Project Profile: MICROTUNNELING

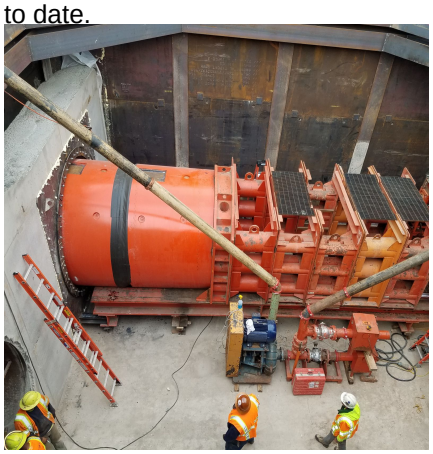
BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

Globeville Landing Outfall Phase 3

Denver , CO

PROJECT OVERVIEW AND CHALLENGES

Bradshaw pipe jacked twin one-pass 96-inch RPMP tunnels (515’ each) using slurry microtunneling for the City of Denver. The tunnels passed under Union Pacific Railroad and RTD commuter rail lines. The new storm water transmission lines are essential to improving flood control of the Platte to Park Hill Storm-Water Systems. The soil conditions were in dense sand, silt, and clay. The main challenges included limited worksites, a tight schedule, existing RCP conflict, railroad property control, commuter rail sensitivity, limited allowable RR settlement, and extremely tight microtunnel installation tolerances. Of critical importance was microtunneling through an existing crushed RCP sewer underneath the edge of the RTD tracks. This created significant risks for slurry line blockages, inadvertent slurry surface returns and excessive settlement. These challenges were overcome for a very successful project. It is also Bradshaw’s largest diameter microtunnel project to date.



PROJECT INFORMATION - 578

OWNER:
City & County of Denver
Department of Public Works
720-913-1311

ENGINEER:
Merrick & Company
Michael Galuzzi
303-964-3333

CONTRACTOR:
Kiewit Infrastructure Co.

COMPLETION DATE:
6/13/2018

GEOLOGY:
Clay, Silt, Sand w/ some Gravel

EXCAVATION METHOD:
RASA DH-1900 MTBM Skinned up to 100.75” OD

MINING DIMENSIONS:
515' & 515' x 100.75" Ø

FINAL LINING:
96" Reinforced Polymer Mortar Pipe

FOR MORE INFORMATION:
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Refer to Project 578