Project Profile: TBM TUNNELING

East Bay/Calhoun Drainage Facilities Division I - Collection Tunnel System
Charleston, SC

PROJECT OVERVIEW AND CHALLENGES

BTM Joint Venture, led by Bradshaw Construction, constructed the first deep storm sewer tunnel for the City of Charleston to control flooding along Calhoun Street to Marion Square Park. The work consisted of 2,880’ of 120” rib & board TBM tunnel for a 96” ID cast in place storm sewer, two (2) caisson shafts, and two (2) drop stack intakes. The principal challenge on the project was first and foremost to meet the mayor’s requirement to “not disturb the tranquil repose of Charleston”. The project also had limited work areas and a tunnel alignment adjacent to numerous historic structures of this 300 year old city. The tunnel receiving shaft was in Marion Square which is the center of Charleston’s public entertainment and meeting space.

PROJECT INFORMATION - 1JV1

OWNER:
City of Charleston
Laura Cabiness
(843) 724-3761

ENGINEER:
Davis & Floyd Engineering, Inc.
Herb Gilliam
(843) 554-8602

CONTRACTOR:
BTM Joint Venture - Bradshaw Construction Managing Partner

CONTRACT VALUE:
$4,368,139.00

COMPLETION DATE:
6/14/1996

GEOLOGY:
Cooper Marl (calcareous clay)

EXCAVATION METHOD:
Lovat TBM

MINING DIMENSIONS:
2,880’ x 120”Ø

FINAL LINING:
96” Cast-In-Place Concrete Storm Sewer

FOR MORE INFORMATION:
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(410) 970-8300
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Refer to Project 1JV1