

# Special Specification 3034

## Soft Surface Pavement



### 1. DESCRIPTION

Furnish and install soft surface pavement as shown on the plans. The soft surface pavement includes geotextile fabric materials, geoweb system, and decomposed granite materials.

### 2. MATERIALS

2.1. **Geotextile Fabric Materials.** Furnish materials in accordance with the following Item:

- DMS-6200, "Filter Fabric."

Provide Type 2 filter fabric materials meeting requirements specified in the Departmental Materials Specification DMS-6200.

2.2. **Geoweb System.** Geoweb system composed of geoweb matress and infill materials inside the web.

2.2.1. Geoweb Mattress. Provide the following geoweb mattress or approved equals:

2.2.1.1. System: Geoweb

Manufacturer: PRESTO GEOSYSTEMS

Base Material:

- Material Composition: Polyethylene
- Color: Carbon Black

Cell Properties:

- Model: GW20V
- Depth: 4 in

2.2.1.2.

System: EnviroGrid

Manufacturer: GEO PRODUCTS, LLC

Base Material:

- Material Composition: Polyethylene
- Color: Carbon Black

Cell Properties:

- Model: EGA 30
- Depth: 4 in

2.2.2. Infill Materials. Per manufacturer's recommendations. With approval of the Engineer, decomposed granite can be used as infill materials.

2.2.3. Anchoring and other Attachments. Per manufacturer's recommendations.

2.3. **Decomposed Granite Materials.** Provide the decomposed granite materials and stabilizer binder as specified below:

2.3.1. Decomposed granite materials. Provide 3/8 in. or 1/4 in. crushed granite rock screenings per AASHTO T11-82 and T27-82.

2.3.2. Stabilizer Binder. Provide stabilizer binder from the following manufacturers (or approved equals):  
PolyPavement The Natural Soil Pavement

P.O. Box 36339  
 Los Angeles, CA 90036  
 (323) 954-2244  
 www.Polypavement.com  
 Or  
 Stabilizer Solutions, Inc.  
 33 South 28th Street  
 Phoenix, AZ 85034  
 800-336-2468  
 www.StabilizerSolutions.com

Provide non-toxic, organic binder that is a colorless and odorless concentrated powder that binds decomposed granite together to produce a firm surface. The binder must not alter the decomposed granite color.

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### 3. CONSTRUCTION

- 3.1. **Geotextile Fabric Placement.** Prepare subgrade to the line and grade shown on the plans before the placement of geotextile fabric materials. Remove all loose or unsuitable materials. Carefully backfill all depressions to grade with suitable materials from adjacent required excavation or another approved source, and compact the backfill to a density at least equal to the adjacent foundation. Remove any buried debris protruding from the foundation and carefully backfill and compact voids as specified above.

Spread geotextile fabric uniformly on the prepared foundation surface. Any defects, rips, holes, flaws, or damage to the material may be cause for rejection. Place the material with the long axis parallel to the centerline of the roadway. Place securing pins in the lapped longitudinal joints, spaced on approximately 10-ft. centers. Keep the fabric material free of tension, stress, folds, wrinkles, or creases. Lap the material at least 3 ft. along the longitudinal joint of material, or lap the joints 1 ft. and sew them. Lap the ends of rolls at joints by at least 3 ft. Repair torn or punctured fabric by placing a layer of fabric over the damaged area, overlapping at least 3 ft. beyond the damaged area in all directions.

Place securing pins through both strips of material at lapped joints at approximately the midpoint of the overlap. Place additional securing pins as necessary to hold filter fabric in position. Store the geotextile fabric materials away from direct sunlight. Cover geotextile fabric as soon as possible after placing, but within 3 days.

- 3.2. **Geoweb System Placement.** Install a 4 ft. wide x 10 ft. long mockup of geoweb system including the geoweb mattress and granular infill materials at locations as directed by the Engineer for approval.

Install the geoweb system in accordance with the manufacturer's installation Guide.

Do not install geoweb system during rainy conditions or when the subgrade is too soft.

- 3.3. **Decomposed Granite Placement.** Install a 4 ft. wide x 10 ft. long mockup of decomposed granite with stabilizer additive at locations as directed by the Engineer for approval. The decomposed granite layer can be placed atop of the approved geoweb mattress system.

Blend 16 lb. of stabilizer per 1 ton of decomposed granite. It is critical that the stabilizer be thoroughly and uniformly mixed throughout the decomposed granite.

Do not install decomposed granite during rainy conditions.

Temperatures must remain above 45° F during installation and for a period of 15 days after installation is complete.

Place decomposed granite over geoweb mattress system to the thickness as shown on the plans. Remove loose material or unsuitable materials. Wet the surface thoroughly in accordance with the supplier's recommendations and let set according to the supplier's instructions. Compact to not less than 90% nor more than 95% of maximum dry density (ASTM D 698) with a double drum roller. Do not use a tamp plate.

Do not begin compaction for 6 hours after placement but no longer than 48 hours after placement. Use caution in compacting decomposed granite when there are adjacent planting and irrigation systems.

Remove and replace decomposed granite that is damaged, defective, or does not meet requirements of this specification.

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#### **4. MEASUREMENT**

- 4.1. The quantity of geotextile fabric materials in square yard will be provided for Contractor's information only. The quantity does not include lapping areas.
- 4.2. The geoweb mattress system will be measure by the square yard, complete in place, as shown on the plans.
- 4.3. The decomposed granite will be measure by the square yard, complete in place, as shown on the plans.

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#### **5. PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Geoweb System" of the height specified and for "Decomposed Granite" of the thickness shown on the plans. This price is full compensation for furnishing all labor, materials, freight, tools, equipment, and incidentals, and for doing all the work involved in placement of geoweb system and decomposed granite, complete in place.

The furnishing and placement of geotextile materials including labor, materials, freight, tool, and equipment will not be paid for directly but will be considered subsidiary to this Item.