

PERMANENT RETENTION

(CANTILEVERED PILES / PRECAST LAGGING)

Vienna, Virginia

Summer - Winter 2016

Situated alongside a very busy thoroughfare in Northern Virginia, this multi-phase shoring project presented several challenges – both above ground and below. Overhead power lines and an extremely small footprint created access issues, while underground fiber optic utilities, collapsing soils, and a very shallow groundwater table created drilling challenges. In addition, hard rock was encountered unexpectedly during drilling operations. Due to the permanent nature of the work, pile location was critical and tight tolerances were maintained throughout construction. Several drilling methods were utilized: traditional rotary drilling, temporary casing, and air drilling (cluster hammer) were all used.

CDC was able to help the contractor in the following ways:

- Equipment selection (drill rig, air compressors, etc.)
- Drill tool selection and procurement
- Site supervision and troubleshooting
- Drill rig operation



