

## Upper Jones Falls Interceptor Sewer - Phase 2 Baltimore, MD



### PROJECT OVERVIEW AND CHALLENGES

As part of a 6,000 foot microtunnel sewer project, Bradshaw installed a 40' wide x 70' long x 35' deep elliptical shaft over an existing 42" sewer and manhole. This shaft was large enough to allow a gravity by-pass of the existing 42" sewer so a unique cross-over structure could be constructed to tie this existing sewer into the new microtunneled 48" sewer. The shaft was excavated by the NATM (New Austrian Tunneling Method) which uses reinforcing steel and sprayed shotcrete to support the shaft walls. Ground conditions were silt and sand over weathered rock. The challenges on the job were protecting the existing sewer, managing flood level flows and constructing the shaft within feet of Interstate I-83.



### PROJECT INFORMATION - 434

#### OWNER:

City of Baltimore  
Department of Public Works  
Jonathan Scott  
410.396.3671  
jonathan.scott@baltimorecity.gov

#### ENGINEER:

Patton, Harris, and Rust Associates  
Graeme Lake, PE  
410.997.8900  
graeme.lake@phra.com

#### CONTRACTOR:

Bradshaw Construction Corporation

#### CONTRACT VALUE:

\$23,000,000

#### COMPLETION DATE:

6/30/2007

#### GEOLOGY:

Silts and Sands over Weathered Rock

#### EXCAVATION METHOD:

NATM - Sprayed Shotcrete

#### MINING DIMENSIONS:

40' x 70' x 35VF

#### FINAL LINING:

48" Polycrete Pipe & Manholes

#### FOR MORE INFORMATION:

Todd Brown, Project Manager  
410.970.8300  
tbrown@bradshawcc.com  
Refer to Project 434