Soil Boring Proposal Guidance for Consultant Managed Drilling & Testing

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Proposal:

- Submit a boring request form and location map with the proposal that should be reviewed by DelDOT's Assistant Materials Engineer and Soils and Aggregate Lab Manager prior to approval of the proposal
- Obtain all required environmental, boring, well, and other project specific permits
- Obtain MOT, Miss Utility clearance and any other project specific needs
- Update DelDOT's Assistant Materials Engineer and DelDOT's Soils and Aggregate Lab Manager with drilling schedule and lab testing schedule

Borings

- Continuous sampling for the top 20'
- SPT in 5' intervals thereafter
- n- Value determined in 6" intervals with 24" spoon
- 140 lb hammer dropped 30"
- Submit a copy of the field log to the DelDOT Geotechnical Engineer
- For Stormwater Soil Borings, perform boring operations in accordance with the Delaware Sediment and Stormwater Regulations (DSSR), Section 12.1.2 General Soil Investigations.

Infiltration Tests

- Perform Design infiltration tests based on soil borings and in accordance with the DSSR, Section 12.1.3.1 Planning and Design Phase.
- Perform Confirmatory Infiltration tests during construction in accordance with the DSSR, Section 12.1.3.2 Construction Phase.
- Submit infiltration test results to Stormwater Engineer.

Boring Logs must include the following:

- Project Number
- Project Name
- Boring Number with unique identifier (Do not use B-1 or SB-1 on every project. Please make the boring numbers job specific, for example Dupont Highway Boring #1 could be DH-1)
- Northing and Easting of each boring
- The model of drilling rig being used
- Names of the driller, logger and any helpers

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- The date the boring is started and the date of completion
- Sample recovery in inches for each sample as well as the 4 blow counts per spoon
- Depth water is encountered, depth of water at completion and depth the hole caved

Laboratory testing at an AMRL Accredited testing facility:

- Moisture content AASHTO T-265
- Particle Size of Soil AASHTO T-88
- Liquid Limit of Soil AASHTO T-89
- Plastic Limit of Soil AASHTO T-90
- Material descriptions and classification must be in accordance with **AASHTO classification NOT USCS**.
- All samples are tested, not select samples or "strata changes".
- Submit a PDF copy of the final log, lab analysis, location plan, and Geotechnical Report to DelDOT's Geotechnical Engineer

Rock Samples:

- If rock is encountered, it must be notated on the boring log. Sample length, recovery, RQD, and description must be recorded. Additionally, RQD must be measured and recorded to the nearest percent.
- All rock samples must be cataloged and photographed in the sample boxes before handling or being disturbed. The photographs must include measurements.
- Rock samples must be stored by the engineer or driller during the design phase and turned over to the Delaware Geological Survey at the University of Delaware after design is complete.