# Project Profile: TBM TUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

## North Central Hillsborough Inter-tie - Phase 2
Tampa, FL



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction Corp. was subcontracted to Rockdale Pipeline Inc. (RPI) to tunnel under the Hillsborough river and install an 84-inch diameter water main in the tunnel. Two shafts were constructed on either side of the river by RPI using driven steel sheets. BCC mined the tunnel by jacking a 98-inch diameter steel casing behind a 101-inch diameter earth pressure balance (EPB) tunnel boring machine (TBM) manufactured by Lovat of Ontario, Canada. The tunnel was completed successfully through difficult ground conditions including layers of hard and abrasive chert and high groundwater pressures.





### PROJECT INFORMATION - 377

**OWNER:**
Tampa Bay Water Authority
2575 Enterprise Road
Clearwater, FL 33763
(727) 796-2355

**ENGINEER:**
Greeley & Hansen
Dave Hodge
(813) 873-3666

**CONTRACTOR:**
Rockdale Pipeline, Inc.

**COMPLETION DATE:**
2/4/2004

**GEOLOGY:**
Limestone, Clay & Chert

**EXCAVATION METHOD:**
Lovat TBM

**MINING DIMENSIONS:**
300' x 101" Ø

**FINAL LINING:**
84" Steel Pipe

**FOR MORE INFORMATION:**
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Refer to Project 377