

**AMENDMENT NO. 1**  
**TO**  
**AGREEMENT BETWEEN**  
**TOWN OF WILTON**  
**AND**  
**WRIGHT-PIERCE**  
**FOR**  
**TOWN WIDE SANITARY SEWER SYSTEM INFLOW AND INFILTRATION STUDY**

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This AMENDMENT made the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between Town of Wilton, (hereinafter called CLIENT), and WRIGHT-PIERCE (hereinafter called ENGINEER).

WHEREAS, an Agreement was entered on \_\_\_\_\_, 20\_\_\_\_ between the CLIENT and ENGINEER, which Agreement is entitled \_\_\_\_\_ (hereinafter referred to as AGREEMENT).

WHEREAS, CLIENT has requested that ENGINEER perform the Sanitary Sewer Evaluation System work as recommended in the I / I Study dated September 2023.

NOW, THEREFORE, in consideration of said AGREEMENT and other good and valuable considerations, it is hereby agreed and acknowledged by and between CLIENT and ENGINEER to amend the AGREEMENT as follows:

1. The AGREEMENT shall be amended to include this AMENDMENT No. 1, a copy of which shall be attached thereto and made a part thereof.
2. The scope and schedule shall be as described Exhibit A – Amendment No.1, attached.
3. The fee shall be increased from Ninety Thousand Nine Hundred and 00/100 dollars (\$90,900.00) to Four Hundred Thirty-Seven Thousand and 00/100 dollars (**\$437,000.00**) for the services described in Exhibit A and Exhibit A -Amendment No.1.

IN WITNESS WHEREOF, the parties hereto have made and executed this AMENDMENT to said AGREEMENT as of the day and year first above written.

CLIENT:

ENGINEER:

\_\_\_\_\_  
By: Lynne Vanderslice  
\_\_\_\_\_  
Title: First Selectwoman  
\_\_\_\_\_  
Date: \_\_\_\_\_

\_\_\_\_\_  
By: Christopher N. Pierce, PE  
\_\_\_\_\_  
Title: Vice President  
\_\_\_\_\_  
Date: \_\_\_\_\_

## **EXHIBIT A – AMENDMENT No.1**

### **DESCRIPTION OF SERVICES**

Each of the alphabetized paragraphs below are amended as follows and coincide with Wilton RFQ 2022-05.

E. Manhole Inspections – DELETE “TBD” and INSERT “Refer to Task II as amended herein”.

F. Smoke Testing – DELETE “TBD” and INSERT “Refer to Task II as amended herein”.

G. Video Inspection - DELETE “TBD” and INSERT “Refer to Task II as amended herein”.

INSERT “Task II – SSES Evaluation” after “Task I – Infiltration and Inflow Evaluation” included in Wilton RFQ 2022-05.

#### **Task II – SSES Evaluation Phase**

During the SSES Evaluation Phase, the ENGINEER shall:

##### **A. Phase 1 - SSES in Lowest Sewer Shed**

1. Manhole Inspections
  - a. Perform up to 72 manhole inspections following NASSCO Manhole Assessment Certification Program (MACP)<sup>TM</sup> standards to evaluate manhole condition. The manhole inspections will be MACP Level 2 inspections and performed by a 2-person crew using a tripod-mounted video camera. Inspection videos will be collected in the field and the observations will be coded by an MACP-certified technician in the office. Data to be recorded includes manhole physical information, pipe sizes, direction of flow, and observations of defects or potential problems. The video camera will be utilized to document the condition of all interior parts of the manhole, including, but not limited to, the frame adjustment, chimney, walls, bench, and pipe seals.
  - b. Perform a QA/QC review of manhole inspection data.
  - c. Coordinate the traffic control and provide a traffic control subcontractor, where applicable.
2. Smoke Testing

- a. Perform up to 22,000 linear feet of smoke testing to identify potential inflow sources. This effort may be performed in a different season than the manhole inspections.
  - b. Prior to performing smoke testing, notify property owners and emergency response personnel of the pending smoke testing activities. The primary notification method will be doorknob hangers with the option of up to two languages. Distribute the doorknob hanger notifications to all the properties. Assist the CLIENT in developing language for announcements on the CLIENT's website and social media sites if the CLIENT elects additional methods to notify residents/business owners. The notifications will provide a phone number if they have questions, health issues, or if smoke enters their houses. Notify the CLIENT's police and fire departments daily of where the smoke testing will occur.
  - c. Provide a 3-person crew to perform the smoke testing.
  - d. Perform up one day of dye testing (to 11 dye tests) to help find connections to the sewer system. This work will be performed by a 3-person crew after the smoke testing.
  - e. Coordinate the traffic control and provide a traffic control subcontractor, where applicable.
3. Sewer System Model
- a. Create a hydraulic model, built in EPA SWMM or InfoSWMM.
  - b. The extent of the model will include:
    - (1) Upstream sections of the Wilton Retirement and Rolling Hills sewer extensions and their junction with the 18" interceptor sewer.
    - (2) Downstream sections along the interceptor through the pump station, ending at the flow-meter manhole at the Norwalk / Wilton town line.
    - (3) The model will also include the following branches:
      - (a) Station Place
      - (b) Intersection of Ridgefield and Norwalk Danbury Road
      - (c) Village Walk to the end of Wolf Pit
      - (d) Town Hall to Crowne Pond
      - (e) Westport Road
  - c. CLIENT shall provide the required data in a GIS database or spreadsheet format suitable for use in the modeling software. ENGINEER has budgeted for populating less than 10% of the system data for the model manually from record drawings. If record drawings are not available, additional field investigation may be needed. These additional field investigations are not included in this Scope of Work.

- d. The model will be a hydraulic model only; sewershed hydrology modeling will not be performed. Portions of the system that exhibit influence from wet weather flow will be included as sustained peak flows. The existing system flows will be obtained from flow meter data collected during the I/I program completed by WP in Spring 2023.
- e. Analyze impacts of new developments. The following two scenarios will be completed:
  - (1) Applications submitted to the WPCA which have already been considered / approved and applications currently under review.
  - (2) Known projects yet to be formally submitted (approximately 5).
- f. Develop a draft technical memorandum of findings for review by the Town, including:
  - (1) System understanding
  - (2) Model development
  - (3) Summary of model results
  - (4) Recommendations for future actions
- g. Produce final memorandum addressing the Town's comments or concerns.

## **B. Phase 2 – CCTV in Lowest Sewer Shed**

### **1. CCTV Pipe Inspections**

- a. Provide subcontractor to clean and CCTV inspect up to 22,000 LF of sewer pipes using a NASSCO Pipeline Assessment Certification Program (PACP)<sup>TM</sup> certified operator. The CCTV inspections will be recorded using a NASSCO PACP approved software program. Subcontractor will provide light and heavy cleaning (as defined within NASSCO PACP guidelines version 7.0.4) as required to conduct the CCTV inspections. ENGINEER's budget for this task was developed based on light cleaning being required in up to half of the total linear footage and heavy cleaning being required in up to half of the total linear footage for CCTV pipe inspection.
- b. Debris collected from the sewers during the pipe cleaning process will be disposed of by CCTV subcontractor at the Norwalk WPCF; the CLIENT will pay Norwalk directly the associated fees for disposal.
- c. Provide a NASSCO PACP-certified staff member part-time to oversee the work.
- d. ENGINEER's NASSCO PACP-certified engineers will review up to 20% of the sewer segments that were CCTV inspected.

- e. The subcontractor will coordinate and provide traffic control.

### **C. Phase 3 - SSES in Upper Sewer Sheds**

#### **1. Manhole Inspections**

- a. Perform up to 340 manhole inspections following NASSCO Manhole Assessment Certification Program (MACP)<sup>TM</sup> standards to evaluate manhole condition. The manhole inspections will be MACP Level 2 inspections and performed by a 2-person crew using a tripod-mounted video camera. Inspection videos will be collected in the field and the observations will be coded by an MACP-certified technician in the office. Data to be recorded includes manhole physical information, pipe sizes, direction of flow, and observations of defects or potential problems. The video camera will be utilized to document the condition of all interior parts of the manhole, including, but not limited to, the frame adjustment, chimney, walls, bench, and pipe seals.
- b. Perform a QA/QC review of manhole inspection data.
- c. Coordinate the traffic control and provide a traffic control subcontractor, where applicable.

#### **2. Smoke Testing**

- a. Perform up to 64,000 linear feet of smoke testing to find inflow sources. This effort may be performed in a different season than the manhole inspections.
- b. Prior to performing smoke testing, notify property owners and emergency response personnel of the pending smoke testing activities. The primary notification method will be doorknob hangers, with the option of up to two languages. Distribute the doorknob hanger notifications to all the properties. Assist the CLIENT in developing language for announcements on the CLIENT's website and social media sites if they want additional methods to notify residents/business owners. The notifications provide a phone number if they have questions, health issues, or if smoke enters their houses. We will also notify the CLIENT's police and fire departments daily of where the smoke testing will occur.
- c. Provide a 3-person crew perform the smoke testing.
- d. Coordinate the traffic control and provide a traffic control subcontractor, where applicable.

### **D. Evaluation and Report (for each phase)**

- 1. Information and results from the field work will be provided to the CLIENT (i.e. manhole videos, CCTV videos, etc.).

## 2. Data Analysis and Evaluation

- a. Review and evaluate the results of the fieldwork for manhole inspections, smoke testing, and CCTV pipe inspections.
- b. The analysis will include:
  - Identification of structural and O&M issues
  - Location of I/I sources
  - Identification, location, and estimated quantification of I/I by source for both private and public sources
  - A cost-effective analysis for I/I reduction
  - Recommendations for rehabilitation and/or replacement

## 3. Draft and Final Report

- a. Prepare a draft report summarizing the results of the SSES field work completed, an outline of recommended future sewer rehabilitation tasks, cost estimates, and schedule.
- b. Submit a draft report to the CLIENT for review. Upon approval from the CLIENT, a final report will be submitted.
- c. Results will be provided as a GIS database.

## **E. Assumptions**

The following is a list of work not included in proposed scope of services:

1. The CLIENT will provide ENGINEER's subcontractor with access to use the CLIENT's water for pipe and manhole cleaning. The subcontractor will coordinate and install a water meter from the water company; Wilton will pay for the water directly.
2. Light cleaning is required in up to half of the total linear footage and heavy cleaning is required in up to half of the total linear footage for CCTV pipe inspection.
3. CCTV inspections of the sewer service laterals, and corresponding analysis are not included.
4. ENGINEER shall provide a subcontractor for traffic control where needed; police detail is not included in our scope. If police detail is required by the Town, the CLIENT will pay directly for the police detail officers and cruisers.
5. Sewer rehabilitation design, bidding and construction phases are not included.

**SUMMARY OF ESTIMATED STAFF EFFORT (HOURS) AND COSTS**

Wilton - SSES Evaluation

Phase	Task	Task Descriptions	Principal In Charge	Project Manager	Technical Adviser	Sr./Lead Project Engineer	Field Manager	IAG Evaluator	Sewer Modeler	Field Engineer	IAG Engineer	GIS Technician	Admin. Assistant	QA/QC Manager	TOTAL	NON-LABOR <sup>1,2</sup>	SUB COST <sup>2</sup>	TOTAL	
		Estimated Hourly Rate	\$ 205	\$ 201	\$ 149	\$ 163	\$ 118	\$ 93	\$ 150	\$ 106	\$ 95	\$ 102	\$ 105	\$ 212					
<b>1</b>		<b>SSES in Lowest Sewer Shed</b>																	
	A	Administration	1	19	1	2	2	1	0	1	0	2	1	1	31	\$ 315		<b>\$ 99,407</b>	
	B	SSES Field Work and Report	2	8	55	9	12	120	0	90	80	15	9	2	402	\$ 10,428	\$ 7,920		
	C	Sewer Model	0	7	0	4	0	8	152	40	0	12	0	0	223	\$ -			
		Hours	3	34	56	15	14	129	152	131	80	29	10	3	656				
		Labor	\$ 614	\$ 6,848	\$ 8,363	\$ 2,441	\$ 1,656	\$ 11,960	\$ 22,839	\$ 13,821	\$ 7,560	\$ 2,961	\$ 1,045	\$ 636	\$ 80,744				
<b>2</b>		<b>CCTV in Lowest Sewer Shed</b>																	
	A	Administration	2	21	1	2	2	1	0	1	0	3	3	3	39	\$ 315		<b>\$ 110,941</b>	
	B	CCTV and Report	2	13	31	18	4	90	0	16	75	12	8	2	271	\$ 1,151	\$ 72,006		
		Hours	4	34	32	20	6	91	0	17	75	15	11	5	310				
		Labor	\$ 818	\$ 6,848	\$ 4,779	\$ 3,255	\$ 710	\$ 8,437	\$ -	\$ 1,794	\$ 7,088	\$ 1,532	\$ 1,150	\$ 1,060	\$ 37,469				
<b>3</b>		<b>SSES in Upper Sewer Sheds</b>																	
	A	Administration	2	20	1	2	2	1	0	1	0	2	1	3	35	\$ 428		<b>\$ 135,751</b>	
	B	SSES Field Work and Report	2	13	77	16	6	128	0	252	228	17	8	5	752	\$ 24,680	\$ 22,880		
		Hours	4	33	78	18	8	129	0	253	228	19	9	8	787				
		Labor	\$ 818	\$ 6,647	\$ 11,648	\$ 2,929	\$ 946	\$ 11,960	\$ -	\$ 26,692	\$ 21,547	\$ 1,940	\$ 941	\$ 1,696	\$ 87,763			<b>TOTAL</b>	<b>\$ 346,100</b>
		1 Non-Labor costs includes use of WP owned equipment such as blowers, manhole vision scan, etc.												<b>Hours</b>	<b>\$ 1,753</b>				
		2 Includes mark-up												<b>Labor</b>	<b>\$205,977</b>				
																		<b>Expenses</b>	<b>\$140,123</b>
																		<b>Total Fee</b>	<b>\$346,100</b>