

Northeast Trunkline Phase 4

May 25, 2023

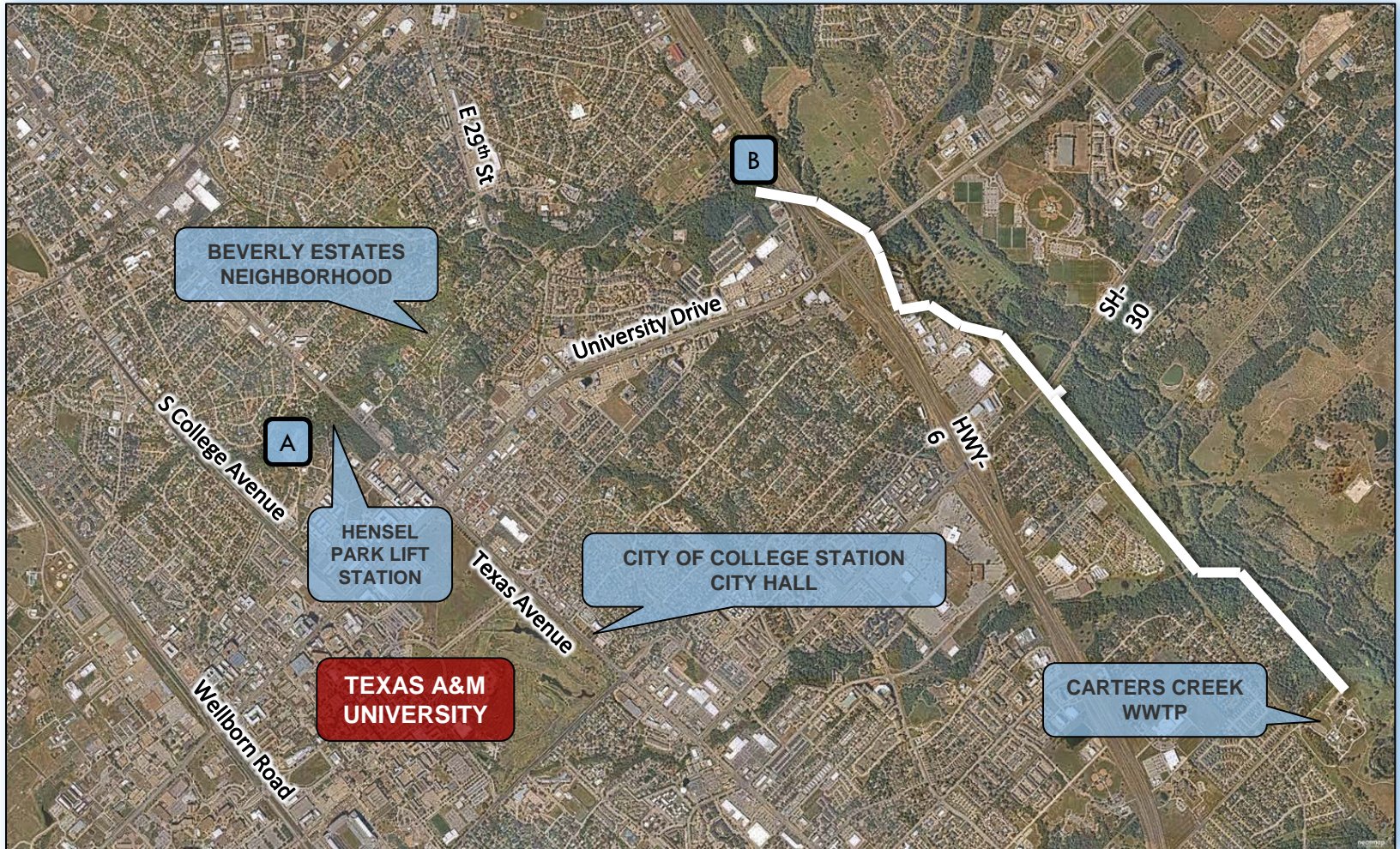


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PROJECT INTRO



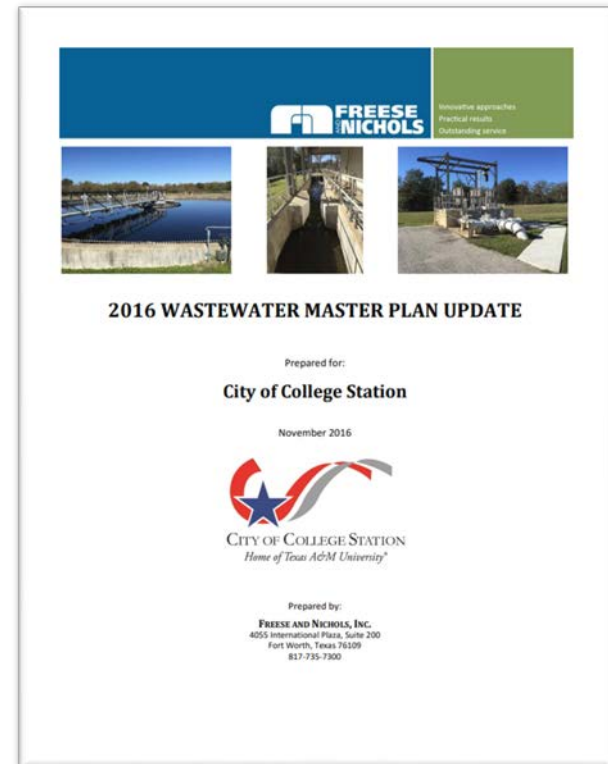
DEFINITIONS

Definitions:

- Bore Pit: A boring pit is an excavation of specific size to house a boring machine and tracks. (trenchless)
- CCN: A Certificate of Convenience and Necessity (CCN) gives a retail public utility the exclusive right to provide retail water or sewer utility service to an identified geographic area. The Texas Water Code and Public Utility Commission of Texas (PUCT) rules refer to this as the “certificated service area.” A CCN holder is required to provide continuous and adequate service to the area within its CCN boundary.
- Easement: An interest in land owned by another person, consisting in the right to use or control the land, or an area above or below it, for a specific limited purpose (such as to cross it for access to a public road). A common example is a utility company obtaining an easement across private property.
- Lift Station: A wastewater lift station is a pumping station that moves wastewater from a lower elevation to a higher elevation.
- Open Cut: Installation of sewer line that requires opening the surface of the ground to the required depth for installing of a pipeline. It is a traditional method that is used widely for installation of sewer lines.
- Right of Way: (1) The right to pass through property owned by another, usually based upon an easement. (2) A path or thoroughfare over which passage is made. (3) A strip of land over which facilities such as highways, railroads or power lines are built.
- Trenchless: Boring is a trenchless method of installing sewer lines underground along a predetermined bore path. This type of drilling system allows for the placement of sewer lines with minimal disturbance or disruption along the ground surface.

WATER & WASTEWATER CAPITAL PLAN

- Annually Review Prioritization of Unfunded Capital Projects
 - Work Orders
 - Condition Assessments
 - Development & Economic Growth
 - Redevelopment & District Plans
 - O&M of Water Production and Wastewater Treatment Facilities
 - Public Works Streets Maintenance Plan & Unfunded Capital Projects
- Capital Project Groups
 - Water Production
 - Water Transmission & Distribution
 - Wastewater Collection
 - Wastewater Treatment
 - Joint Street Rehabilitation





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COONER STREET PROJECT

Scope:

Included the installation of approximately 400 LF of 12" Force Main, 1585 LF of 24" sanitary sewer line, 1855 LF of 12" waterline, 1100 LF of RCP Storm drain ranging in size from 48" to 18" in diameter, 2565 LF of new curb & gutter, and 7270 SY of HMAC removal and replacement.

Timeline:

Construction Start: September 2014

Final Completion: September 2015

Cost:

Design: \$302,092

Construction: \$2,072,612



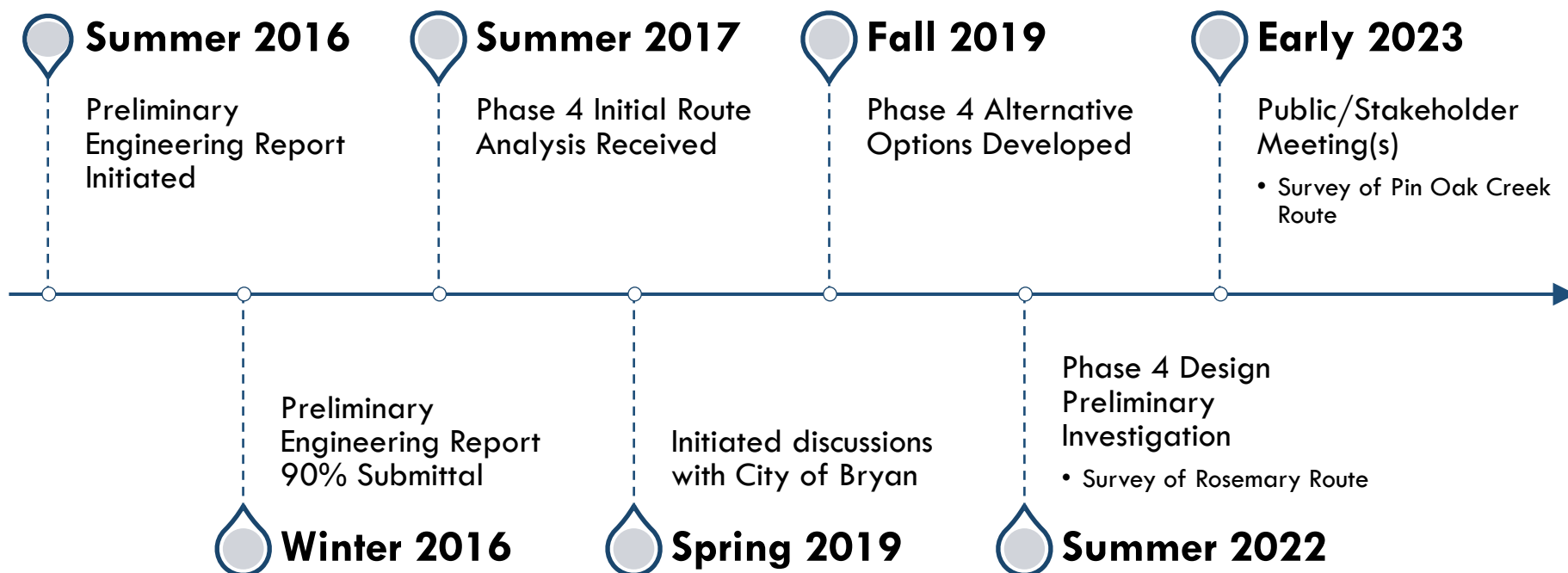


NORTHEAST TRUNKLINE PROJECT GOALS

- ❖ To Serve Growth on University Corridor/Northgate
- ❖ To Serve Texas A&M Property, Including Hensel Park
- ❖ Maintain TCEQ compliance
- ❖ Investment to Date, \$7.5 Million

PRELIMINARY ENGINEERING REPORT

A PER includes the following items: the design's systems, basic requirements, and the high-level design features.



*Need identified in 1997 and confirmed in 2010 study



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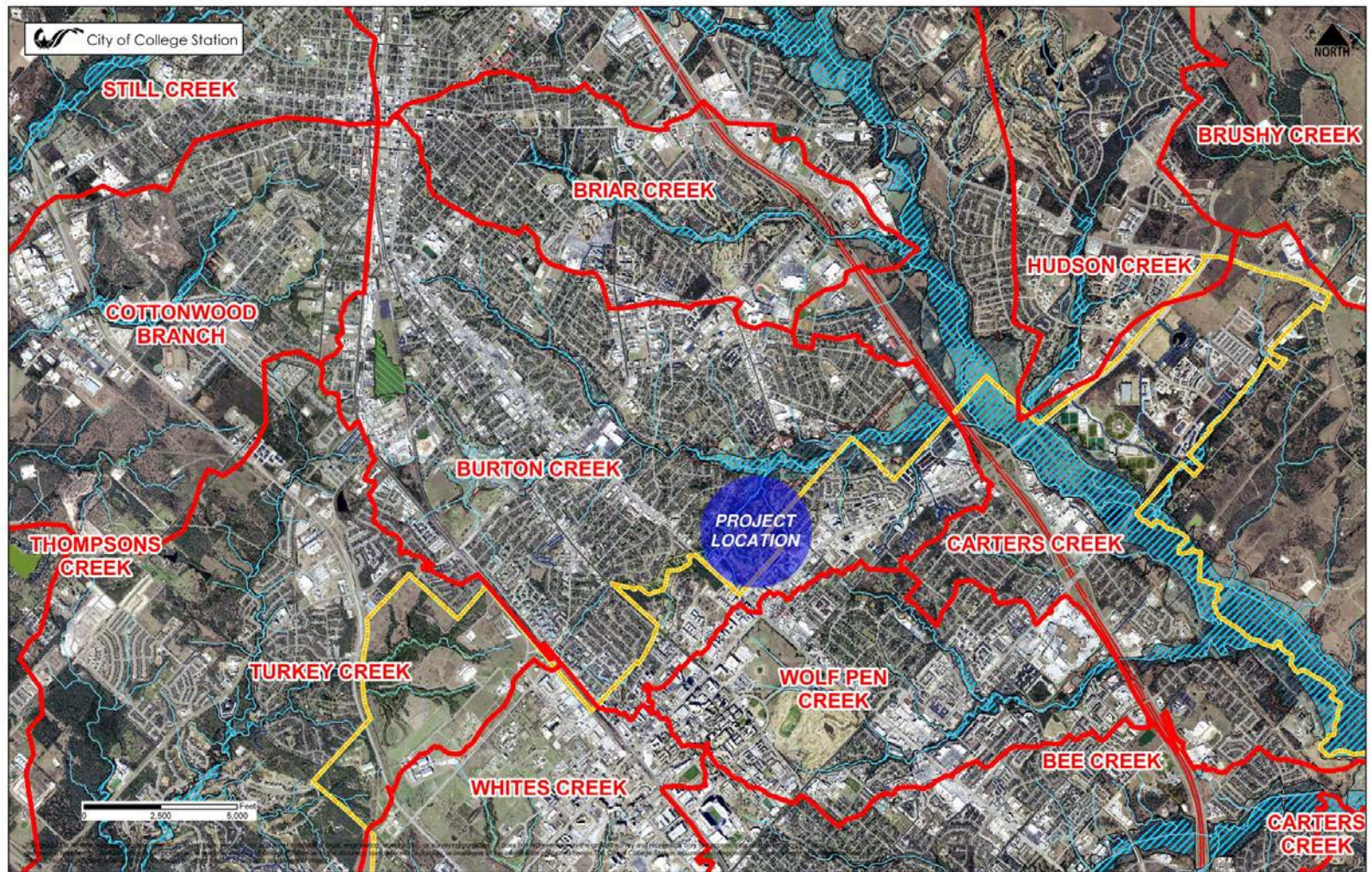
SEWERSHED MAP





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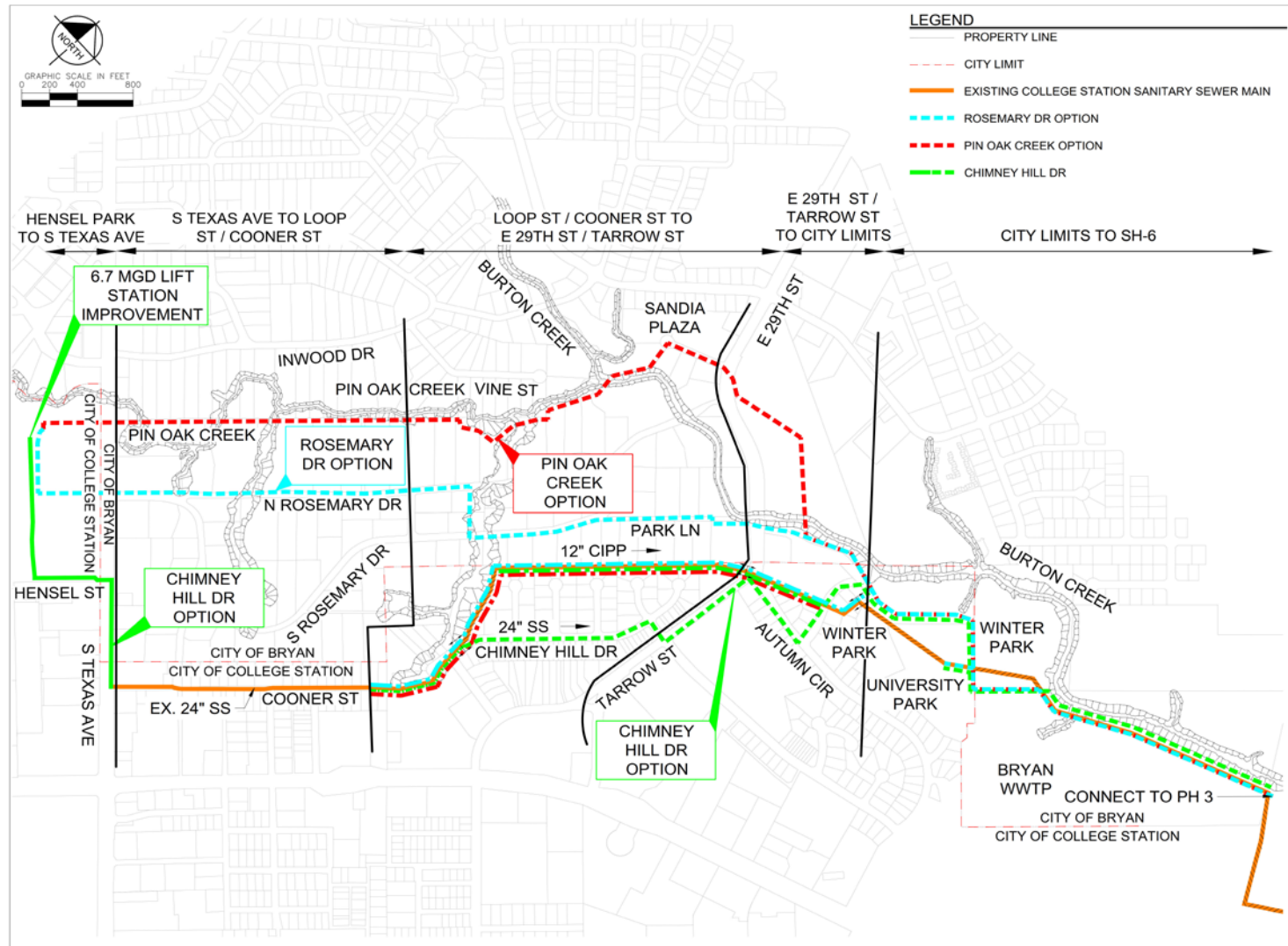
DRAINAGE WATERSHED MAP





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PHASE 4 POTENTIAL ROUTES



TECHNICAL COMPONENTS

Technical Components:

Included in all routes:

- 24" to 30" Diameter Gravity Line
 - Approximately 7,300 - 11,200 Linear Feet (depending on route)
- 12" CIPP
 - CIPP (cured-in-place pipe) is a trenchless rehabilitation method used to repair existing pipelines. It is a jointless, seamless pipe lining within an existing pipe.
 - Approximately 2,800 - 4,300 Linear Feet (depending on route)
- Bore Pit (trenchless method only)
 - 24' to 30' diameter

Included only for Chimney Hill route:

- 6.7 MGD Lift Station

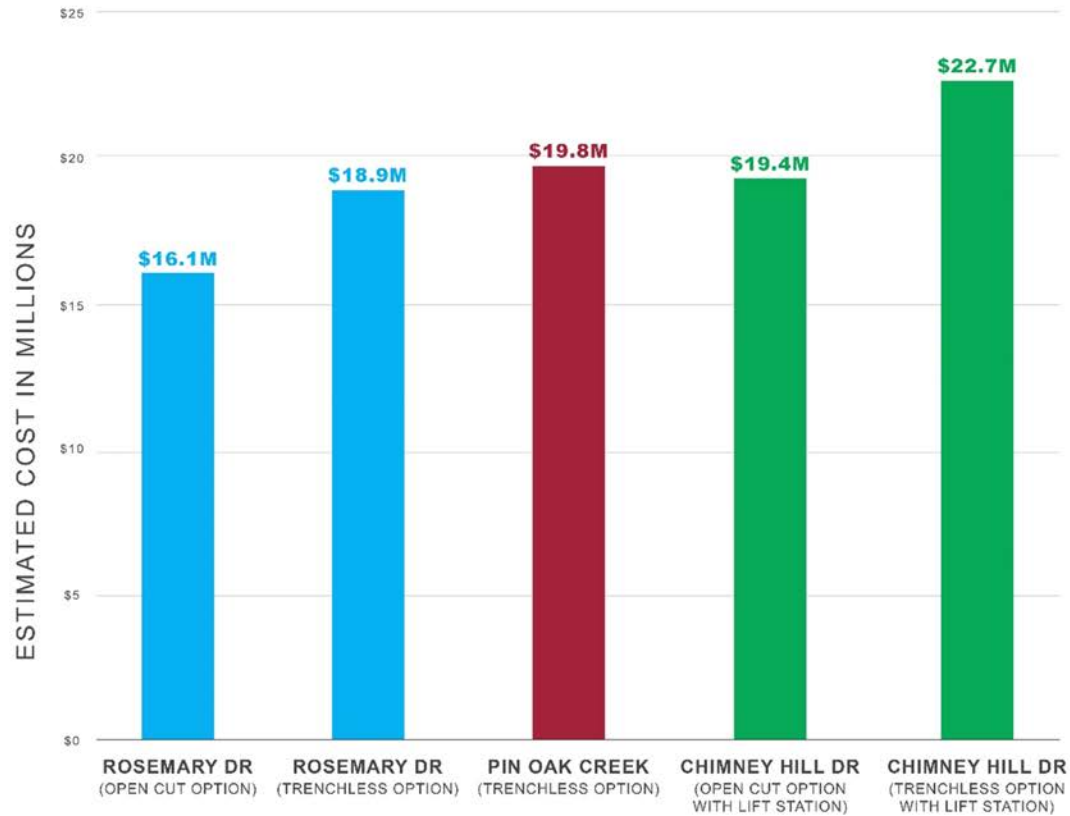
CHALLENGES FOR EACH ROUTE

1. ROW Option: Rosemary/Beverly Estates
 - Property Owner Access During Construction
 - Easement Acquisition (10)
2. Chimney Hill/Lift Station
 - Highest Cost Option
 - Lift Station
 - Risk
 - On-going Maintenance
 - Property Owner Access During Construction
 - Easement Acquisition (11)
3. Pin Oak Creek Option: Rosemary Backlots – Not Recommended
 - Easement Acquisition (26+)
 - Aerial crossing(s)
 - Additional studies – costs, time, etc.
 - Constructability – access, etc.
 - Potential Environmental impacts



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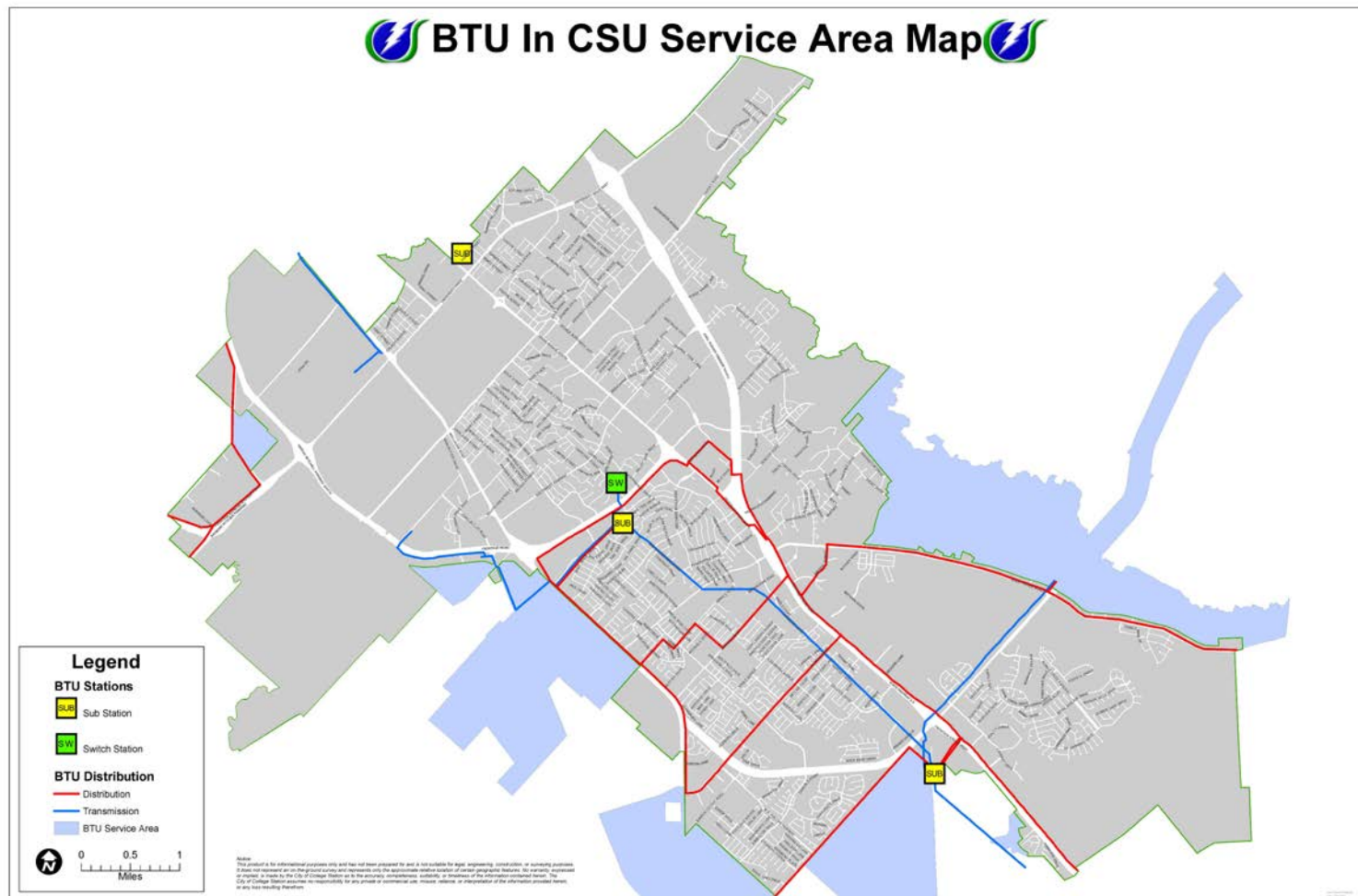
COST COMPARISONS





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BRYAN TEXAS UTILITIES (BTU)



There are approximately 29 miles of BTU distribution lines and 16 miles of BTU transmission lines inside the CSU certification area of College Station.



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BRYAN TEXAS UTILITIES (BTU)



Barron Road



Balcones Drive



Substation on Rio Grande



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BRYAN TEXAS UTILITIES (BTU)

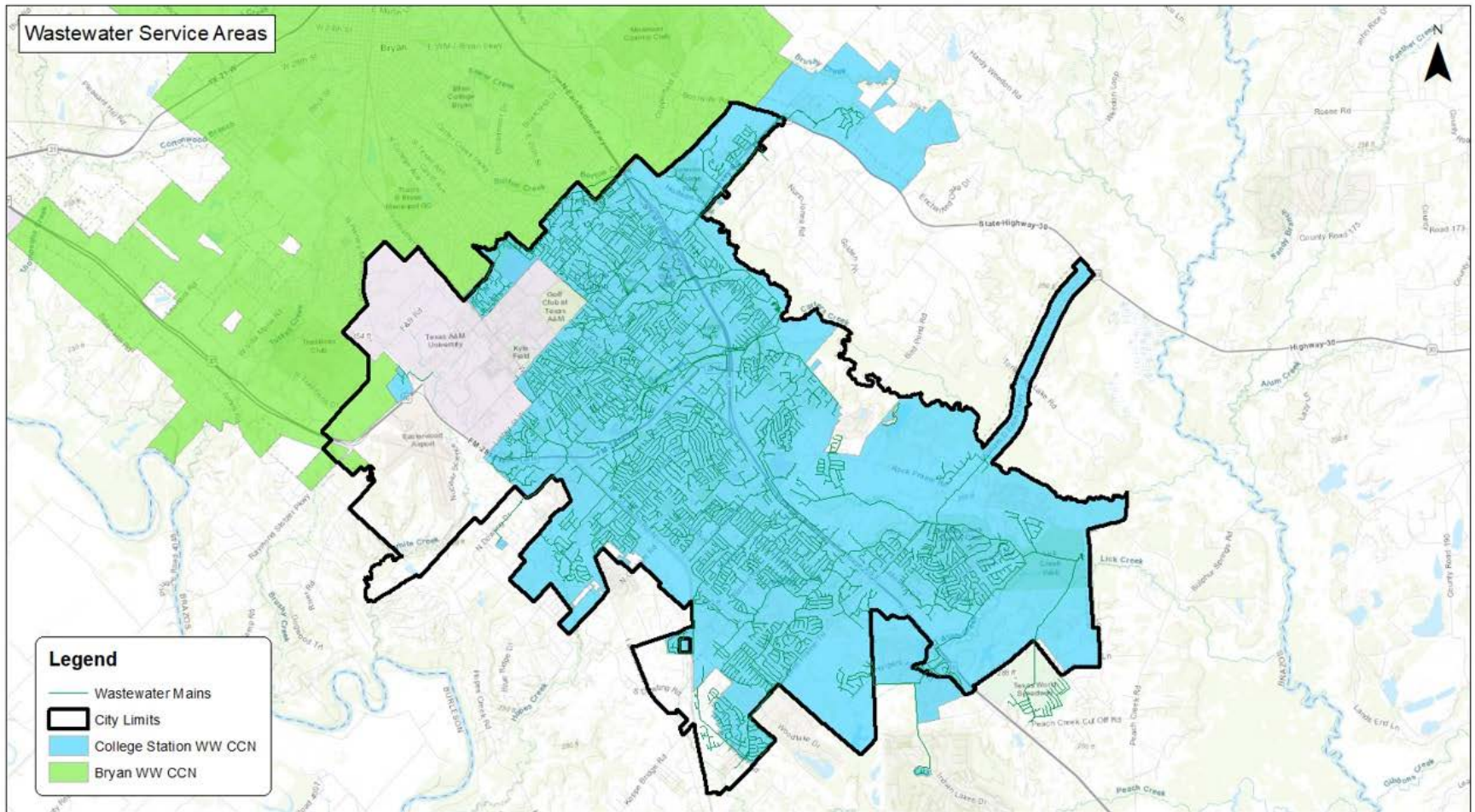
- March 2019: Variance approved by College Station Zoning Board of Adjustments to Section 7.6 Landscaping in order to provide no screening or landscaping.
- August 2019: Site Plan submitted by BTU for expansion of Substation at 111 Cooner
- January 27, 2023: City of Bryan purchased lot at 203 Cooner. Existing 6 unit multifamily structure.
- May 5, 2023: Demo permit of the structure at 203 Cooner submitted in order to expand the substation.





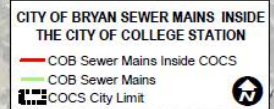
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COLLEGE STATION WASTEWATER CCN





There are approximately 14,933 ft (or ~2.83 miles) of sewer lines in College Station that serve Bryan residents.





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ROW PERMIT PROCESS



RIGHT-OF-WAY CONSTRUCTION PERMIT APPLICATION

MINIMUM SUBMITTAL REQUIREMENTS:

- ☐ Application completed in full. This application form provided by the City of College Station must be used and may not be adjusted or altered. Please attach pages if additional information is provided.
- ☐ One (1) copy of a drawing showing detailed work location and adjacent College Station utilities.
- ☐ Wireless Facilities Only: Complete ROW Construction Permit Supplement

NOTE: This permit shall expire twenty-four (24) months from the approved date.

APPLICANT/PROJECT MANAGER'S INFORMATION (Primary contact for the project):

Name _____ E-mail _____
Street Address _____
City _____ State _____ Zip Code _____
Phone Number _____ Fax Number _____

RIGHT-OF-WAY USER INFORMATION:

Name _____ E-mail _____
Street Address _____
City _____ State _____ Zip Code _____
Phone Number _____ Fax Number _____

PROJECT INSTALLATION CONTRACTOR INFORMATION

Name _____ E-mail _____
Street Address _____
City _____ State _____ Zip Code _____
Phone Number _____ Fax Number _____

PROPOSED UTILITY (CHECK ALL APPLICABLE)

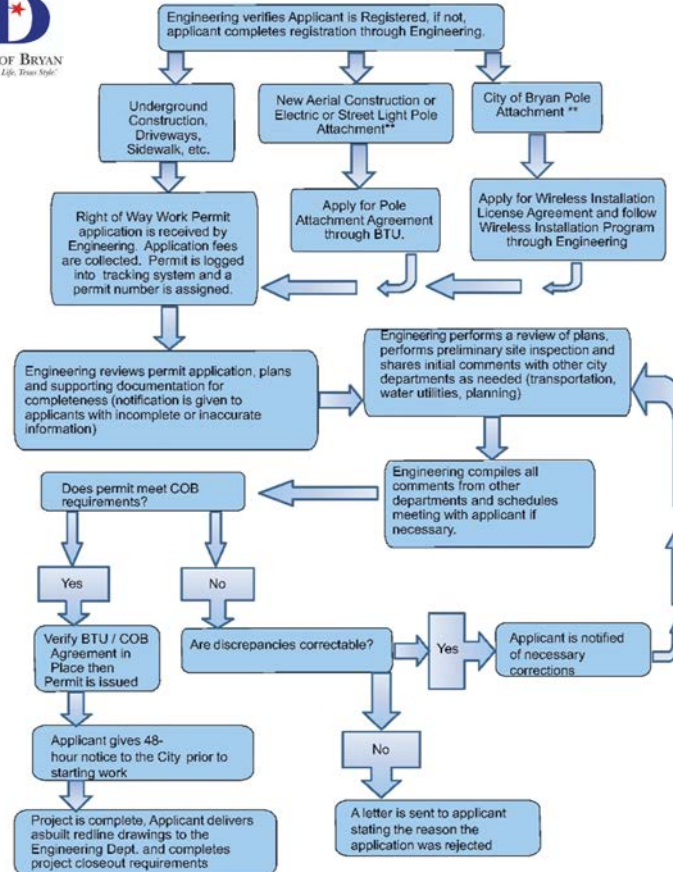
- ☐ Underground Telecommunications ☐ Pole Attached Telecommunications ☐ Oil & Gas Pipeline

Telecommunications Only
Will this proposed infrastructure require electrical power by College Station Utilities? ☐ Yes ☐ No

Method of physically locating existing utilities (hydro locations, excavation, hand digs, etc.)



Right-of-Way Work Permit Process



FUTURE STEPS - DESIGN

Including but not limited to:

- Additional Survey Work
- Geotechnical Investigation
- Environmental Study
- Easement Acquisition
- Subsurface Utility Engineering
- Traffic Control/Access Plan
- Jurisdictional Coordination
- Tree Protection Plan
- Public Communication/Engagement



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ENVIRONMENTAL STUDY



Jurisdictional Waters



Threatened and Endangered Species and Associated Habitats



Migratory Birds



Floodplains



Cultural and Historic Resources, Protected Resources



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TREES

“Avoid trenching (open cut) near trees for utility lines and other piping, but when this is not possible, take steps to minimize the damage. Rather than cut across the root zone, lines should be bored below the root system (Figure 15).” (p.60, From: Texas A&M Operational Overview Tree Protection Procedures, February 2023)

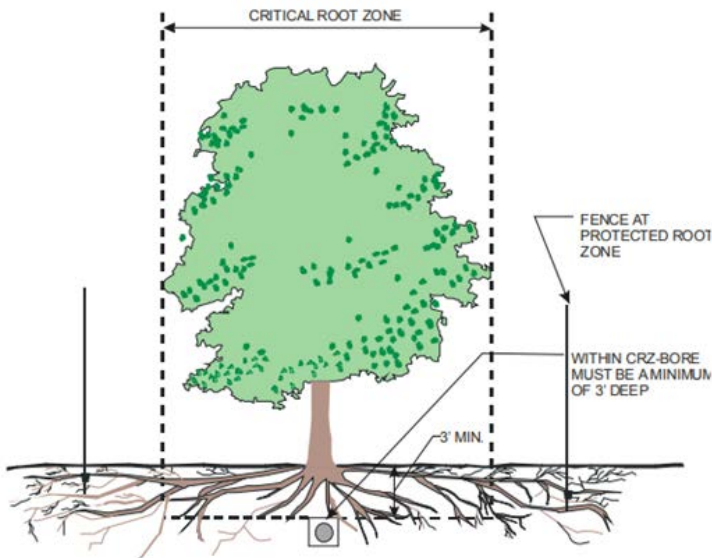


Figure 15. Trench Under Root System.

Per Mike Sills, Regional Urban Forester, Community Forest Program, Texas A&M Forest Service: the roots of our local trees are predominantly in the top 18" of soil.

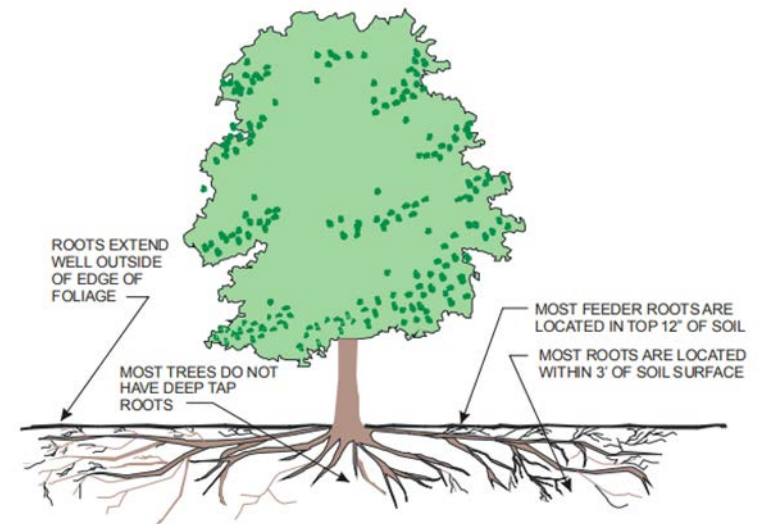


Figure 3. Tree Root System.

QUESTIONS AND DISCUSSION



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