic netting | 190 - 210 | 18 - 24 | 7.0 - 8.0 | 8 - 11.5 |
| Coconut | Biodegradable w/ organic netting | 190 - 240 | 24 - 36 | 9.0 - 10.0 | 9.5 - 10 |
|  |  | **Dry Tensile Strength (lbs/ft) (MD/TD)** |  |  |  |
| Coir Fiber 400g | Biodegradable w/ coir fiber | 500 - 800 | 36 | 8 | 11.8 - 12.5 |
| Coir Fiber 700g | Biodegradable w/ coir fiber | 1250 - 1600 | 36 | 10.0 - 12.0 | 20.0 - 27 |
| Coir Fiber 900g | Biodegradable w/ coir fiber | 1900 - 2000 | 36 | 16 | 26 - 27 |

Anchors:

Staples Article 1060-8:

Only allowed for Straw, Straw/Coconut, and Coconut Mattings

Wooden Dead Stout Stake:

Provide hardwood stakes 24" long with a 2" x 2" nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving through the coir fiber mat and down into the underlying soil.

Wooden Matting Stake:

Provide hardwood stakes 12” long, with a nominal 1” x 1” square cross section. One end of the stake must be sharpened or beveled to facilitate driving through the coir fiber mat and down into the underlying soil. The other end of the stake needs to have a 1"- 2" long head at the top with a 0.75" notch following to catch and secure the coir fiber mat.

Alternate methods of securing the coir fiber mat with the stake may be proposed by the Contractor to be approved by the Engineer prior to implementation.

This item also includes all elements of work required for seedbed preparation, furnishing, and applying fertilizer, limestone, and grass seed in accordance with the City of Charlotte “Landscape Construction Standards” Seeding and Sodding Turfgrass Section 04200 with the exception that portions pertaining to mulch will not apply.

**3.0 INSTALLATION**

Installation will be in accordance with Section 1631, “Rolled Erosion Control Products” with the exception that the staple pattern will be per the Manufacturer’s recommendations or as directed by the Engineer.

Coir matting bank stabilization installation shall be per City of Charlotte Storm Water Services Coir Matting Bank Stabilization detail.

**4.0 MEASUREMENT**

Measurement will be per Section 1631, “Rolled Erosion Control Products” with the exception that there shall be no separate measurement for overlap areas.

**5.0 PAYMENT**

Payment will be per Section 1631, “Rolled Erosion Control Products” with the exception that no separate payment will be made for wire staples, wooden anchors, overlap areas, seedbed preparation, furnishing and applying fertilizer, limestone, and grass seed for Erosion Control Matting.

Payment will be made under:

**MATTING FOR EROSION CONTROL (100% Biodegradable Straw Matting w/ organic netting) SY**

**MATTING FOR EROSION CONTROL (100% Biodegradable Coconut Matting w/ organic netting) SY**

**MATTING FOR EROSION CONTROL (100% Biodegradable Straw/Coconut Matting w/ organic netting) .SY**

**Matting for Erosion Control (Coir Fiber Matting 400) SY**

**Matting For Erosion Control (Coir Fiber Matting 700) SY**

**Matting For Erosion Control (Coir Fiber Matting 900) SY**