

# Shelby's Bear of a Water Project

Expedited Schedule, EDA  
Funding, and Creating  
Jobs at an Industry  
Codenamed "Grizzly"

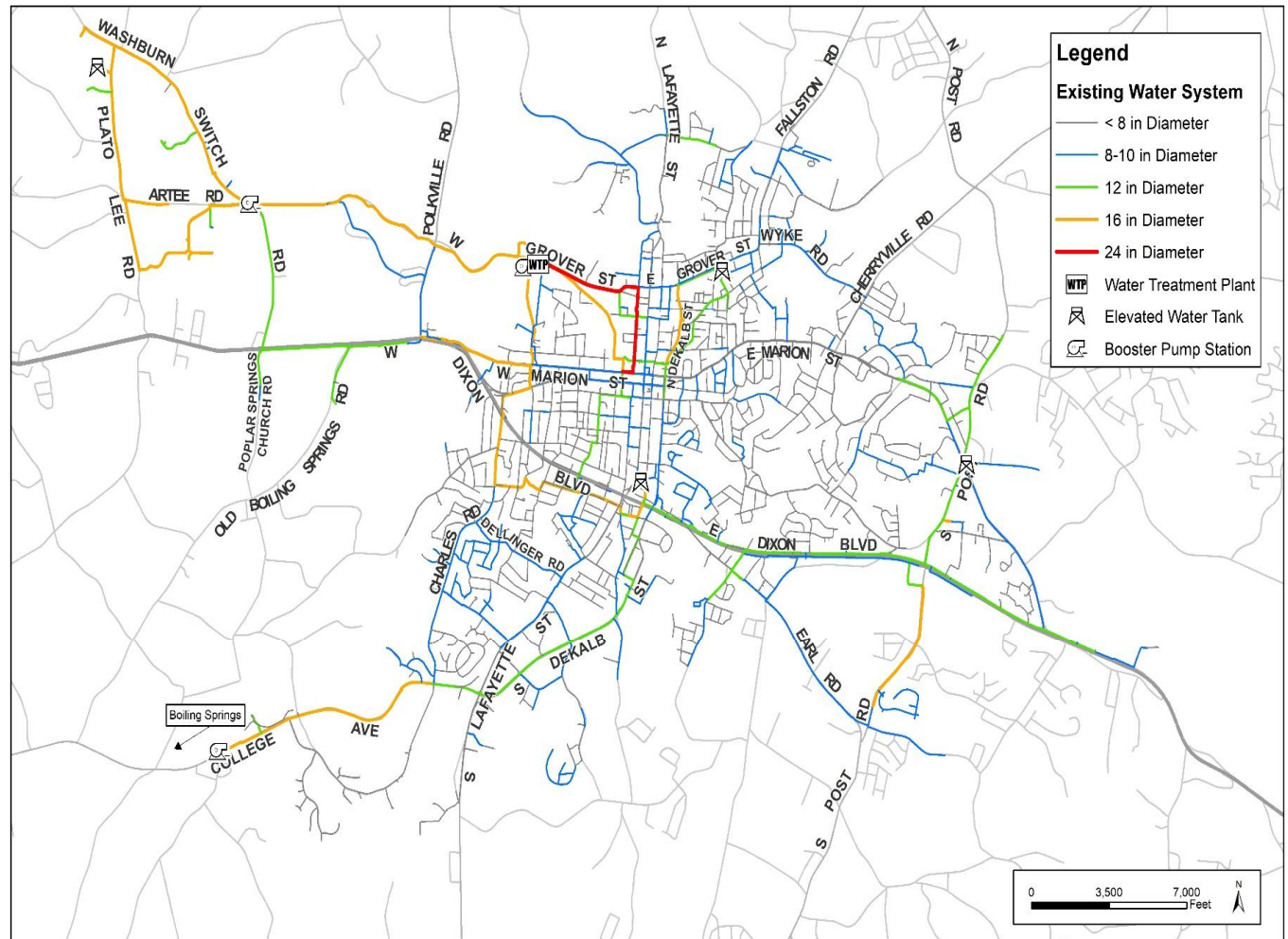
Matthew Shoesmith, P.E.  
Kimley»Horn



# UNDERGROUND CONSTRUCTION TECHNOLOGY

The Underground Utilities Event | July 13-15, 2021 | Music City Center | Nashville, TN

Project Introduction:  
220 Miles of Mains  
12 MGD WTP  
2 Pressure Zones  
1056&1093





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## Governor Cooper announces 180-job expansion by Clearwater Paper in Cleveland County

*Company will invest \$330 million in production and distribution operations*

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SHELBY

Feb 8, 2017

Governor Roy Cooper announced today that Clearwater Paper Corporation will launch a major expansion at its facility in Cleveland County, creating 180 jobs over the next two years. The company will invest \$330 million at its production and distribution operations in Shelby.

“Companies like Clearwater Paper know that North Carolina is a wonderful place to do business thanks to our skilled workforce, strong infrastructure and prime location,” said Governor Cooper. “We want companies looking to expand to come to North Carolina because there’s no better place to invest and grow.”

Clearwater Paper is the largest provider of private-brand tissue to the U.S. retail market. Headquartered in Spokane, Wash., the publicly-traded company [NYSE: CLW] was created in 2008 through a spinoff from a predecessor company. Clearwater Paper has manufacturing facilities in 13 states. Its facility in Shelby opened in 2012 and currently employs 264.

### Contact Information

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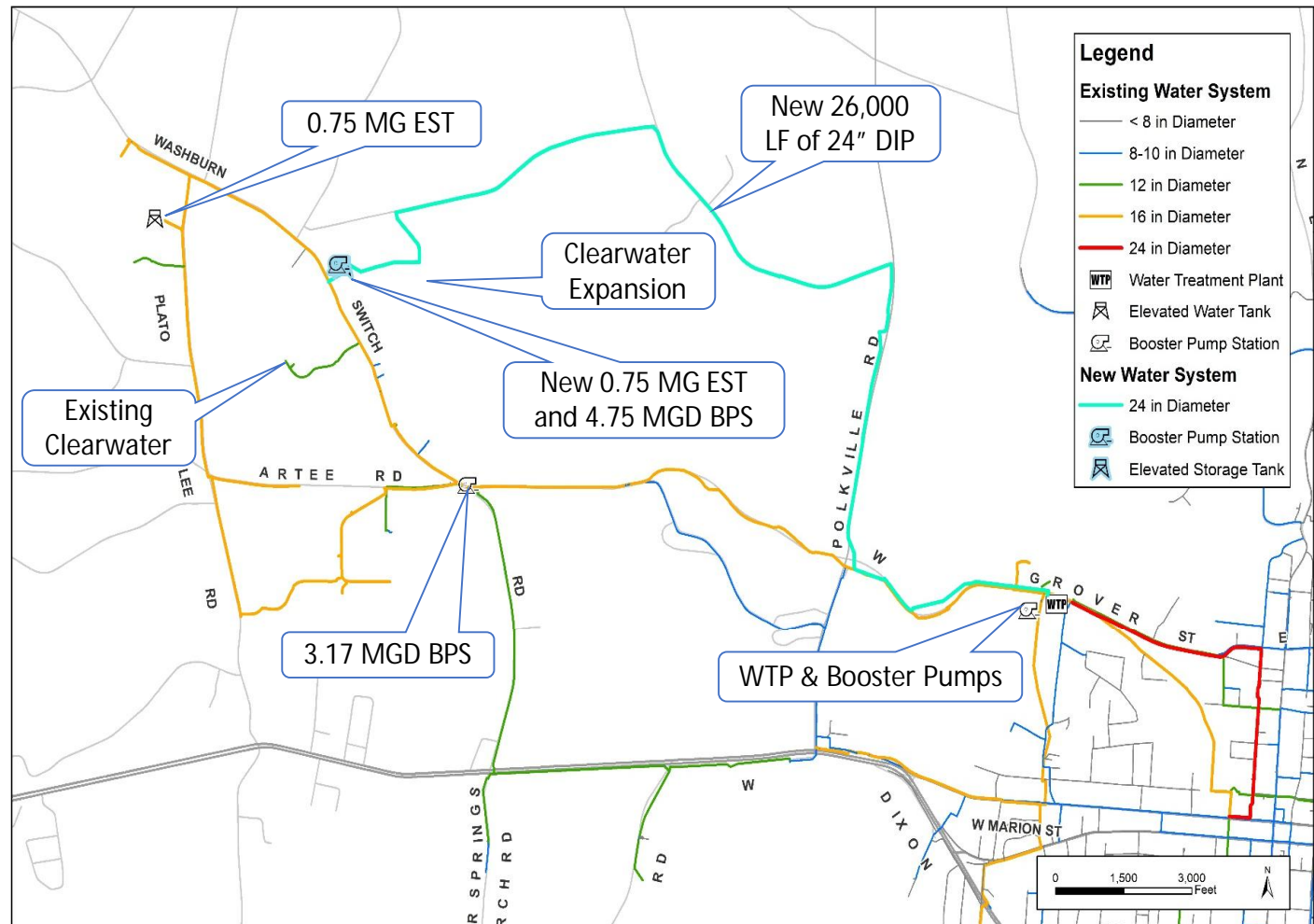
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919-814-2100 



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Required  
Improvements:  
New EST  
New BPS  
26,000 LF of 24"  
Watermain







## Schedule

Event	Date
Shelby negotiates contract with Clearwater	Late 2016
NTP Design	Feb. 14, 2017
EDA Review	30 days
NTP Construction	Apr. 10, 2018
Contract Date	Feb. 13, 2019

Total project cost: ~\$12M

Less than 2 years for all design, permitting

- and construction



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## Project Challenges

- 6 NCDOT Road Crossings
- 1 Railroad Crossing
- One Proposed Interstate Crossing
- 90% within NCDOT ROW
- 3 River or Creek Crossings





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## Design Solutions

- 2x 24" Horizontal Direction Drill (1,164 LF)
- 1x 8" Horizontal Direction Drill (2,000 LF)
- 5x 36" Jack & Bore (total 632 LF)
- Open Cut Proposed Interstate Crossing
- 4.75 MGD Booster Pump Station
- 750,000 Elevated Tank (delayed)







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## 24" Jack and Bore

- 36" Steel Casing
- 100' Max Length
- Under NCDOT Roads
- Under NS railroad







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## 24" Jack and Bore







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## 24" Jack and Bore







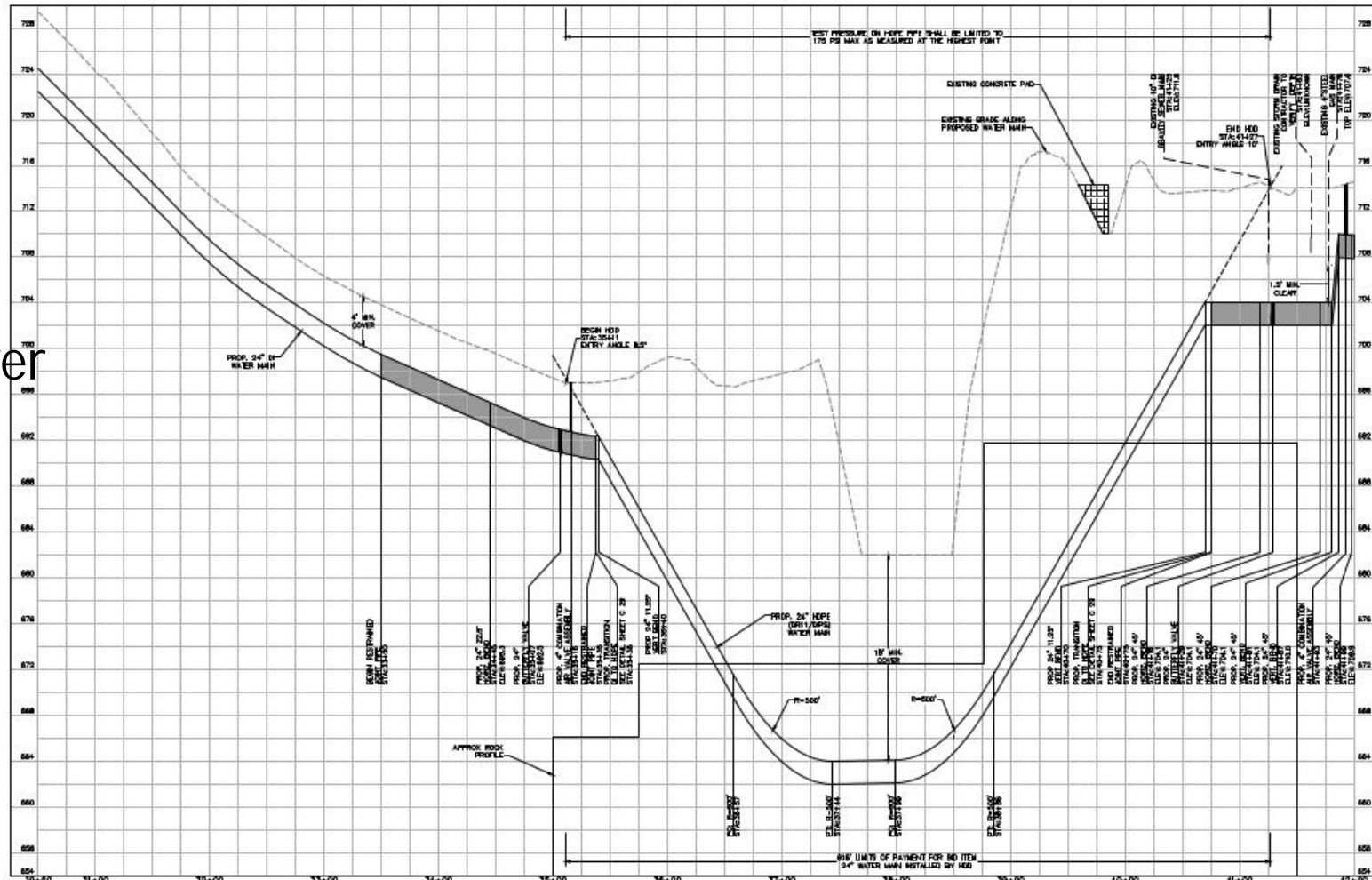
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## 24" Jack and Bore



- 55' Max Depth







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24" HDD







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24" HDD







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## 24" HDD Cutting Heads







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## 24" HDD







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## 24" HDD







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8" HDD – 2000 LF  
Flexible PVC







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## Elevated Storage Tank





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## Elevated Storage Tank







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## Booster Pump Station





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## Acknowledgements:

City of Shelby – David Hux, Rick Howell, Ben Yarboro, Mark Swink, Chad Hubbard, Brad Greene, Mike Mull, Jody Bell

Clearwater Paper, EDA, and Golden LEAF

Contractors – Hall Contracting Corporation, Piedmont Utilities Group, CMH Solutions, Phoenix Fabricators & Erectors, WS Parks

Kimley-Horn – Matt Shoesmith, Corey King, Rachel Rausch, Scott Funk, James Veen, Nick Black





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