

**DISTRICTS # 1 & #4**

**VILLAGE OF LOMBARD**  
**REQUEST FOR BOARD OF TRUSTEES ACTION**  
For Inclusion on Board Agenda


    X     Resolution or Ordinance (Blue)                 Waiver of First Requested  
           Recommendations of Boards, Commissions & Committees (Green)  
           Other Business (Pink)

**TO:** PRESIDENT AND BOARD OF TRUSTEES

**FROM:** Scott Niehaus, Village Manager

**DATE:** March 23, 2021 (COW) (B of T)      **Date:** April 1, 2021

**TITLE:** Sanitary Sewer Investigation Program (FY 21)  
(Olde Towne Area)  
Professional Engineering Services

**SUBMITTED BY:** David Gorman, P.E., Assistant Director of Public Works 

**BACKGROUND/POLICY IMPLICATIONS:**

Contract for engineering services to investigate potential sources of inflow and infiltration into the sanitary sewer system that contribute to excessive "clear water" flows to the Olde Towne Sanitary Sewer Lift Station.

**FISCAL IMPACT/FUNDING SOURCE:**

Total Contract Amount: \$75,647.00  
Project Number: RM PROG 53 Sanitary Sewer Investigation  
Total CIP Budget Amount: Funding from 2 existing program budgets  
Account: Water/Sewer Capital Reserve Fund: 520.790.715.75420 (\$50,000.00)  
          RM PROG 10 Sewer Maintenance and Improvements  
          Water/Sewer Capital Reserve Fund: 520.790.715.75420 (\$25,647.00)

Review (as necessary):

Village Attorney X \_\_\_\_\_ Date \_\_\_\_\_  
Finance Director X \_\_\_\_\_ Date \_\_\_\_\_  
Village Manager X \_\_\_\_\_ Date \_\_\_\_\_

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



To: Scott Niehaus, Village Manager  
 Through: Carl Goldsmith, Director of Public Works  
 From: David Gorman, P.E., Assistant Director of Public Works  
 Date: March 23, 2021  
 Subject: FY 21 Sanitary Sewer Investigation Program  
 Olde Towne Area

Attached are the resolution, contract, and fee schedule for engineering services related to the FY 21 Sanitary Sewer Investigation Program.

### **Background**

Public Works wishes to investigate the potential sources of clear water (downspouts, sump pumps, and foundation drains directly connected to the sanitary sewer system) entering the sanitary sewer system within the Olde Towne area (the area roughly bounded by West Road, St. Charles Road, the Great Western Trail, and Craig Place). The Olde Towne Lift Station (located at 122 N Elizabeth) experiences massive spikes in flow during moderate to heavy storm events. The result of having clear water entering the sewage system is the potential for basement backups and the cost of processing the additional volume of sewage at the Glenbard Wastewater Facility. The “extra flow” results in increased treatment costs to the Village and ultimately the residents.

The scope of work includes flow monitoring at three locations, smoke testing, location and documentation of any defects, and a study report of the findings. After the analysis, programs and potential policy changes that can address the identified deficiencies will be recommended. Budget estimates for these projects will then be programmed into the Capital Improvement Program (CIP). The obtained data will also be recorded into the Public Works Asset Management system (Cartegraph).

### **Award**

Baxter and Woodman (B&W) of Crystal Lake is part of the current Public Works Design Engineering Short List. B&W was selected for this contract based on performing similar sanitary sewer overflow investigations work in 2020 in the Route 53 stormwater pumping station and Terrace View Pond areas.

The scope and fee were negotiated with B&W and agreed to by both parties. The not-to-exceed fee for engineering services is \$75,647.00. Monies shall be drawn from the related CIP maintenance programs.

Please present this contract to the President and Board of Trustees at their regular meeting of April 1, 2021. If approved, please return one original signed copy to Public Works-Engineering for further processing.

File: H:\PW\PW-ENG\PROJECTS\FY2021\RM PROG 53 SANITARY SEWER INVESTIGATION\BOT & CONTRACT\BOT MEMO AWARD.DOC

Attachments: Contract, Resolution & Consultant Letter

DG/RGS

**RESOLUTION**  
**R \_\_\_\_\_ 21**

**A RESOLUTION AUTHORIZING SIGNATURE OF**  
**PRESIDENT AND CLERK ON AN AGREEMENT**

**WHEREAS**, the Corporate Authorities of the Village of Lombard have received a Contract between the Village of Lombard, and Baxter & Woodman Group regarding engineering services related to the Sanitary Sewer Investigation Program (FY 21 Olde Towne Lift Station) as attached hereto and marked Exhibit "A", and

**WHEREAS**, the Corporate Authorities deem it to be in the best interest of the Village of Lombard to approve such Contract.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS as follows:

**SECTION 1:** That the Village President be and hereby is authorized to sign on behalf of the Village of Lombard said Contract as attached hereto.

**SECTION 2:** That the Village Clerk be and hereby is authorized to attest said Contract as attached hereto.

Adopted this 1st day of April 2021.

Ayes; \_\_\_\_\_

Nays: \_\_\_\_\_

Absent: \_\_\_\_\_

Approved this 1st day of April 2021.

\_\_\_\_\_  
**Keith Giagnorio**  
**Village President**

ATTEST:

\_\_\_\_\_  
**Sharon Kuderna**  
**Village Clerk**

March 23, 2021

Mr. Carl Goldsmith  
Director of Public Works  
Village of Lombard  
255 E. Wilson Avenue  
Lombard, IL 60148

***Subject: Lombard – Olde Town Lift Station Infiltration/Inflow Investigation***

Dear: Mr. Goldsmith:

Baxter & Woodman, Inc. is pleased to submit this Proposal to perform an Inflow/Infiltration Investigation in the Olde Town Lift Station area. The proposed scope of work includes smoke testing of approximately 15,000 feet of sanitary sewer and flow monitoring at three locations for a four-month period. Duke's will be used as a subcontractor for the smoke testing services.

**Scope of Services**

1. PROJECT MANAGEMENT, AND MEETINGS
  - a. Conduct a meeting with key Village staff to discuss the study area in detail.
  - b. Project management, meetings, calls, and progress reporting/invoices.
  
2. SMOKE TESTING
  - a. Smoke testing of 15,000 feet of tributary sewer in accordance with NASSCO Performance Specification Guideline.
  - b. NASSCO certified operators for manholes, pipelines, and laterals.
  - c. Two (2) smoke testing units.
  - d. Provide a draft resident notification letter describing the work and precautions to take, to be put on Village letterhead and mailed to the affected residents by the Village.
  - e. Provide public notification door tags.
  - f. Call Center for resident questions.
  - g. Notification to appropriate Police and Fire Department.
  - h. Posting of signs in the neighborhoods prior to smoke testing project.
  - i. Report identifying defects with pictures; green marking paint (or flags) for each defect observed including smoke exfiltration from: Roof gutters, Sewer cleanouts, Leakage in house laterals, Patio or area drains, Storm drain cross connections, Manholes, Sewer vents (lack of smoke), other source not stated above.
  - j. Each smoke defect will include an address and be accompanied by a photograph.
  - k. Hand drawn corrections to study area maps.
  - l. Database format for defects per NASSCO smoke testing code standards.
  - m. Paper and electronic formats delivered.

- n. Cellular device grade GPS points for each defect.
3. **FLOW MONITORING**
- a. Visit the three (3) proposed monitoring locations to determine if suitable flow conditions exist. Where the flow conditions are not suitable, alternate locations will be selected.
  - b. Provide, install, calibrate, and remove three (3) area-velocity wastewater flow meters at the selected locations. The duration of monitoring is assumed at four months, but may be shorter if sufficient data (storm events) is collected in a shorter amount of time, or longer if sufficient data is not able to be collected within four months. Additional staff time and meter lease fees will apply beyond four months.
  - c. Perform site visits every other week to collect the recorded flow data, perform maintenance as required, such as cleaning debris from the meter probes and changing batteries.
  - d. Analyze the flow data to determine average daily dry and wet weather flow rates, peak wet weather flow rates, peak inflow rates, and total I/I volume at each location. Depending on the recurrence interval of each storm experienced, the flow data can be extrapolated to estimate what the peak flows would be as a result of a larger “design” event.
  - e. Remove the meters at the conclusion of the monitoring period.
4. **STUDY REPORT**
- a. Prepare a draft summary report of the smoke testing and flow monitoring results for Village staff review and input.
  - b. Prepare GIS exhibits.
  - c. Integrate results of field services in the Village’s GIS.
  - d. Prepare a final report of analysis and review findings, recommendations, and costs for all recommendations.

**Engineering Fee**

Our engineering fee for the above stated scope of services is a lump sum amount of \$75,647. The following table provides a summary of the tasks and associated fee. The fee does not include procuring a contract for necessary sewer cleaning/televising.

<b>Task No.</b>	<b>Task</b>	<b>Engineering Fee</b>
<b>1</b>	PROJECT MANAGEMENT, AND MEETINGS	\$7,195
<b>2</b>	SMOKE TESTING	\$16,830
<b>3</b>	FLOW MONITORING	\$34,222
<b>4</b>	STUDY REPORT	<u>\$17,400</u>
	<b>Total</b>	<b>\$75,647</b>

We appreciate the opportunity to work with the Village again. If you have questions or need additional information, please do not hesitate to call Sean O'Dell at 815-444-4438 or email at [sodell@baxterwoodman.com](mailto:sodell@baxterwoodman.com).

Sincerely,

BAXTER & WOODMAN, INC.  
CONSULTING ENGINEERS



John V. Ambrose, P.E.  
CEO/President

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**VILLAGE OF LOMBARD, ILLINOIS**  
**Olde Town Lift Station Infiltration/Inflow Investigation**

**Detailed Fee Breakdown**

Fee is based on an estimated quantities for the purpose of calculating unit costs:

Task		Basis of Cost		Amount
<b>1. Inspection and Analysis Plan, Project Management, and Meetings</b>				
a	Project Management		24 hrs.	\$ 4,080
b	Project Meetings (2 x 2 people x 2 hrs/mtg.)		8 hrs.	\$ 1,360
c	GIS Exhibits		10 hrs.	\$ 1,500
d	Mileage and Expenses	0.58	440 miles	\$ 255
		<b>Subtotal</b>		<b>\$ 7,195</b>
<b>2a. Smoke Testing</b>				
		15,000	Ft.	
		0.85	/Ft.	\$ 12,750
<b>2b. Data Review / Analysis / Summary</b>				
		24	hrs.	
		\$ 170.00	\$/hr.	\$ 4,080
		<b>Subtotal</b>		<b>\$ 16,830</b>
<b>5. Flow Monitoring - 3 locations - 4 months</b>				
	Site Selection		8 hrs.	\$ 1,360
	In-house meter preparation		10 hrs.	\$ 1,700
			10 hrs.	\$ 1,500
	Meter Installation		10 hrs.	\$ 1,700
			10 hrs.	\$ 1,500
	Bi-weekly site visits (16 hrs./mo)		64 hrs.	\$ 9,600
	Meter Removal/Cleanup		10 hrs.	\$ 1,700
			10 hrs.	\$ 1,500
	Data Analysis		48 hrs.	\$ 8,160
	Meter Lease (\$400/mo/meter, 4 months)			\$ 4,800
	Mileage (110 mi./trip, 11 trips)			\$ 702
		<b>Subtotal</b>		<b>\$ 34,222</b>
<b>6. Study Reports</b>				
	SSES Report (draft and final)		120 hrs.	\$ 17,400
		<b>Subtotal</b>		<b>\$ 17,400</b>
		<b>TOTAL</b>		<b>\$ 75,647</b>



**VILLAGE OF LOMBARD  
CONTRACT**

**SANITARY SEWER INVESTIGATION PROGRAM  
CONTRACT DOCUMENT NUMBER RM PROG 53 (FY 21)**

This Contract is made this 1st day of April 2021, between and shall be binding upon the VILLAGE of Lombard, an Illinois Municipal Corporation hereinafter referred to as the "VILLAGE" and Baxter & Woodman hereinafter referred to as the "ENGINEER" and its successors.

Witnessed, that in consideration of the mutual promises of the parties delineated in the Contract Documents, the ENGINEER agrees to perform the services and the VILLAGE agrees to pay for the following services as outlined in the Contract documents:

**Engineering Services for the Sanitary Sewer Investigation Program**

1. This Contract shall embrace and include all applicable contract documents listed below as if attached hereto or repeated herein:
  - a. Request for Qualifications and Request for Proposal (October 31, 2016) consisting of the following:
    - i) Cover Sheet
    - ii) Table of Contents
    - iii) General Provisions
    - iv) Special Provisions
    - v) Request for Qualifications and Proposals for Resident Engineering Short-List
    - vi) Instructions Regarding the Consultant Evaluation Form
    - vii) Instructions Regarding the Statement of Qualifications Form
    - viii) Consultant Evaluation Form
    - ix) Statement of Qualifications Form
  - b. ENGINEER'S Proposal, Work Effort, and Fee Dated March 23, 2021
  - c. Required Certificates and Signatures and Certificate of Insurance
2. The VILLAGE agrees to pay, and the ENGINEER agrees to accept as full payment for the services, which are the subject matter of this contract per the General Provisions.
3. This Contract represents the entire agreement between the parties and may not be modified without the written approval of both parties.



IN WITNESS WHEREOF, the Village of Lombard, Illinois by Keith Giagnorio, Village President, and the ENGINEER have hereunto set their hands this 1st day of April 2021.

If an individual or partnership, all individual names of each partner shall be signed, or if a corporation, an officer duly authorized shall sign here:

\_\_\_\_\_  
Baxter & Woodman

Accepted this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

Individual or Partnership \_\_\_\_\_ Corporation \_\_\_\_\_

\_\_\_\_\_  
By

\_\_\_\_\_  
Position/Title

\_\_\_\_\_  
By

\_\_\_\_\_  
Position/Title

THE VILLAGE OF LOMBARD, ILLINOIS

Accepted this 1st day of April 2021.

\_\_\_\_\_  
Keith Giagnorio, Village President

Attest:

\_\_\_\_\_  
Sharon Kuderna, Village Clerk

**VILLAGE OF LOMBARD  
ENGINEER'S CERTIFICATION**

\_\_\_\_\_, having been first duly sworn depose and states as follows:  
(Officer or Owner of Company)

\_\_\_\_\_, having submitted a proposal for:  
(Name of Company)

to the Village of Lombard hereby certifies that said ENGINEER:

1. has a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105(A) (4).
2. is not delinquent in the payment of any tax administered by the Illinois Department of Revenue, or if it is:
  - a. it is contesting its liability for the tax or the amount of tax per procedures established by the approve Revenue Act; or
  - b. it has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.
3. is in full compliance with the Federal Highway Administration Rules on Controlled Substances and Alcohol Use and Testing, 49 CFR Parts 40 and 382 and that

\_\_\_\_\_  
(Name of employee/driver or "all employee drivers")  
is/are currently participating in a drug and alcohol testing program pursuant to the  
aforementioned rules.

By: \_\_\_\_\_  
Officer or Owner of the Company named above

Subscribed and sworn to  
before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public