Project Profile: MICROTUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

SWTP Discharge Water Line

New Braunfels, TX

PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction Corporation installed a 412' long, 48" RCP tunnel underneath the Guadelupe River in New Braunfels, Texas. The unique feature of this tunnel was that it was installed on a 620' radius vertical curve, with the tunnel launched on a -19.63% slope and emerging on the far side of the river at a 17.10% slope. The tunnel passed predominantly through claystone until a transition into sandy gravel at the end of the drive. Hydraulic joints manufactured by JackControl were utilized to distribute loads through the RCP and allow for the curve installation around the tight radius. A hydrostatic water level combined with a gyro was provided and routinely updated by VMT, allowing for precise installation within contract tolerances. 36" HDPE was installed and backfilled upon completion of the tunnel.

PROJECT INFORMATION - 623

OWNER:
New Braunfels Utilities
David Guerrero Jr.
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ENGINEER:
Aldea Services (Tunnel Subconsultant)
Ashley Heckman
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CONTRACTOR:
Pesado Construction

COMPLETION DATE:
1/13/2023

GEOLOGY:
Claystone, Gravel

EXCAVATION METHOD:
Herrenknecht AVN-1200 MTBM

MINING DIMENSIONS:
412' x 60" Ø

FINAL LINING:
48" Reinforced Concrete Pipe
36" HDPE

FOR MORE INFORMATION:
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Refer to Project 623