Project Profile: MICROTUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

Cohas Brook Interceptor - Phase 1
Manchester, NH

PROJECT OVERVIEW AND CHALLENGES

Bradshaw installed 2,400’ of 42” RCP using an Akkerman Slurry Microtunnel Boring Machine (SL-44). There were 5 separate microtunnel drives, 3 of which encountered boulders requiring rescue shafts. Three drives crossed major highways and one drive crossed under the Pine Island Pond. The geologic report for the project stated the tunnel elevation was selected to avoid any boulders in the glacial deposits. Bradshaw installed all drive and receiving shafts including two by the caisson method. The greatest challenge on the job was the ground conditions. This included unexpected boulder obstructions, extremely loose silt, and saw dust and wood debris in the pond invert. One obstructed drive had to be converted to a hand mined tunnel using liner plate supports and compressed air ground stabilization.

PROJECT INFORMATION - 324

OWNER:
City of Manchester
475 Valley Street
Manchester, NH 03103
(603) 624-6444

ENGINEER:
Costello, Lomasney & deNapoli, Inc.
Leslie G. Nelson, P.E.
(603) 668-8223

CONTRACTOR:
Park Construction Corp.

COMPLETION DATE:
6/15/1999

GEOLOGY:
Alluvial deposits of silt, sand, cobbles and boulders

EXCAVATION METHOD:
Akkerman MTBM SL-44

MINING DIMENSIONS:
2,400 x 54" Ø

FINAL LINING:
42" Reinforced Concrete Pipe

FOR MORE INFORMATION:
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Refer to Project 324