Project Profile: SHAFT CONSTRUCTION

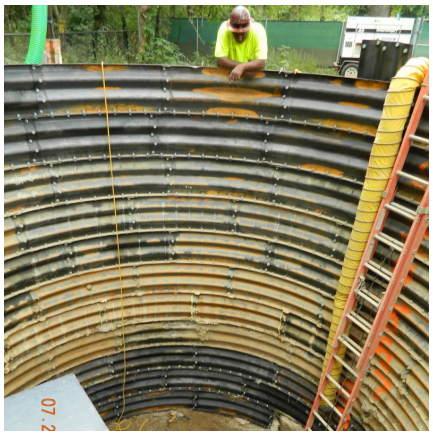
BRADSHAW CONSTRUCTION CORPORATION TUNNELING SPECIALISTS

Castleton Relief Sewer Project-Phase 1
Indianapolis, IN



PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction installed 2,740 linear feet of 42 inch reinforced concrete pipe for a relief sanitary sewer by microtunneling through sand with cobbles and boulders below the groundwater table at an average depth of 20 feet. The microtunneling was accomplished in four drives, the longest of which was 810 feet. Six access shafts were constructed using steel ribs and liner plates (16 feet and 20 feetin diameter) and steel sheet piling (16 feet and 20 feet square). Six precast concrete manholes were installed up to 96 inch in diameter.





PROJECT INFORMATION - 504

OWNER:
Citizens Energy Group
(Formerly Consolidated City of Indianapolis, DPW)
Sandra Shafer
(317) 327-4546
sshafer@citizensenergygroup.com

ENGINEER:
Black and Veatch, Inc.
James McKelvey
(317) 570-8331

CONTRACTOR:
Bradshaw Construction Corporation

CONTRACT VALUE:
$5,988,200

COMPLETION DATE:
6/30/2012

GEOLOGY:
Sand, Gravel, Boulders, Glacial Till

EXCAVATION METHOD:
Clam Bucket

MINING DIMENSIONS:
16' x 20' Ø & 16' x 20' square

FINAL LINING:
N/A

FOR MORE INFORMATION:
Todd Brown, Project Manager
(410) 970-8300
tbrown@bradshawcc.com
Refer to Project 504