



February 5, 2025

WCHBO00038P

West Chester Borough

Attn: Sean Mitchell, Sewer Director
401 East Gay Street
West Chester, PA 19380
SMitchell@west-chester.com

**RE: Proposal for Engineering Services
Goose Creek Sanitary Sewer Upgrade: Phases 1 & 2 Design and Phase 1 Bid & Construction Phase**

Dear Mr. Mitchell:

Pennoni is pleased to submit the following proposal to West Chester Borough for design, permitting, bid, and construction phase services for initial phases of the sanitary sewer gravity pipe upgrades in the Goose Creek Collection System.

Background

Pennoni performed a hydraulic study of a portion of the Goose Creek Collection System to assess the sanitary sewer pipe capacities of several pipe runs along Franklin Street, Union Street, Fasnaught Alley, Magnolia Street, and Maple Alley that exceed their gravity conveyance capacity during existing peak wet weather flows. In the study report, dated January 24, 2024, we evaluated several sanitary sewer capacity improvement alternatives and provided a recommendation to eliminate existing capacity issues within this specific portion of the sewer system and to provide adequate future capacity.

The recommended solution is a three-phased approach to eliminate surcharging within this portion of the Goose Creek sanitary sewer basin:

- Phase 1 consists of upgrading four pipe runs from manhole 608 to manhole 626 (referenced from the Borough's previous manhole numbering scheme) from 12-inch to 21-inch diameter. These pipes are in Maple Alley between Lacey Street and Linden Street.
- Phase 2 consists of upgrading four additional upstream pipe runs from manhole 621 to manhole 608 from 12-inch to 21-inch diameter. These pipes are in Fasnaught Alley and Magnolia Street between E. Union Street and Lacey Street.
- Phase 3 consists of a new pump station near Cedar Alley with a force main to divert flows upstream of existing manhole 47 at the intersection of S. Franklin Street and Cedar Alley to existing manhole 92 at the intersection of Cedar Alley and S. Matlack Street.

A potential 4th phase was also identified for future consideration to remove an aboveground sanitary sewer main that runs through a Goose Creek culvert along E. Union Street, but that is not being pursued at this time since it is not considered necessary for sanitary sewer capacity.

This proposal is for the design of Phase 1 and Phase 2 and for bid and construction services for Phase 1. Pennoni assisted the Borough with obtaining a \$750,000 Local Share Account (LSA) grant, which was awarded in October 2024, for these Phase 1 improvements. The budgetary cost opinion for Phase 1, including engineering and construction, is \$1,307,000.

Phase 2 is planned to be constructed via separate construction contract after Phase 1. Therefore, bid and construction phase services for Phase 2 will be proposed by Pennoni in the future under a separate proposal. However, Phase 2 is proposed to be designed as part of this current proposal to ensure compatibility with the Phase 1 improvements, take advantage of economies in the associated investigations and design, to strengthen the potential for upcoming grant opportunities by having a shovel-ready Phase 2 project for grant applications, and to be able to initiate construction quickly when funding becomes available. Scope of Services Task 1 through 4 as described hereafter will therefore cover the design of both phases now, and only limited updates to the plans and specifications are expected to be necessary in the future for Phase 2 bidding and construction.

Phase 3 is planned to occur after the construction of Phase 1 and Phase 2, if additional capacity becomes necessary in that upstream part of the sewage basin. As such, a separate proposal for all Phase 3 services can be provided at a later date.

Scope of Services

Pennoni will provide the following Scope of Services:

1. UTILITY LOCATING

Utility locating services will be performed by Blood Hound as a subcontractor to Pennoni. Underground utilities identified in the Phases 1 and 2 roadway corridor via PA One Call will be located and marked out by Blood Hound. Pennoni will have a representative on-site part-time during Blood Hound's locating work. We will provide traffic control during the utility locating. Our fee estimate is based upon 24 hours (3 days) of field locating.

We assume no test pits will be required.

2. SANITARY SEWER TV INSPECTION

Pennoni will commission a subcontractor to televise the existing sewers from manhole 621 to manhole 626 in order to identify the location of all existing laterals for design of reconnections to the upgraded sewers. Immediate upstream and downstream sewers will also be televised for lateral location and bypass pumping design purposes, consisting of manhole 97 to manhole 1 on E. Union Street, manhole 90 to manhole 60 on Magnolia Street, manhole 106 to manhole 9078 on Lacey Street, manhole 9080 to manhole 762 on E. Nields Street, and manhole 236 to manhole 238 on Linden Street. The subcontractor will provide electronic copies of the videos. Pennoni will have a representative on-site part-time during the televising work. We will provide traffic control during the televising work. Our fee estimate is based upon 24 hours (3 days) of TV inspections.

We assume that no pipe cleaning or bypass pumping will be required for the TV inspections.

3. TOPOGRAPHIC AND EXISTING CONDITIONS SURVEY

Pennoni will perform a field topographic and existing conditions survey of the Phase 1 and 2 roadway corridor from manhole 621 to manhole 626. We will survey Blood Hound's marked-out utilities, any PA One Call utility markouts, and existing conditions and topography within the associated roads for a distance up to 10-15 feet beyond the edge of road pavement. The survey will include rim and invert elevations of accessible storm sewer inlets and manholes and of accessible sanitary sewer manholes, poles, trees, fences, building corners, and edge of driveways.

We assume that we will not need to provide separate traffic control for the survey – that our survey can be coordinated with Blood Hound's traffic control, and any additional limited traffic control that may be needed can be provided by the Borough.

We will prepare an existing conditions plan of the Phases 1 and 2 roadway corridor. Right-of-way and property lines will be obtained from County GIS data. We assume that deed research and property boundary surveys will not be required.

4. DESIGN AND PERMITTING

A. Plans and Project Documents

1. Pennoni will prepare one construction plan set including both Phase 1 and Phase 2 upgrades, anticipated to consist of a cover sheet, overall site reference plan, one existing site plan sheet per road block including existing pavement markings, one proposed site plan sheet per road block with profiles, road restoration plan, traffic control/detour plan, bypass pumping notes, and construction details and notes.

We assume that the roads in which work is performed can be closed to traffic for their full width during construction hours and that only limited detour plans and signage will be required. We also assume that no PennDOT permitting or PennDOT approval of a detour route will be required.

2. We will prepare bid documents including general conditions and technical specifications, which will be applicable for current use in Phase 1 construction contracting and will also be applicable for future use in Phase 2 construction contracting. Separate unit price bid forms will be prepared for Phases 1 and 2.
3. Pennoni will prepare separate Engineer's Opinion of Probable Construction Costs for Phases 1 and 2.

B. PADEP Water Quality Management (WQM) Permit Application

1. Pennoni will prepare and submit a WQM permit application to Pennsylvania Department of Environmental Protection (PADEP) if required by PADEP. The application will include both Phase 1 and Phase 2 sewer upgrades. We anticipate the application fee will be \$2,500 for a new permit for a "sewer extension". Pennoni will pay the application fee.

C. Meetings

1. We will attend four design/review meetings with the Borough, expected to be one review meeting after each of the 60% and 90% submissions and two interim meetings.

5. PHASE 1 BID ASSISTANCE

Pennoni will provide bid services for the Phase 1 upgrades. We will prepare the bid advertisement, administer the solicitation on the PennBID website, conduct one pre-bid meeting, respond to questions from prospective bidders, prepare addenda, conduct the bid opening, review bid results, review bidders' qualifications and Responsible Contractor Ordinance compliance, prepare a bid tabulation, and provide an award recommendation. We will also attend one public Public Works Committee meeting and one Council meeting to present the bid results and award recommendation. Our fee estimate is based upon 55 hours of effort for bid assistance.

6. PHASE 1 CONSTRUCTION PHASE SERVICES

Pennoni will provide the following construction phase services to administer the construction contract, provide office engineering support, and perform inspections. We have allocated 116 hours for the engineering support services and 158 hours for field inspections in our fee estimate.

- A. Construction contract document preparation, review, and execution by all parties.
- B. Prepare a Construction Issue plan set if there are changes to the bid plans during or after the solicitation period.
- C. Conduct a pre-construction meeting.
- D. Review and respond to RFIs, review material shop drawings, review construction submittals for bypass pumping and traffic control plans, coordinate schedules and status updates with the contractor and the Borough, review as-built plans, and provide other requested engineering construction administration services.

- E. Perform near full-time on-site construction observation during pipe and manhole installation and permanent paving. Our fee estimate is based upon 6 hours/day of inspection time for a 4-week construction duration.
- F. Review payment applications, certified payrolls, and closeout documents from the contractor.
- G. Prepare as-built plans in CAD based upon survey data and redlines provided by the contractor, and provide as-built plans to the Borough in CAD and PDF formats.

Assumptions

In addition to assumptions noted above, this proposal is based upon the following assumptions:

- 1. No easements will be required. Pennoni can provide a separate proposal to prepare easements if any are determined to be necessary during the course of the project.
- 2. The only required permit is the PADEP Water Quality Management Permit.
- 3. Grant coordination and reimbursement activities are not included for existing grants or for application of any future grants.

Deliverables

Pennoni will provide 60%, 90%, and Final PDF submissions to the Borough for review. All submissions will include plan sheets. The bid document, specifications, and Engineer’s Opinion of Probable Construction Costs will be provided in the 90% and Final submissions. Pennoni will provide a signed and sealed plan set with the Final submission.

Schedule

Performance of services will commence upon receipt of Notice to Proceed. We anticipate the following tentative schedule with estimated milestone durations and dates.

	MILESTONE	ESTIMATED DATE
DESIGN	Notice to Proceed	Late-February 2025
	Sanitary Sewer TV Inspection	March 2025
	Utility Locating	March 2025
	Field Survey	March 2025
	60% Submission	April 18, 2025
	60% Review Meeting	April 25, 2025
	90% Submission (±3 weeks after 60% meeting)	May 16, 2025
	90% Review Meeting	May 23, 2025
	Final Submission (±2 weeks after 90% meeting)	June 6, 2025
	WQM Permit Application Submission to PADEP	June 6, 2025
	PADEP WQM Permit Application Response (±2 months after submission)	August 6, 2025
	BID & CONST.	Advertise Construction Solicitation
Bids Due		Late July 2025
Construction Award		August 2025
Construction		September – November 2025

Fee

We will perform the Scope of Services on a Time and Materials (T&M) basis to be billed at the Borough’s approved hourly rates for Pennoni for the calendar year in which work is performed for an estimated fee of **One Hundred Fifty-Six Thousand Five Hundred Dollars (\$156,500.00)**. A breakdown of the estimated fee follows:

TASK	DESCRIPTION	ESTIMATED FEE
1	Utility Locating	\$12,000.00
2	Sanitary Sewer TV Inspection	\$11,000.00
3	Topographic and Existing Conditions Survey	\$25,000.00
4	Design and Permitting	\$67,000.00
5	Phase 1 Bid Assistance	\$7,500.00
6	Phase 1 Construction Phase Services	\$34,000.00
TOTAL		\$156,500.00

We have proposed a Scope of Services which satisfies our current understanding of the project. Should additional services be requested that are not included in the above Scope of Services or should additional hours be requested beyond those explicitly included above, such as if the construction duration is longer than anticipated, we will perform such work on a T&M basis at our hourly rates or submit a supplemental proposal.

Billing and Payment

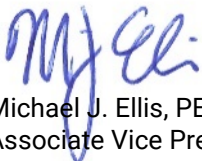
Invoices will be submitted monthly. Payment is due within 30 days of invoicing.

Thank you for the opportunity to continue to provide our professional services to West Chester Borough. If you wish to discuss any of the above, please do not hesitate to contact Mike Ellis at 302-351-5236 or mellis@pennoni.com.

If this proposal is acceptable, please execute by signing and returning a copy to this office to serve as our Notice to Proceed.

Sincerely,

PENNONI ASSOCIATES INC.



Michael J. Ellis, PE
Associate Vice President

cc: Sean Metrick, Borough Manager

ACCEPTED BY:

Written Name:

West Chester Borough

DATE:
