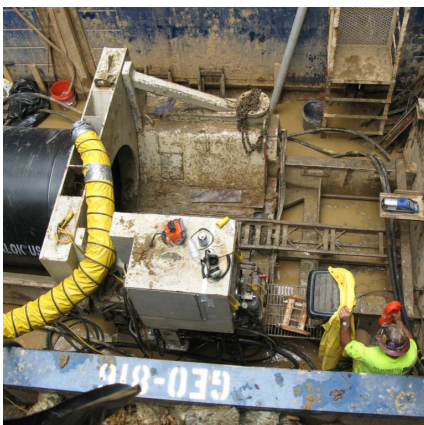


## Manchester Creek Outfall, Phase II Rockhill, SC



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw jacked two 60 inch diameter steel casings 15 feet below Dave Lyle Blvd. and Anderson Road using a conventional tunnel boring machine (TBM) in Rock Hill, SC. The 265 and 140 linear foot drives were part of a sanitary sewer outfall project. One 30-foot reach had to be hand mined through an unanticipated rock formation. Bradshaw finished the tunnels by installing 42 inch Ductile Iron Pipe and grouting it in place.



### PROJECT INFORMATION - 530

#### OWNER:

City of Rock Hill  
Utilities Department, Engineering  
Division  
Scott Turner  
803-329-5500  
sturner@cityofrockhill.com

#### ENGINEER:

Wiedeman & Singleton  
Troy Began  
803-329-2944  
tab@wiedeman.com

#### CONTRACTOR:

Garawaco, Inc.

#### COMPLETION DATE:

9/28/2013

#### GEOLOGY:

Residual soils, PWR, & rock

#### EXCAVATION METHOD:

Akkerman WM-480

#### MINING DIMENSIONS:

265' x 60" & 140' x 60" Ø

#### FINAL LINING:

42" Ductile Iron Pipe

#### FOR MORE INFORMATION:

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410-970-8300  
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Refer to Project 530