Evaluation Table

PEP ID:	**XXXXXX**
Manufacturer:	**Name of Manufacturer**
Product Name:	**Name of Product**

1014 Soil Reinforcement and Geosynthetics
1014 Geogrid (single layer only)
ADOT Standard Specification: 1014-1, 1014-3
Responsible Section: Materials Group

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
NTPEP Datamine	1014-1	Geosynthetic materials, including eligible biaxial geogrid, must be on the DataMine list for geotextiles and geosynthetics on the NTPEP website.		
Composition	1014-1	Fibers, yarns, and filaments used in the manufacture of geotextile fabric, and the threads used in joining by sewing, shall consist of long-chain synthetic polymers, composed at least 95 percent, by weight, of polyolefins or polyesters.		
Packaging	1014-1	Geosynthetic materials shall be furnished in protective covers capable of protecting the materials from harmful environmental conditions such as ultraviolet rays, abrasion, extreme heat, and water.		
General	1014-1	Geotextile fabric shall be resistant to chemical attack, rot, and mildew, and shall have no tears or defects which will adversely alter its physical properties.		
Structure	1014-3	Geogrid reinforcement material for roadway base applications shall be a bi-axial polymer grid structure, specifically fabricated for use as a base reinforcement.		

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Width	1014-3	The width of the geogrid shall be approximately 13 feet or as appropriate for the proposed construction.		
Geogrid type A, B, or C	1014-3	(A) A structure comprised of punched and drawn polypropylene sheet to form a grid		
		(B) A structure comprised of polypropylene extruded to form a grid.		
		(C) A structure comprised of polypropylene integrally formed by extruding then stretching longitudinally and transversely to form a grid.		
Average Aperture Size, min, inches	1014-3 I.D. Calipered	MD: 0.8-1.5 inches		
		XMD: 0.8-1.5 inches		
Rib thickness, min, inches	1014-3 ASTM D1777	MD: 0.05 inches		
		XMD: 0.05 inches		
Tensile strength at 2% strain, min, lbs./ft.	1014-3 ASTM D6637	MD: 410 lbs./ft.		
		XMD: 620 lbs./ft.		
Tensile strength at 5% strain, min, lbs./ft.	1014-3 ASTM D6637	MD: 810 lbs./ft.		
		XMD: 1,340 lbs./ft.		
Ultimate tensile strength, min, lbs./ft.	1014-3 ASTM D6637	MD: 1,310 lbs./ft.		
		XMD: 1,970 lbs./ft.		
Flexural Rigidity, min, mg-cm	1014-3 ASTM D7748	750,000 mg-cm		
Junction efficiency, min, %	1014-3 ASTM D7737	93%		
Resistance to UV degradation, min, %	1014-3 ASTM D4355	100%		
Junction efficiency, min, %	1014-3 ASTM D7737	93%		
Resistance to UV degradation, min, %	1014-3 ASTM D4355	100%		

I.D. Caliper note: Maximum inside dimension in each principal direction is measured by calipers.
MD: Machine direction which is along roll length.
XMD: Cross machine direction which is across the roll width.