

**REQUEST FOR STATEMENT OF QUALIFICATIONS FOR
I-85 GRAVITY SEWER TRANSMISSION MAIN REPLACEMENT
For
SOUTH GRANVILLE WATER AND SEWER AUTHORITY, NORTH
CAROLINA**

**Qualification Statements Due by:
AUGUST 21, 2020
5:00 pm**

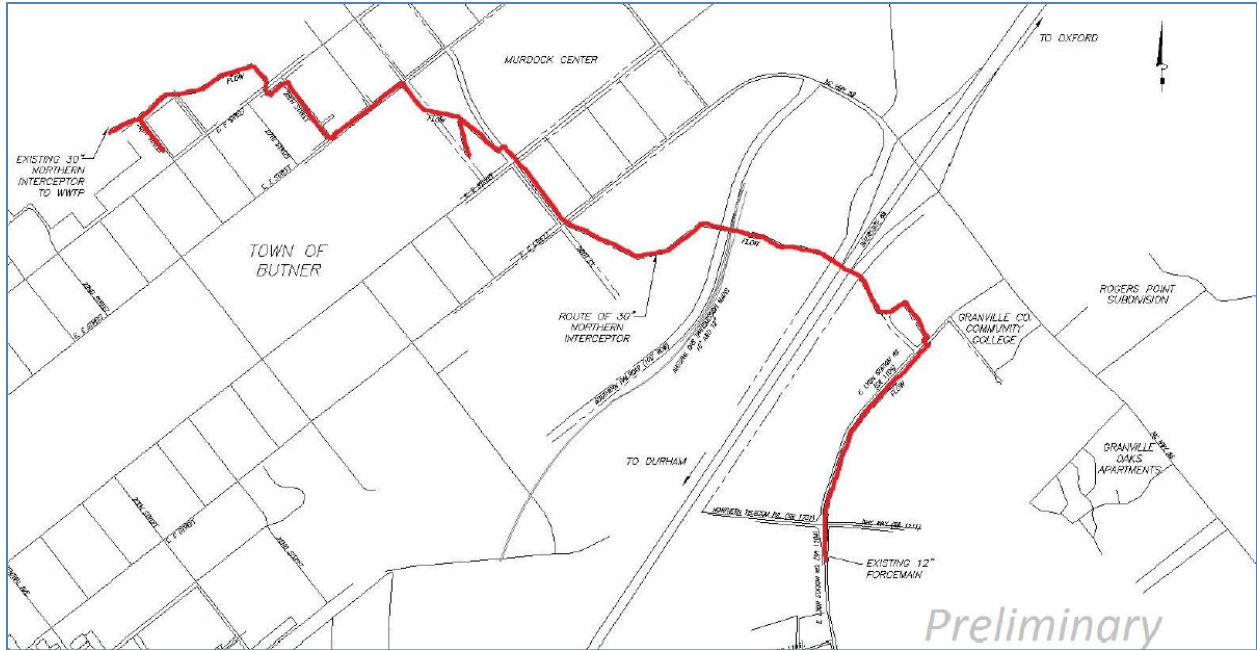
I. PURPOSE/BACKGROUND

The South Granville Water and Sewer Authority (SGWASA) is a water and sewer authority serving a population of approximately 19,000 in the southern portion of Granville County, North Carolina, including the Town of Butner, the City of Creedmoor, the Town of Stem and part of the unincorporated areas of southern Granville County. This places SGWASA's service area in the Falls Lake watershed (Neuse River) and some of SGWASA's distribution and collection system extend up to the edge of, and into, the Tar River Basin watershed.

The SGWASA sewer system is comprised of gravity sewer lines ranging in size from 4" to 48" with multiple sewer lift stations located throughout the system. Existing gravity sewer line sizes have created restrictions in available system capacity. To alleviate the restrictions and increase capacity to the maximum amount available in the existing pipe diameters, two projects known as the "Northern Interceptor" and "Southern Interceptor" are planned. Each project would replace existing gravity sewers with larger diameter pipe to increase carrying capacity between land on the east side of I-85 and gravity sewers on the west and south side of Butner, NC.

SGWASA is seeking a qualified engineering consultant to prepare a final route evaluation and prepare detailed engineering plans for the replacement of approximately 22,000 linear feet of pipe for the Northern Interceptor and 9,000 to 22,000 linear feet of pipe for the Southern Interceptor.

These projects were identified in a Coulter Jewell Thames study for SGWASA. A Summary presentation presented to SGWASA's Board in January 2019. A copy of that presentation is included with the RFQ for reference. Illustrations of the two Interceptors from that presentation are included below.



NORTHERN INTERCEPTOR



SOUTHERN INTERCEPTOR

II. GOALS AND OBJECTIVES

The selected consultant will work closely with SGWASA and their on-call consulting engineer, McGill Associates as well as State and local government agencies throughout the Project. As the first phase of the work to be performed, the selected Consultant will prepare an alternatives analysis for the proposed sewer replacement projects detailing various replacement routes along existing streets and easements. The analysis will be based on existing studies and data available from SGWASA and McGill. If additional materials are required to complete the analysis, these additional services will be negotiated with the Selected Consultant. Once the preferred alternative(s) have been selected, the Consultant will be responsible for all surveying (including R/W), design, and permitting necessary to develop a "shovel ready" set of plans and specifications. The project plans will be developed as two stand-alone projects. It is anticipated that the improvements will follow existing sewer routes utilizing existing right-of-way and easements; however, other routes would be considered.

At a minimum, the selected consultant is expected to be thoroughly familiar with the following:

1. Rehabilitation & upgrading of older existing sewer systems while maintaining service.
2. State and Federal wastewater rules and regulations.
3. State and Federal Transportation Laws as it pertains to utility crossings.

IV. SUBMITTAL REQUIREMENTS

Please take note of the following very important requirements:

1. **All materials shall be submitted electronically in Adobe Acrobat 5.0 (or later) PDF format (preferably in one file) by the date indicated in the schedule below.** No printing, binding or other paper handling is required of the consultant.
2. Submittals may be color or black/white and all portions must be 8½" x 11".
3. Submittals may include spreadsheets, graphics, logos and any other "objects" embedded in the file.
4. A cover letter may be included and will not count toward the page limit.
5. Links or references to websites will not be allowed.
6. **Submittal is limited to a maximum of 20 pages (excluding cover sheet(s) and cover letter).**

If applicable, clearly disclose all potential conflicts or appearances of conflicts of interest.

The submission shall address each of the following:

A. PROJECT APPROACH

A brief description of the firm's understanding of and approach to the tasks. Include a proposed scope of services listing specific anticipated work tasks.

B. SIMILAR EXPERIENCE

In detail, describe the past experience of your firm over the last five (5) years with similar projects. Include a minimum of three (3) specific projects, names and description of the work completed, client names and individuals with telephone numbers of one (1) individual to contact for reference for each project listed. Photographs, maps, layouts or other supporting material from similar projects are encouraged.

C. PROJECT TEAM

Provide organizational chart of the proposed key staffing to be assigned to the project. Provide resumes for key staff demonstrating the qualifications and experience of the specific individuals who are to be involved in this project. Sub-consultants will be permitted to provide the best-qualified professionals for this contract.

D. COST CONTROL & SCHEDULING

Describe your firm's method of keeping a project on schedule and within budget. The consultant shall assure that at all times, sufficient staff is available and assigned to the project.

V. ANTICIPATED SCHEDULE

All submittals received by the deadline will be evaluated. Submittals received after the deadline will not be evaluated.

Proposal submittal deadline: **5:00 AUGUST 21, 2020**

Qualification submittals are to be received by SGWASA by the date shown above. **Submittals must be e-mailed** to Bill Roark, PE, Principal at: bill.roark@mcgillassociates.com

In lieu of an e-mail submittal, Consultants may mail or deliver a USB Thumb Drive to:

McGill Associates
5400 Trinity Road, Suite 107
Raleigh, NC 27607
Attention: Bill Roark, PE, Principal
RE: RFQ FOR I-85 GRAVITY SEWER TRANSMISSION MAIN REPLACEMENT

Consultants mailing or hand delivering their submittal must first contact Bill Roark at (919) 378-9111 to notify SGWASA and McGill of the planned physical submittal. Consultants are advised to use a delivery method that provides record of delivery. Submittals received after the deadline will not be considered.

Questions regarding this project should be submitted in writing to Bill Roark, PE, Principal, at: bill.roark@mcgillassociates.com

- **Consultants are strongly encouraged to test-submit proposals to themselves to review format and integrity of the submittal. Submittals that cannot be opened or are otherwise corrupt will not be evaluated.**
- **Consultants are strongly encouraged not to wait until the deadline. Submittals that are received after the deadline due to Internet delays, firewalls, large file delivery times, etc. will not be considered.**
- **Consultants will receive an e-mail confirmation upon receipt and successful opening of their submittal including that submittal was received before the deadline.**

After a review of the submittals, one firm will be selected for the project. Note: interviews are not anticipated for consultant selection for this project. If interviews are deemed necessary, they will be conducted using video conferencing technology such as Microsoft Teams, Zoom or other mutually agreeable format.

VI. SELECTION CRITERIA

The selection of the consultant shall be based on proposal information exhibited in both written and graphic form and personal interviews (if conducted). Criteria for selection will include, but not necessarily be limited to the following:

- Relevant experience of the same or similar projects in content and scope..... 40%
- Project approach..... 25%
- Approach to cost control and scheduling..... 15%
- The submittal itself as an example of the quality of the firm's work..... 15%
- Prior work experience with SGWASA..... 5%

VII. MISCELLANEOUS PROJECT REQUIREMENTS

A. MINORITY/WOMEN BUSINESS ENTERPRISE

It is the policy of SGWASA to provide minorities and women equal opportunity for participating in all aspects of the County's contracting and procurement programs, including but not limited to employment, construction development projects, and materials/services, consistent with the laws of the State of North Carolina. The policy of SGWASA prohibits discrimination against any person or business in pursuit of these opportunities on the basis of race, color, national origin, religion, sex, age, disability, or veteran's status. It is further the policy of SGWASA to conduct its contracting and procurement programs so as to prevent such discrimination and to resolve any and all claims of such discrimination.

B. ADA COMPLIANCE

SGWASA will comply with the Americans with Disabilities Act (ADA) which prohibits discrimination on the basis of a disability. SGWASA will make reasonable accommodations in all programs to enable participation by an individual with a disability who meets essential eligibility requirements. SGWASA programs will be available in the most integrated setting for each individual. If any accommodations are necessary for participation in any program or services, participants are encouraged to notify SGWASA Staff.

C. INDEMNITY AND INSURANCE REQUIREMENTS

To the extent permitted by law, the Consultant shall indemnify and save harmless SGWASA, its officers, agents, employees and assigns from and against all loss, costs, damages, expenses and liability caused by an accident or other occurrence resulting in bodily injury, including death, sickness and disease to any person; or damage or destruction to property, real or personal; arising directly or indirectly from operations, products or services rendered or purchased under the contract by and between the selected consultant and SGWASA.

The selected consultant shall provide the following minimum insurance limits:

AUTOMOBILE LIABILITY - Bodily injury and property damage liability insurance covering all owned, non-owned, and hired automobiles for limits for bodily injury of not less than \$1,000,000 per person/\$2,000,000 per accident, and property damage limits of not less than \$1,000,000 per accident. The automobile liability insurance coverage amounts may be satisfied with a combination of primary and excess/umbrella coverage.

COMMERCIAL GENERAL LIABILITY - Bodily injury and property damage liability shall protect the contractor, and any subcontractor performing work under the contract, from claims of bodily injury or property damage which arise from operation of this Agreement, whether such operations are performed by contractor, any subcontractor, or anyone directly or indirectly employed by either. The amounts of such insurance shall not be less than \$2,000,000 bodily injury each occurrence/\$4,000,000 aggregate and \$2,000,000 property damage each occurrence/\$4,000,000 aggregate. This insurance shall include coverage for products/completed operations, personal and advertising injury liability and contractual liability in an amount not less than \$2,000,000 each occurrence/\$4,000,000 aggregate. The liability insurance coverage amounts may be satisfied with a combination of primary and excess/umbrella coverage.

WORKERS' COMPENSATION - Meeting the statutory requirements of the State of North Carolina, even if not required by law to maintain such insurance. Said Workers' Compensation insurance shall have at least the following limits: Employers Liability - \$100,000 per accident limit, \$500,000 disease per policy limit, \$100,000 disease each employee limit.

PROFESSIONAL LIABILITY – Insuring against professional negligence/ errors and omissions on an occurrence or claims-made basis with policy limits of \$2,000,000 per claim/\$4,000,000 annual aggregate. If insurance is provided on a claims-made basis, "Tail" coverage will be required at the completion of this Agreement for duration of thirty-six months, or the maximum time period reasonably available in the marketplace. Contractor shall furnish certification of "tail" coverage as described or continuous "claims made" liability coverage for thirty-six months following completion of its services under this Agreement. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage provided its retroactive date is on or before the effective date of this Agreement. If Continuous "claims made" coverage is used, Contractor shall be required to keep the coverage in effect for duration of not less than thirty-six months from the end of this Agreement. This will be a condition of the final acceptance of work or services.

Certificates of such insurance will be furnished and shall contain the provision that SGWASA will be given 30 days written notice of any intent to amend or terminate by either the consultant or the insuring company. In addition, SGWASA shall be named an additional insured under such automobile and commercial general liability policies.

END OF REQUEST FOR STATEMENT OF QUALIFICATIONS

ATTACHMENT:
JANUARY 2019 SGWASA SANITARY SEWER STUDY BOARD PRESENTATION

SGWASA Sanitary Sewer Study

Status Update
January 15, 2019



SGASA Sewer Study Team

Coulter Jewell Thames, PA – Surveying & Civil Engineering

- James Thames, PE – Interceptor Extensions
- Preston Royster, PE – Pump Station Study
- Chuck Hill, PE – New Service Areas

S&ME, Inc. – Geotechnical Investigations & Recommendations

- Adam Browning, PE – Geotechnical Assessment

ADS Environmental Services

- Islam Khallaf, PMP – Existing Interceptor Flow Monitoring



Objectives of the Sanitary Sewer Study

- I. Address deficiencies in the current sanitary sewer collection/pumping system that conveys wastewater from the east side of I-85 (Creedmoor and Old Lyons Station District Collection Systems) through the Butner Collection System (west side of I-85) to SGWASA'S Wastewater Treatment Plant.
- II. Evaluate existing pump stations and the possibility of eliminating existing pump stations with the extension of new gravity sanitary sewers.
- III. Preliminary layout of sanitary sewers, pump stations, and force mains to serve specific areas.
- IV. To provide SGWASA a "Master Plan" for service to meet current and future sanitary sewer needs.



SOUTH GRANVILLE WATER AND SEWER AUTHORITY

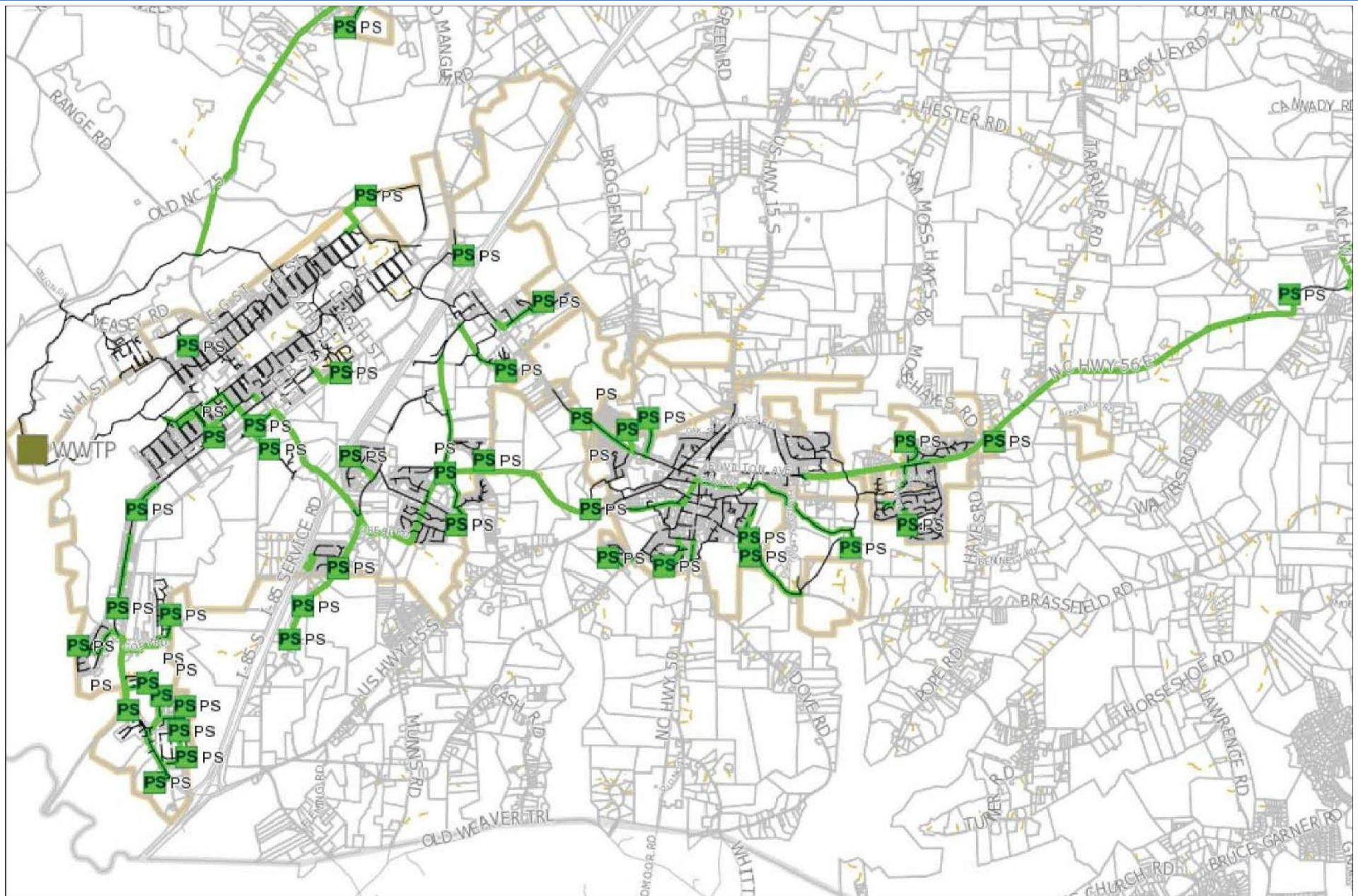
I-85 SANITARY SEWER STUDY

WORK ITEMS
January 15, 2019

- CONTRACT ITEM II A: FLOW MONITORING OF NORTHERN INTERCEPTOR BASE PRICE FOR MONITORING FOR TWO (2) MONTHS.
- CONTRACT ITEM II B: FLOW MONITORING OF SOUTHERN INTERCEPTOR BASE PRICE FOR MONITORING FOR TWO (2) MONTHS.
- CONTRACT ITEM II C: GEOTECHNICAL BORING INVESTIGATIONS ON THE EAST AND WEST SIDE OF I-85.
- CONTRACT ITEM II D: INVESTIGATE THE USE OF NCDOT PIPING UNDER I-85, IF ANY, WHEN I-85 WAS CONSTRUCTED.
- WORK ITEM 1 – RESEARCH NCDOT RECORDS
- WORK ITEMS 2, 3, AND 4 – EXPLORATORY EXCAVATIONS
- CONTRACT ITEM II E: EXTENSION OF NORTHERN INTERCEPTOR
- CONTRACT ITEM II F: EXTENSION OF SOUTHERN INTERCEPTOR
- CONTRACT ITEM II G: EVALUATION OF EXISTING PUMP STATIONS SERVING FORMER LYONS STATION SANITARY SEWER DISTRICT AND CITY OF CREEDMOOR SANITARY SEWER COLLECTION SYSTEM
- CONTRACT ITEM II H: FUTURE WASTEWATER COLLECTION SYSTEM PIPING AND PUMPING
- CONTRACT ITEM II I: MASTER PLAN PREPARATION AND SUMMARY



Existing Sanitary Sewer System



Existing Sanitary Sewer Collection System

Butner, Creedmoor, Stem, and miscellaneous south Granville County service areas are served by the following:

- A. Total Length of Gravity Sanitary Sewer – 512,000'
- B. Lift Stations – 48
- C. Force Main Piping – 210,000'
- D. Northern interceptor – 30" Ductile Iron Pipe
Current Length – 11,862 Linear Feet
- F. Southern Interceptor – 36" Ductile Iron Pipe
Current Length – 5,867 Linear Feet



Exhibit 1

Existing Northern and Southern Interceptors



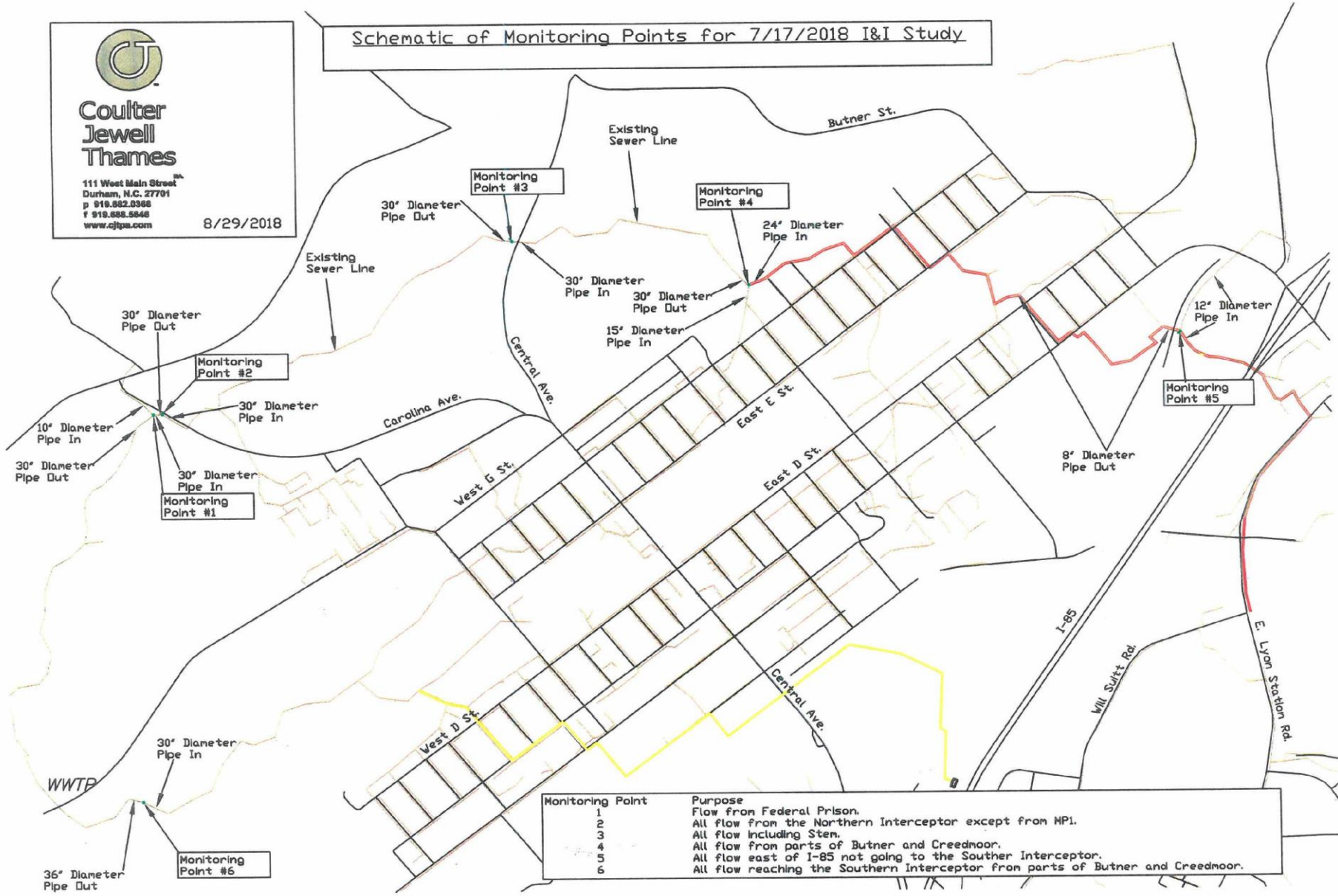
Exhibit 2



**Coulter
Jewell
Thames**
111 West Main Street
Durham, N.C. 27701
p 919.852.5966
f 919.855.5648
www.cjta.com

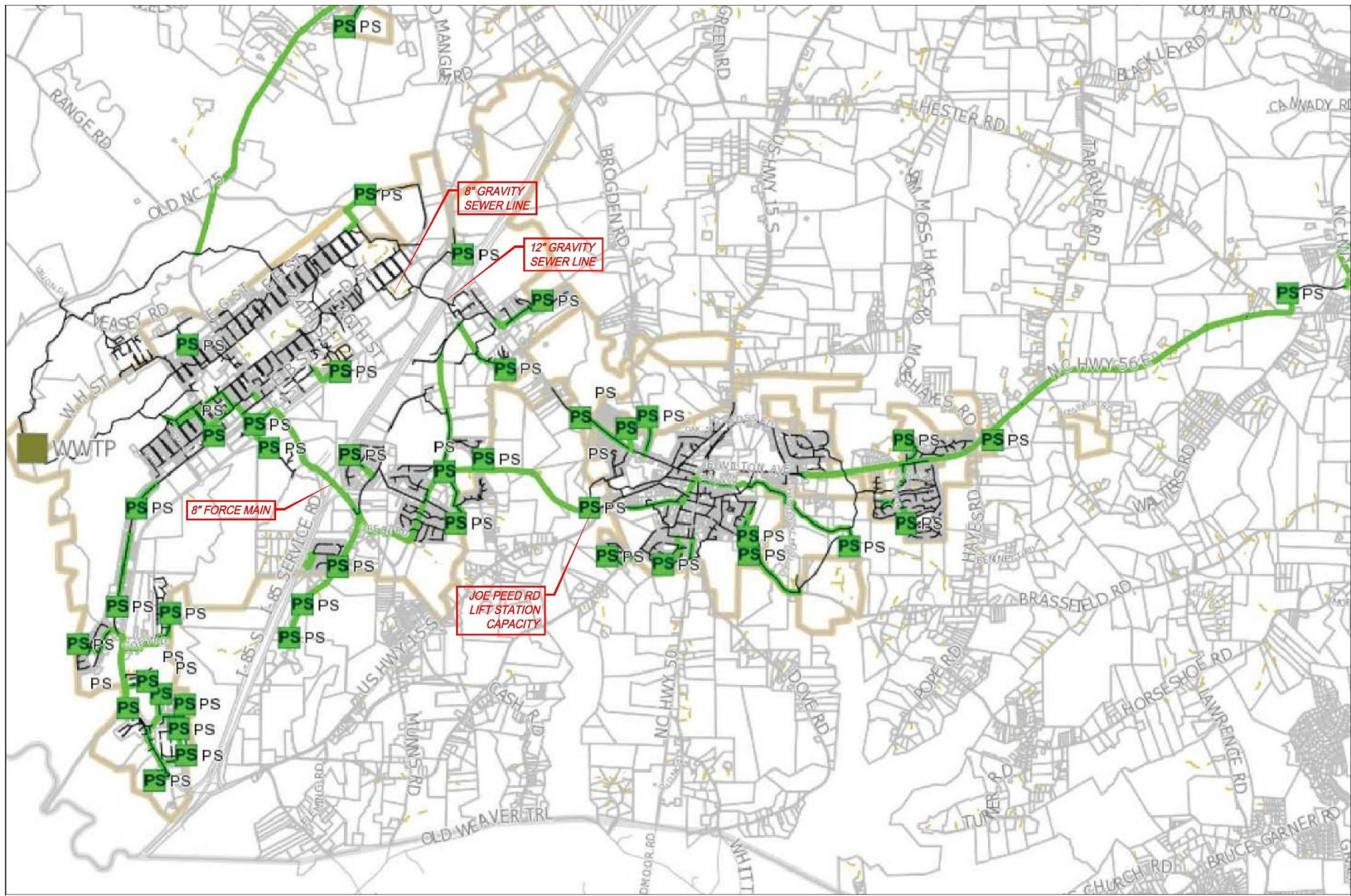
8/29/2018

Schematic of Monitoring Points for 7/17/2018 I&I Study



Monitoring Point	Purpose
1	Flow from Federal Prison.
2	All flow from the Northern Interceptor except from NPI.
3	All flow including Sten.
4	All flow from parts of Butner and Creedmoor.
5	All flow east of I-85 not going to the Southern Interceptor.
6	All flow reaching the Southern Interceptor from parts of Butner and Creedmoor.

Sewer System Deficiencies



Contract Items II A and II B Flow Monitoring



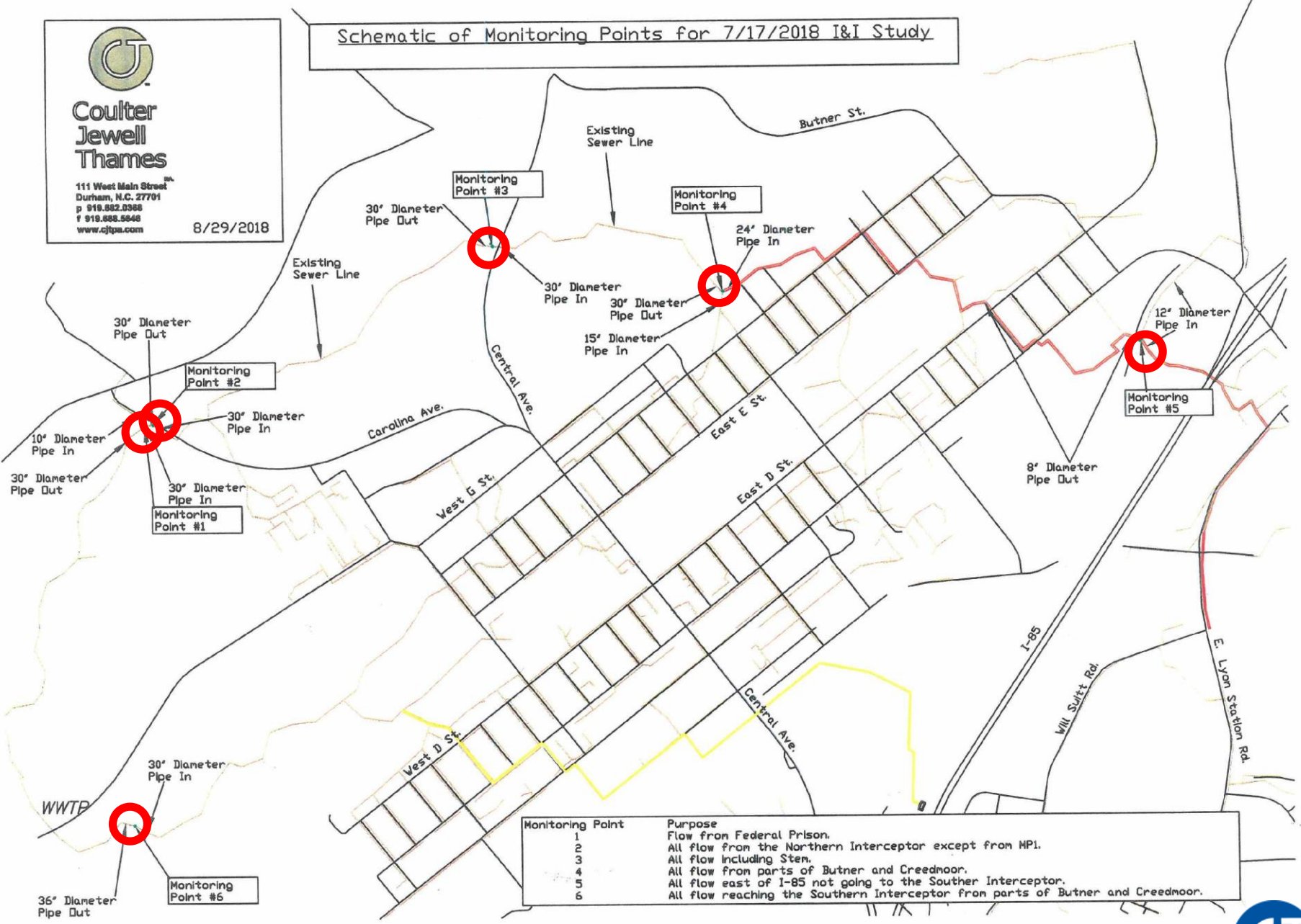


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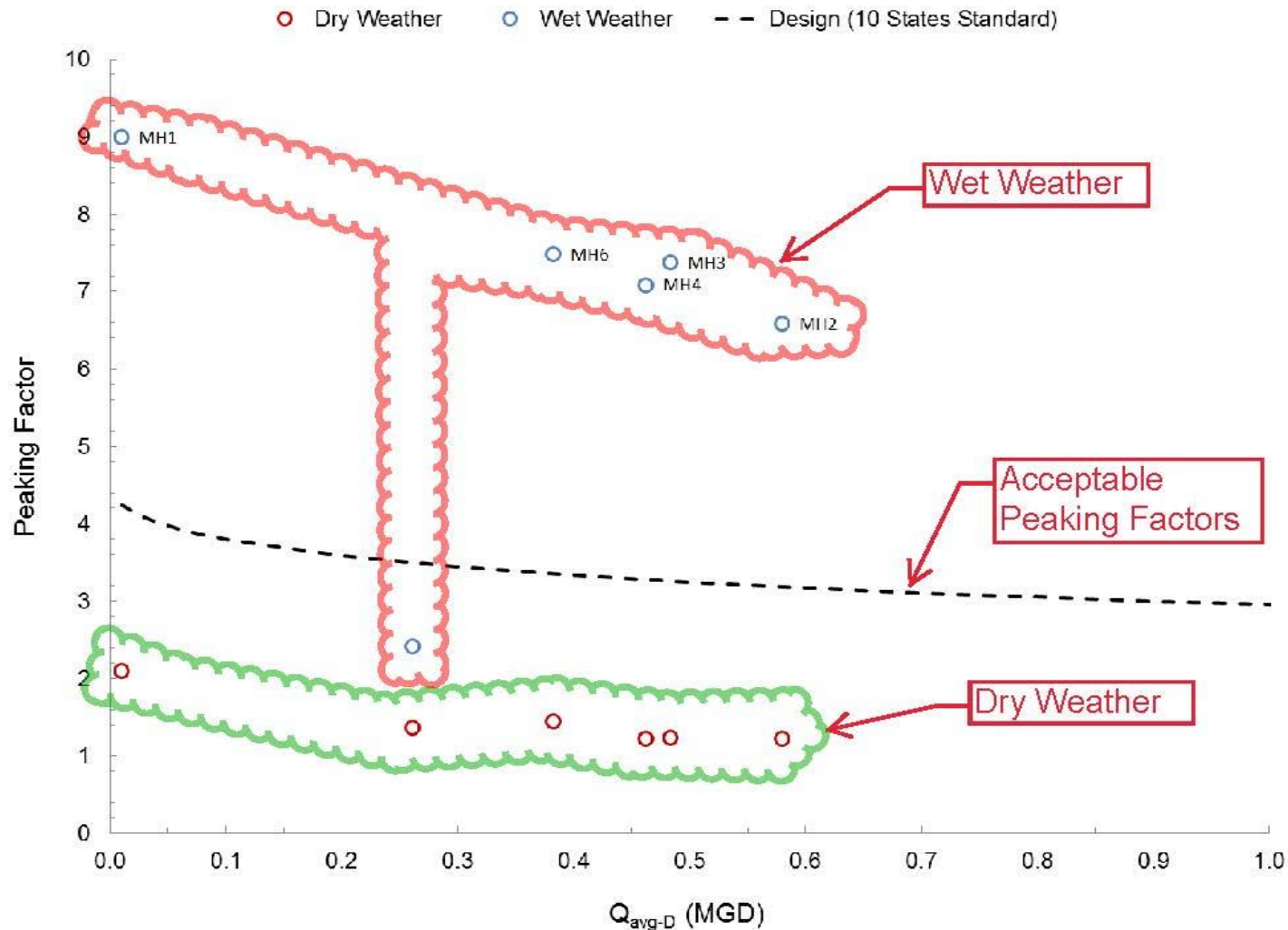
Schematic of Monitoring Points for 7/17/2018 I&I Study



Monitoring Point	Purpose
1	Flow from Federal Prison.
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4	All flow from parts of Butner and Creedmoor.
5	All flow east of I-85 not going to the Souther Interceptor.
6	All flow reaching the Southern Interceptor from parts of Butner and Creedmoor.



Figure 4: Peaking Factors Compared to Design Guidance



All of the observed dry weather peaking factors fall within design guidelines. During wet weather, all but one of the peaking factors falls outside of recommended design guidelines. MH1 had the highest observed wet weather peaking factor at 9.00, followed by MH6 at 7.49. MH3, MH4, and MH2 also had wet weather peaking factors outside of design guidelines with values of 7.39, 7.09, and 6.59, respectively.

Contract Item II C Geotechnical Borings



Table 4-1 – Depths to Partially Weathered Rock and Auger Refusal

Boring	Crossing Location	Depth to PWR (feet)	Depth to Auger Refusal (feet)
NG-1	Railroad and gas line east of 26 th Street	9.5	13.6
NG-2		3	13.5
NI-1	I-85 crossing southwest of NC Highway 56	4	NE*
NI-2		PWR lens from 6.5 – 8.5, 13.5	NE*

*NE = Not Encountered



Note: Aerial imagery from Google Earth February 2018.

SCALE:	NTS
CHECKED BY:	EGB
DRAWN BY:	EGB
DATE:	10/11/17



BORING LOCATION PLAN
 SGWASA Sewer Crossings – Northern Interceptor
 Butner, North Carolina

S&ME PROJECT NUMBER: 1305-18-104

FIGURE

1

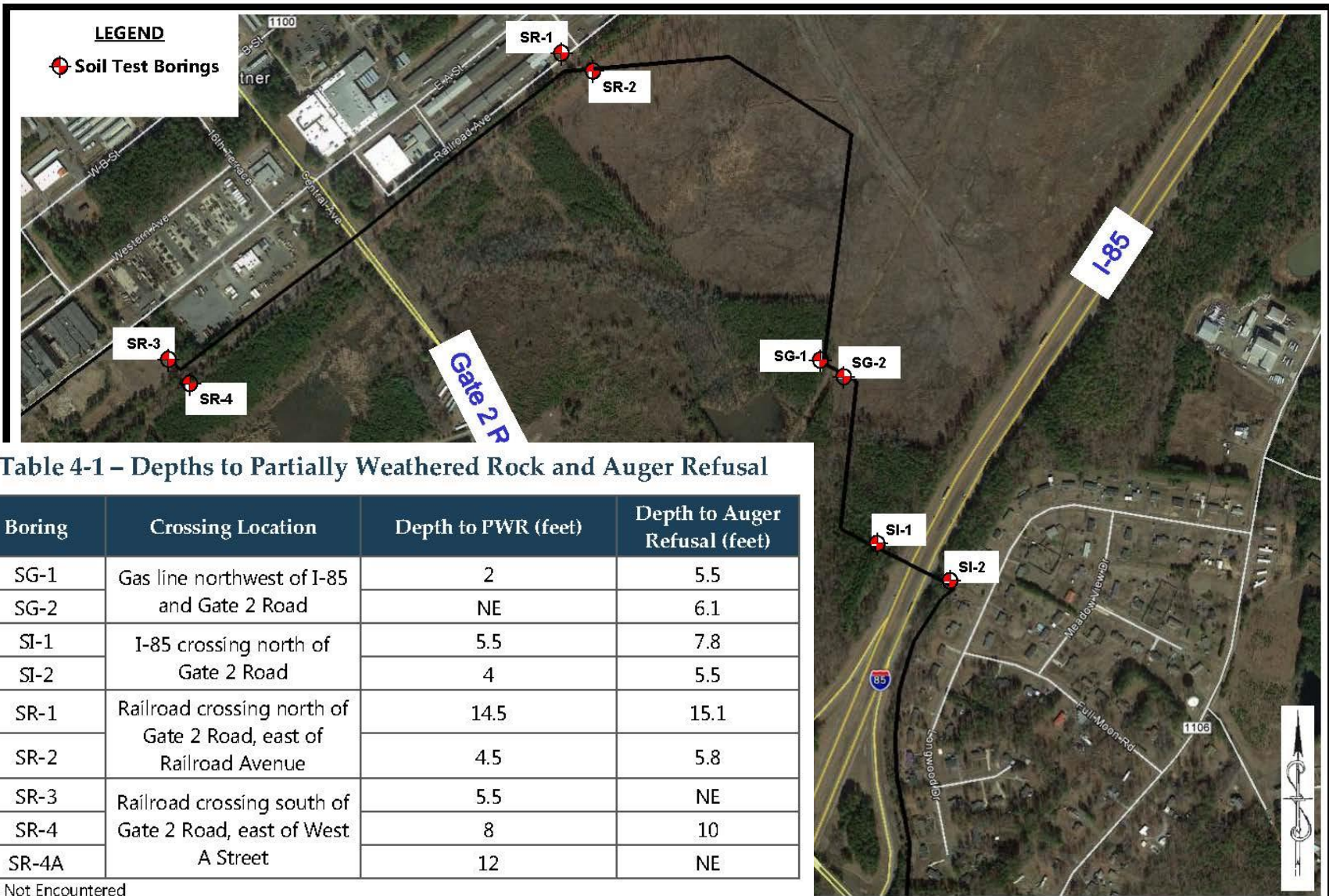


Table 4-1 – Depths to Partially Weathered Rock and Auger Refusal

Boring	Crossing Location	Depth to PWR (feet)	Depth to Auger Refusal (feet)
SG-1	Gas line northwest of I-85 and Gate 2 Road	2	5.5
SG-2		NE	6.1
SI-1	I-85 crossing north of Gate 2 Road	5.5	7.8
SI-2		4	5.5
SR-1	Railroad crossing north of Gate 2 Road, east of Railroad Avenue	14.5	15.1
SR-2		4.5	5.8
SR-3	Railroad crossing south of Gate 2 Road, east of West A Street	5.5	NE
SR-4	Gate 2 Road, east of West A Street	8	10
SR-4A		12	NE

NE = Not Encountered

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">SCALE:</td><td style="padding: 2px;">NTS</td></tr> <tr><td style="padding: 2px;">CHECKED BY:</td><td style="padding: 2px;">EGB</td></tr> <tr><td style="padding: 2px;">DRAWN BY:</td><td style="padding: 2px;">EGB</td></tr> <tr><td style="padding: 2px;">DATE:</td><td style="padding: 2px;">10/30/18</td></tr> </table>	SCALE:	NTS	CHECKED BY:	EGB	DRAWN BY:	EGB	DATE:	10/30/18		<p>BORING LOCATION PLAN SGWASA Sewer Crossings – Southern Interceptor Butner, North Carolina</p>	<p>FIGURE 1</p>
SCALE:	NTS										
CHECKED BY:	EGB										
DRAWN BY:	EGB										
DATE:	10/30/18										
<p>S&ME PROJECT NUMBER: 1305-18-104</p>											

Contract Item II D
Existing Piping Under I-85



Existing Piping Under I-85

- NCDOT Design Plans for I-85
- NCDOT Records
- SGWASA Records
- Field Investigation

- Concerns with using an existing pipe
 - Condition of Existing Pipe
 - Location of Existing Pipe
 - Size of Existing Pipe



Contract Item II E
Extension of Northern Interceptor



Northern Interceptor

Contract Item II E

I. Scope of Work

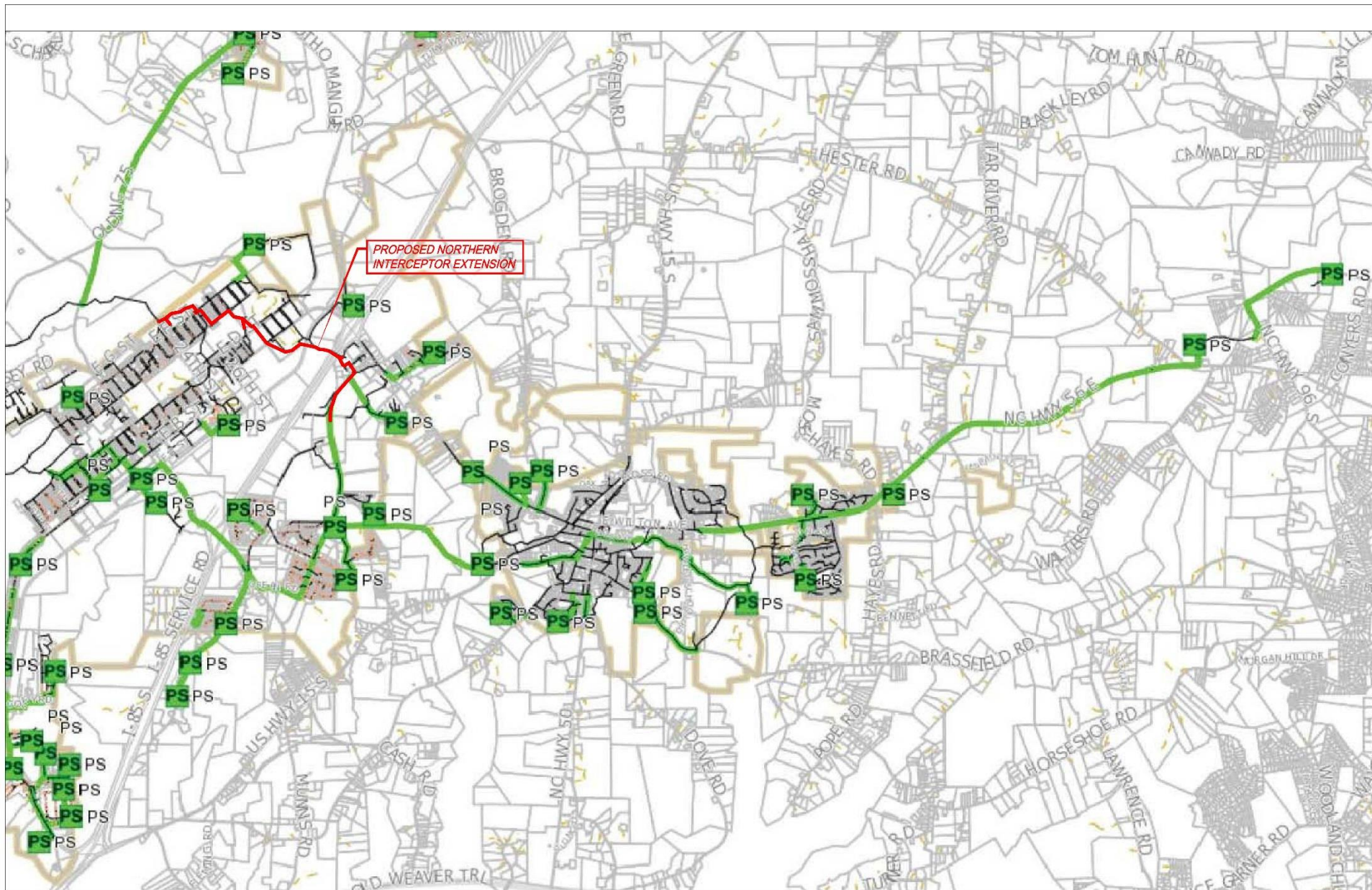
- Feasibility to extend current Northern Interceptor to the east side of I-85
- Planning maps from field surveys for route location and profile elevations.
- Estimated Cost
- Progression towards developing construction drawings

II. Future Work (Not in Contract)

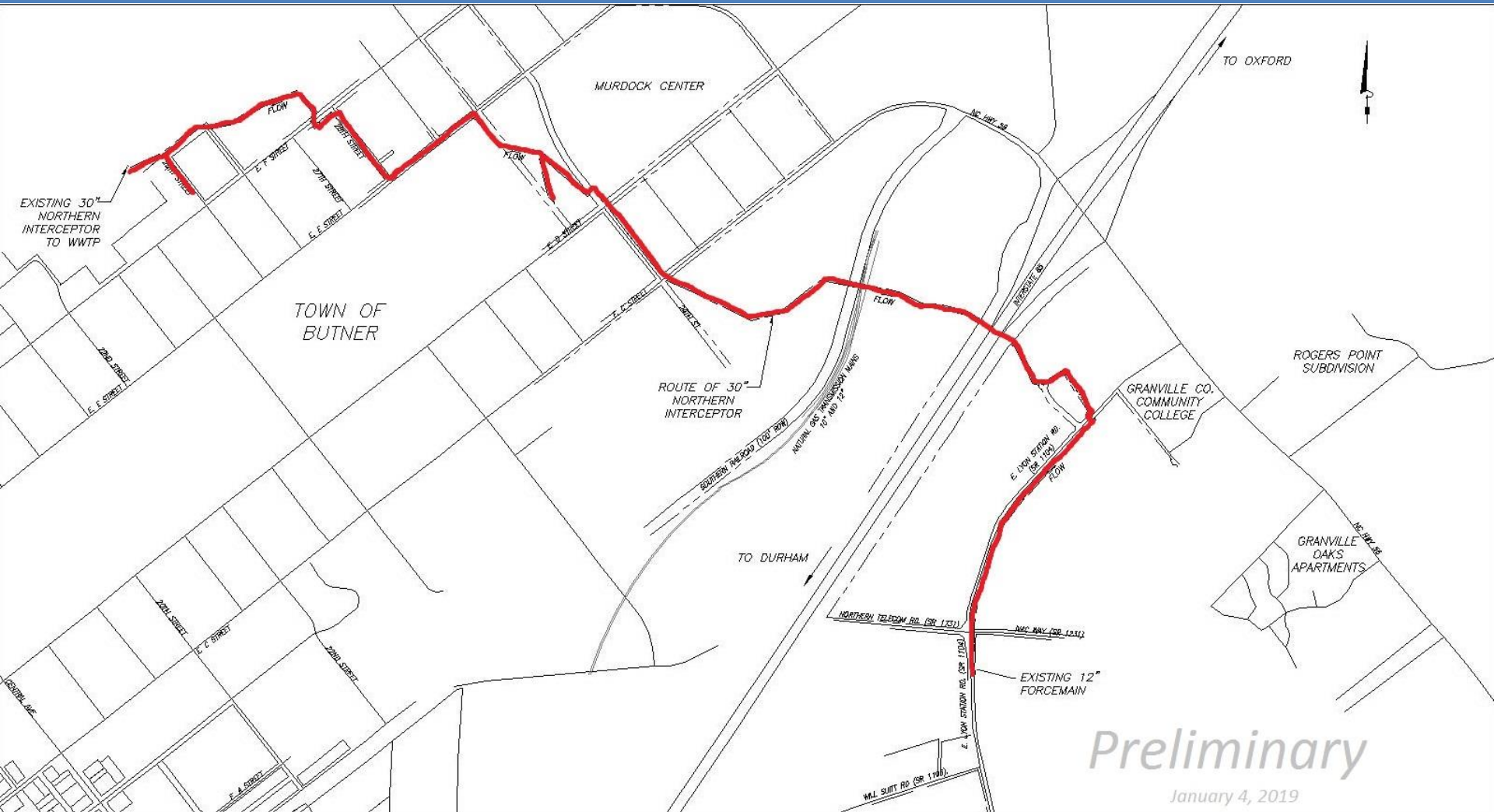
- Environmental Assessment
- Geological Borings
- Easement Acquisition
- Complete Construction Drawings
 - Detail Design
 - Erosion Control Plan
 - Waterline Relocations to Eliminate Conflicts
 - Stormwater Piping Designs to Eliminate Conflicts
 - Project Specifications
 - Contract Documents
 - Easement Plats
 - Permitting
 - Public Bidding
 - Award Contract
 - Construction Phase



Northern Interceptor



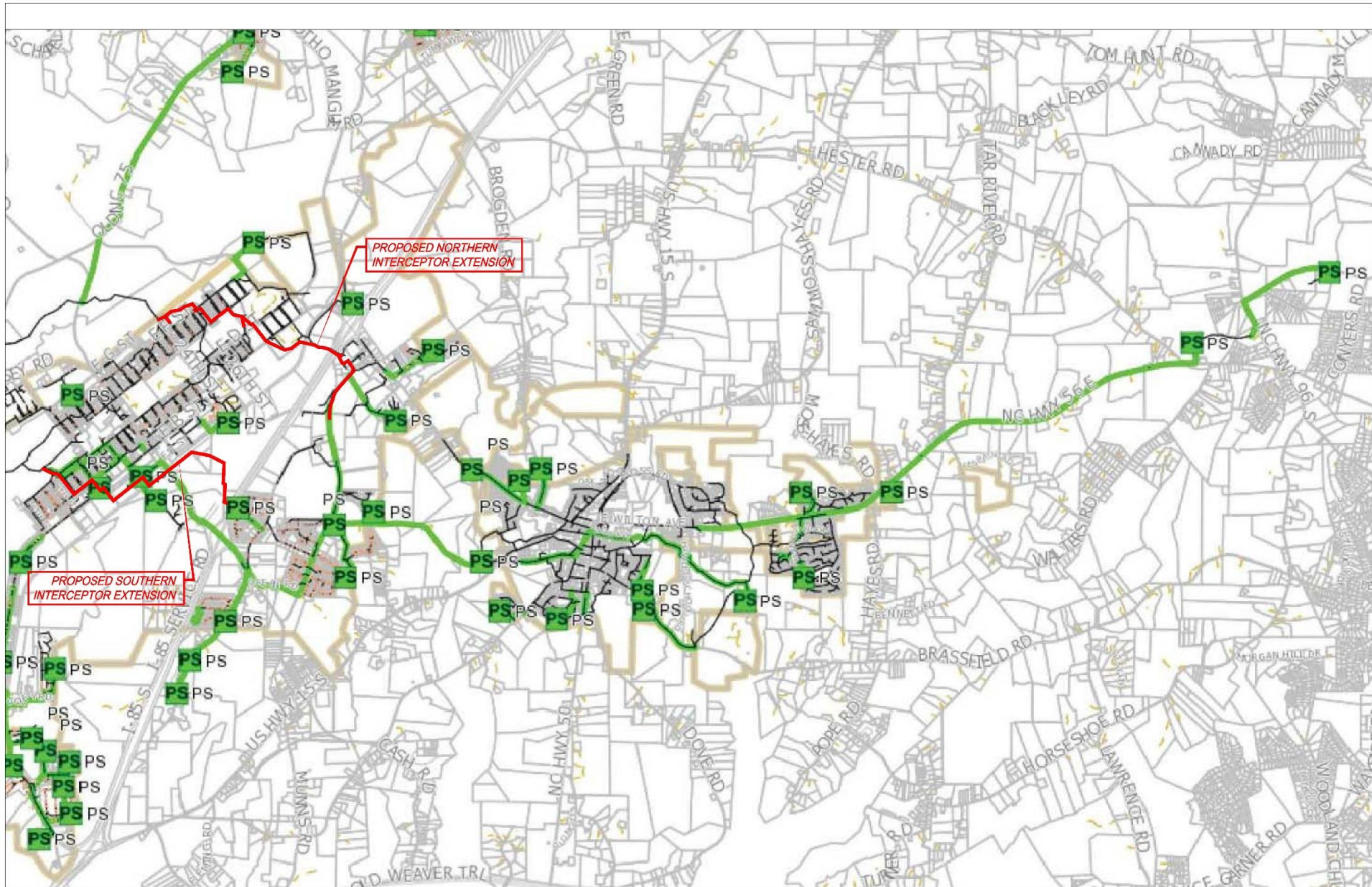
Proposed Northern Interceptor Extension



Contract Item II F
Extension of Southern Interceptor



Southern Interceptor



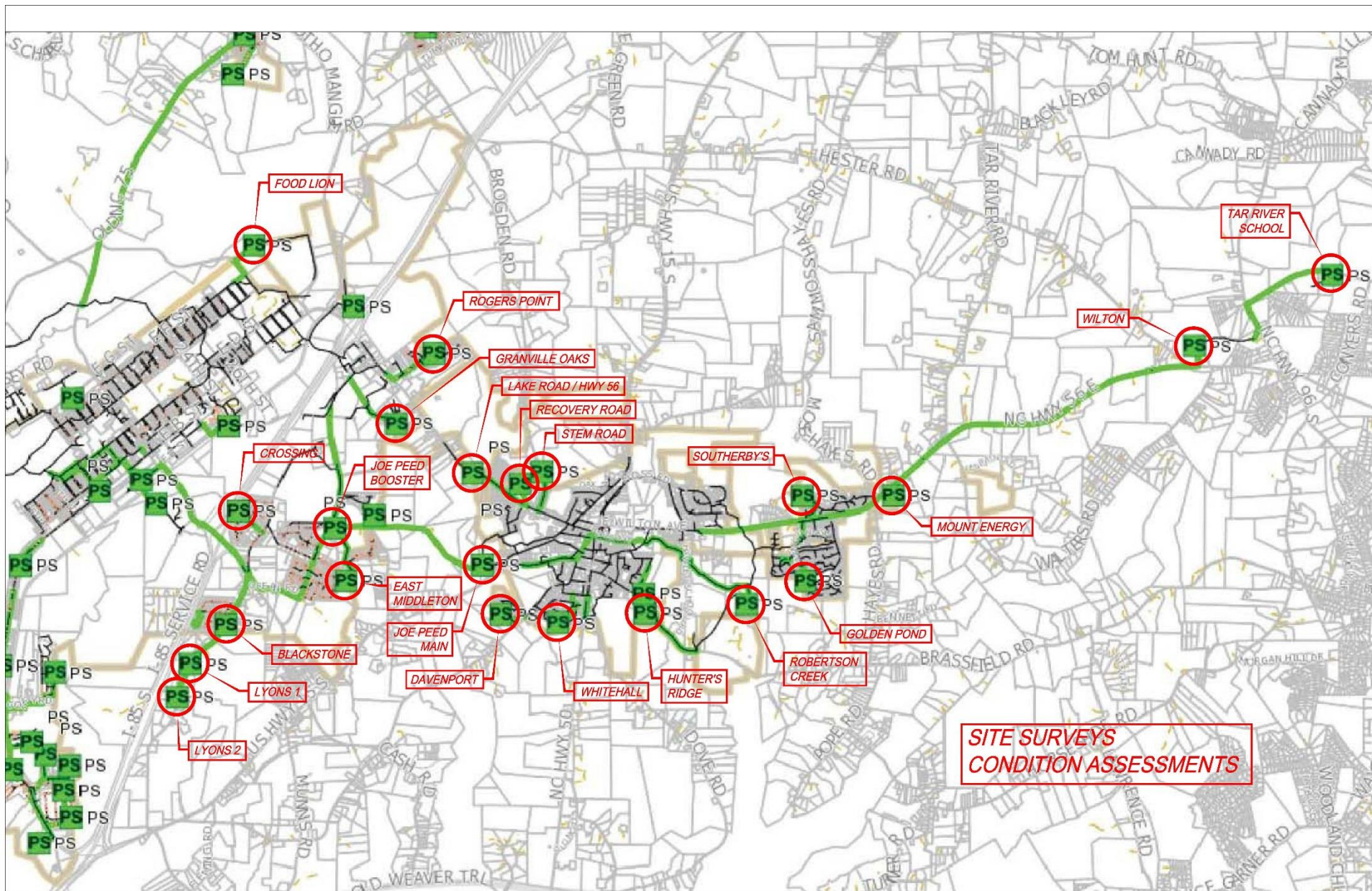
Proposed Southern Interceptor Extension



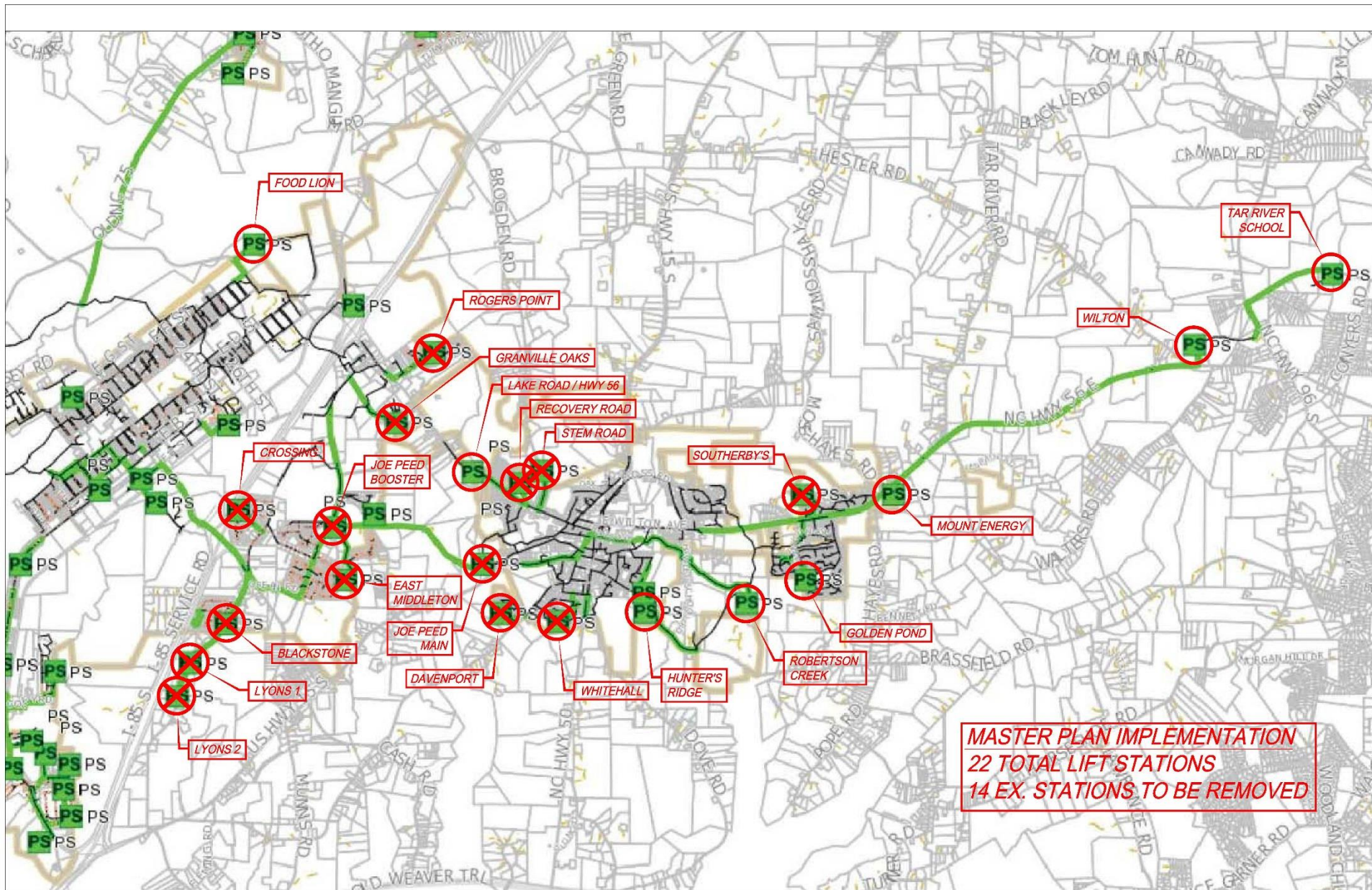
Contract Item II G
Evaluation of Existing Pump Stations



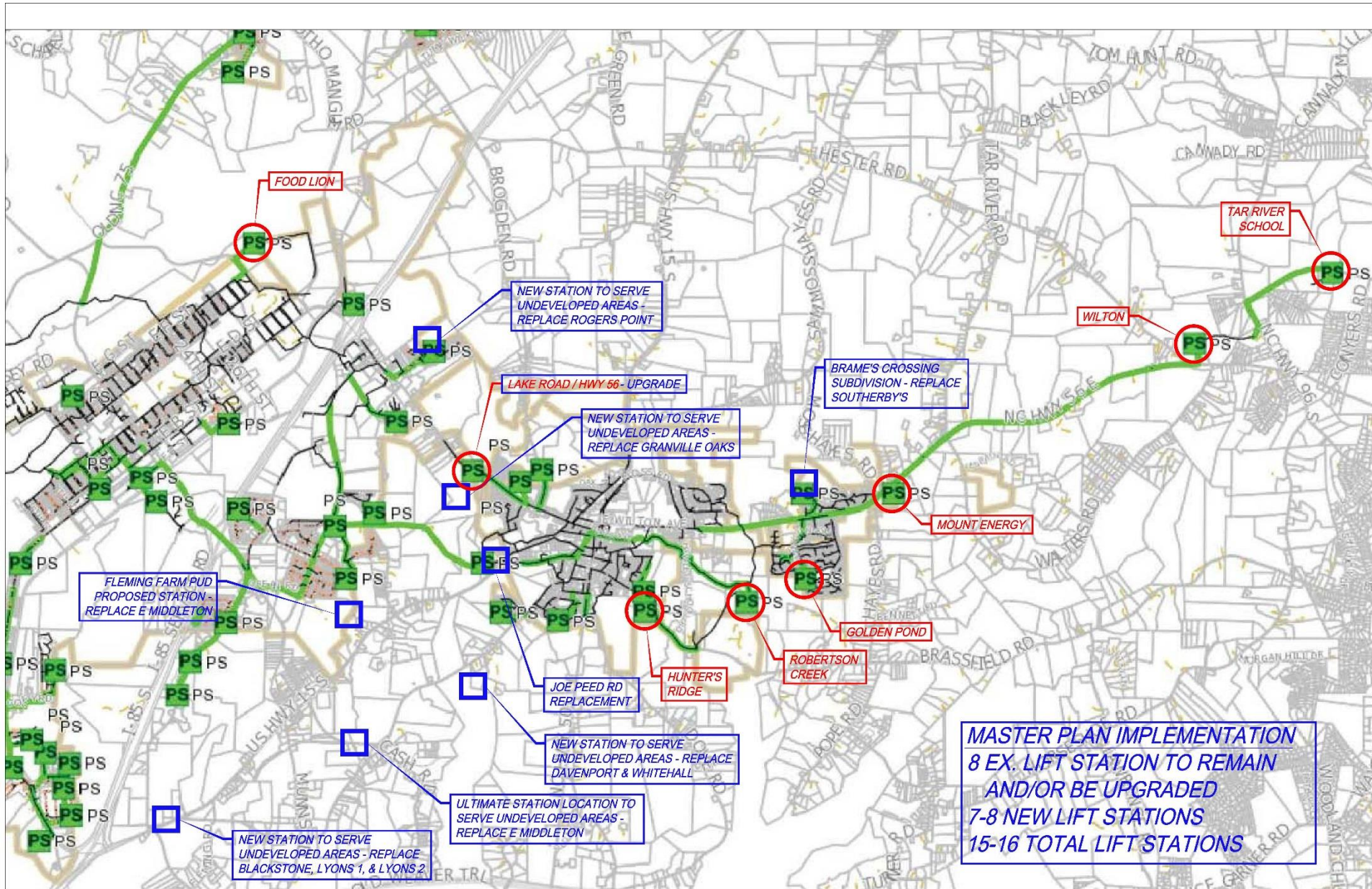
Evaluation of Existing Pump Stations



Existing Pump Stations To Be Removed



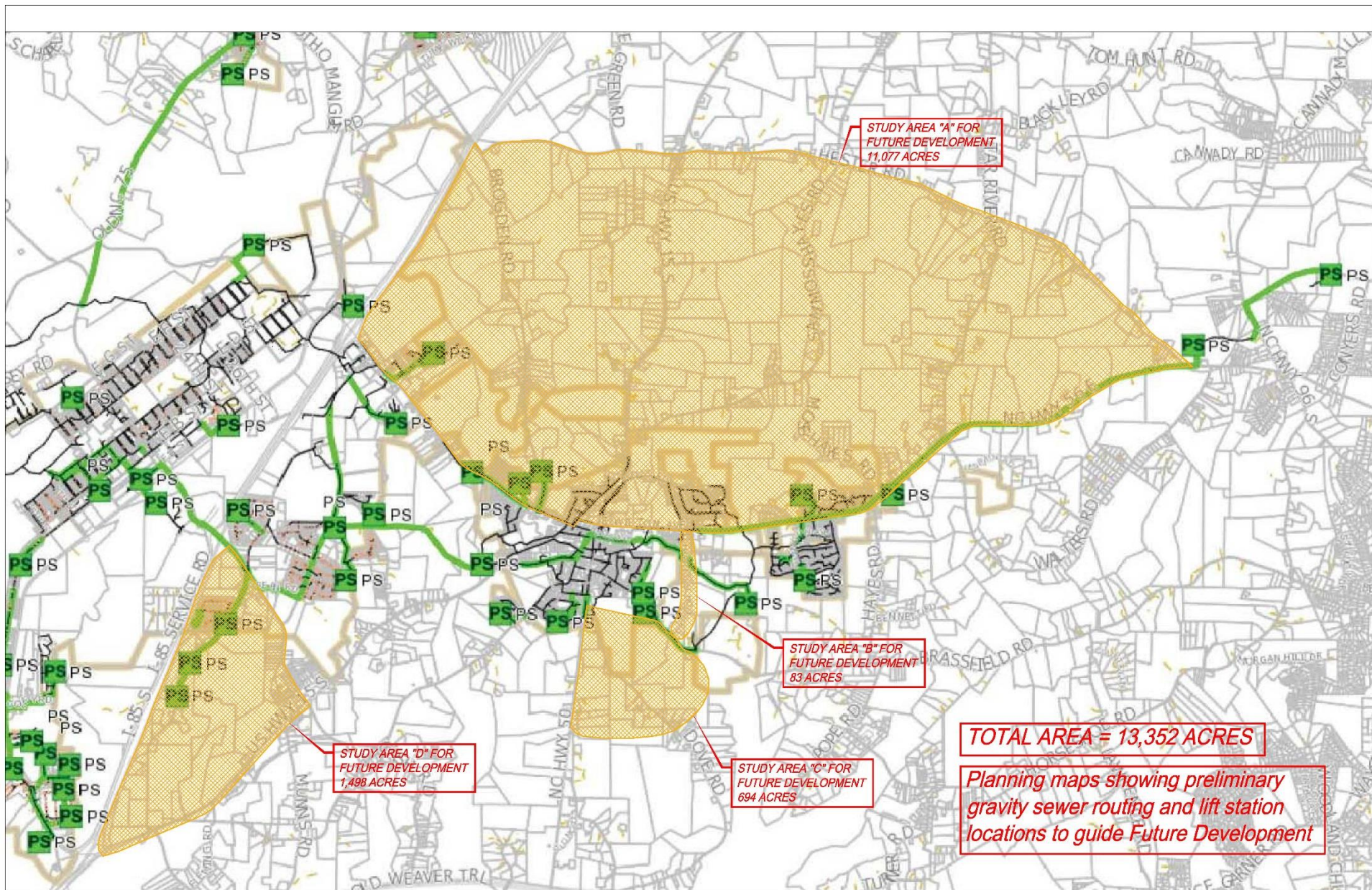
Proposed Pump Stations

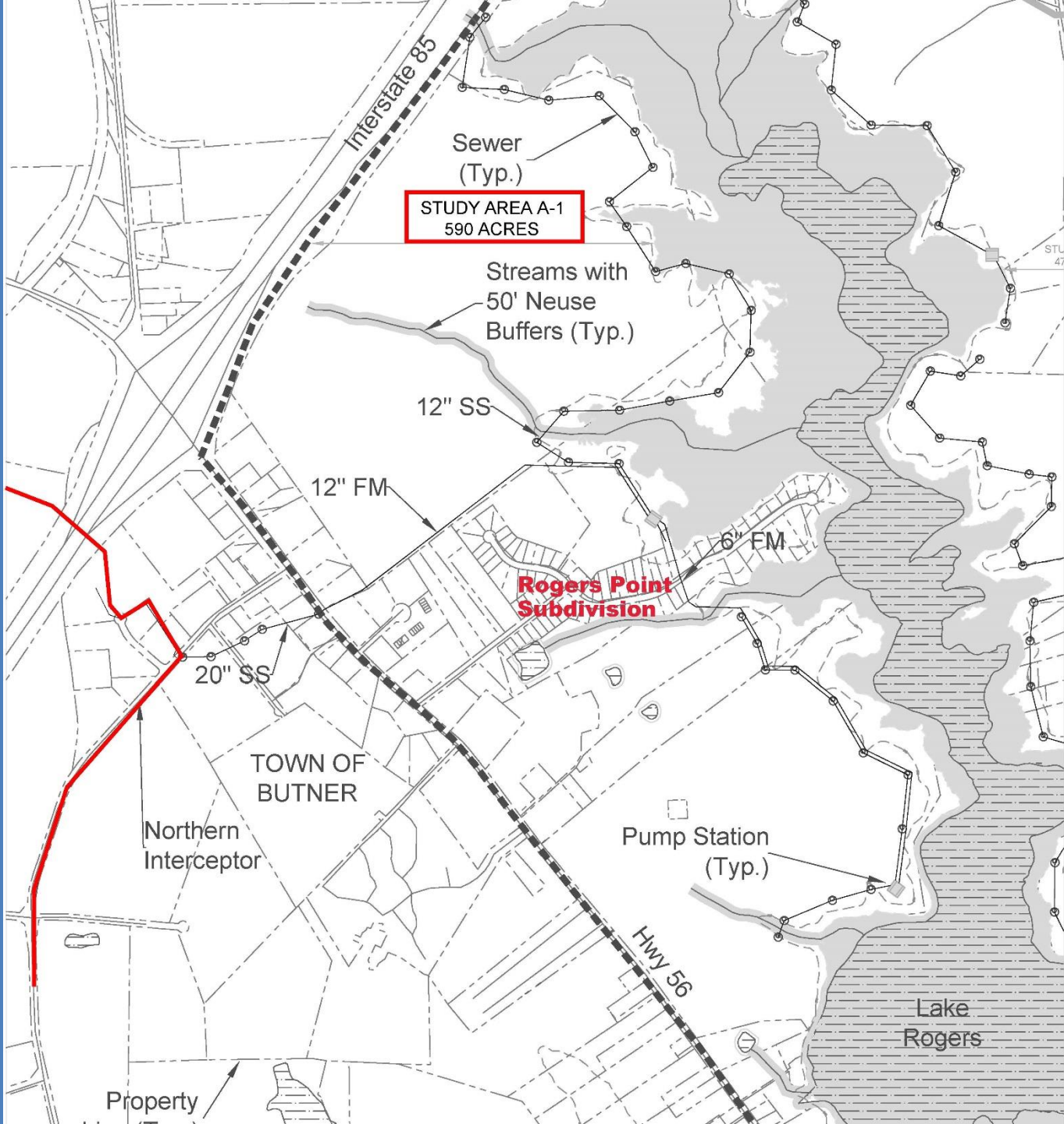


Contract Item II H
Future Wastewater Collection System



Future Wastewater Collection Systems





Summary

- I. CJT has been tasked with consolidating many years of uncoordinated development efforts by many parties as well as providing a master plan that will guide development in this area for many years to come.
- II. Contract Completion Date – May 2019



Questions?

