

1. GENERAL

1.1 RELATED WORK

1. Section 32 91 00 – Topsoil, Seeding and Sodding.

1.2 SCOPE

- .1 This section specifies the requirements for the supply and installation of composite turf reinforcement matting on projects.

1.3 MEASUREMENT AND PAYMENT

- .1 Rolled Erosion Control Products will be measured in square metres, based on the surface area of the ground covered by the installation. No allowances will be made for any required burying or lapping of material.
- .2 Payment will be made at the unit price bid per square metre for the type installed. The payment will be full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Engineer and in accordance with the manufacturer's recommendations.

2. PRODUCTS

2.1 COMPOSITE TURF REINFORCEMENT MAT

- .1 Composite turf reinforcement mat shall be a machine produced mat of 70% straw and 30% coconut fibre matrix incorporated into permanent three-dimensional turf reinforcement matting, unless otherwise approved or directed by the Engineer or within the Bid Forms.
 - .1 The matrix shall be evenly distributed across the entire width of the matting and stitch bonded openings, an ultra heavy-duty UV stabilized, dramatically corrugated (crimped) intermediate netting with 1.27 cm x 1.27 cm openings and covered by a heavy-duty UV stabilized netting with 1.27 cm x 1.27 cm openings.
 - .2 The middle-corrugated netting shall form prominent closely spaced ridges across the entire width of the mat.
 - .3 The three (3) nettings will be stitched together on 3.81 cm centres with UV stabilized polypropylene thread to form permanent three-dimensional turf reinforcement matting.
 - .4 All mats shall be manufactured with a coloured thread stitched along both outer edges as an overlap for adjacent mats.

2.2 STAPLES

- .1 Staples shall be made in a shape from 4 mm diameter (minimum) ungalvanized wire. Staples shall have 150 mm or 300 mm long parallel legs spaced 40 mm apart at the crown
- .2 The Contractor shall have the option of supplying biodegradable plastic or wooden staples compatible with the composite turf reinforcement mat, as an alternative to ungalvanized wire pins. Alternative materials must be approved by the Engineer prior to substitution.

3. EXECUTION

3.1 PLACEMENT OF ROLLED EROSION CONTROL PRODUCTS

- .1 Rolled erosion control products will be placed immediately following seeding and fertilizing operations. Under no circumstance is the rolled erosion control product to be placed prior to seeding and fertilizing operations. The Contractor shall ensure that the ground surface is free from stones or other debris, which would interfere with the uniform contact of the covering within the soil. Prepared surface must be free from sharp depressions or mounds.
- .2 Rolled erosion control products shall be unrolled in the direction of expected water flow and shall be applied without stretching so that they loosely, but smoothly, contact the soil surface. The top end of any ditch or installation shall be stapled and buried in a narrow trench that is at least 150 mm deep. The soil backfill in the trench shall be firmly tamped in place. Mat should intimately conform to the soil surface, free from wrinkles and folds.
- .3 Longitudinal laps in covering installation shall be achieved by excavating a check slot of 150 mm minimum depth, at the location of the lap, and burying the upper end of the downslope blanket in the slot. The upslope covering shall then overlap the downslope covering by a minimum of 150 mm, or as specified by the manufacturer. Covering lying side by side shall be lapped a minimum of 100 mm, or as specified by the manufacturer.
- .4 Additional check slots shall be provided at a spacing of 15 m along slopes and 10 m along ditches measured parallel to the ground slope. The covering shall be folded to contact the cross section of the slot and stapled in place. The trench shall then be firmly tamped.
- .5 Stapling of the rolled erosion control products shall be to the manufacturer's recommendations. A common row of staples shall be used for all laps. Staples must be installed as the mat is being unrolled. Walking on the mat to install the staples can displace the mat, disturb the soil under the mat, and stretch the mat or put it under tension, and must therefore be avoided where possible. Increase density of staples if required to ensure full contact between the mat and the soil.

END OF SECTION