



Land Development News

Technical Memorandum

Subject: Testing Guidelines for Infiltration Facilities

Date: June 14, 2010 **No.:** 10-04

Summary: The testing guidelines for infiltration facilities have been revised to allow the determination of Seasonal High Water Table (SHWT) using soil morphology throughout the year by a certified professional registered in Virginia, with training and experience in soil morphology (Certified Professional Soil Scientist, Professional Wetland Delineator, or Professional Geologist). Professional Engineers registered in Virginia with experience in the field of geotechnical engineering may also be certified to determine the SHWT provided that they have successfully completed the Soil Morphology Training Class offered by the Northern Virginia Soil and Water Conservation District (NVSWCD) and are on their list of certified professionals.

Effective Date: Immediately.

Background: Determination of the SHWT should be performed during the months of November through May. SHWT determination by direct observation of the ground water level should not be performed during the months of June through October, unless the value of the Palmer Drought Severity Index (PDSI) is equal to or greater than 2.0. To avoid possible delays in plan submissions during the months of June through October, DPWES formed a committee with industry professional to explore the possibility of using other methods to determine the SHWT. The committee recommended that soil morphology be considered as an alternative to direct observation of the SHWT. Based on that recommendation, staff developed guidelines for the use of soil morphology in determining the SHWT.

Requirement: The SHWT may be determined using soil morphology throughout the year by a certified professional registered in Virginia, with training and experience in soil morphology (Certified Professional Soil Scientist, Professional Wetland Delineator, or Professional Geologist). Professional Engineers registered in Virginia with experience in the field of geotechnical engineering may also be certified to determine the SHWT provided that they have successfully completed the Soil Morphology Training Class offered by the NVSWCD and are on their list of certified professionals. For class schedule and more information, please contact NVSWCD at (703) 324-1460 or visit their web site at: <http://www.fairfaxcounty.gov/nvswcd/>

Evaluation of the SHWT utilizing soil morphology shall be based on low chroma colors, mottles, and redoximorphic features of the soil. Unlike other types of field tests which may be performed by an individual under the responsible charge of the registered professional, this evaluation must be performed by the registered professional personally. If the registered professional performing the evaluation determines that a follow-up confirmatory field measurement of the SHWT is required, or if required by the County, the follow-up evaluation shall be performed when the Palmer Drought Severity Index (PDSI) is equal or greater than 2, or anytime during the months of November through May. The complete guidelines for using soil morphology to determine the

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SHWT can be found in Testing Guidelines for Infiltration Facilities (June 2010) on the Department's web site.

If you have any questions, please contact an engineer with the Stormwater and Geotechnical Section, Environmental and Site Review Division, at **703-324-1720, TTY 711**.

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