Project Profile: TBM TUNNELING



Abingdon WTP Expansion

Abingdon, MD



PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction successfully completed a TBM Tunnel using an Akkerman Digger Shield and 114"Ø Rib & Board Supports under Interstate 95 for the Abingdon Waste Water Treatment Plant. With the key goal of minimizing potential settlement of I-95, the tunnel size was reduced from a plan diameter of 144" to 114". However, the size reduction increased the challenge of installing the Ductile Iron Pipe and PVC Conduits in the smaller area. Bradshaw was able to meet the goals and challenges of the project resulting in essentially no settlement of the highway, and the pipe and conduit installation was completed on schedule. This tunnel was part of the project that was awarded the Engineering News-Record Civil Works/Infrastructure Award of Merit. See ENR Issue 12/10/12 for more information on the Award.





PROJECT INFORMATION - 477

OWNER:

Arcadis US Inc.
Construction Manager
Oscar Toledo
(410) 381-1990
otoledo@arcadis-us.com

ENGINEER:

Hazen & Sawyer
Aaron Duke
(410) 539-7681
aduke@hazenandsawyer.com

CONTRACTOR:

Pizzagalli Construction Company

COMPLETION DATE:

9/24/2009

GEOLOGY:

Soft Ground

EXCAVATION METHOD:

Akkerman Digger Shield BS96C

MINING DIMENSIONS:

372' x 114" Ø

FINAL LINING:

48", 36", 12" Ductile Iron Pipe 6" PVC Pipe

FOR MORE INFORMATION:

Eric Eisold, Vice President 410-970-8300 eeisold@bradshawcc.com Refer to Project 477