CSX Transportation Howard St. Tunnel, Camden St. Drain Replacement
Baltimore, MD

PROJECT OVERVIEW AND CHALLENGES

Bradshaw has finished work on a high profile project in an area of downtown Baltimore, MD as part of a design-build team. An existing storm drain is currently located in the invert of the CSX Transportation Howard Street Tunnel and is the cause of frequent flooding. This replaces that 48” storm with a larger, deeper siphon drain which will eliminate the flooding and allow for CSX to increase the size of the existing tunnel to gain freight capacity through the area. A total of three tunnels were mined out of a 26’ diameter by 55’ deep shaft. The Lower Tunnel consisted of a two-pass microtunnel of 74” steel casing for a 60” FRP storm drain. The tunnel spanned 122’ under Howard Street which finished at the footing of the Convention Center and will be the siphon that reconnects to the existing storm network. The subsurface conditions consisted of poorly graded sand with silt and gravel, which required extensive grouting prior to tunnel excavation.

PROJECT INFORMATION - 576

OWNER:
CSX Transportation
904-359-3100

ENGINEER:
McMillen Jacobs Associates
Joe Shrank
615-490-9025
shrank@mcmjac.com

CONTRACTOR:
Clark Construction Group, LLC

COMPLETION DATE:
5/19/2018

GEOLOGY:
Very Dense Alluvial Sand & Gravel

EXCAVATION METHOD:
Herrenknecht AVN-1500 MTBM

MINING DIMENSIONS:
158’ x 74” Ø

FINAL LINING:
60” Fiberglass Reinforced Pipe

FOR MORE INFORMATION:
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Refer to Project 576