

EAST MARLBOROUGH TOWNSHIP
STORMWATER MANAGEMENT
ORDINANCE

APPENDIX 5

SOIL USE GUIDE

STORMWATER MGMT. & LAND DISTURB.

SOIL USE GUIDE					
Soil Type	Detention Basin Location	Infiltration Structure	Infiltration Rate for Calculating pit or Trench Size	Diverston Terraces or Berms and Interceptor Channels (Max. flow rates and grade)	Erodibility Factor
Manor	Not recommended (see 1 below)	Highly recommended	2" per hour	1.5 fps, 1% grade	High
Neshaminy	Not recommended	Highly recommended	2" per hour	2.5 fps, 2% grade	Low
Brandywine	With restrictions (see 1 & 2 below)	Highly recommended	3" per hour for facilities 2 feet deep	2.5 fps, 2% grade	Low when stripped to 1 foot; moderate at grade
Chester	See 1 below. Can be used where recommended soil is not available.	Recommended	1.2" per hour	2.0 fps, 1.5% grade	Moderate at grade; high when stripped to 2 feet
Glenelg	See 1 below. Can be used where recommended soil is not available.	Recommended	1.2" per hour	2.0 fps, 1.5% grade	
Glenville	Recommended	Generally not recommended	0.8" per hour	1.5 fps, 1% grade	High at grade; moderate at 4 feet
Chewacla	Recommended (except as noted in 3 below)	Not recommended	0.8" per hour	1.5 fps, 1% grade	High
Worsham	Recommended (except as noted in 3 below)	Not recommended	0.8" per hour	2.0 fps, 2% grade	Moderate
Wehadkee	Recommended (except as noted in 3 below)	Not recommended	0.8" per hour	2.0 fps, 2% grade	Moderate
Sassfras	Prohibited (see 4 below)	Highly recommended	3.5" per hour	2.0 fps, 1.5% grade	Moderate to 40"; low below 40"
Woodstown	Prohibited (see 4 below)	Highly recommended; high-water table may restrict if not used for water supply	3.5" per hour	2.0 fps, 1.5% grade	Moderate
Othello	Generally prohibited (see 5 below)	Highly recommended <u>only</u> when water supply drawn from the area; otherwise high-water table restricts use	2" per hour	1.5 fps, 1% grade	High

1. If recommended soils are available on a site, this soil is not recommended for detention basins which will handle normal runoff from streets, parking areas and other locations which might have major pollutants present. The soil may be used for detaining water from other areas, however. Due to high erodibility potential, Manor soils should not be used to construct walls of detention basins. Where basins are built in Manor soil areas, velocity controls at inlets and outlets are extremely important. When detention basins for street areas, etc., must be built in Manor soils, the top ten (10) inches of soil should usually be removed first.
2. Brandywine soils which must be used for detention basins should not be excavated or stripped.
3. This soil is an alluvial soil frequently found in floodplains and high-water areas. Since the township's floodplain regulations restrict structures in many of these soil areas, reference must be made to the floodplain map and the ordinance to determine whether a basin may be built at a particular location. High-water tables in this soil will require basins above ground level, since an excavated area would frequently be filled with water.