

Underground Construction Technology | Jan. 29-31, 2019 | Fort Worth, TX





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Liam Conlon

Project Manager



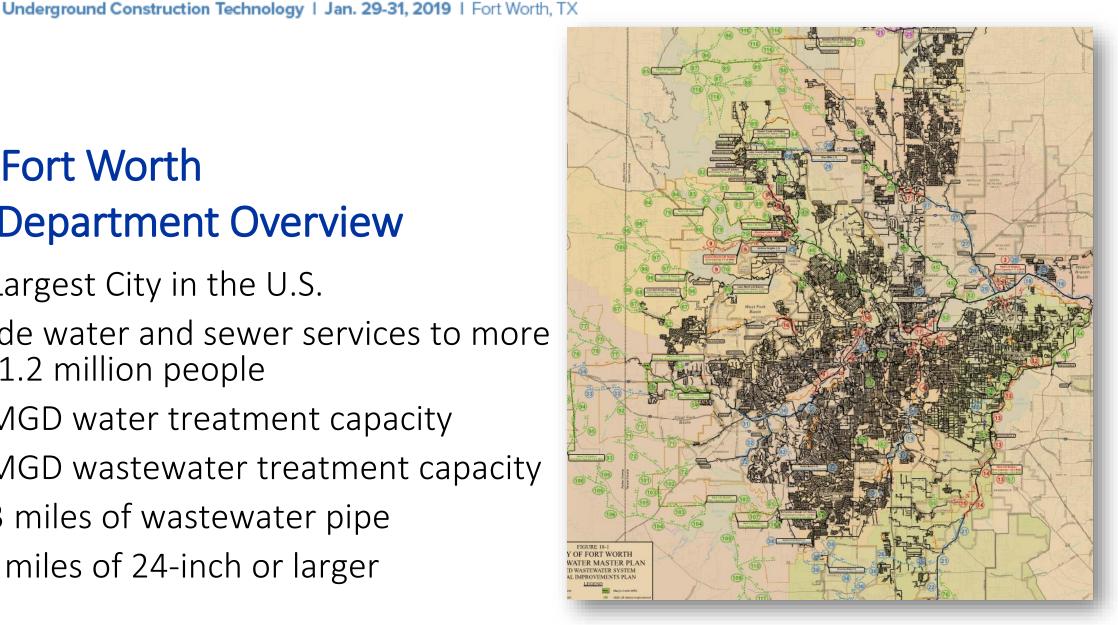


GregVaughn, PE

Senior Project Manager

City of Fort Worth Water Department Overview

- 15th Largest City in the U.S.
- Provide water and sewer services to more than 1.2 million people
- 497 MGD water treatment capacity
- 166 MGD wastewater treatment capacity
- 3,303 miles of wastewater pipe
- → 255+ miles of 24-inch or larger

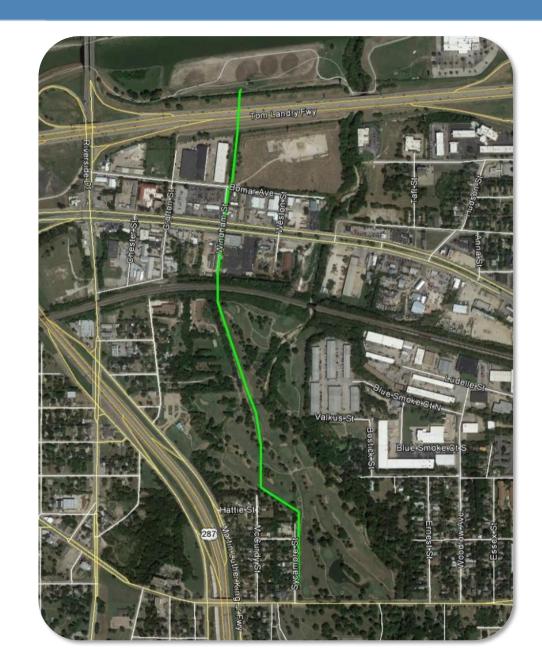




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City of Fort Worth Sycamore Creek Project Background

- Existing 48-, 54- & 60-Inch Interceptor (1961)
- Planned Rehabilitation
- Parallel Relief Capacity Required
- Multiple Phases Required
- → 2030 Combined Flow = 79 MGD



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City of Fort Worth Sycamore Creek Stakeholders

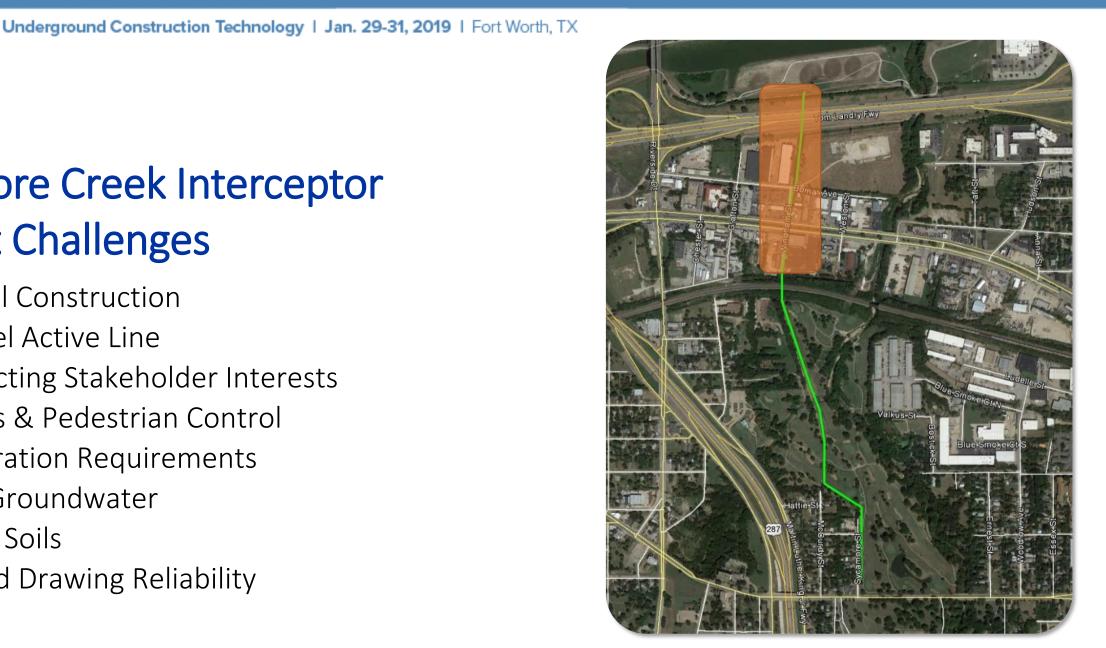
- Trinity River Vision Authority (COE)
- Texas Department of Transportation
- Energy Transfer Partners





Sycamore Creek Interceptor **Project Challenges**

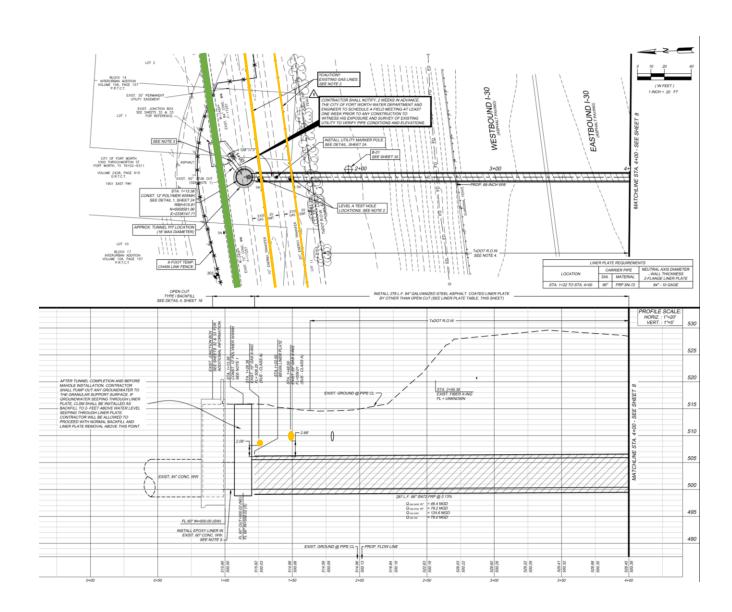
- **Tunnel Construction**
- Parallel Active Line
- Conflicting Stakeholder Interests
- Access & Pedestrian Control
- Restoration Requirements
- High Groundwater
- Sandy Soils
- **Record Drawing Reliability**



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Sycamore Creek Interceptor Project Challenges

- Tunnel Construction
- Parallel Active Line
- Conflicting Stakeholder Interests
- Access & Pedestrian Control
- Restoration Requirements
- → High Groundwater
- → Sandy Soils
- Record Drawing Reliability



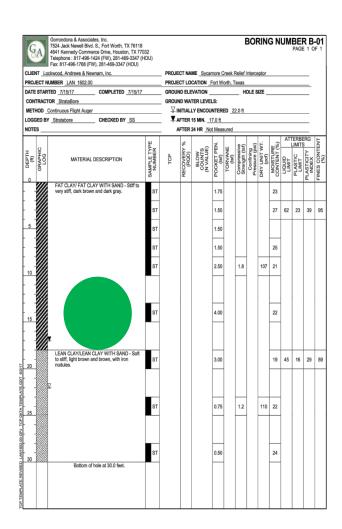
Sycamore Creek Interceptor Project Challenges

- Tunnel Construction
- → Parallel Active Line
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Sycamore Creek Interceptor Project Challenges

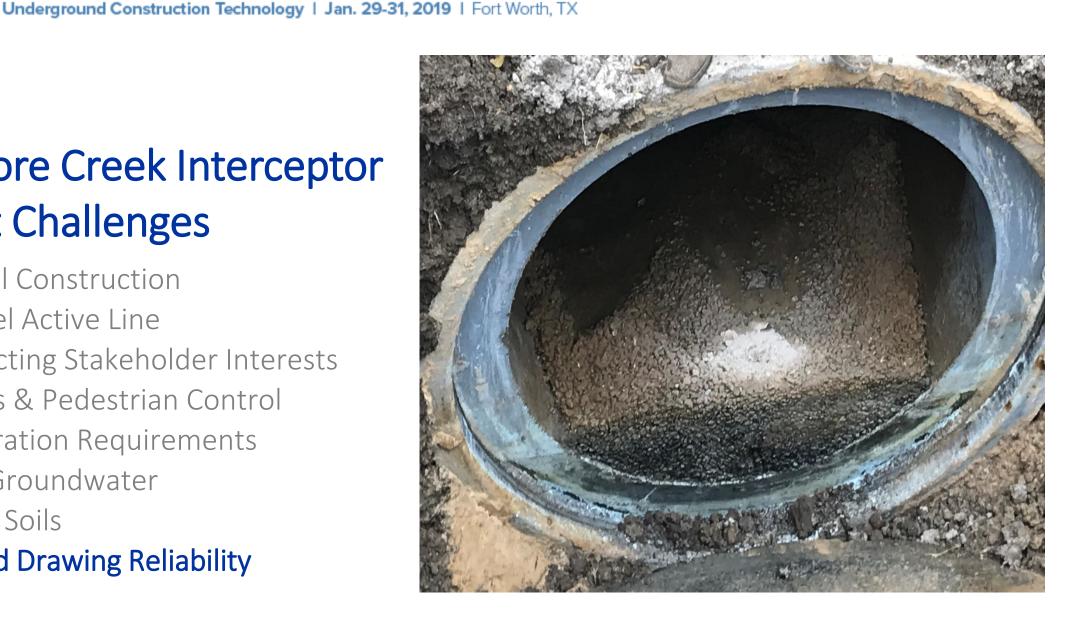
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Gorrondona & Associates, inc. 424 Jack Newell Burk S., Fort Worth, TX 76118 4241 Kennedy Commerce Drive, Houston, TX 77032 Telephone : 817-496-1424 (FW), 281-469-3347 (HOU) Fax: 817-496-1786 (FW), 281-469-3347 (HOU)						BORING NUMBER B-02 PAGE 1 OF 1												
CLIENT Lockwood, Andrews & Newnam, Inc.					PROJECT NAME Sycamore Creek Relief Interceptor													
PROJECT NUMBER LAN 1602.00					PROJECT LOCATION Fort Worth, Texas													
DATE STARTED 6/29/17 COMPLETED 6/29/17																		
CONTRACTOR StrataBore					GROUND WATER LEVELS:													
METHOD Continuous Flight Auger						✓ INITIALLY ENCOUNTERED 23.0 ft ✓ AFTER 15 MIN. 17.3 ft												
LOGGED BY Denny CHECKED BY SS																_		
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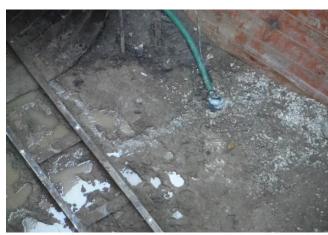
Sycamore Creek Interceptor Project Status

- → Phase 1
 - → 1,800 LF of 66"-Inch
- → Phase 2
 - → 3,650 LF 66-Inch
 - Pending Bid Advertisement
- Phase 3 and beyond...pending







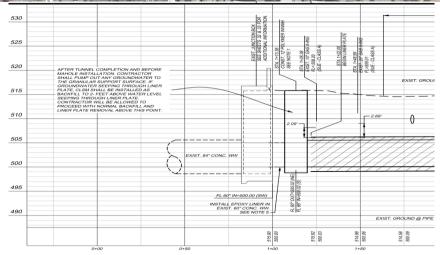


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Sycamore Creek Interceptor Final Thoughts & Takeaway

- Conflicting interests require engineered solutions
- Don't be afraid to get into means and methods
- Don't ignore the field conditions







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City of Fort Worth | Sycamore Creek Relief Interceptor Design



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