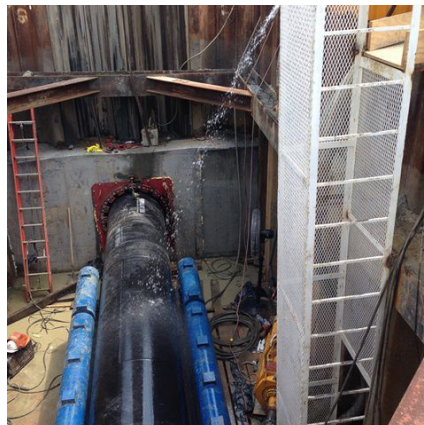


## Sewerage System Improvements Division C, Phase 1 & Suction Lines Portsmouth, VA



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction microtunnelled 110 linear feet of 43 inch steel casing under a CSX railroad track in Portsmouth, VA. The subsurface conditions consisted of loose, poorly graded & silty sand (SP-SM), below the groundwater table. Settlement points were monitored along the railroad, with all readings measuring less than 1/8 of an inch. Mining was conducted on a 24/7 basis per the requirements of CSX. The HDPE carrier pipe was installed by the General Contractor, Tidewater Utility Construction.



### PROJECT INFORMATION - 548

#### OWNER:

Hampton Roads Sanitation District  
Gary Hart  
757-460-2261  
ghart@hrsd.com

#### ENGINEER:

URS  
Daniel Rickmond  
757-321-1231  
daniel.rickmond@urs.com

#### CONTRACTOR:

Tidewater Utility Construction

#### COMPLETION DATE:

5/28/2015

#### GEOLOGY:

Sand

#### EXCAVATION METHOD:

Herrenknecht AVN-800 MTBM

#### MINING DIMENSIONS:

110' x 43" Ø

#### FINAL LINING:

30" High Density Polyethylene Pipe

#### FOR MORE INFORMATION:

Doug Piper, Project Manager  
410-970-8300  
dpiper@bradshawcc.com  
Refer to Project 548