

## SAWS WRIPP Segment 2B

Von Ormy, TX



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction completed two drives with four shafts (two per drive) at each tunnel location for a new waterline. The Medina River drive (726 linear feet) included a 70 and 105 foot deep shafts, respectively. The second tunnel at Medio Creek (543 linear feet) consisted of 50 and 55 foot shafts, respectively. 73.5 inch steel casing was installed by slurry microtunneling for both drives for 60 inch steel carrier pipe. Higher than normal groundwater levels from prolonged rain created a persistent challenge during shaft construction. Dewatering efforts were hindered by the ability to install dewatering wells into the claystone. Re-engineering of shaft designs and best management practices enabled the successful construction of shafts and tunnels. Soil conditions consisted of clay stone, hard rock, cobbles, and boulders below the water table.



### PROJECT INFORMATION - 550

#### OWNER:

San Antonio Water System  
Victor Yates  
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#### ENGINEER:

Civil Engineering Consultants, Inc.  
Terry Conn  
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#### CONTRACTOR:

Garney Companies, Inc.

#### COMPLETION DATE:

1/28/2016

#### GEOLOGY:

Clay, Hard Rock, Gravel

#### EXCAVATION METHOD:

Herrenknecht AVN-1200 MTBM

#### MINING DIMENSIONS:

726' & 543' x 73.5"Ø

#### FINAL LINING:

60" Steel Pipe

#### FOR MORE INFORMATION:

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Refer to Project 550