

Fullerton Water Transmission Main Section I Fullerton, MD



PROJECT OVERVIEW AND CHALLENGES

Bradshaw used a Lovat tunnel boring machine (TBM) to construct 1,707 feet of 112 inch OD rib and board tunnel for an 84 inch welded steel watermain. Bradshaw also installed a 42' x 72' x 35' deep elliptical NATM mining shaft. The tunnel ground conditions were alluvial deposits of silt, sand and gravel. The challenges of the project were: 1) the limited stand up time of the alluvial soils in the tunnel crown during TBM excavation and 2) grout backfilling the annulus between the tunnel supports and the steel water main given the long tunnel length and limited surface access along the alignment.



PROJECT INFORMATION - 308

OWNER:

Baltimore County
Department of Public Works
(410) 396-3310

ENGINEER:

Rummel, Klepper, & Kahl
Robert J. Halbert
(410) 728-2900

CONTRACTOR:

Corman Construction, Inc.

COMPLETION DATE:

8/4/1997

GEOLOGY:

Alluvial silt, sand and gravel

EXCAVATION METHOD:

Lovat 112" TBM

MINING DIMENSIONS:

1,707' x 112" Ø

FINAL LINING:

84" Welded Steel Pipe

FOR MORE INFORMATION:

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Refer to Project 308