



## SOIL REPORT

All new single-family residences in Chesterfield County and structures with habitable space located in the Triassic Area require the homeowner or contractor to acquire the services of a soils scientist, geotechnical or civil engineer who visits the site, makes appropriate soil borings near the perimeter of the new structure, provides a written, sealed report stating the findings, including the probability for “shrink-swell” soil issues. Even though the proposed dwelling may not be located in a known shrink swell soil area, the department still requires the report because of the possibility of there being small amounts of shrink-swell soil anywhere within Chesterfield County.

The shrink-swell soil report should provide the boring test results and should be sealed by an engineer. The typical report should indicate:

1. The lot and section number of the property or house address,
2. How many soil borings were made,
3. The approximate location of the borings,
4. Describe the composition of the earth in the borings,
5. Conclude with the engineer’s assessment of the potential for shrink-swell.
6. If the report concludes “low” probability, the contractor may use the County Minimum Standard Footing Design. If the analysis shows a “moderate” to “very high” potential for shrink-swell, a sealed engineer’s footing design is required to accompany the report,
7. Any alterations to the soil report must be dated and resealed by the testing engineer.

Refer to the “COMPOSITE LIST OF REQUIREMENTS FOR SOIL REPORTS AND FOOTINGS” below for specific requirements for specific types of construction.

<b>Requirements for Soil Reports and Footings</b>		
	<b>In High Potential for Shrink-Swell Soil Area (refer to Soil map)</b>	<b>In Low Potential for Shrink-Swell Soil Area (refer to Soil map)</b>
New house	Soil test required. “Low” <sup>(1)</sup> 24” deep, “Moderate” or higher <sup>(2)</sup> engineer design	Soil test required. “Low” <sup>(1)</sup> 24” deep, Moderate or higher <sup>(2)</sup> engineer design
Industrialized (modular) home or manufactured home	No test required. Manufacturer’s design, or engineered design, or 24” deep cont. footing	No test required. Manufacturer’s design, or engineered design, or 24” deep cont. footing
Addition to house with (potentially) habitable space	Soil test required. “Low” <sup>(1)</sup> 24” deep, “Moderate” or higher <sup>(2)</sup> Engineer design	No test required. Footing 24” deep
Addition to house without (potentially) habitable space, screen porches, and unheated (three season) porches	No test required. Footing 24” deep	No test required. Footing 24” deep
Detached garage with (potentially) habitable space	Soil test required. Footing 24” deep	No test required. Footing 24” deep
Detached garage without (potentially) habitable space	No test required. Footing 18” deep	No test required. Footing 18” deep

(1) LOW refers shrink swell potential, based on engineer’s analysis in the soil report.

(2) MODERATE OR HIGHER potential for shrink swell, based on engineer’s analysis of the soil report. An engineered footing is required.

# SOIL MAP CHESTERFIELD COUNTY, VA

## Legend

- High probability of Shrink-Swell Soils
- Low probability of Shrink-Swell Soils

