

Make the following Section a part of the Standard Specifications:

“SECTION 675 – VEGETATIVE GEOTEXTILE FOR SLOPE STABILIZATION

675.01 Description. This section describes furnishing and placing vegetative geotextile, also referred to as rolled erosion control products (RECPs), on slopes for erosion control and to promote growth of vegetation.

675.02 Materials.

Structure Backfill Material

703.20

(A) Vegetative Geotextile. Composite turf reinforcement mat of 100% coconut fiber matrix incorporated into a permanent three-dimensional turf reinforcement matting. The matrix shall be evenly distributed across the entire width of the matting and stitch bonded between a super heavy duty UV stabilized netting with 0.50 x 0.50 inch (1.27 x 1.27 cm) opening, an ultra heavy UV stabilized, dramatically corrugated (crimped) intermediate netting with 0.5 x 0.5 inch (1.27 x 1.27 cm) openings. The three nettings shall be stitched together on 1.50 inch (3.81cm) centers with UV stabilized polypropylene thread to form permanent three-dimensional turf reinforcement matting. RECPs shall meet the requirements of the Material Content, Property, and Anchor Type tables below, unless otherwise instructed.

Material Content		
Matrix	100% Coconut Fiber	0.50 lbs/yd ²
Netting	Top and Bottom, UV stabilized Polypropylene	8 lb/1000 ft ²
	Middle, Corrugated UV stabilized Polypropylene	24 lb/1000 ft ²
Thread	Polypropylene, UV Stable	

Property	Test Method	Typical
Thickness	ASTM D6525	0.67 in (17.0mm)
Resiliency	ASTM 6524	90%
Density	ASTM D792	0.53 oz/in ³
Stiffness	ASTM 1388	3.83 oz-in
Tensile Strength – MD	ASTM 6818	625 lbs/ft (9.12 kN/m)
Elongation – MD	ASTM 6818	22%
Tensile Strength – TD	ASTM 6818	768 lbs/ft (11.21 kN/m)
Elongation – TD	ASTM 6818	15%

(B) Staples and Stakes.

Soil Type	Anchor Type
Clay – Clay Loam	10 inch 8 ga. steel wire staple
Silt Loam – Loam	10 inch 8 ga. steel wire staple
Sandy Loam	12 inch 8 ga. steel wire staple
Sand/Muck ≤ 6 in	12 inch #3 rebar staple

675.03 Construction.

(A) Site Preparation. Prepare soil in accordance with Section 206 – Excavation and Backfill for Drainage Facilities before installing rolled erosion control products (RECP's), including any necessary application of lime, fertilizer, and seed in accordance with manufacturer's specifications.

(B) Storage and Handling. Geotextiles shall be stored and handled in accordance with ASTM D 4873 and this subsection. Geotextiles shall be kept dry and stored off the ground. During shipment and storage, material shall not be exposed to sunlight or other forms of light that contain ultraviolet rays, for more than five days.

(C) Installation.

(1) Begin at top of the slope by anchoring the RECPs in a 6" deep x 6" wide trench with approximately 12" of RECPs extended beyond the up-slope portion of the trench. Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" portion of RECPs back over seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECPs.

(2) Roll the RECPs (A.) down or (B.) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations. Follow manufacturer's recommendation for staple/stake pattern.

(3) Place consecutive RECPs end over end (single style) with a 2' overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPs.

(4) Full length edge of RECPs at top and side slopes must be anchored with a row of staples approximately 12" apart in a 6" deep x 6" wide trench. Backfill and compact the trench after staking.

(5) The terminal end of the RECPs must be anchored with a row of staples approximately 12" apart in a 6" deep x 6" wide trench. Backfill and compact the trench after staking

675.04 Measurement. Vegetative geotextile will be measured per square foot.

675.05 Payment. The Engineer will pay for the accepted quantities of vegetative geotextile per square foot. Payment will be full compensation for the work prescribed in this section, by the Engineer, and in the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	Pay Unit
Vegetative Geotextile for Erosion Control Applications	Square Foot

END OF SECTION 675