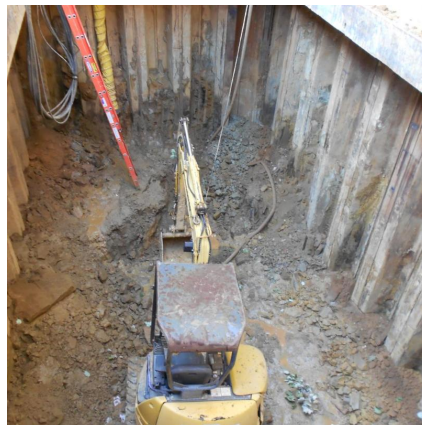


## I-66 Sanitary Sewer Crossing Fairfax, VA



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction contracted with the Fairfax County Department of Public Works to install a new 18" sanitary sewer line across I-66, abandoning a previously installed line. During shaft installation, unforeseen partially weathered schist was encountered that could only be excavated using a hammer drill. Fairfax County performed additional geotechnical investigation to determine the extent of the rock and its potential impact on the tunnel installation. After some delay, it was determined that the originally planned 43" microtunnel excavation would still be acceptable. Despite encountering additional rock along the drive, Bradshaw successfully used their 43" Herrenknecht AVN-800 to complete the crossing with minimal production impacts. Additional work consisted of installing new manholes to connect to the existing system, and abandoning of the original line.



### PROJECT INFORMATION - 515

**OWNER:**

Fairfax County  
Department of Public Works  
12000 Government Center Parkway,  
Suite 463  
Fairfax, VA 22035  
703.324.5815

**ENGINEER:**

CDM Smith  
Danial Gilroy  
703.691.6500

**CONTRACTOR:**

Bradshaw Construction Corporation

**CONTRACT VALUE:**

\$889,675

**COMPLETION DATE:**

1/31/2013

**GEOLOGY:**

Partially weathered schist and sands

**EXCAVATION METHOD:**

Herrenknecht AVN-800 MTBM

**MINING DIMENSIONS:**

330' x 43" Ø

**FINAL LINING:**

18" Ductile Iron Pipe

**FOR MORE INFORMATION:**

Jordan Bradshaw, Estimator  
410.970.8300  
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Refer to Project 515