

**WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DESIGN DIRECTIVE**

<p>DD-402 SOIL AND GEOLOGIC DATA <i>December 23, 2005</i></p>

The "Soil and Geologic Data" shall be prepared in accordance to the following guidelines:

1. The West Virginia standardized symbols shall be presented on a preface sheet, an example of which is attached, and are to be used to depict the soil, rock and other information on the plan view and the graphical presentation of the borings.
2. A plan view of the borings shall be prepared on contour mapping, where such mapping is available. The preferable mapping is 1"=50' scale with 2' contours, reduced to 1"=100' scale. The second choice is 1"=200' scale mapping with 5' contours. If no mapping is available, reproducibles of the plan sheets shall be used. The plan view shall be incorporated into the plans and noted "For Informational Purposes." A reproducible of the roadway profile is to be included showing all borings plotted at the appropriate elevation and scale.
3. Boring logs and tests shall be bound separately and referenced as an attachment to the soils report. Ten sets shall be submitted.
4. The designer shall submit along with any plans containing a recommended slope design for review, cross sections with the borings plotted thereon and utilizing the appropriate symbols indicated on the preface sheet.

The graphical presentation of borings shall be no less than 0.2" nor more than 0.4" in width.

The designer shall also submit all work profiles and summaries of the borings and test data developed during his studies. It is desirable that the summaries include the interpretations of the soils engineer and/or geologist of all borings in both soil and rock. Also all calculations and analyses utilized in the development of designs for soil slope and foundation stability shall be submitted.

The borings shall be shown on the final cross-sections included in the contract plans with appropriate statements on the plans that they are for informational purposes.

5. Three draft copies of the narrative report shall be presented with the final field review plans and five copies of the final narrative report shall be presented with the final plan submission. Additionally, a set of five compact discs containing the final narrative report in Portable Document Format (PDF) shall be presented with the final plan submission. The narrative shall summarize all the studies and include the recommendation used for design along with supporting data used.
6. The designer shall prepare cut bench profiles and submit for review at final field and final office review stages. The cut bench profiles shall be included in final contract plans.