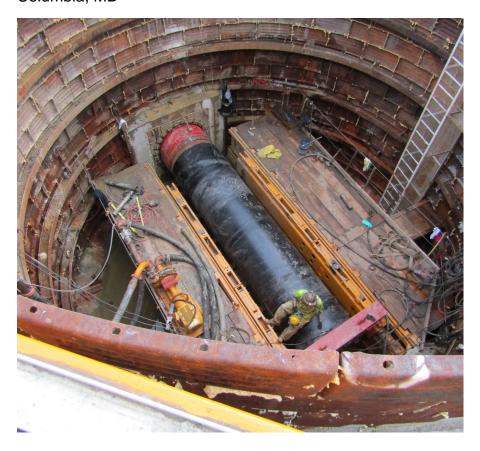
# **Project Profile: MICROTUNNELING**



# **U.S. Route 29 Water Transmission Main** Columbia, MD



#### PROJECT OVERVIEW AND CHALLENGES

Bradshaw recently completed the installation of 470 linear feet of 60 inch steel casing under U.S. Route 29 for a 36 inch water transmission main. Tunnel depths ranged from 6 to 30 feet below the surface, with the alignment passing beneath the water table through dense silty sands and partially weathered rock. Bradshaw constructed a 32 foot diameter, 27 foot deep steel rib-and-liner plate launch shaft to facilitate tunneling activities, and the MTBM was recovered out of a trench box on the far side of the highway. The access shaft was constructed in a potential flood zone within 10 ft of active sanitary sewer and water lines, and within 50 feet of the Little Patuxent River.





#### **PROJECT INFORMATION - 562**

#### OWNER:

Howard County
Department of Public Works
Robert Bowins
410-313-6375
rbowins@howardcountymd.gov

#### **ENGINEER:**

O'Brien & Gere Louis Ragozzino 410-771-3005 Louis.Ragozzino@obg.com

#### **CONTRACTOR:**

Marona Construction Company

#### **COMPLETION DATE:**

11/18/2016

#### **GEOLOGY:**

Silty Sands, Partially Weathered Rock

#### **EXCAVATION METHOD:**

Herrenknecht AVN-1200 MTBM

## **MINING DIMENSIONS:**

469' x 60"Ø

## FINAL LINING:

36" Prestressed Concrete Cylinder Pipe

#### FOR MORE INFORMATION:

Jordan Bradshaw, Project Manager 410-970-8300 jordan.bradshaw@bradshawcc.com Refer to Project 562