

PART 1 - GENERAL

- 1.1 SECTION INCLUDES .1 Materials and installation of polymeric geogrids used as slope protection/turf reinforcement.
- 1.2 MEASUREMENT AND PAYMENT .1 Measure geogrid in square metres of area covered by material. No allowance will be made for seams and overlaps.  
.1 Slope protection material
- 1.3 REFERENCES .1 American Society for Testing and Materials International, (ASTM)  
.1 ASTM D6524-11, Standard Test Method for Measuring the Resiliency of Turf Reinforcement Mats  
.2 ASTM D6525-06, Standard Test Method for Measuring Nominal Thickness of Permanent Rolled Erosion Control Products  
.3 ASTM D6566-06, Standard Test Method for Measuring mass Per Unit Area of Turf Reinforcement Mats  
.4 ASTM D6567-06, Standard Test method for Measuring the Light Penetration of Turf Reinforcement Mat  
.5 ASTM D6575-06, Standard Test Method for Determining Stiffness of Geosynthetics Used as Turf Reinforcement Mats  
.6 ASTM D6818-09, Standard Test Method for Ultimate Tensile Properties of Turf Reinforcement Mats
- 1.4 SUBMITTALS .1 Submit samples in accordance with Section 01 33 00.
- 1.5 DELIVERY, STORAGE AND HANDLING .1 During delivery and storage, protect geogrids from direct sunlight, ultraviolet rays, excessive heat, mud, dirt, dust, debris and rodents.
- 1.6 WASTE MANAGEMENT AND .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 20.

DISPOSAL

- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard, packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
- .4 Fold up metal banding, flatten and place in designated area for recycling.

PART 2 - PRODUCTS

2.1 MATERIAL

- .1 Turf reinforcement mat, capable of providing stability for sloped surfaces.
- .2 Geogrid: Open grid polymer having biaxial orientation, free of striations, roughness, pinholes, blisters, undispersed raw materials or any sign of contamination by foreign matter.
  - .1 Roll width: 2.0m minimum
  - .2 Roll length: 42.2m minimum
- .3 Geogrid physical and mechanical properties:
  - .1 Peak tensile strength to ASM D-6818:
    - .1 5.8x4.3 kN/m
  - .2 Tensile elongation to ASTM D-6818:
    - .1 50%
  - .3 Resiliency to ASTM D-6524:
    - .1 90%
  - .4 Flexibility to ASTM D-6575:
    - .1 30000 mg-cm
  - .5 Mass per unit are to ASTM D-6566:
    - .1 340 g/m<sup>2</sup>
  - .6 Thickness to ASTM D-6525:
    - .1 10.1 mm
  - .7 Light penetration to ASTM D-6567:
    - .1 20%
  - .8 Color: green or tan.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Place geogrid material by unrolling onto graded surface in manner and locations indicated and retain in

position in accordance with manufacturer's written recommendations.

- .2 Place geogrid on (sloping) surfaces in one continuous length as shown on the drawings.
- .3 Join successive strips of geogrid as recommended by manufacturer.
- .4 Protect geogrid from displacement, damage or deterioration.
- .5 Replace damaged or deteriorated geogrid to approval of Departmental Representative.

### 3.2 CLEANING

- .1 Remove construction debris from Project site and dispose of debris in an environmentally responsible and legal manner.

### 3.3 PROTECTION

- .1 Vehicular traffic not permitted directly on geogrid.