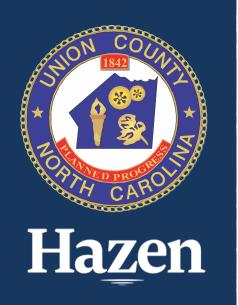
West Fork Twelve Mile Creek Interceptor Project

2nd Public Meeting March 29, 2018



Presentation Outline

- Introductions
- Project Overview
- Frequently Asked Questions
- Easement Acquisition Process
- Project Schedule
- Next Steps
- Open Discussion

Introduction

• Union County Public Works Department



Michael Caldwell, PE - Project Manager

Hazen and Sawyer Environmental Engineers and Scientists



Jim Struve, PE - Project Manager



Jeff Greene - Project Designer



Ellie Mierzejewski - Project Engineer

Introduction

Professional Property Services



Craig Long



Annette Hefner



Brad Marsh



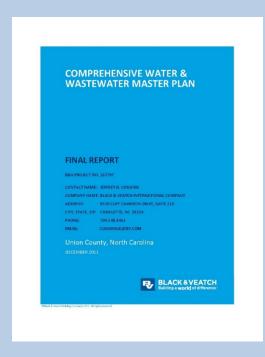
Emory Helms

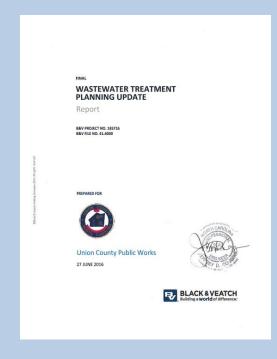


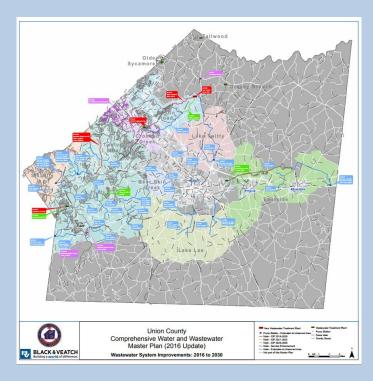
Chris Davis

Project Overview

Why Was this Project Initiated?







Project Overview

- Conducted Routing Study
 - Future Projects
 - Property Parcels
 - Roadway Crossings
 - Stream Crossings
 - Environmental Impacts
 - Construction Cost



November 2, 201

To: Union County Public Works Michael Caldwell, PE (Project Manager)

From: Hazen and Sawyer
Jim Struve, PE (Project Manager)
Brandon Moretz, PE (Assistant Project Manager)
Ellie Mierzejewski, El (Project Engineer)

West Fork Twelve Mile Creek Interceptor

Technical Memorandum No. 1 Hazen Project No. 30831-049

Introduction

Union County Public Works (UCPW) has retained Hazen and Sawyer (Hazen) to provide a route evaluation prior to providing design, bidding, and construction phase services for the proposed West Fork Twelve Mile Creek Interceptor (West Fork Interceptor). This study evaluates the most cost-effective route for constructing approximately 24,970 LF of 24-inch, 18-inch and 8-inch diameter sewer line, which will provide gravity sewer service to the immediate area. Black & Veatch (B&V) performed the hydraulic modeling which resulted in recommended pipe sizes as presented within the Wastewater Treatment Planning Update Report (dated June 27, 2016) for UCPW.

This technical memorandum (TM) will consider the following key criteria as part of this evaluation.

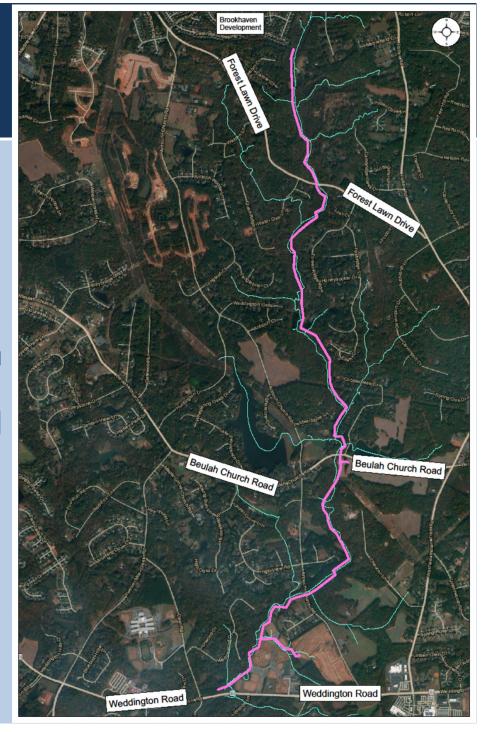
- Consideration of Future Projects
- Impacted Property Parcels
- Roadway Crossings
- Stream Crossings
- Additional Environmental Considerations
- Construction Considerations

The findings of this evaluation are summarized herein along with recommendations (including a construction cost estimate). Upon review and approval by UCPW, the recommendations presented herein will serve as the basis of design during development of plan and profile drawings and technical specifications.

Hazen and Sawyer • 9101 Southern Pine Blvd, Suite 250 • Charlotte, NC 28273 • 704.357.3150

Project Overview

- Routing Study Conclusions
 - Sewer Length 25,000 LF
 - Sewer Diameter 8 to 24 In
 - o Construction Cost \$10.9 M



Frequently Asked Questions

- 1. Why can't the sewer be installed along the road?
- 2. Will the sewer contaminate the groundwater?
- 3. When will construction occur?
- 4. Is the sewer vented?
- 5. Will odors be generated?
- 6. Can I connect to the sewer?

County Easement Acquisition Policy

Procedure

 1st Mailed Notice 	Apr 11, 2017
o 2 nd Mailed Notice	Feb 8, 2018
o 1st Public Meeting	Feb 20, 2018
o 3 rd Mailed Notice	Mar 13, 2018
o 2 nd Public Meeting	Mar 29, 2018
o 4th Mailed Notice	Property Owners Not in Attendance
o Courtesy Call	Outstanding Easement Instruments

Easement Definition

 A Strip of Land that Allows the County to Access your Property for the Purpose of Installing and/or Maintaining Utilities. It <u>Prohibits</u> the Property Owner from Constructing Permanent Structures that Would Prevent the County from Accessing and/or Performing Work Within the Easement.

Types of Easements

- Two Types of Easements
 - Permanent Construction Easement (PCE)
 - Temporary Construction Easement (TCE)

Permanent Construction Easement (PCE)

 PCE allows the County to use the land, and to place certain restrictions on the land use. However, the County does not own the land. Additionally, the easement is attached to the property deed so that it passes on even when the property is transferred or sold.

Temporary Construction Easement (TCE)

 TCE provides work area for the temporary use of land outside the normal Right-of-Way (ROW) that is necessary for construction of the project. The use of this land will be for a specified time period.

Why Are Easements Needed?

- Conventional Open Trench
 - Most Common Method
 - Work ProgressesAbove Ground
 - 25 to 40-foot
 Easement Required

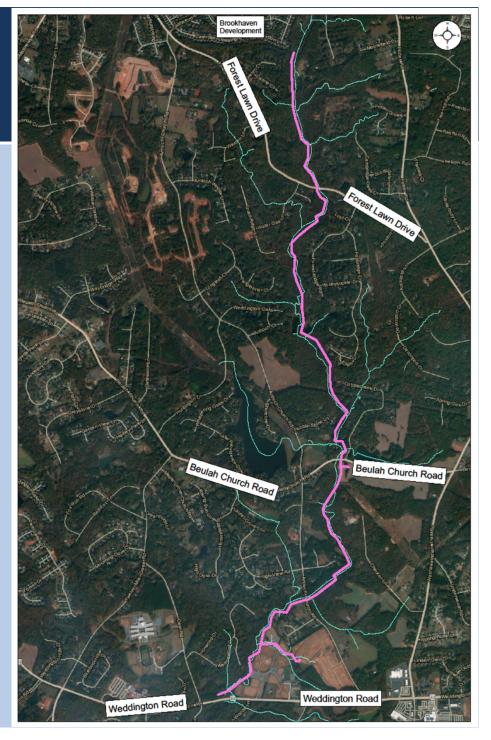


Easement Following Construction



Where are Easements Required ?

- All along the Interceptor Alignment
- 30-foot PCE
- 10-foot TCE



County Payment Procedure

 County will Pay Property Owners for Acquiring Permanent and Temporary Construction Easement

Uniform Payment Formula:

- PCE = (Acreage) x (Land Tax Value) x (0.50)
- TCE = (Acreage) x (Land Tax Value) x (0.25)

PCE Payment Example

- PCE Payment Calculation Example:
 - Strip of Land 10'x60' = 0.0138 Acres
 - Land Value = \$20,000 per Acre
 - Adjusted Tax Factor = 0.50
 - \circ (0.0138) x (\$20,000) x (0.50) = \$138.00

What Happens if Stalemate Occurs?

- County Policy and Procedure allows for Condemnation
- Condemnation Actions Occur 1 Month after the 4th Mailed Notice

County's Easement Acquisition Agent

- Professional Property Services (PPS)
 - o Role
 - Answer Questions
 - Execute and Notarize PCE / TCE Agreements

Project Schedule

Milestone

Finalize Design

Advertise Project

Begin Construction

End Construction

Tentative Date

Apr 2018

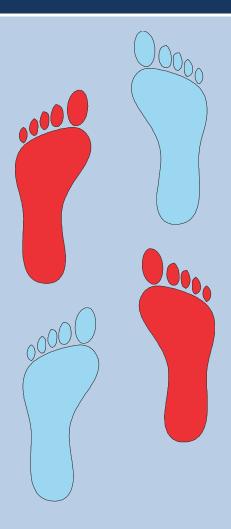
Jun 2018

Nov 2018

Jul 2020

Next Steps

- Forthcoming Letter
 Regarding TCE and PCE
- PPS will be Contacting to Meet with each Property Owner Individually
- Execute TCE / PCE Agreements



Open Discussion

