

EAST GOSHEN MUNICIPAL AUTHORITY

November 13, 2023

7:00

1. **CALL TO ORDER/PLEDGE OF ALLEGIANCE/MOMENT OF SILENCE**

- Ask if anyone will be taping the meeting

2. **CHAIRMAN'S REPORT/OTHER MEMBERS' REPORTS**

3. **SEWER REPORTS**

- Director of Public Work's Report
- Pennoni Engineer's Report
- Big Fish Environmental Report

4. **APPROVAL OF MINUTES**

- October 16, 2023

5. **APPROVAL OF INVOICES**

- | | | |
|--|------------------|--------------------|
| • Pennoni | Invoice #1194870 | \$27.75 (paid) |
| • Pennoni | Invoice #1194871 | \$209.25 (paid) |
| • Pennoni | Invoice #1194872 | \$928.25 (paid) |
| • Pennoni | Invoice #1194874 | \$8,612.50 (paid) |
| • Philadelphia Bearing & Drive Solutions | Invoice #6522098 | \$17,834.75 (paid) |
| • JWC Environmental | Invoice #116551 | \$16,542.00 (paid) |
| • Gawthrop Greenwood | Invoice #280886 | \$472.00 |
| • E & W Equipment Co. | Invoice #755 | \$80,991.00 |

6. **LIAISON REPORTS**

7. **FINANCIAL REPORTS**

- a. October 2023

8. **OLD BUSINESS**

- Hershey's Mill Estates Sanitary Sewer Replacement:
 1. Review/Approval of Change Order #2
 2. Approval of Payment Application #3 (see Mark for certified payrolls)

9. **2023 Goals:**

Goal	Status
Ridley Creek plant compliance	January, February, March, April, May, June, July, August, September, & October were in compliance and met all requirements.
Continue to implement infiltration and inflow for the sewer system	Ongoing
RCSTP UV Disinfection System	Delivered

10. **NEW BUSINESS**

11. **CAPACITY REQUESTS**

- 301 Reservoir Rd

12. **ANY OTHER MATTER**

13. **CORRESPONDENCE AND REPORTS OF INTEREST**

14. **PUBLIC COMMENT**

15. **ADJOURNMENT**

**EAST GOSHEN MUNICIPAL AUTHORITY
EAST GOSHEN TOWNSHIP**
1580 PAOLI PIKE, WEST CHESTER, PA 19380-6199
610-692-7171

To: Municipal Authority

From: Mark Miller

Re: November 13, 2023, Monthly Report

Monthly Flows: The average daily flow to West Goshen was 723,959 per day.

Meters: Were read on a daily basis with no problems to report

C.C. Collection: The pump stations were visited on daily basis with no problems to report.

C.C. Interceptor: We inspected the lids and castings while we were clearing the right of way.

R.C. Collection: The pump stations were visited on a daily basis with no problems to report.

Ridley Creek Plant:

- Transducer went bad in the Ridley STP wet well. John Laidley came in to replace it and check the floats. We're looking into a float back-up system.
- The UV system has been delivered.
- The wet well electronic cabinet is rotted out. We have ordered a replacement cabinet and are scheduling the work.

Alarms: 7 (storm-related)

PA One Calls: 182

Monthly Rainfall: 1.76"

Lateral Repairs or Caps: Two laterals at 301 Reservoir Rd were dug & capped off.

EAST GOSHEN MUNICIPAL AUTHORITY**ENGINEER'S REPORT**

November 8, 2023

Ridley Creek Sewage Treatment Plant (RCSTP)

- Caustic Soda Conversion – During a site visit on October 4, it was noticed that the tank's outside insulation was cracked in some locations and loose/peeling off in others. We contacted the supplier, Pyrz, to alert them of this issue. Pyrz is scheduling to make the repairs, which we expect to happen in November. They indicated repairs will take about a half day of work to allow the spray insulation to set and coat it.

Once the insulation is repaired and the outdoor emergency shower is installed, the tank can be put into operation.

We previously prepared a draft O&M Manual information for the system that was submitted to the Township and operator for review. We will set up a meeting to review so that the Manual can be finalized.

- UV Disinfection System – The temporary channel was delivered to the Township on August 24. The UV modules were delivered to the Township on October 30, and the submersible bypass pumps were delivered on November 2. The bypass hoses are scheduled for delivery the week of November 13. Upon receipt of the hoses, construction can begin, starting with the general contractor setting up the temporary channel and flow bypass system.

An updated tentative construction schedule follows with completed work in italics:

- *Delivery of Permanent UV Equipment – October 30, 2023*
 - Delivery of Bypass Pumps and Hoses – Week of November 13-17, 2023
 - Initiate Temporary Bypass Work – Mid-November 2023
 - Complete Temporary Bypass Work and Initiate Use of Bypass System – December 20, 2023
 - Two Week Trial and Sampling of Temporary Bypass System – December 20, 2023-January 3, 2024
 - Township to Perform Concrete Channel Work – January 8-February 29, 2024
 - 2nd Notice to Proceed to Contractors: Permanent Work – March 1, 2024
 - Redirect Flow back to Permanent Channel (30 days of 2nd NTP) – April 1, 2024
 - Two Week Trial of New UV System in Permanent Channel –April 1-15, 2024
 - Install Second UV Module into Permanent Channel – April 16, 2024
 - Two Week Trial of Second New UV System in Permanent Channel – April 17-May 1, 2024
 - Construction Completed – Early May 2024
- Generator #2 Replacement – Premium Power Services released the Cummins' 500 kW diesel generator for fabrication in early March 2023. The lead times on the generator and ATS are 43 weeks and 22 weeks respectively, so we expect delivery of the entire system around January 2024.

We are currently preparing electrical design and structural concrete pad plans for the new generator for use by the Township in construction.

- Operating Cost Analysis – We are continuing to coordinate with Scott Towler for the evaluation of industry WWTP operating costs in an effort to benchmark RCSTP costs against other similar WWTPs.

Sanitary Sewer Pipe Rehab

- Chester Creek Sewer Rehab – We are reviewing shop drawings and construction submittals from the contractor, Insituform. They will schedule the work upon approval of those submittals.
- Hershey's Mill Estates – The contractor is scheduled to complete minor punchlist work – removing E&S controls, cleaning up construction debris, and opening/unsealing new residential cleanout lids – by November 10. We will perform a site visit to verify the remaining punchlist work has been completed.

The contractor submitted the 3rd (final) pay application, and we provided a payment recommendation. We also processed Change Order #2 to formally document changes to as-built quantities for unit price bid items.

- LSA Grant Application – We are assembling information and assisting Dave Ware with preparation of the grant application for pipe lining and rehabilitation of the Chester Creek Interceptor Phases 1 and 2 and the remainder of pipe lining in Supplee Valley. The application is due November 30.

New Connections

- Millstone Meadows (1010 Hershey Mill Road) – We received the 3rd submission of Subdivision and Land Development Plans. We are currently reviewing the plans, including the revised sanitary sewer extension design.
- 301 Reservoir Road (5-Lot Residential Subdivision) – We received a revised submission of Subdivision and Land Development Plans that is currently under review. We also discussed modifications to the proposed sewer extension alignment with Mark Miller.
- 1712 E. Boot Road – The low pressure sewer was constructed via directional drilling from the property and connected to the public sewer manhole. We performed an inspection of the completed work at the manhole connection, and it was found acceptable with the exception of debris/mud that needs to be cleaned from the manhole channel. The grinder pump has not yet been installed.
- 14 Reservoir Road – We reviewed a revised Subdivision and Land Development plan submission, which includes connection of one new lot to public sewer via grinder pump. We provided outstanding comments to the Township and Applicant.

END OF REPORT



Executive Summary

The Ridley Creek sewage treatment plant outfall 001 has met all effluent limitations regarding water quality for October 2023. All supplemental reports were submitted for September. 2023 Chemical usage utilized for total alkalinity remained consistent with previous months. Aluminum sulfate solution volumes decreased slightly to a daily average of 70.7 from the previous standard of 72.5 gallons per day. No significant mechanical or operational issues were observed during the sludge dewatering equipment or SBR treatment process. Sludge dewatering experienced no mechanical issues impacting production. There were no odor complaints during the month.

Table 1

October 2023- Final Effluent - Outfall 001													
NPDES Permit Discharge Limitations	Flow	CBOD ₅		Total Nitrogen		TSS		NH ₄ -N		Total Phosphorus		Fecal Coliform	
	MGD		lbs/		lbs/		lbs/		lbs/		lbs/	Geo	Geo
	Average	mg/L	month	mg/L	month	mg/L	month	mg/L	month	mg/L	month	Mean	Mean
	0.75	10	62	Report	Report	10	62	2.5	44	0.5	3	200	1,000
	Inst. Max	20	94			15	94	5		1			
Sample Date													
October 3, 2023	0.248	2.0	4.1	8.42	17.4	4.4	9.1	0.10	0.21	0.17	0.35	44	1.6435
October 10, 2023	0.257	2.0	4.3	7.31	15.7	4.4	9.4	0.10	0.21	0.16	0.34	1	0.0000
October 17, 2023	0.264	2.0	4.4	6.85	15.1	4.0	8.8	0.10	0.22	0.17	0.37	25	1.3979
October 26, 2023	0.236	2.0	3.9	9.24	18.2	4.8	9.4	0.10	0.20	0.10	0.20	15	1.1761
October 31, 2023	0.241	2.0	4.0	5.98	12.0	5.0	10.0	0.10	0.20	0.10	0.20	5	0.6990
Average	0.249	2.0	4.2	7.56	15.7	4.5	9.4	0.10	0.21	0.14	0.29	18	0.9833
Minimum	0.236	2.0	3.9	5.98	12.0	4.0	8.8	0.10	0.20	0.10	0.20	1	0.0000
Maximum	0.264	2.0	4.4	9.24	18.2	5.0	10.0	0.10	0.22	0.17	0.37	44	1.6435

Treatment Process Operation

Table 1 illustrates the final effluent composite sample data reported for outfall 001 for October 2023. The monthly average total phosphorus was reported as 0.14 mg/L compared to the permit limitation of 0.50 mg/L. The TSS samples were consistently in single digits. The results remain below the weekly maximum of 15 mg/L. The monthly average TSS is reported as 4.5 mg/L compared to the discharge limitation of 10 mg/L.

The final effluent test results demonstrate that the biological treatment performed well during October. The sequencing batch reactors (SBRs) numbered 2, 3, and 4 were in service.

Table 2 illustrates the final effluent composite sample data reported for outfall 002 for October 2023.

Table 2

October 2022 - Applebrook - Out Fall 002													
NPDES Permit Discharge Limitations	Flow	CBOD ₅		Total Nitrogen		TSS		NH ₄ -N		Phosphorus, Total		Fecal Coliform	
	MGD Average	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	mg/L	lbs/ month	Geo Mean	Geo Mean
	0.135	25		Report	Report	30		7.0	44	0.5	3	200	1,000
		40				45							
October 3, 2023	0.0328	2.0	0.55	8.42	2.30	4.4	1.20	0.10	0.21	0.17	0.35	44	1.6435
October 10, 2023	0.0321	2.0	0.54	7.31	1.96	4.4	1.18	0.10	0.21	0.16	0.34	1	0.0000
October 17, 2023	0.0322	2.0	0.54	6.85	1.84	4.0	1.07	0.10	0.22	0.17	0.37	25	1.3979
October 26, 2023	0.0307	2.0	0.51	9.24	2.37	4.8	1.23	0.10	0.20	0.10	0.20	15	1.1761
October 31, 2023	0.0287	2.0	0.48	5.98	1.43	5.0	1.20	0.10	0.20	0.10	0.20	5	0.6990
Average	0.0313	2.0	0.52	7.56	1.98	4.52	1.18	0.10	0.21	0.14	0.29	18	0.9833
Minimum	0.0287	2.0	0.48	5.98	1.43	4.00	1.07	0.10	0.20	0.10	0.20	1	0.0000
Maximum	0.0328	2.0	0.55	9.24	2.37	5.00	1.23	0.10	0.22	0.17	0.37	44	1.6435

The influent wastewater pollutant concentrations and loading entering the wastewater treatment facility generally remained within the design concentration and organic loading values. The TSS and CBOD₅ monthly average weekly concentrations were usually observed to be within the design parameters for the treatment process.

Table 3 presents the pollutant data for the influent wastewater collected at the doghouse manhole during October 2023.

Table 3

October 2023 - Influent Wastewater													
Design Basis	Flow	BOD ₅		CBOD ₅		TSS		NH ₄ -N		TKN, mg/L		Phosphorus, Total , mg/L	
		mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day
	MGD Average	335	2,098	NA	NA	320	2,001	32	200	48	301	9.1	57
Sample Date													
October 3, 2023	0.318	679	1,799	532	1,409	860	2,278	39.6	105	82.3	218	10.1	26.8
October 10, 2023	0.308	299	768	335	860	437	1,122	39.9	102	63.3	163	6.53	16.8
October 17, 2023	0.308	181	465	204	524	120	308	42.0	108	54.9	141	6.63	17.0
October 26, 2023	0.354	220	650	149	440	196	579	45.9	136	57.5	170	6.79	20.1
October 31, 2023	0.253	448	945	sample under review		603	1,271	41.6	88	76.7	162	8.58	18.1
Average	0.308	365	925	305	808	443	1,112	41.8	108	66.9	171	7.73	19.7
Minimum	0.253	181	465	149.0	440	120	308	39.6	88	54.9	141	6.53	16.8
Maximum	0.354	679	1,799	532	1,409	860	2,278	45.9	136	82.3	218	10.10	26.8

PA DEP

No activity

Pennoni Associates

The UV system replacement project continues.

Significant Rainfall

During October, there were eight (8) days when rainfall occurred. The total rainfall for October was a total 1.97 inches.

Chemical Data

October 2023		
<u>Chemical</u>	Daily Average	Total Monthly
<u>Soda Ash, pounds</u>	300	9,300
<u>Aluminum Sulfate solution, gal</u>	70.7	2,192
<u>Sludge Dewatering, gal*</u>	16,301	423,836

*19 days of sludge dewatering

Minor Preventative Maintenance

Flushed chemical feed lines to the SBRs.

Cleaned final effluent weir trough daily.

Skimmed surface of disc filters daily

Drained and cleaned disc filters bi-weekly.

Cleaned buildings and laboratory.

Flow Data

October 2023			
Flow Meter Location	Total Volume for Month, MG	Average Daily Flow, gpd	Daily Maximum Flow, gpd
Influent Wastewater to Screening Building*	10.571	340,988	836,360
Influent Wastewater to SBRs*	11.991	386,806	444,776
Internal Recycle**	2.104	67,872	406,126
Treated Effluent to Disc Filters	11.645	375,640	428,106
Final Effluent Discharge	8.220	265,000	304,000
Applebrook Golf Course	1.031	33,270	37,184

DRAFT
EAST GOSHEN TOWNSHIP MUNICIPAL AUTHORITY
MEETING MINUTES
October 16, 2023

The East Goshen Township Municipal Authority held their regular meeting on Monday, October 16, 2023 at 7:00 pm. at the Township Building. Members in attendance are indicated in

BOLD:

Kevin Cummings, Chairman
Dana Pizarro, Vice Chairman
Jack Yahraes
Carmen Battavio
Walter Wujcik

Also in attendance were: Mark Miller (Director of Public Works), Mike Ellis (Pennoni representative), Ellen Koopman (Attorney), Dave Ware (Finance Director), and Michael Lynch (Township Supervisor), and Scott Towler (on phone)

COMMON ACRONYMS:

<i>ATS – Automatic Transfer Switch</i>	<i>MA- Municipal Authority</i>
<i>BFES – Big Fish Environmental Services</i>	<i>NPDES – National Pollutant Discharge Elimination System</i>
<i>BOS – Board of Supervisors</i>	<i>PC – Planning Commission</i>
<i>CB – Conservancy Board</i>	<i>PM – Prevention Maintenance</i>
<i>DEP – Department of Environmental Protection</i>	<i>PR – Park & Recreation Board</i>
<i>EPA – Environmental protection Agency</i>	<i>RCSTP – Ridley Creek Sewer Treatment Plant</i>
<i>HC – Historical Commission</i>	<i>SBR – Sequencing Batch Reactor</i>
<i>I&I – Inflow & Infiltration</i>	<i>SSO – Sanitary System Overflow</i>
<i>LCSTP – Lockwood Chase Sewer Treatment Plant</i>	<i>WAS – Waste Activated Sludge</i>
<i>PWD – Public Works Department</i>	

Call to Order & Pledge of Allegiance

Kevin called the meeting to order at 7:00 pm and led those present in the Pledge of Allegiance. He asked for a moment of silence for our First Responders and Military. He asked if anyone would be recording the meeting. There was no response.

Chairman's Report

None

SEWER REPORTS

1. Director of Public Works, Mark Miller's report for October 16, 2023

Monthly Flows – The average daily flow to West Goshen was 726,075 gallons per day.

Meters: The meters were read on a daily basis with no problems to report.

1 **C.C. Collection:** The pump stations were visited on a daily basis with no problems to report.

2
3 **C.C. Interceptor:** We inspected the lids and castings while we were clearing the right of way.

4
5 **R.C. Collection:** The pump stations were visited on a daily basis with no problems to report.

6
7 **Ridley Creek Plant:**

- 8 • Applebrook pump burned up and was replaced.
- 9 • Met with Erika from Pennoni to go over the work that needs to be done for the new
- 10 generator.
- 11 • New UV System
 - 12 o Temporary tank channel arrived.
 - 13 o Pumps, hose, and control panels are ordered.
 - 14 o Third pump ordered as a designated spare in case one of the main pumps goes
 - 15 down.

16
17 **Alarms:** 12 (storm related)

18
19 **PA 1 Calls:** 194 for the month

20
21 **Monthly Rainfall:** 5.8 inches of rain for the month of September

22
23 **Lateral Repairs or Caps:** Four lateral repairs were done on private systems. Inspections were done

24 by Public Works. We are picking up the repairs on the PA One Calls.

25
26
27 **2. Pennoni Engineer's Report dated October 13, 2023**

28
29 **Ridley Creek Sewage Treatment Plant (RCSTP)**

- 30 • Caustic Soda Conversion – Once the outdoor emergency shower is installed, the tank can be
- 31 put into operation. We also prepared a draft O&M Manual information for the system that
- 32 was submitted to the Township and operator for review.

33 During a site visit on October 4, it was noticed that the tank's outside insulation was cracked

34 in some locations and loose/peeling off in others. We contacted the supplier, Pyrz, to alert

35 them of this issue. Pyrz then contacted the manufacturer, Assmann, to have this issue

36 resolved. Assmann will ship Pyrz needed materials for repairs. After the materials are

37 received, Pyrz will schedule a site visit to re-apply the insulation and add the mastic paint to

38 repair the parts that have come loose. It will take about a half day of work to allow the spray

39 insulation to set and coat it.

- 40 • UV Disinfection System – The temporary channel was delivered to the Township on August 24. As of
- 41 September 29, Glasco stated that the units have been fabricated but have not been tested yet. A
- 42 date for testing the units has not been set. After testing is complete, the UV system would be able to
- 43 be shipped in about two weeks. We are still awaiting a definitive delivery date.

We continued coordination with vendors and obtained additional cost quotes for the bypass pumps with control boxes. Quotes for the jib crane were previously obtained. The Township has placed orders for the jib crane and submersible pumps with control boxes. The lead times for the jib crane and pumps are 3-4 weeks after orders are placed. We are waiting on definitive delivery dates for the products. .

An updated tentative construction schedule follows:

- Initiate Temporary Bypass Work – Week of October 23, 2023
 - Delivery of Permanent UV Equipment – Mid-to-Late October 2023
 - Delivery of Jib Crane and Bypass Pumps – Early-Mid November 2023
 - Complete Temporary Bypass Work and Initiate Use of Bypass System – December 20, 2023
 - Two Week Trial and Sampling of Temporary Bypass System – December 20, 2023-January 3, 2024
 - Township to Perform Concrete Channel Work – January 8-February 29, 2024
 - 2nd Notice to Proceed to Contractors: Permanent Work – March 1, 2024
 - Redirect Flow back to Permanent Channel (30 days of 2nd NTP) – April 1, 2024
 - Two Week Trial of New UV System in Permanent Channel –April 1-15, 2024
 - Install Second UV Module into Permanent Channel – April 16, 2024
 - Two Week Trial of Second New UV System in Permanent Channel – April 17-May 1, 2024
 - Construction Completed – Early May 2024
- Generator #2 Replacement – Premium Power Services released the Cummins’ 500 kW diesel generator for fabrication in early March 2023. The lead times on the generator and ATS are 43 weeks and 22 weeks respectively, so we expect delivery of the entire system around January 2024.
- A site meeting with Pennoni and the Township was held on October 4 to discuss the options for the new generator layout. It was decided that installing the new generator slightly north of the existing generator’s location would require the least amount of labor and be the most cost-effective option. We are preparing electrical and structural concrete pad plans for this layout.
- Operating Cost Analysis – We are continuing to coordinate with Scott Towler for the evaluation of industry WWTP operating costs in an effort to benchmark RCSTP costs against other similar WWTPs.

Sanitary Sewer Pipe Rehab

- Chester Creek Sewer Rehab – The contractor, Insituform, provided their bonds and insurance documents. All were found acceptable. The contract was subsequently executed. A pre-construction meeting with the contractor was held on September 27. The Notice to Proceed letter is anticipated to be issued by the end of October.
- Hershey’s Mill Estates – Most punchlist work and permanent restoration is complete. There are a few remaining minor punchlist items that were identified in a subsequent inspection of which we will notify the contractor.

- Ridley Creek Exposed Sewer Rehab – A full PADEP permit application has been prepared and will be submitted to PADEP in follow-up to the emergency authorization now that construction has been completed.

New Connections

- 1010 Hershey Mill Road (Moser) – No activity since our last report.
- 301 Reservoir Road (5-Lot Residential Subdivision) – No activity since our last report.
- 1712 E. Boot Road – No activity since our last report.
- 14 Reservoir Road – No activity since our last report.

3. Big Fish Environmental Services –

The Ridley Creek sewage treatment plant outfall 001 has met all effluent limitations regarding water quality for September 2023. All supplemental reports were submitted for the month of August 2023 with the eDMR. Discharge to the Applebrook irrigation lagoon was restarted on September 21st. Chemical usage utilized for total alkalinity remained consistent with previous months. Aluminum sulfate solution volumes increased slightly to a daily average of 72.5 gpd from the previous average of 68.6 gallons per day. No significant mechanical or operational issues were observed during the sludge dewatering equipment or SBR treatment process. Sludge dewatering experienced some mechanical issues impacting production. There were no odor complaints during the month. Walter and Dana mentioned that the tables were all wrong. Scott will correct them. Carmen mentioned the foam overage on page 3 and asked about the clarity. Kevin voiced concern about the insulation in the new tank which appears to be pulling off. Mike asked about microplastics. The EPA is working on rules for this. Scott spoke about all of the new contaminates/hazardous materials.

Approval of Minutes

The minutes of the September 11, 2023 meeting were approved as amended.

Approval of Invoices

1. Carmen moved to approve payment of the following Pennoni invoices:

- a. Invoice #1190712 \$ 464.50
- b. Invoice #1190713 \$ 1,716.50
- c. Invoice #1190714 \$10,769.75
- d. Invoice #1190715 \$13,951.25

Dana seconded the motion. The motion passed unanimously.

2. Walter moved to approve payment of the following Gawthrop Greenwood invoices:

- a. Invoice #277578 \$1,146.00
- b. Invoice #279612 \$ 658.50

Carmen seconded the motion. The motion passed unanimously.

3. Dana moved to approve payment of Mainline Concrete & Supply Invoice #525430 in the amount of \$159.75. Walter seconded the motion. The motion passed unanimously.

4. Carmen moved to approve payment of Gap Power Invoice #1870216 in the amount of \$2,977.97. Walter seconded the motion. The motion passed unanimously.

1 **New Business**

2 1. Millstone Meadows/1010 Hershey Mill Road – T.R. Moser, developer, was present. East Goshen
3 is asking them to pay for the upgrade of the pump station. Mr. Moser explained the process and
4 supplied the utility plan.

5 2. Legal Services – Kevin signed the approval of 2024 fees for Legal Services.
6
7

8 **Liaison Reports**

9 1. Board of Supervisors – Mike Lynch reported that the BOS will be discussing the General Fund
10 Budget. There is no plan for a tax increase.
11

12 **Financial Reports**

13 Dave Ware supplied the following report:

14 Year to date September 2023, the Municipal Authority recorded \$545,467 in revenues (primarily
15 from Sewer Operating transfers and Sewer Capital Reserve transfers and tapping fees) and \$541,910
16 in expenses (Engineering Services, Audit fees, Administrative Wages, Hershey's Mill Estates Sewer
17 costs, Caustic Soda project costs, capital costs at the Ridley Creek Sanitary Treatment Plant, capital
18 improvements to the Westtown Way Pump station, auditor and legal fees). The net result of
19 operations is \$3,557. As of September 30, 2023, the fund balance was (\$50,947). This negative
20 balance is a function of balance versus cash reporting. There is \$59,676 in invoices being held so the
21 actual cash balance is \$8,729.
22

23 **Old Business**

24 None
25

26 **Goals**

27 The Goals were reviewed.
28

29 **Capacity Requests** - None
30

31 **Any Other Matter** – None
32

33 **Correspondence**- None
34

35 **Public Comment** - None
36

37 **Adjournment**

38 There being no further business Carmen moved to adjourn the meeting. Dana seconded the motion.
39 The motion passed unanimously. The meeting was adjourned at 7:34 pm.
40 The next regular meeting will be held on Monday, November 13, 2023 at 7:00 pm.
41

42 Respectfully submitted,
43
44

45 Ruth Kiefer, Recording Secretary



INVOICE

Remit Payment To:
Pennoni Associates Inc.
P.O. Box 827328
Philadelphia, PA 19182-7328

Mark Miller
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1194870
Invoice Date : 10/26/2023
Project : EGMAU20004
Project Name : RCSTP Caustic Soda
Conversion

For Services Rendered Through 10/15/2023

Contacted vendor to resolve tank insulation defects.

Phase Code / Name		Contract Amount	Previously Billed	% Complete	Complete To Date	Amount This Invoice
01 -- Design and Permitting		\$26,500.00	\$26,500.00	100.00%	\$26,500.00	\$0.00
02 -- Construction Phase Services	est.	\$5,400.00	\$2,717.75		\$2,745.50	\$27.75
Total :		\$31,900.00	\$29,217.75		\$29,245.50	\$27.75

Phase: 02 -- Construction Phase Services

Labor

Class	Hours	Rate	Amount
Associate Professional	0.25	111.00	27.75
Labor			27.75

Phase Subtotal

\$27.75

PAID

Amount Due This Invoice

\$27.75

APPROVED BY: _____
DATE PAID: _____
CHECK #: _____
CHARGED TO: 07-429-1520

West Goshen RCSTP Caustic Soda Conversion
EGMAU20004 Invoice Summary
Invoice Date 10/26/2023

Project: EGMAU20004
Pennoni Job No.: RCSTP Caustic Soda Conversion
Invoice No: 1194870
Invoice Period: 9/18/2023 to 10/15/2023
Initial Authorization: \$ 31,900.00 **Date:** 10/26/2023
Contract Amount: \$ 31,900.00
Previously Invoiced: \$ 29,217.75
Current Invoice: \$ 27.75
Invoiced to Date (\$): \$ 29,245.50
Invoiced to Date (%): 92%
Remaining Budget (\$): \$ 2,654.50
Remaining Budget (%): 8%

Budget by Phase:

Phase Name: RCSTP Caustic Soda Conversion
Phase Budget: \$ 31,900.00
Previously Invoiced: \$ 29,217.75
Current Invoice: \$ 27.75
Invoiced to Date (\$): \$ 29,245.50
Invoiced to Date (%): 92%
Remaining Budget (\$): \$ 2,654.50
Remaining Budget (%): 8%

Comments: Contacted vendor to resolve tank insulation defects



INVOICE

Remit Payment To:
Pennoni Associates Inc.
P.O. Box 827328
Philadelphia, PA 19182-7328

Mark Miller
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1194871
Invoice Date : 10/26/2023
Project : EGMAU21004
Project Name : HM Estates Sewer
Design & Permitting

For Services Rendered Through 10/15/2023

Construction Admin & Inspections: Second punchlist site visit and coordination with contractor to complete punchlist work.

Phase Code / Name		Contract Amount	Previously Billed	% Complete	Complete To Date	Amount This Invoice
01 -- Wetland & Watercourse Investigation		\$6,750.00	\$6,750.00	100.00%	\$6,750.00	\$0.00
02 -- Phase I Bog Turtle Habitat Assessment		\$6,750.00	\$6,750.00	100.00%	\$6,750.00	\$0.00
03 -- Survey		\$17,200.00	\$17,200.00	100.00%	\$17,200.00	\$0.00
04 -- Design		\$26,100.00	\$26,100.00	100.00%	\$26,100.00	\$0.00
05 -- Permitting		\$8,000.00	\$8,000.00	100.00%	\$8,000.00	\$0.00
06 -- Property Line Stakeout	est.	\$5,000.00	\$7,520.50		\$7,520.50	\$0.00
07 -- Geotechnical	NTE	\$10,000.00	\$6,271.25	62.71%	\$6,271.25	\$0.00
08 -- Bid Assistance	NTE	\$9,690.50	\$9,690.50	100.00%	\$9,690.50	\$0.00
09 -- Construction Admin & Inspection	NTE	\$60,000.00	\$51,602.50	86.35%	\$51,811.75	\$209.25
Total :		\$149,490.50	\$139,884.75		\$140,094.00	\$209.25

Phase: 09 -- Construction Admin & Inspection

Labor

Class	Hours	Rate	Amount
Authority Engineer	0.50	149.00	74.50
Associate Professional	0.25	111.00	27.75
Sr. Eng Tech	1.00	107.00	107.00

PAID

Labor

Phase Subtotal

209.25

\$209.25

Amount Due This Invoice

\$209.25

APPROVED BY: _____

DATE PAID: _____

CHECK #: _____

CHARGED TO: 10-909-6050

West Goshen HM Estates Sewer Design Permitting
EGMAU21004 Invoice Summary
Invoice Date 10/26/2023

Project:	EGMAU21004		
Pennoni Job No.:	HM Estates Sewer Design & Permitting		
Invoice No:	1194871		
Invoice Period:	9/18/2023	to	10/15/2023
Initial Authorization:	\$ 64,800.00	Date:	10/26/2023
Contract Amount:	\$ 149,490.50		
Previously Invoiced:	\$ 139,884.75		
Current Invoice:	\$ 209.25		
Invoiced to Date (\$):	\$ 140,094.00		
Invoiced to Date (%):	94%		
Remaining Budget (\$):	\$ 9,396.50		
Remaining Budget (%):	6%		

Budget by Phase:

Phase Name:	HM Estates Sewer Design & Permitting		
Phase Budget:	\$ 149,490.50		
Previously Invoiced:	\$ 139,884.75		
Current Invoice:	\$ 209.25		
Invoiced to Date (\$):	\$ 140,094.00		
Invoiced to Date (%):	94%		
Remaining Budget (\$):	\$ 9,396.50		
Remaining Budget (%):	6%		

Comments: Construction Admin & Inspections: Second punchlist site visit and coordination with contractor to complete punchlist work.



INVOICE

Remit Payment To:
Pennoni Associates Inc.
P.O. Box 827328
Philadelphia, PA 19182-7328

Mark Miller
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1194872
Invoice Date : 10/26/2023
Project : EGMAU22004
Project Name : RCSTP UV
Replacement

For Services Rendered Through 10/15/2023

Construction Phase Services: Obtained additional bypass pump purchase quotes and prepared purchase recommendation memo; reviewed jib crane submittal; and met on-site with PW Dept regarding upcoming concrete channel work and prepared responses to their construction questions and reviewed proposed materials

Phase	02	Construction Phase Services		
Labor				
		Hours	Rate	Amount
Authority Engineer		.50	149.00	74.50
Senior Professional		3.25	145.00	471.25
Associate Professional		2.00	111.00	222.00
Sr. Eng Tech		1.50	107.00	160.50
Totals		7.25		928.25
Total Labor				928.25
Billing Limits		Current	Prior	To-Date
Total Billings		928.25	6,759.75	7,688.00
Limit				10,000.00
Remaining				2,312.00
Total this Phase				\$928.25
Total this Invoice				<u>\$928.25</u>

APPROVED BY: _____

DATE PAID: _____

CHECK #: _____

CHARGED TO: 07-4129-1505

RCSTP UV Replacement
EGMAU22004 Invoice Summary
Invoice Date 10/26/2023

Project: EGMAU22004
Pennoni Job No.: RCSTP UV Replacement
Invoice No: 1194872
Invoice Period: 9/18/2023 to 10/15/2023
Initial Authorization: \$ 30,000.00 **Date:** 10/26/2023
Contract Amount: \$ 54,000.00
Previously Invoiced: \$ 50,655.50
Current Invoice: \$ 928.25
Invoiced to Date (\$): \$ 51,583.75
Invoiced to Date (%): 96%
Remaining Budget (\$): \$ 2,416.25
Remaining Budget (%): 4%

Budget by Phase:

Phase Name:	RCSTP UV Replacement	1129796
Phase Budget:	\$ 54,000.00	
Previously Invoiced:	\$ 50,655.50	
Current Invoice:	\$ 928.25	
Invoiced to Date (\$):	\$ 51,583.75	
Invoiced to Date (%):	96%	
Remaining Budget (\$):	\$ 2,416.25	
Remaining Budget (%):	4%	

Comments: Construction Phase Services: Obtained additional bypass pump purchase quotes and prepared purchase recommendation memo; reviewed jib crane submittal; and met on-site with PW Dept regarding upcoming concrete channel work and prepared responses to their construction questions and reviewed proposed materials



INVOICE

Remit Payment To:
Pennoni Associates Inc.
P.O. Box 827328
Philadelphia, PA 19182-7328

Mark Miller
East Goshen Municipal Authority
1580 Paoli Pike
West Chester, PA 19380-6199

Invoice No : 1194874
Invoice Date : 10/26/2023
Project : EGMAU23001
Project Name : 2023 General
Services

For Services Rendered Through 10/15/2023

Prepared October Engineer's Report and reviewed October RCSTP operator's report.

Chester Creek Interceptor Sewer Rehab: Coordinated with Township to execute construction contract with awarded contractor, and prepared for and conducted pre-construction meeting.

RCSTP Generator #2 Replacement: Follow-up field visit and site meeting regarding wiring and equipment, continued electrical design and plans for generator and ATS replacement, coordinated with generator manufacturer on equipment, evaluated several alternatives for locating replacement generator since conduit penetration in existing concrete pad does not align with new generator, provided alternative sketches and comments to Township, attended on-site meeting with M. Miller to review and select alternative, and initiated structural design of concrete pad expansion for selected alternative..

Billing Limits	Current	Prior	To-Date
Total Billings	8,612.50	30,810.75	39,423.25
Limit			42,000.00
Remaining			2,576.75

Labor

	Hours	Rate	Amount
Authority Engineer	3.00	149.00	447.00
Senior Professional	13.00	145.00	1,885.00
Staff Professional	38.50	117.00	4,504.50
Associate Professional	16.00	111.00	1,776.00
Totals	70.50		8,612.50
Total Labor			8,612.50
Total this Invoice			<u>\$8,612.50</u>

APPROVED BY: _____

DATE PAID: _____

CHECK #: _____

CHARGED TO: 04-424-3180

2023 General Services
EGMAU23001Invoice Summary
Invoice Date 10/26/2023

Project:	EGMAU23001		
Pennoni Job No.:	2023 General Services		
Invoice No:	1194874		
Invoice Period:	9/18/2023	to	10/15/2023
Initial Authorization:	\$ 42,000.00	Date:	10/26/2023
Contract Amount:	\$ 42,000.00		
Previously Invoiced:	\$ 30,810.75		
Current Invoice:	\$ 8,612.50		
Invoiced to Date (\$):	\$ 39,423.25		
Invoiced to Date (%):	94%		
Remaining Budget (\$):	\$ 2,576.75		
Remaining Budget (%):	6%		

Budget by Phase:

Phase Name:	2023 General Services		
Phase Budget:	\$ 42,000.00		
Previously Invoiced:	\$ 30,810.75		
Current Invoice:	\$ 8,612.50		
Invoiced to Date (\$):	\$ 39,423.25		
Invoiced to Date (%):	94%		
Remaining Budget (\$):	\$ 2,576.75		
Remaining Budget (%):	6%		

Comments: Prepared October Engineer's Report and reviewed October RCSTP operator's report.

Chester Creek Interceptor Sewer Rehab: Coordinated with Township to execute construction contract with awarded contractor, and prepared for and conducted pre-construction meeting.

RCSTP Generator #2 Replacement: Follow-up field visit and site meeting regarding wiring and equipment, continued electrical design and plans for generator and ATS replacement, coordinated with generator manufacturer on equipment, evaluated several alternatives for locating replacement generator since conduit penetration in existing concrete pad does not align with new generator, provided alternative sketches and comments to Township, attended on-site meeting with M. Miller to review and select alternative, and initiated structural design of concrete pad expansion for selected alternative

PHILADELPHIA
BEARING & DRIVE
SOLUTIONS

PHILADELPHIA BDS - DOWNINGTOWN
PHILADELPHIA BEARING & DRIVE SOLUTIONS
503 TRESTLE PLACE
DOWNINGTOWN, PA 19355
OFFICE PH: 610-323-0400
OFFICE FX: 610-327-4566
ACCOUNTING PH: 215-723-1200

Bill To:

Ship To:

Attn: DANA GIEDER

Customer ID: 113664

Delivery Instructions: MARK MILLER @ 610-656-2742

Carrier: OUR DELIVERY

Tracking #:

1.00	1.00	0.00 EA	1.0	PUMP REPAIR PUMP REPAIR RCSTP-REPLACEMENT MYERS PUMP. BDS Job# 2683839. Submersible 10hp pump. Dismantle & inspect, sandblast, repair bearing journal, replace upper and lower seal housing, cord assembly, brgs, seals and gaskets, rewind stator, dip & bake, assemble, test & paint.	EA	1.0	17,625.0000	17,625.00
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Total Lines: 1

Total Freight In: 204.75

Total Freight Out: 0.00

SUB-TOTAL: 17,625.00

TOTAL FREIGHT:	204.75
-----------------------	--------

TAX: 0.00

FUEL SURCHARGE:	5.00
------------------------	------

AMOUNT DUE: 17,834.75

U.S. Dollars

PROVED BY: _____
 DATE PAID: _____
 CHECK #: _____
 CHARGED TO: 07-424-7490

MATERIAL IS RETURNABLE
ONLY WITH OUR PERMISSION
AND IS SUBJECT TO A
REHANDLING & RESTOCKING
CHARGE

ORIGINAL



JWC
Environmental®

2850 Red Hill Ave., STE 125
Santa Ana, CA 92705
(949) 833-3888

Invoice No: 116551
Date: 9/27/2023
Order No: 116476
Page No: 1
F.O.B: Origin

Sold To
East Goshen Township 1580 Paoli Pike West Chester, PA 19380 US - UNITED STATES

Ship To
East Goshen Township 1580 Paoli Pike West Chester, PA 19380 US - UNITED STATES

TIN: 45-2771126

DUNNS# 61-059-2388

CUSTOMER ID		CUSTOMER PO		PAYMENT TERMS		FREIGHT TERMS	
6005886		23-01869		Net 30		Freight: Prepaid	
SALES REP ID		SHIPPING METHOD			SHIP DATE	INVOICE DUE DATE	
035		Old Dominion Freight Line			9/27/2023	10/27/2023	
QUANTITY							
LI#	ORD	SH	BCK	PART	DESCRIPTION	X	

1	1	1	0	10000-0804-DI	10000-0804-DI
2	1	1	0	PC2200	PC2200-001-1-5HP-460V-60HZ
3	3	3	0	SUBMITTALS	Standard Submittals
4	4	4	0	MANUALS	O&M MANUALS HARD COPY
5	1	1	0	SU	Start Up
6	1	1	0	Shipping	Shipping & Handling

PAID

SUB TOTAL: \$16,542.00
SALES TAX: \$0.00

TOTAL AMOUNT DUE: \$16,542.00

PLEASE REFERENCE THIS INVOICE

NUMBER ON YOUR CHECK AND REMIT TO: **JWC Environmental Inc.**
2850 Red Hill Ave Ste 125
Santa Ana, CA 92705

IF PAYING BY ACH OR WIRE:

ACH/WIRE INSTRUCTIONS
BANK NAME: BANK OF AMERICA
ADDRESS: NEWPORT BEACH, CA.
ABA/EFT ROUTING#: 111000012
DOM WIRE ROUTING#: 026009593
SWIFT ADDRESS: BOFAUS3N
ACCOUNT #: 4451287711
ACCOUNT NAME: JWC Environmental Inc.

PROVED BY: _____
DATE PAID: _____
CHECK #: _____
CHARGED TO: 07-424-7490

Please send remittance advice to receivables@jwce.com



Gawthrop Greenwood, PC
Attorneys at Law

(p) 610-696-8225
(f) 610-344-0922
gglaw@gawthrop.com www.gawthrop.com


GAWTHROP GREENWOOD CLIENT INVOICE

Please Mail checks to:

**P.O. Box 562
West Chester, PA 19381-0562**

**To Make a Payment with a Credit Card, please visit:
<https://secure.lawpay.com/pages/gawthrop/operating>**

East Goshen Municipal Authority
1580 Paoli Pike
West Chester PA 19380

APPROVED BY: 

DATE PAID: 11/18/23

CHECK #:

CHARGED TO: 07-424-3140

Client No:
Invoice No.

Page: 1
11/07/2023
6604-001M
280886

General Authority Services

Fees

		Hours	
10/04/2023			
PMM	Email from L. Werkheiser regarding rescheduled meeting.	0.20	41.00
10/13/2023			
EBK	Review emails with Agenda and updated Agenda attached for upcoming meeting	0.20	39.00
PMM	Email from L. Werkheimer with meeting materials.	0.20	41.00
10/16/2023			
EBK	Review email with attached draft minutes from prior meeting		
	Review and analyze meeting materials	1.80	351.00
	Travel to/from and attend meeting		
	For Current Services Rendered	2.40	472.00

Recapitulation

<u>Timekeeper</u>	<u>Hours</u>	<u>Hourly Rate</u>	<u>Total</u>
Patrick M. McKenna, Esquire	0.40	\$205.00	\$82.00
Ellen B. Koopman, Esquire	2.00	195.00	390.00

Previous Balance \$1,804.50

Total Current Charges 472.00

10/24/2023 Payment -1,804.50

Balance Due \$472.00

East Goshen Municipal Authority

General Authority Services

Page: 2
11/07/2023
Client No: 6604-001M
Invoice No. 280886

To ensure proper credit, please write your client number on
your check when returning payment.
A finance charge of 1.25% per month (15% annually) may be
charged on balances not paid 60 days after the invoice date.



Gawthrop Greenwood, PC
Attorneys at Law

(p) 610-696-8225
(f) 610-344-0922
gglaw@gawthrop.com | www.gawthrop.com

GAWTHROP GREENWOOD CLIENT INVOICE

Please Mail checks to:

**P.O. Box 562
West Chester, PA 19381-0562**

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East Goshen Municipal Authority
1580 Paoli Pike
West Chester PA 19380

Page: 1
11/07/2023
Client No: 6604M

Previous Balance	Fees	Expenses	Payments	Balance
6604-001 General Authority Services				
1,804.50	472.00	0.00	-1,804.50	<u>\$472.00</u>

To ensure proper credit, please write your client number on
your check when returning payment.
A finance charge of 1.25% per month (15% annually) may be
charged on balances not paid 60 days after the invoice date.



INVOICE

E & W Equipment Co., LLC

INVOICE #755
DATE: NOVEMBER 1, 2023

TO Mr. Mark Miller
East Goshen Township Municipal Authority

PAYABLE TO E&W Equipment Company, LLC
901 School Street
Moosic, PA 18507
570-677-1919

SALESPERSON	JOB	PURCHASE ORDER	PAYMENT TERMS
n/a	Ridley Creek WWTP UV System	Signed proposal 4/8/2022	Upon receipt

ITEM #	DESCRIPTION	UNIT PRICE	QUANTITY	LINE TOTAL
1	UV Disinfection system (60% upon delivery)	\$134,985.00	0.6	\$80,991.00
SUBTOTAL				\$80,991.00
TAX				Exempt
TOTAL				\$80,991.00

From: [Michael Ellis](#)
To: [Mark Miller](#)
Cc: [Lynn Werkheiser](#); [David Ware](#); [Derek Davis](#); [Erika Addison](#)
Subject: FW: UV System Invoice
Date: Wednesday, November 8, 2023 10:24:40 AM
Attachments: [2023-11-01 Invoice 755 East Goshen UV - 60 percent on delivery.pdf](#)
[signed proposal UV System East Goshen Township.pdf](#)
Importance: High

Mark,

It is our understanding that the remainder of the UV system equipment was delivered on October 30. Please confirm. If so, we recommend payment of this invoice as submitted for 60%. This is consistent with the terms of their attached proposal. There is 10% remaining to be paid upon system start-up.

We recommend this 60% payment be included on the MA agenda.

Mike

Michael Ellis, PE

Municipal Division Manager

Pennoni

121 Continental Drive, Suite 207 | Newark, DE 19713

Direct: +1 302-351-5236 | **Mobile:** +1 302-561-4235

www.pennoni.com | MEllis@Pennoni.com

From: James Connor <jconnor@ewequipment.com>
Sent: Wednesday, November 1, 2023 8:04 AM
To: Mark S. Miller (mmiller@eastgoshen.org) <mmiller@eastgoshen.org>
Cc: Michael Ellis <MEllis@Pennoni.com>
Subject: RE: UV System Invoice
Importance: High

Mark,

Hope all is well. The invoice for the next 60% of the UV System upon delivery is attached. Please forward this to accounting for payment.

Also, please keep us updated with the progress at the site. We will need a couple of weeks notice before the startup of the temporary UV unit.

Thanks!

Jim

James P. Connor, P.E.

E & W Equipment Company, LLC

In Association with Iron Horse Environmental

901 School St.

Moosic, PA 18507

Mobile: 570-677-1919

Fax: 866-297-3372

jconnor@ewequipment.com

From: James Connor

Sent: Wednesday, May 31, 2023 11:08 AM

To: Mark S. Miller (mmiller@eastgoshen.org) <mmiller@eastgoshen.org>

Cc: Michael Ellis <mellis@pennoni.com>

Subject: UV System Invoice

Importance: High

Mark,

Hope all is well with you. Going through my records, I realized that I never sent in the 30% invoice for the UV System when the drawings were approved. It is now attached. Can you please forward this on to accounting for payment?

See you at the pre-bid next week.

Jim

James P. Connor, P.E.

E & W Equipment Company, LLC

In Association with Iron Horse Environmental

901 School St.

Moosic, PA 18507

Mobile: 570-677-1919

Fax: 866-297-3372

jconnor@ewequipment.com



E&W Equipment Co. LLC
 901 School Street
 Moosic, PA 18507
 Phone: 570-677-1919
 e-mail: jconnor@ewequipment.com

PROPOSAL 2022-02-08 REV-1

TO East Goshen Township Municipal Authority
 PROJECT Ridley Creek Wastewater UV Disinfection System
 LOCATION East Goshen Township, PA
 DATE 2022-03-08

Per your request and through E&W Equipment's association with Glasco UV, we offer this proposal for purchase of a Glasco UV disinfection system from E&W Equipment through the PA COSTARS program (COSTARS Contract #016-095). The proposed UV system consists of VCS-40-A150-2 X 2 to be installed within the existing UV Channel that would be modified to accommodate the new system. The proposal also includes a painted steel channel to be used with one of the new UV modules as temporary disinfection while the channel modifications are being constructed. Installation would be by others.

The proposed UV disinfection equipment is based on the following design information:

PROPOSED UV DESIGN BASIS:

Project Type:	Wastewater
Channel Type	Existing concrete open channel to be modified
Orientation	Vertical 30"
System Name	VCS-40-A150-2
Lamp Technology	Low pressure amalgam 150 W
Flow rate range	
Peak hydraulic flow	3.0 MGD
Average flow	0.7 MGD
Redundancy	N+1
Location	Indoors
Water Quality	
UV transmission %	65%
Influent fecal counts	200,000 fc/100 ml
Water temp.	33-90° F
TSS	<30 mg/l
BOD	<30 mg/l
Discharge permit	<200 fc/100 ml
Design UV dosage	30 mJ
Dimensions	
Channel length	See drawing
Channel width	23"
Channel height	See drawing
Water level	29"
Level control	Finger weir (existing to be relocated by others)
Ballast Control Center	Freestanding NEMA 4x Stainless w A/C



PROPOSED UV EQUIPMENT OVERVIEW:

Model Name	VCS-40-A150-2 X 2
System type	Vertical
Configuration	Open Channel
Lamp type	Low pressure amalgam 150 W
Channels	1
Modules per channel	2
Lamps per module	40
Lamps per channel	40
UV monitoring	0-100% - 4-20 ma
Auto quartz cleaning	Pneumatic
Lamp status	Green LEDs
Remote control	H/O/A
Voltage	220-240 Volt
kW/hr	6 kW (per module)
Weight	300 lbs
Integration	
UV output	4-20 mA from UV
Flow signal	4-20 mA to UV
Basic PLC	AB MicroLogix
Remote control	H/O/A

Modules receive a flow signal and segments are turned on and off as needed. This saves energy and lamp hours.

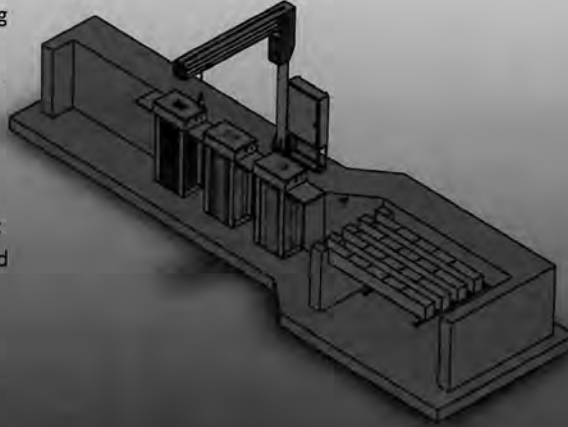
A level control weir ensures that the lamps are submerged regardless of flow rate. 30" arc length needs to be under water.

Modules have an automatic quartz cleaning mechanism. A compressed air source is required and can be provided as an option.

Lamps can be changed without removing the module.

A hoist can be used for seasonal or periodic out of channel cleaning and can be provided as an option.

A remote Ballast Control Center with A/C sits above the channel and attaches to the modules with power, data and air.



PROPOSED SCOPE OF ENGINEERING SERVICES

The following documentation will be provided at the time of submittal:

- Installation Operation and Maintenance manual
- Layout drawings
- P+ID drawings
- Panel and wiring drawings
- Ladder logic diagrams
- Terminal block diagrams
- Warranty requirements
- Long term storage requirements
- Bills of materials
- Equipment descriptions
- Equipment brochures
- UV Head loss calculations
- and other relevant documentation.

PROPOSED SCOPE OF SUPPLY:

Quantity	Description
Two (2)	VCS-40-A150-2 Vertical modules with automatic cleaning and low-pressure amalgam lamps. Lamps are 30" and are 150 watts.
One (1)	Ballast Control Center (BCC) / System Control Center (SCC) (PLC), NEMA 4X modified Type 304 SS enclosure with AB MicroLogix PLC with AB touch screen OUI. System will be air conditioned. With mounting legs to clear drain.
One (1)	Automatic quartz cleaning system center with air compressor
One (1)	Low level sensor
One (1)	Conduit with connectors to bring power to module in the temporary channel – approximately 20' in length
One (1)	Temporary channel constructed of painted carbon steel
Two (2)	Operator safety kit for UV system
Three (3)	O&M Manuals
Spares	
Eight (8)	UV Lamps
One (1)	Ballast
Eight (8)	Quartz Sleeves
Eight (8)	Seals and Wiper Rings

COSTARS Price Proposal	
UV Disinfection System, 1.5 MGD temporary channel, controls, accessories, and spare parts	\$127,985.00
Startup and Training for Temporary Unit	\$3,500.00
Startup and Training for Permanent Unit	\$3,500.00
Total (including all options)	\$134,985.00

Commercial Offering:**TERMS:**

Net 30 days

30% upon approved drawings

60% upon equipment delivery (or upon notification of ready and holding)

10% upon start-up or within six (6) months from delivery, whichever occurs first

FREIGHT:

Included in proposal

SUBMITTAL:

4 to 6 weeks after release of order

DELIVERY:

16-18 weeks after receipt of approved submittals

Proposal Accepted by: Mark S. MillerSignature: [Signature] Date: 4/8/2022

Notes:

1. E&W Equipment proposes to furnish materials and/or equipment for the above project. Any items not shown above as detailed under 'SCOPE OF SUPPLY', or other attachments to this proposal, are EXCLUDED.
2. Any order resulting from this proposal is subject to the COSTARS Contract Standard Terms and Conditions, COSTARS Contract Special Terms and Conditions, and the attached Terms and Conditions in addition to the following understandings:
 - a. Prices noted will be held valid for a period of 90 days from the date of the proposal.
 - b. Prices are in US Dollars.
 - c. Local or state taxes are not included in this proposal.
3. Purchase Orders shall be issued to E&W Equipment Company, LLC, 901 School Street, Moosic, PA 18507 and electronically to jconnor@eweequipment.com.
4. Items not included in this scope of supply include but are not limited to the following:
 - a) Structure above UV modules to protect from direct heat as well as from inclement weather.
 - b) Mechanical installation labor for installing equipment, cabling and instrumentation.
 - c) Lightning surge protection and electrical ground connection.
 - d) Unloading of components.
 - e) Placement in storage of all components.
 - f) All required equipment, labor, analysis, etc. for any on-site biological performance tests that may be required (regular support for operational tests is provided).
 - g) Supply and installation of electrical conduit and wiring for power supply and controls of UV system.
 - h) Any civil and/or mechanical work required to support or install the UV system or its associated controls. This includes concrete pads and/or Unistrut.
 - i) Power surge protection and lightning strike protection devices to be provided by contractor.
 - j) All transformers, circuit breakers and disconnect devices prior to the UV system enclosures are to be provided by electrical contractor.
 - k) Labor and installation of UV modules and electrical enclosures.
 - l) Contractor to supply stainless steel anchor bolts for component installation.

Glasco UV Warranty

The warranty period is 18 months from date of delivery or 12 months from date of the Certification of Substantial Completion whichever comes first. It covers all failures due to defects in material and/or workmanship excluding consumables (see separate lamp and ballast warranties below).

This warranty shall not apply to any failure or defect which results from the Equipment not being operated and maintained in strict accordance with instructions specified in Glasco UV's Instructions Manual or which results from mishandling, misuse, neglect, improper storage, improper operation of the Equipment with other equipment furnished by the Customer or by other third parties or from defects in designs or specifications furnished by or on behalf of the Customer by a person other than Glasco UV. In addition, this warranty shall not apply to Equipment that has been altered or repaired after start-up by any one except:

- Authorized representatives of Glasco UV, or
- Customer acting under specific instructions from Glasco UV.

Customer must notify Glasco UV in writing within 5 days of the date of any Equipment failure. This notification shall include a description of the problem, a copy of the operator's log, a copy of the Customer's maintenance record and any analytical results detailing the problem. If Customer has not maintained the operator's log and maintenance record in the manner directed in the Operation and Maintenance manual, or does not notify Glasco UV of the problem as specified above, this warranty may, in Glasco UV's discretion, be invalid.

Customer will fully cooperate with Glasco UV, in the manner requested by Glasco UV, in attempting to diagnose and resolve the problem by way of telephone support. If the problem can be diagnosed by telephone support and a replacement part is required, Glasco UV will either, at Glasco UV's expense, ship a repaired, reworked or new part to the Customer who will install such part as directed by Glasco UV or will direct Customer to acquire, at Glasco UV's expense, such part from a third party and then install such part as directed by Glasco UV.

This warranty is the exclusive remedy of the Customer for all claims based on a failure of or defect in the Equipment, whether the claim is based on contract (including fundamental breach), tort (including negligence), strict liability or otherwise. This warranty is lieu of all other warranties whether written, oral, implied or statutory. Without limitation, no warranty of merchantability or fitness for a particular purpose shall apply to the Equipment.

Lamp Warranty

Each low pressure, high output lamp is guaranteed for 13,000 hours operating time under normal operating conditions. Normal operating conditions include:

- On/off cycles max, 4 per 24 operating hours,
- Voltage fluctuations according to DIN IEC 38.

In case of premature lamp failure, the client is requested to send the lamp back to Glasco UV together with the information of UV unit serial number, hours run and on/off cycles. Glasco UV then offers the following:

- Lamp failure before 9,000 h: Glasco UV will send a replacement lamp free of charge,
- Lamp failure after 9,000 h: Glasco UV will issue a credit proportional to the hours not used.

Upon return to our facilities in Mahwah, NJ, we will dispose/recycle all used and failed lamps at no charge to the client.

Terms & Conditions

1. Applicable Terms. These terms govern the purchase and sale of the equipment and related services, if any (collectively, "Equipment"), referred to in Seller's purchase order, quotation, proposal or acknowledgment, as the case may be ("Seller's Documentation"). Whether these terms are included in an offer or an acceptance by Seller, such offer or acceptance is conditioned on Buyer's assent to these terms. Seller rejects all additional or different terms in any of Buyer's forms or documents.
2. Payment. Buyer shall pay Seller the full purchase price as set forth in Seller's Documentation. Unless Seller's Documentation provides otherwise, freight, storage, insurance and all taxes, duties or other governmental charges relating to the Equipment shall be paid by Buyer. If Seller is required to pay any such charges, Buyer shall immediately reimburse Seller. All payments are due within 30 days after receipt of invoice. Buyer shall be charged the lower of 1 1/2% interest per month or the maximum legal rate on all amounts not received by the due date and shall pay all of Seller's reasonable costs (including attorneys' fees) of collecting amounts due but unpaid. All orders are subject to credit approval.
3. Delivery. Delivery of the Equipment shall be in material compliance with the schedule in Seller's Documentation. Unless Seller's Documentation provides otherwise, Delivery terms are F.O.B. Seller's facility.
4. Ownership of Materials. All devices, designs (including drawings, plans and specifications), estimates, prices, notes, electronic data and other documents or information prepared or disclosed by Seller, and all related intellectual property rights, shall remain Seller's property. Seller grants Buyer a non-exclusive, non-transferable license to use any such material solely for Buyer's use of the Equipment. Buyer shall not disclose any such material to third parties without Seller's prior written consent.
5. Changes. Seller shall not implement any changes in the scope of work described in Seller's Documentation unless Buyer and Seller agree in writing to the details of the change and any resulting price, schedule or other contractual modifications. This includes any changes necessitated by a change in applicable law occurring after the effective date of any contract including these terms.
6. Warranty. Subject to the following sentence, Seller warrants to Buyer that the Equipment shall materially conform to the description in Seller's Documentation and shall be free from defects in material and workmanship. The foregoing warranty shall not apply to any Equipment that is specified or otherwise demanded by Buyer and is not manufactured or selected by Seller, as to which (i) Seller hereby assigns to Buyer, to the extent assignable, any warranties made to Seller and (ii) Seller shall have no other liability to Buyer under warranty, tort or any other legal theory. If Buyer gives Seller prompt written notice of breach of this warranty within 18 months from delivery or 1 year from acceptance, whichever occurs first (the "Warranty Period"), Seller shall, at its sole option and as Buyer's sole remedy, repair or replace the subject parts or refund the purchase price therefore. If Seller determines that any claimed breach is not, in fact, covered by this warranty, Buyer shall pay Seller its then customary charges for any repair or replacement made by Seller. Seller's warranty is conditioned on Buyer's (a) operating and maintaining the Equipment in accordance with Seller's instructions, (b) not making any unauthorized repairs or alterations, and (c) not being in default of any payment obligation to Seller. Seller's warranty does not cover damage caused by chemical action or abrasive material, misuse or improper installation (unless installed by Seller). THE WARRANTIES SET FORTH IN THIS SECTION ARE SELLER'S SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO SECTION 10 BELOW. SELLER MAKES NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.
7. Indemnity. Seller shall indemnify, defend and hold Buyer harmless from any claim, cause of action or liability incurred by Buyer as a result of third party claims for personal injury, death or damage to tangible property, to the extent caused by Seller's negligence. Seller shall have the sole authority to direct the defense of and settle any indemnified claim. Seller's indemnification is conditioned on Buyer (a) promptly, within the Warranty Period, notifying Seller of any claim, and (b) providing reasonable cooperation in the defense of any claim.
8. Force Majeure. Neither Seller nor Buyer shall have any liability for any breach (except for breach of payment obligations) caused by extreme weather or other act of God, strike or other labor shortage or disturbance, fire, accident, war or civil disturbance, delay of carriers, failure of normal sources of supply, act of government or any other cause beyond such party's reasonable control.
9. Cancellation. If Buyer cancels or suspends its order for any reason other than Seller's breach, Buyer shall promptly pay Seller for work performed prior to cancellation or suspension and any other direct costs incurred by Seller as a result of such cancellation or suspension.
10. LIMITATION OF LIABILITY. NOTWITHSTANDING ANYTHING ELSE TO THE CONTRARY, SELLER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER INDIRECT DAMAGES, AND SELLER'S TOTAL LIABILITY ARISING AT ANY TIME FROM THE SALE OR USE OF THE EQUIPMENT SHALL NOT EXCEED THE PURCHASE PRICE PAID FOR THE EQUIPMENT. THESE LIMITATIONS APPLY WHETHER THE LIABILITY IS BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.
11. Reservation Clause. Buyer acknowledges that Seller is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the Equipment provided under this Agreement, including any export license requirements. Buyer agrees that such Equipment shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by Seller of its obligations hereunder that compliance with such export laws and regulations be maintained at all times. BUYER AGREES TO INDEMNIFY AND HOLD SELLER HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.
12. Miscellaneous. If these terms are issued in connection with a government contract, they shall be deemed to include those federal acquisition regulations that are required by law to be included. These terms, together with any quotation, purchase order or acknowledgement issued or signed by the Seller, comprise the complete and exclusive statement of the agreement between the parties (the "Agreement") and supersede any terms contained in Buyer's documents, unless separately signed by Seller. No part of the Agreement may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the Agreement. If any of these terms is unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. Buyer may not assign or permit any other transfer of the Agreement without Seller's prior written consent. The Agreement shall be governed by the laws of the State of New Jersey without regard to its conflict of laws provisions.

Memo

To: Municipal Authority
From: Dave Ware
Re: MA October 2023 YTD Financial Report
Date: November 7, 2023

YTD October 2023, the Municipal Authority recorded \$613,704 in revenues (primarily from Sewer Operating transfers, Sewer Capital Reserve transfers, and tapping fees) and \$609,817 in expenses (Engineering Services, Audit Fees, Administrative Wages, Hershey's Mill Estates Sewer costs, Caustic Soda project costs, capital costs at the Ridley Creek Sanitary Treatment Plant, capital improvements to the Westtown Way Pump station and auditor and legal fees). The net result of operations is \$3,887. As of October 31, 2023, the fund balance was (\$35,485). This negative balance is a function of balance versus cash reporting. There is \$44,544 in invoices being held so the actual cash balance is \$9,058.

Attached is a complete list of 2023 full year MA revenues and expenses.

EAST GOSHEN TOWNSHIP
Municipal Authority Fund
October 2023

Account Id	Account Description	Annual Budget	Current YTD	Prior YTD
REVENUE				
07-341-1000	INTEREST EARNINGS	0.00	225.95	2.51
07-354-0400	DCED GRANT	152,980.00	0	0
07-364-1100	C.C. TAPPING FEES	2,300.00	0.00	2,300.00
07-364-1110	R.C.TAPPING FEES	2,000.00	5,478.40	1,493.52
07-364-1130	CONNECTION FEES - SEWER	1,000.00	563.76	563.76
07-380-1000	MISCELLANEOUS REVENUE	282.24	282.24	282.24
07-392-0500	TRANSFER FROM SEWER OPERATING	100,000.00	125,603.29	78,182.90
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	1,471,553.00	481,550.19	253,955.35
	Total Revenue	1,730,115.24	613,703.83	336,780.28
EXPENSES				
07-424-1400	ADMINISTRATIVE WAGES	32,055.45	29,687.04	25,116.15
07-424-3000	MISCELLANEOUS EXPENSE	1,748.79	1,759.25	1,665.25
07-424-3110	MUNIC.AUTH.-AUDITING	10,815.00	10,500.00	10,250.00
07-424-3130	ENGINEERING SERVICES	47,250.00	39,473.25	38,964.75
07-424-3140	LEGAL SERVICES	8,400.00	7,237.00	5,720.00
07-424-7440	R.C. CAPITAL-STP	355,793.00	0.00	0.00
07-424-7490	CAP.REPLACEMENT R.C.	488,847.00	76,373.76	0.00
07-426-3001	RELINING	260,000.00	0.00	0.00
07-429-1501	BARKWAY PUMP STATION CAPITAL	0.00	0.00	2,215.00
07-429-1502	ASHBRIDGE PUMP STATION CAPITAL	0.00	0.00	11,493.05
07-429-1503	HERSHEYS MILL PUMP STATION CAPITAL	78,000.00	10,240.62	148,365.67
07-429-1504	HUNT CO PUMP STATION CAPITAL	0.00	0.00	1,870.00
07-429-1505	RCSTP CAPITAL	260,000.00	148,262.38	97,955.95
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	0.00	48,116.63	0.00
07-429-1520	RCSTP - CAUSTIC SODA	0.00	55,905.12	0.00
07-429-6100	WEST GOSHEN CAPITAL	187,206.00	182,262.24	0.00
07-492-0100	TRANSFER TO GENERAL FUND	0.00	0.00	212.99
	Total Expenses	1,730,115.24	609,817.29	343,828.81
	Net Result From Operations	0.00	3,886.54	-7,048.53

Municipal Authority
YTD Revenues and Expenses thru 10/31/2023

Account Number	Account Description	Date	Type	Transaction Data/Comment	Amount
07-341-1000	INTEREST EARNINGS	01/31/23	Revenue Journal	INTEREST EARNED JAN 2023	2.65
07-341-1000	INTEREST EARNINGS	02/28/23	Revenue Journal	INTEREST EARNED FEBRUARY 2023	6.32
07-341-1000	INTEREST EARNINGS	03/31/23	Revenue Journal	INTEREST EARNED MARCH 2023	23.37
07-341-1000	INTEREST EARNINGS	04/30/23	Revenue Journal	INTEREST EARNED APRIL 2023	12.47
07-341-1000	INTEREST EARNINGS	05/31/23	Revenue Journal	INTEREST EARNED MAY 2023	32.83
07-341-1000	INTEREST EARNINGS	06/30/23	Revenue Journal	INTEREST EARNED JUNE 2023	67.17
07-341-1000	INTEREST EARNINGS	07/31/23	Revenue Journal	INTEREST EARNED JULY 2023	10.61
07-341-1000	INTEREST EARNINGS	08/31/23	Revenue Journal	INTEREST EARNED AUGUST 2023	9.11
07-341-1000	INTEREST EARNINGS	09/30/23	Revenue Journal	INTEREST EARNED SEPTEMBER 2023	29.99
07-341-1000	INTEREST EARNINGS	10/31/23	Revenue Journal	INTEREST EARNED SEPTEMBER 2023	31.43
07-364-1110	R.C.TAPPING FEES	01/01/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	02/01/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	03/01/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	04/03/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	05/01/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	06/01/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	06/28/23	Revenue Journal	TAP IN FEE 1712 E BOOT RD	297.84
07-364-1110	R.C.TAPPING FEES	06/28/23	Revenue Journal	SEWER INSPECTION FEE 1712 E BOOT RD	2,000.00
07-364-1110	R.C.TAPPING FEES	07/03/23	Revenue Journal	1577 COLONIAL LN	500.00
07-364-1110	R.C.TAPPING FEES	08/01/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	09/01/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1110	R.C.TAPPING FEES	10/02/23	Revenue Journal	1577 COLONIAL LN	297.84
07-364-1130	CONNECTION FEES - SEWER	01/27/23	Revenue Journal	CONNECTION FEE INSTALLMENT INV# 12838	297.84
07-364-1130	CONNECTION FEES - SEWER	03/23/23	Revenue Journal	CONNECTION FEE INSTALLMENT INV# 12839	281.88
07-380-1000	MISCELLANEOUS REVENUE	01/27/23	Revenue Journal	PINE ROCK INTEREST PORTION - STOFFLET	281.88
07-380-1000	MISCELLANEOUS REVENUE	03/23/23	Revenue Journal	PINE ROCK INTEREST PORTION - PAPPANO	141.12
07-392-0500	TRANSFER FROM SEWER OPERATING	01/20/23	Revenue Journal	XFER TO 07 FROM 05 RE: MA EXPENSES	141.12
07-392-0500	TRANSFER FROM SEWER OPERATING	01/30/23	Revenue Journal	XFER \$ TO MA07 FROM 05-SEWER	3,384.75
07-392-0500	TRANSFER FROM SEWER OPERATING	01/31/23	Revenue Journal	XFER \$ FROM 05 TO 07 RE: MA EXPENSES	14,572.43
07-392-0500	TRANSFER FROM SEWER OPERATING	02/17/23	Revenue Journal	XFER TO 07 FROM 05 RE: EXPENSES	3,000.00
07-392-0500	TRANSFER FROM SEWER OPERATING	02/23/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	36,455.37
07-392-0500	TRANSFER FROM SEWER OPERATING	03/22/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	2,877.00
07-392-0500	TRANSFER FROM SEWER OPERATING	03/23/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	715.00
07-392-0500	TRANSFER FROM SEWER OPERATING	03/24/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	880.25
07-392-0500	TRANSFER FROM SEWER OPERATING	03/29/23	Revenue Journal	XFER TO 07 FROM 05 RE: EXPENSES	6,738.25
07-392-0500	TRANSFER FROM SEWER OPERATING	03/31/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	8,000.00
07-392-0500	TRANSFER FROM SEWER OPERATING	04/17/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	8,944.84
07-392-0500	TRANSFER FROM SEWER OPERATING	05/10/23	Revenue Journal	FROM 05 SEWER OP TO 07 MA	4,992.75
07-392-0500	TRANSFER FROM SEWER OPERATING	05/10/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	707.00
07-392-0500	TRANSFER FROM SEWER OPERATING	05/10/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	5,627.50
07-392-0500	TRANSFER FROM SEWER OPERATING	06/08/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	1,253.25
07-392-0500	TRANSFER FROM SEWER OPERATING	06/30/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	10,398.41

Municipal Authority

YTD Revenues and Expenses thru 10/31/2023

Account Number	Account Description	Date	Type	Transaction Data/Comment	Amount
07-392-0500	TRANSFER FROM SEWER OPERATING	07/13/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	1,041.00
07-392-0500	TRANSFER FROM SEWER OPERATING	08/08/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	60.00
07-392-0500	TRANSFER FROM SEWER OPERATING	08/24/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	5,040.00
07-392-0500	TRANSFER FROM SEWER OPERATING	09/27/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	10,343.79
07-392-0500	TRANSFER FROM SEWER OPERATING	10/11/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	104.00
07-392-0500	TRANSFER FROM SEWER OPERATING	10/13/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	17,834.75
07-392-0500	TRANSFER FROM SEWER OPERATING	10/17/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	16,542.00
07-392-0500	TRANSFER FROM SEWER OPERATING	10/18/23	Revenue Journal	XFER FROM 05 SEWER OPERATING TO 07 MA	15,755.75
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	01/12/23	Revenue Journal	XFER \$ FROM 09 TO 07 TO COVER CAP.EXP.	41,381.95
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	01/20/23	Revenue Journal	XFER TO 07 FROM 09 RE: MA EXPENSES	11,730.76
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	01/30/23	Revenue Journal	XFER \$ TO MA07 FROM 09- SEWER CAP	5,221.00
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	02/10/23	Revenue Journal	FROM 09 SEWER CAP RESERVE TO 07 MA	115,362.26
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	02/23/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	8,690.50
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	03/01/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	20,201.84
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	03/09/23	Revenue Journal	XFER \$ TO 07 FROM 09	1,264.96
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	03/22/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	1,961.86
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	03/24/23	Revenue Journal	XFER TO 07 FROM 09 RE: EXPENSES	11,080.96
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	03/29/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	5,221.00
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	04/05/23	Revenue Journal	XFER FROM 09 SEWER OP TO 07 MA	1,041.75
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	04/21/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	977.06
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	04/25/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	4,801.50
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	04/26/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	252.28
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	04/28/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	688.81
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	05/04/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	5,069.52
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	05/10/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	1,953.58
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	05/19/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	66,899.98
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	06/08/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	56,078.05
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	06/13/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	450.18
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	06/20/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	888.22
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	07/03/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	6,746.00
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	07/11/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	209.00
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	07/13/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	824.50
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	08/08/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	22.12
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	08/24/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	5,626.50
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	08/31/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	18,930.40
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	09/07/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	17,500.00
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	09/22/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	3,137.72
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	10/13/23	Revenue Journal	XFER FROM 09 SEWER OPERATING TO 07 MA	5,028.13
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	10/18/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	11,234.25
07-392-0900	TRANSFER FROM SEWER CAP RESERVE	10/24/23	Revenue Journal	XFER FROM 09 SEWER CAP TO 07 MA	1,408.75
Total Revenue					613,703.83

Municipal Authority
YTD Revenues and Expenses thru 10/31/2023

Account Number	Account Description	Date	Type	Transaction Data/Comment	Amount
07-424-1400	ADMINISTRATIVE WAGES	03/31/23	Pay Check: 3402	23-00878 QTR 1 2023 MA CHARGE BACK	8,944.84
07-424-1400	ADMINISTRATIVE WAGES	06/30/23	Pay Check: 3431	23-01745 QTR 2 2023 MA CHARGE BACK	10,398.41
07-424-1400	ADMINISTRATIVE WAGES	09/29/23	Expd	QTR 3 2023 MA CHARGE BACK	10,343.79
07-424-3000	MISCELLANEOUS EXPENSE	03/22/23	Pay Check: 3395	23-00707 2023 ANNUAL DAILY DISCHARGE CA	715.00
07-424-3000	MISCELLANEOUS EXPENSE	03/23/23	Expd	REIMBURSE 01 FOR 07 CC EXPENSE	880.25
07-424-3000	MISCELLANEOUS EXPENSE	08/08/23	Expd	REIMBURSE 01 FOR 07 CC EXPENSE	60.00
07-424-3000	MISCELLANEOUS EXPENSE	10/11/23	Pay Check: 3442	23-02597 GEN, SEWER, MUN AUTH CHECKS	104.00
07-424-3110	MUNIC.AUTH.-AUDITING	02/15/23	Pay Check: 3389	23-00406 PROGRESS BILLING EGT MUA123122	1,793.00
07-424-3110	MUNIC.AUTH.-AUDITING	03/29/23	Pay Check: 3401	23-00870 PROGRESS BILLING AUD EGT MUA	8,000.00
07-424-3110	MUNIC.AUTH.-AUDITING	05/10/23	Pay Check: 3417	23-01270 PROGRESS BILLING AUDIT EGT MUA	707.00
07-424-3130	ENGINEERING SERVICES	01/20/23	Pay Check: 3379	23-00111 SERV THRU 12/18/22 GEN.SERV.22	3,384.75
07-424-3130	ENGINEERING SERVICES	02/23/23	Pay Check: 3392	23-00443 SERV THRU 011523 GEN SERVICES	2,294.00
07-424-3130	ENGINEERING SERVICES	03/24/23	Pay Check: 3399	23-00816 SERV THRU 021223 CHAPTER 94 RE	2,246.00
07-424-3130	ENGINEERING SERVICES	03/24/23	Pay Check: 3399	23-00815 SERV THRU 021223 GENERAL SERVI	3,482.75
07-424-3130	ENGINEERING SERVICES	04/17/23	Pay Check: 3406	23-01018 SERV THRU 031923 GENERAL SERVI	2,614.75
07-424-3130	ENGINEERING SERVICES	04/17/23	Pay Check: 3406	23-01019 SERV THRU 031923 CHAPTER 94 RE	1,654.50
07-424-3130	ENGINEERING SERVICES	05/10/23	Pay Check: 3420	23-01302 SERV THRU 041623 2023 GEN SERV	3,663.25
07-424-3130	ENGINEERING SERVICES	05/10/23	Pay Check: 3420	23-01303 SERV THRU 041623 2022 CHAPT 94	1,377.25
07-424-3130	ENGINEERING SERVICES	06/08/23	Pay Check: 3425	23-01576 SERV THRU 051423 2023 GEN SERV	1,253.25
07-424-3130	ENGINEERING SERVICES	07/13/23	Pay Check: 3435	23-01882 SERV THRU 061823 2023 GEN SERV	651.50
07-424-3130	ENGINEERING SERVICES	08/24/23	Pay Check: 3437	23-02177 SERV THRU 071623 2023 GEN SERV	2,900.00
07-424-3130	ENGINEERING SERVICES	10/18/23	Pay Check: 3447	23-02710 SERV THRU 091723 2023 GEN SERV	13,951.25
07-424-3140	LEGAL SERVICES	02/23/23	Pay Check: 3391	23-00442 LEGAL SERV. JAN 2023 GEN AUTH	583.00
07-424-3140	LEGAL SERVICES	03/24/23	Pay Check: 3398	23-00812 LEGAL SERV FEB 2023 GEN AUTHOR	389.50
07-424-3140	LEGAL SERVICES	03/24/23	Pay Check: 3398	23-00813 LEGAL SERV DEC 2022 GEN AUTHOR	620.00
07-424-3140	LEGAL SERVICES	04/17/23	Pay Check: 3405	23-01020 LEGAL SERV MARCH 2023 GEN AUTH	431.00
07-424-3140	LEGAL SERVICES	04/17/23	Pay Check: 3405	23-01017 LEGAL SERV FEB 2023 GEN AUTH	292.50
07-424-3140	LEGAL SERVICES	05/10/23	Pay Check: 3419	23-01304 LEGAL SERV APRIL 2023 GEN AUTH	587.00
07-424-3140	LEGAL SERVICES	07/13/23	Pay Check: 3434	23-01883 LEGAL SERV MAY 2023 GEN AUTH	389.50
07-424-3140	LEGAL SERVICES	08/24/23	Pay Check: 3436	23-02176 LEAL SERV JUNE 2023 GEN AUTH	348.50
07-424-3140	LEGAL SERVICES	08/24/23	Pay Check: 3436	23-02175 LEGAL SERV JULY 2023 GEN AUTH	1,791.50
07-424-3140	LEGAL SERVICES	10/18/23	Pay Check: 3446	23-02706 LEGAL SERV SEPT 2023 GEN AUTH	658.50
07-424-3140	LEGAL SERVICES	10/18/23	Pay Check: 3446	23-02705 LEGAL SERV AUG 2023 GEN AUTH	1,146.00
07-424-7490	CAP.REPLACEMENT R.C.	01/27/23	Pay Check: 3381	23-00148 WATER TIGHT CASTINGS & LIDS	6,904.64
07-424-7490	CAP.REPLACEMENT R.C.	02/06/23	Pay Check: 3386	23-00364 PALLET 200' 8" FILTER SOXX	430.00
07-424-7490	CAP.REPLACEMENT R.C.	02/15/23	Pay Check: 3387	23-00429 PVC PIPE, ADPTR, 2WAY CLEANOUT	1,708.22
07-424-7490	CAP.REPLACEMENT R.C.	02/15/23	Pay Check: 3387	23-00412 PVC FITTINGS,ADPTR,BEND, REDCR	17,817.91
07-424-7490	CAP.REPLACEMENT R.C.	02/15/23	Pay Check: 3387	23-00411 24" N12 HDPE PIPE	3,771.00
07-424-7490	CAP.REPLACEMENT R.C.	02/15/23	Pay Check: 3388	23-00381 1 % DISCOUNT	-65.65
07-424-7490	CAP.REPLACEMENT R.C.	02/15/23	Pay Check: 3388	23-00381 DIAMOND PLATE BLACK MATS	6,564.64

Municipal Authority
YTD Revenues and Expenses thru 10/31/2023

Account Number	Account Description	Date	Type	Transaction Data/Comment	Amount
07-424-7490	CAP. REPLACEMENT R.C.	02/15/23	Pay Check: 3390	23-00415 AASHTO#1 48.32TON #57 146.33TN	4,866.25
07-424-7490	CAP. REPLACEMENT R.C.	10/13/23	Pay Check: 3443	23-01990 RCSTP-REPLACEMENT MYERS PUMP	17,834.75
07-424-7490	CAP. REPLACEMENT R.C.	10/17/23	Pay Check: 3445	23-01869 10K0804 INLINE MUFFIN MONSTER	16,542.00
07-429-1503	HERSHEY'S MILL PUMP STATION CAPITAL	01/20/23	Pay Check: 3379	23-00110 SERV. THRU 12/18/22 HM EST SEWR	9,690.50
07-429-1503	HERSHEY'S MILL PUMP STATION CAPITAL	02/06/23	Pay Check: 3385	23-00331 STONE, AASHTO #57	550.12
07-429-1505	RCSTP CAPITAL	01/10/23	Pay Check: 3377	23-00030 CONDUITS, STRAPS, LOCKNUTS +	1,161.95
07-429-1505	RCSTP CAPITAL	01/10/23	Pay Check: 3378	23-00075 PULSAFEEDER - RCSPT CAUSTIC SO	40,220.00
07-429-1505	RCSTP CAPITAL	01/20/23	Pay Check: 3379	23-00109 SERV. THRU 12/18/22 RCSTP SODA	861.51
07-429-1505	RCSTP CAPITAL	01/20/23	Pay Check: 3379	23-00112 SERV. THRU 12/18/22 RCSTP UV	1,178.75
07-429-1505	RCSTP CAPITAL	01/27/23	Pay Check: 3380	23-00151 HELIFLOW 408 PD BLOWER	5,221.00
07-429-1505	RCSTP CAPITAL	02/06/23	Pay Check: 3384	23-00305 50HP 3540RPM BALDOR MOTOR	4,683.69
07-429-1505	RCSTP CAPITAL	03/24/23	Pay Check: 3399	23-00817 SERV THRU 021223 RCSTP CAU SOD	4,144.21
07-429-1505	RCSTP CAPITAL	03/29/23	Pay Check: 3400	23-00827 HELIFLOW 408 LHBD BLOWER	5,221.00
07-429-1505	RCSTP CAPITAL	06/08/23	Pay Check: 3422	23-01548 UV DISINFECTION SYS PYMT- 30%	40,495.80
07-429-1505	RCSTP CAPITAL	06/08/23	Pay Check: 3425	23-01575 SERV THRU 051423 RCSTP UV REPL	5,770.00
07-429-1505	RCSTP CAPITAL	06/08/23	Pay Check: 3425	23-01573 SERV THRU 051423 RCSTP CAU SOD	37.25
07-429-1505	RCSTP CAPITAL	07/13/23	Pay Check: 3435	23-01881 SERV THRU 061823 RCSTP CAU SOD	824.50
07-429-1505	RCSTP CAPITAL	08/24/23	Pay Check: 3437	23-02178 SERV THRU 060823 RCSTP UV REPL	5,626.50
07-429-1505	RCSTP CAPITAL	09/07/23	Pay Check: 3439	23-02333 PARTIAL PYMT RC GENERATOR SUPP	17,500.00
07-429-1505	RCSTP CAPITAL	09/22/23	Pay Check: 3440	23-02474 441T TWINTIER REBAR TYING TOOL	3,008.05
07-429-1505	RCSTP CAPITAL	09/22/23	Pay Check: 3440	23-02474 441T TWINTIER REBAR TYING TOOL	-30.08
07-429-1505	RCSTP CAPITAL	09/22/23	Pay Check: 3441	23-02452 ROD 1/2X20' UV PROJECT	159.75
07-429-1505	RCSTP CAPITAL	10/18/23	Pay Check: 3447	23-02709 SERV THRU 091723 RCSTP UV REPL	10,769.75
07-429-1505	RCSTP CAPITAL	10/24/23	Pay Check: 3448	23-02754 ADHESIVE DISPENSER& CARTRIDGES	1,408.75
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	02/21/23	Expd	RECLASS HERSH.MILL EST. PURCH.23-00153	2,642.00
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	02/21/23	Expd	RECLASS HERSH.MILL EST. PURCH.23-00152	5,025.79
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	02/23/23	Pay Check: 3392	23-00444 SERV THRU 011523 HM ESTATES SW	8,690.50
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	02/28/23	Pay Check: 3393	23-00536 STONE, AASHTO #57 329.79 TON	8,244.78
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	02/28/23	Pay Check: 3393	23-00534 STONE, AASHTO #57 251.05 TON	6,276.27
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	02/28/23	Pay Check: 3393	23-00535 STONE, AASHTO #57 227.23 TON	5,680.79
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	03/09/23	Pay Check: 3394	23-00582 SPLIT COUPLERS	305.40
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	03/09/23	Pay Check: 3394	23-00581 SEWER HUB ADAPTERS, COUPLERS +	959.56
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	03/22/23	Pay Check: 3396	23-00723 36" MARMAC POLYSEAL COUPLER	803.20
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	03/22/23	Pay Check: 3397	23-00731 JOHN DEERE 550K RENTL 2/28-3/1	434.50
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	03/22/23	Pay Check: 3397	23-00730 JOHNDEERE 550K RENTL 2/23-2/24	724.16
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	03/24/23	Pay Check: 3399	23-00814 SERV THRU 021223 HM ESTATES SE	6,936.75
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	04/25/23	Pay Check: 3410	23-01141 SINGLE SIDED STRAW MAT, PINS	1,407.00
07-429-1510	HERSHEY'S MILL ESTATES PROJECT	04/25/23	Pay Check: 3410	23-01141 SINGLE SIDED STRAW MAT, PINS	-14.07
07-429-1520	RCSTP - CAUSTIC SODA	04/05/23	Pay Check: 3403	23-00889 VARIOUS PURCHASES- SEE NOTES	215.75
07-429-1520	RCSTP - CAUSTIC SODA	04/05/23	Pay Check: 3404	23-00906 ROD 5/8 X 20 FT-CAUSTIC SODA	826.00
07-429-1520	RCSTP - CAUSTIC SODA	04/21/23	Pay Check: 3407	23-01081 3" TWISTER CORE BITS	441.00

Municipal Authority
YTD Revenues and Expenses thru 10/31/2023

Account Number	Account Description	Date	Type	Transaction Data/Comment	Amount
07-429-1520	RCSTP - CAUSTIC SODA	04/21/23	Pay Check: 3407	23-01081 3" TWISTER CORE BITS	-4.41
07-429-1520	RCSTP - CAUSTIC SODA	04/21/23	Pay Check: 3408	23-01056 GALV CAP, GFCI RCPT, GREY COVR	168.21
07-429-1520	RCSTP - CAUSTIC SODA	04/21/23	Pay Check: 3408	23-01057 GALV CAP, STEEL CLAMPBACK	372.26
07-429-1520	RCSTP - CAUSTIC SODA	04/25/23	Pay Check: 3409	23-01131 PVC CONDBY, DEV BOX, CTD CPLG	890.32
07-429-1520	RCSTP - CAUSTIC SODA	04/25/23	Pay Check: 3411	23-01112 (30) BUSS FUSES	2,160.00
07-429-1520	RCSTP - CAUSTIC SODA	04/25/23	Pay Check: 3411	23-01144 GALV BLCK CAP, COMPRESSION CPLG	286.08
07-429-1520	RCSTP - CAUSTIC SODA	04/25/23	Pay Check: 3411	23-01128 IRON THRD T BODY, SHEET STEE	72.17
07-429-1520	RCSTP - CAUSTIC SODA	04/26/23	Pay Check: 700	23-01151 CAUSTIC SODA-(2) HVY DUTY TARP	252.28
07-429-1520	RCSTP - CAUSTIC SODA	04/28/23	Pay Check: 3412	23-01177 BLINE SS CHANNEL SLOTTED HOLES	374.17
07-429-1520	RCSTP - CAUSTIC SODA	04/28/23	Pay Check: 3412	23-01176 EMT HW STRAP, MACH SCREW ANCHOR	233.47
07-429-1520	RCSTP - CAUSTIC SODA	04/28/23	Pay Check: 3412	23-01175 GALV RED CAP, COMM SWITCH,	81.17
07-429-1520	RCSTP - CAUSTIC SODA	05/03/23	Pay Check: 3413	23-01225 PVC BELL END PIPE, PVC COUPLING	2,574.00
07-429-1520	RCSTP - CAUSTIC SODA	05/03/23	Pay Check: 3414	23-01227 10 YD CONCRETE 4500 PSI	1,930.00
07-429-1520	RCSTP - CAUSTIC SODA	05/03/23	Pay Check: 3415	23-01219 (30) BLINE EMT-HW STRAP	83.82
07-429-1520	RCSTP - CAUSTIC SODA	05/03/23	Pay Check: 3415	23-01212 OUTLET BOX, SS SWITCH, HW STRAP	481.70
07-429-1520	RCSTP - CAUSTIC SODA	05/10/23	Pay Check: 3416	23-01276 SCH 40 2" PIPE, 2" COUPLING	1,030.64
07-429-1520	RCSTP - CAUSTIC SODA	05/10/23	Pay Check: 3416	23-01275 CORP BALL STOP, SERVICE SADDLE	905.59
07-429-1520	RCSTP - CAUSTIC SODA	05/10/23	Pay Check: 3418	23-01295 TAYMAC GRY METAL INUSE COVER	17.35
07-429-1520	RCSTP - CAUSTIC SODA	06/08/23	Pay Check: 3423	23-01553 RC WWTP CHEMICAL STORAGE TANK	6,415.00
07-429-1520	RCSTP - CAUSTIC SODA	06/08/23	Pay Check: 3424	23-01554 RIDLEY CREEK-RAN CONDUIT	2,008.00
07-429-1520	RCSTP - CAUSTIC SODA	06/08/23	Pay Check: 3424	23-01555 RIDLEY CR-RAN CONDUIT FOR TANK	1,352.00
07-429-1520	RCSTP - CAUSTIC SODA	06/13/23	Pay Check: 3428	23-01617 BALL CORP STOP, BRASS THRD NIPL	450.18
07-429-1520	RCSTP - CAUSTIC SODA	06/20/23	Pay Check: 3429	23-01658 BRASS THREADED NIPPLE&COUPLING	57.22
07-429-1520	RCSTP - CAUSTIC SODA	06/20/23	Pay Check: 3430	23-01654 PULSAFEEDER TUBING & KOPKIT	831.00
07-429-1520	RCSTP - CAUSTIC SODA	07/03/23	Pay Check: 3432	23-01739 RC WWTP CHEMICAL STORAGE TANK	6,746.00
07-429-1520	RCSTP - CAUSTIC SODA	07/11/23	Pay Check: 3433	23-01860 GATE & POST- BLAST PRIMER	209.00
07-429-1520	RCSTP - CAUSTIC SODA	08/08/23	Expd	REIMBURSE 01 FOR 07 CC EXPENSE	22.12
07-429-1520	RCSTP - CAUSTIC SODA	08/31/23	Pay Check: 3438	23-02291 RC PIPING FOR CAUSTICSODA TANK	18,930.40
07-429-1520	RCSTP - CAUSTIC SODA	10/13/23	Pay Check: 3444	23-02664 HEATED SAFETY EYEWASH/SHOWER	5,028.13
07-429-1520	RCSTP - CAUSTIC SODA	10/18/23	Pay Check: 3447	23-02707 SERV THRU 091723 RCSTP CAU SOD	464.50
07-429-6100	WEST GOSHEN CAPITAL	02/06/23	Pay Check: 3383	23-00366 WWPS PYMT LAST INSTALLMENT	115,362.26
07-429-6100	WEST GOSHEN CAPITAL	06/12/23	Pay Check: 3426	23-01363 2022 WG SEWER AUTH BOND FUND E	19,143.34
07-429-6100	WEST GOSHEN CAPITAL	06/12/23	Pay Check: 3427	23-01364 2022 WG SEWER AUTH TAPPING FEE	47,756.64
				Total Expense	609,817.29
				Net Operating	3,886.54



Christiana Executive Campus
121 Continental Drive, Suite 207
Newark, DE 19713
T: 302-655-4451
F: 302-654-2895

www.pennoni.com

November 7, 2023

EGMAU21004

Mark Miller, Director of Public Works
East Goshen Township
1580 Paoli Pike
West Chester, PA 19380

**Re: Change Order No. 2
Hershey's Mill Estates Sanitary Sewer Replacement, Contract No. HME-2022**

Dear Mr. Miller:

We have prepared Change Order No. 2 for the subject project. This change order formalizes as-built quantity changes for unit price bid items.

This change order increases quantities for 6", 24", and 36" HDPE storm sewer pipe installation and rock removal. Additionally, quantities for 8" gravity sewer pipe installation with 2A stone or imported soil backfill, 8" and 12" gravity sewer pipe installation with excavated soil backfill, 6" and 8" diameter sewer laterals, cleanout replacement, concrete curb replacement, miscellaneous excavation and backfill, and 15" HDPE storm sewer pipe installation have been reduced per the as-built measurements.

Change Order No. 2 reflects a net decrease in contract price of \$78,572.00; the resultant contract price is thereby \$665,668.00. We recommend approval of Change Order No. 2 as presented herein.

If you have any questions or need additional information, please call.

Sincerely,

PENNONI ASSOCIATES INC.

Michael J. Ellis, PE
Associate Vice President

Enclosures: Change Order No. 2

/ela

cc: Antonio Tavares, Joao & Bradley
Sheila Allman, Joao & Bradley
Dave Ware, Township Finance Director
Derek Davis, Township Manager

CONTRACT CHANGE ORDER

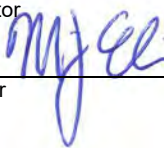
CONTRACT NO.:	HME-2022	DATE:	7-Nov-23
	<u>Hershey's Mill Estates Sanitary Sewer Replacement</u>	PROJECT NO.:	<u>EGMAU21004</u>
CHANGE ORDER NO.:	<u>2</u>	LOCATION:	<u>East Goshen Township</u>
TO: (Contractor)	<u>Joao & Bradley Construction Co., Inc.</u>		<u>Chester County, Pennsylvania</u>

You are hereby requested to comply with the following changes from the contract plans and specifications.

ITEM NO. (1)	DESCRIPTION OF CHANGES-QUANTITIES,UNITS,UNIT PRICES,CHANGES IN COMPLETION SCHEDULE, ETC. (2)	DECREASE IN CONTRACT PRICE (3)	INCREASE IN CONTRACT PRICE (4)
1	<p>The following Bid Item estimated quantities are increased:</p> <p>16. 24" HDPE Storm Sewer Pipe is increased to 58 LF</p> <p>17. 36" HDPE Storm Sewer Pipe is increased to 27 LF</p> <p>21. Rock Removal is increased to 54.71 CY</p> <p>A6. 6" HDPE Storm Sewer Pipe is increased to 120 LF</p>		<p>\$3,105.00</p> <p>\$280.00</p> <p>\$5,942.00</p> <p>\$540.00</p>
2	<p>The following Bid Item estimated quantities are decreased:</p> <p>7. 8" C900, DR-18 Gravity Sewer Pipe with 2A Stone or Imported Soil Backfill is decreased to 174.75 LF</p> <p>8. 8" C900, DR-18 Gravity Sewer Pipe with Excavated Soil Backfill is decreased to 1,836.75 LF</p> <p>9. 12" C900, DR-18 Gravity Sewer Pipe with Excavated Soil Backfill is decreased to 168 LF</p> <p>10. 6" and 8" C900, DR-18 Lateral is decreased to 111 LF</p> <p>11. Replace Cleanouts is decreased to 8 EA</p> <p>19. Replace Concrete Curb is decreased to 0 LF</p> <p>20. Miscellaneous Excavation and Backfill is decreased to 142.79 CY</p> <p>A3. 8" C900, DR-18 Gravity Sewer Pipe with Excavated Soil Backfill is decreased to 99 LF</p> <p>A4. 8" C900, DR-18 Gravity Sewer Pipe with Excavated Soil Backfill is decreased to 108 LF</p> <p>A8. 15" HDPE Storm Sewer Pipe is decreased to 0 LF</p>	<p>(\$37,563.75)</p> <p>(\$10,125.00)</p> <p>(\$5,600.00)</p> <p>(\$8,340.00)</p> <p>(\$5,700.00)</p> <p>(\$3,600.00)</p> <p>(\$8,930.25)</p> <p>(\$3,300.00)</p> <p>(\$3,780.00)</p> <p>(\$1,500.00)</p>	
	CHANGE IN CONTRACT PRICE DUE TO THIS CHANGE ORDER		
	TOTAL DECREASE	(\$88,439.00)	
	TOTAL INCREASE		\$9,867.00
	NET (INCREASE/DECREASE) CONTRACT PRICE (DIFFERENCE BETWEEN COL. (3) AND (4))	(\$78,572.00)	

The sum of **\$78,572.00** is hereby deducted from the total contract price, and the total adjusted contract price to date is thereby **\$665,688.00**.

This document shall become an amendment to the contract and all provisions of the contract will apply hereto.

Accepted by:	<u>AJT</u>	<u>11-7-2023</u>	
	Contractor	Date	
Recommended by:		<u>11/7/2023</u>	
	Engineer	Date	
Approved by:	_____	_____	
	Owner	Date	



Christiana Executive Campus
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www.pennoni.com

November 8, 2023

EGMAU21004

Mark Miller, Director of Public Works
East Goshen Township
1580 Paoli Pike
West Chester, PA 19380

**RE: Payment Application #3 Recommendation Letter
Hershey's Mill Estates Sanitary Sewer Replacement, Contract No. HME-2022**

Dear Mr. Miller:

The Contractor, Joao & Bradley Construction Co., Inc., has submitted the third and final invoice for work completed for the subject project. We have observed the work-in-progress, including sanitary sewer pipe installation, manhole installation, bypass pumping, storm sewer headwall installation, and storm sewer pipe installation, and we confirm that the described work has been completed.

The Contractor still needs to provide the closeout documents, including the Maintenance Bond, Statement of Surety, and the Contractor's Release.

We have reviewed the attached Payment Application #3 provided by the Contractor, and we recommend approval in the amount of \$111,778.15, conditioned that payment not be made until the closeout documents are provided. Overall, the contract is 100% complete.

The certified payrolls for the entire project are also attached.

If you have any questions, please contact me at your convenience.

Sincerely,

PENNONI ASSOCIATES INC.

Michael J. Ellis, PE
Associate Vice President

/ela

Enclosures: Application and Certification for Payment #3
Project Quantities Summary Report
Certified Payrolls

cc: Antonio Tavares, Joao & Bradley
Sheila Allman, Joao & Bradley
Dave Ware, Township Finance Director
Derek Davis, Township Manager

APPLICATION AND CERTIFICATE FOR PAYMENT

AIA DOCUMENT G702

TO (Owner):

East Goshen Municipal Authority

PROJECT:

Hershey's Mill Estates Sanitary Sewer Replacement

APPLICATION NO:

3 - FINAL

Distribution to:

ATTENTION:

Michael J. Ellis, PE

CONTRACTOR:

Joao & Bradley Construction Co., Inc.

PERIOD FROM:

01-Sep-23

PERIOD TO:

12-Sep-23

ENGINEER'S PROJECT NO:

HME-2022

☒ OWNER

☒ ENGINEER

☒ CONTRACTOR

CONTRACT DATE:

CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY				ADDITIONS	DEDUCTIONS
Change Orders approved in previous months by Owner				\$ 5,000.00	
TOTAL				\$ 5,000.00	
Approved this Month					
		Number	Date Approved		
2			07-Nov-23		
TOTALS				\$ 5,000.00	\$ (78,572.00)
Net change by Change Orders					

The undersigned Contractor certifies that to the best of his knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by him for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payments shown herein is now due.

CONTRACTOR:

Joao & Bradley Construction Company, Inc.

State of: PENNSYLVANIA

County of: NORTHAMPTON

By:

AJT


Date:

11-07-2023

Subscribed and sworn to before me this

7TH DAY OF NOVEMBER 2023

Notary Public:



My Commission expires:

Commonwealth of Pennsylvania - Notary Seal
Carlos Lameira, Notary Public
Northampton County
My commission expires November 30, 2026
Commission number 1229327
Member, Pennsylvania Association of Notaries

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Engineer certifies to the Owner that the Work has progressed to the point indicated; that to the best of his knowledge, information and belief the quality of the work is in accordance with the Contract Documents; and that the Contractor is entitled to payment of the AMOUNT CERTIFIED.

The present status of the account for this Contract is as follows:

ORIGINAL CONTRACT SUM	\$	739,260.00
Net change by Change Orders	\$	-73,572.00
CONTRACT SUM TO DATE	\$	665,688.00
TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$	665,688.00
RETAINAGE	\$	0.00
TOTAL EARNED LESS RETAINAGE	\$	665,688.00
LESS PREVIOUS CERTIFICATES FOR PAYMENT	\$	553,909.85
CURRENT PAYMENT DUE	\$	111,778.15

AMOUNT CERTIFIED

(Attach explanation if amount certified differs from the amount applied for.)

ENGINEER:



By:

Date:

11/8/2023

This certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

PROJECT OWNER : EAST GOSHEN MUNICIPAL AUTHORITY
PROJECT : HERSHEY'S MILL ESTATES SANITARY SEWER REPLACEMENT
CONTRACTOR : JOAO & BRADLEY CONSTRUCTION CO., INC.

INVOICE NO. : 3 - FINAL
DATE SUBMITTED : 07-Nov-23
PERIOD ENDING : 12-Sep-23
COMPLETION : 27-Apr-23

WORK COMPLETED : 100.00%
TOTAL DAYS ALLOWED : 100
DAYS USED : 238
NOTICE TO PROCEED : 17-Jan-23

ITEM NO.	ITEM DESCRIPTION	BID QUANTITY		BID UNIT PRICE	BID AMOUNT	PRIOR ESTIMATES		INCREASE THIS PERIOD		TOTALS TO DATE	
		QTY.	UNIT			QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOB & DEMOB	1	LS	20,000.00	20,000.00	0.75	15,000.00	0.25	5,000.00	1.00	20,000.00
2	TREE REMOVAL & SITE PREP	1	LS	30,000.00	30,000.00	1.00	30,000.00	0.00	0.00	1.00	30,000.00
3	E&S	1	LS	65,000.00	65,000.00	0.75	48,750.00	0.25	16,250.00	1.00	65,000.00
4	DEWATERING	1	LS	10,000.00	10,000.00	0.75	7,500.00	0.25	2,500.00	1.00	10,000.00
5	NEW MANHOLE	5	EA	5,500.00	27,500.00	4.25	23,375.00	0.75	4,125.00	5.00	27,500.00
6	REPLACE EXISTING MANHOLE	3	EA	5,700.00	17,100.00	2.25	12,825.00	0.75	4,275.00	3.00	17,100.00
7	8" C900 - 2A BACKFILL/IMPORT SOIL	453	LF	135.00	61,155.00	174.75	23,591.25	0.00	0.00	174.75	23,591.25
8	8" C900 - SUITABLE BACKFILL	1,938	LF	100.00	193,800.00	1,836.75	183,675.00	0.00	0.00	1,836.75	183,675.00
9	12" C900 - SUITABLE BACKFILL	224	LF	100.00	22,400.00	168.00	16,800.00	0.00	0.00	168.00	16,800.00
10	6" and 8" C900 - LATERALS	250	LF	60.00	15,000.00	111.00	6,660.00	0.00	0.00	111.00	6,660.00
11	REPLACE CLEANOUTS	11	EA	1,900.00	20,900.00	6.50	12,350.00	1.50	2,850.00	8.00	15,200.00
12	COFFERDAM	1	LS	5,500.00	5,500.00	1.00	5,500.00	0.00	0.00	1.00	5,500.00
13	BYPASS PUMPING	1	LS	10,000.00	10,000.00	0.75	7,500.00	0.25	2,500.00	1.00	10,000.00
14	CONNECT TO EXIST MANHOLE	10	EA	500.00	5,000.00	3.00	1,500.00	0.00	0.00	3.00	1,500.00
15	RIP RAP	50	TN	150.00	7,500.00	50.00	7,500.00	0.00	0.00	50.00	7,500.00
16	24" HDPE STORM SEWER	35	LF	135.00	4,725.00	58.00	7,830.00	0.00	0.00	58.00	7,830.00
17	36" HDPE STORM SEWER	25	LF	140.00	3,500.00	27.00	3,780.00	0.00	0.00	27.00	3,780.00
18	SITE RESTORATION	1	LS	70,000.00	70,000.00	0.50	35,000.00	0.50	35,000.00	1.00	70,000.00
19	REPLACE CONCRETE	120	LF	30.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
20	MISC EXCAV	500	CY	25.00	12,500.00	142.79	3,569.75	0.00	0.00	142.79	3,569.75
21	ROCK REMOVAL	25	CY	200.00	5,000.00	54.71	10,942.00	0.00	0.00	54.71	10,942.00
22	ABANDON/REMOVE EXIST MANHOLE	1	EA	25,000.00	25,000.00	1.00	25,000.00	0.00	0.00	1.00	25,000.00
23	STORM SWR HEADWALL	1	LS	17,000.00	17,000.00	1.00	17,000.00	0.00	0.00	1.00	17,000.00
24	TRENCH PLUG	5	EA	800.00	4,000.00	5.00	4,000.00	0.00	0.00	5.00	4,000.00
A1	MANHOLE	6	EA	5,500.00	33,000.00	4.50	24,750.00	1.50	8,250.00	6.00	33,000.00
A2	DROP MANHOLE - MH R078	1	EA	7,500.00	7,500.00	0.75	5,625.00	0.25	1,875.00	1.00	7,500.00
A3	8" C900: MH R075 - MH R076	132	LF	100.00	13,200.00	99.00	9,900.00	0.00	0.00	99.00	9,900.00
A4	8" C900: MH R079 - MH R080	144	LF	105.00	15,120.00	108.00	11,340.00	0.00	0.00	108.00	11,340.00
A5	DEDUCT: CONNECT TO EXIST MH	7	EA	-500.00	-3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
A6	6" HDPE STORM SWR PIPE	114	LF	90.00	10,260.00	120.00	10,800.00	0.00	0.00	120.00	10,800.00
A7	24" HDPE WRIPRAP APRON	40	LF	150.00	6,000.00	40.00	6,000.00	0.00	0.00	40.00	6,000.00
A8	15" HDPE STORM SWR PIPE	10	LF	150.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
CO #1	CHANGE ORDER #1 - HEADWALL INSTALL.	1	LS	5,000.00	5,000.00	1.00	5,000.00	0.00	0.00	1.00	5,000.00
CO #2	CHANGE ORDER #2 - ADJUSTING CHANGE ORDER	1	LS	-78,572.00	-78,572.00	0.00	0.00	0.00	0.00	0.00	0.00

TOTAL CONTRACT AMOUNT :

\$665,688.00

\$665,688.00

\$583,063.00

\$82,625.00

\$665,688.00

TOTAL AMOUNT DUE	\$82,625.00	\$665,688.00
RETAINAGE	0%	\$0.00
TOTAL LESS RETAINAGE	\$82,625.00	\$665,688.00
RELEASED RETAINAGE	\$29,153.15	
LESS PREVIOUS PAYMENTS		\$553,909.85
TOTAL AMOUNT PAYABLE	\$111,778.15	\$111,778.15

Memorandum

East Goshen Township
1580 Paoli Pike
West Chester, PA 19380
Voice: 610-692-7171
Fax: 610-692-8950
E-mail: dbrady@eastgoshen.org

Planning Commission Plan Review Request

Date: October 20, 2023
To: Mark Miller
From: Duane J. Brady Sr., Township Zoning Officer
Re: 301 Reservoir Road/Timbermill Conditional Use Application
Preliminary/Final SD Plan. (Conditional Use Application).

Dear Municipal Authority,

The Township staff has received a CU application for 301 Reservoir Road. The proposal is to subdivide the property into five (5) lots. The SD will be a use permitted by right under 240-9 R-2 low Density Residential District B (1). The application has been reviewed for completeness and was accepted by Township Staff on October 12, 2023. **The Conditional Use is for Article VI Historic Preservation.**

Zoning Information:

- ❖ The property is in the R-2 Low Density Residential District.
- ❖ Single-family detached dwellings are a use permitted by right.
- ❖ The minimum lot area is one (1) acre.
- ❖ The front yard is minimum 45 feet / average 60 feet, the side yard is 20 feet, and the rear yard is 50 feet.
- ❖ The minimum building height is 30 feet (3 stories).
- ❖ Total impervious cover is 35%.
- ❖ Total building cover is 25%.
- ❖ The zoning also notes that design and landscaping controls in 240-27D shall apply to residential development in this district.
- ❖ Lot four (4) will be a flagpole lot and may require a Zoning Hearing Board variance.

Background Information and timeline:

- ❖ Existing single-family residential lot on 6.8 acres with multiple structures
- ❖ Existing structures on the property are the main single-family dwelling, a second smaller single-family dwelling, and a barn.
- ❖ The property is listed on the Township Historic Resource Inventory for the Barn and House.

- ❖ The proposed plan is to create 5 building lots with three new building lots, and two existing lots, one for the barn and one for the house and second dwelling. The second dwelling will be changed to an approved accessory building.
- ❖ The proposal is to do a straightforward zoning by-right planning process.

Please complete your review and provide comments to the Zoning Officer by November 20, 2023.

I have attached a copy of the plans and the Sewage Facilities Planning Module Application Mailer for Sewer.

Thank you,

Duane J. Brady Sr.

Duane J. Brady Sr.

East Goshen Township

Zoning Officer



**TIMBERMILL
(301 RESERVOIR ROAD)**

**SEWAGE FACILITIES PLANNING MODULE
APPLICATION MAILER FOR SEWER**

SEPTEMBER 25, 2023

**EAST GOSHEN TOWNSHIP
CHESTER COUNTY, PA**

JOB No. 202040



COMMONWEALTH ENGINEERS, INC.

114 EAST LANCASTER AVENUE, 2nd FLOOR, DOWNINGTOWN, PA 19335
PHONE: (610) 518-9003 ~ FAX: (610) 518-9004 ~ COMENG@CEI-1.COM

SEWAGE FACILITY PLANNING MODULE
APPLICATION MAILER

1. Development Information

Name of Development Timbermill
 Developer Name Timbermill, LLC
 Address Attn: Michael Zappitelli
PO Box 1843, West Chester, PA 19380
 Telephone # 610 416 6499
 Email Build@mazconstruction.com

2. Location of Development

a. County Chester County
 b. Municipality East Goshen Township
 c. Address or Coordinates 301 Reservoir Road
West Chester, PA 19380
 d. Tax Parcel # 5304P 0129 0000
 e. USGS Quad Name West Chester
 inches up 12 over 7
 from bottom right corner of map.
 f. Located in a High Quality/Exceptional Value watershed?
☐ Yes ☒ No

3. Type of Development Proposed (check appropriate box)

☒ Residential ☐ Multi-Residential
 Describe Subdivide tract into 5 lots. One to contain the existing single-family dwelling to be renovated. The existing house utilizes public water & sewer (1 EDU). One lot to contain the existing barn, which may be relocated or converted to a single-family dwelling, and three additional lots, each to contain a single-family dwelling.
☐ Commercial ☐ Institutional
 Describe _____

☐ Brownfield Site Redevelopment

☐ Other (specify) _____

4. Size

a. # of lots 5 # of EDUs 4 New, 1 Existing
 b. # of lots since 5/15/72 1
 c. Development Acreage 4.0 +/- acres
 d. Remaining Acreage 2.8 +/- acres

5. Sewage Flows 1,055 gpd (5 edu's x 211 gpd) 211 Existing gpd
844 Proposed gpd

6. Proposed Sewage Disposal Method (check applicable boxes)

a. ☐ Sewerage System
☒ Existing (connection only) ☐ New (extension)
☒ Public ☐ Private
☐ Pump Station(s)/Force Main ☐ Gravity
 Name of existing system being extended
East Goshen Municipal Authority
 Interceptor Name West Goshen Municipal Authority
 Treatment Facility Name West Goshen Sewage Treatment Plant

NPDES Permit # PA 0028584

b. ☐ Construction of Treatment Facility
☐ With Stream Discharge
☐ With Land Application (not including IRSIS)
☐ Other
☐ Repair?
 Name of waterbody where point of discharge is proposed
 (if stream discharge)

- c. ☐ Onlot Sewage Disposal Systems
 (check appropriate box)
☐ Individual onlot system(s) (including IRSIS)
☐ Community onlot system
☐ Large-Volume onlot system
 d. ☐ Retaining tanks

Number of Holding Tanks _____

Number of Privies _____

7. ☐ Request Sewage Facilities Planning Module forms in electronic format

8. Request for Planning Exemption

- a. Protection of rare, endangered or threatened species

Check one:

- ☒ The "PNDI Project Environmental Review Receipt" is attached, or
☐ A completed "PNDI Project Planning & Environmental Review Form," (PNDI Form) is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning exemption will be considered incomplete and that the DEP processing of my planning exemption request will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials _____

- b. ☒ Plot Plan Attached ☐ Site Reports Attached

c. Onlot Disposal Systems

- (1) I certify that the Official Plan shows this area as an onlot service area.

 (Signature of Municipal Official) Date

 Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone # _____

- (2) I certify that each lot in this subdivision has been tested and is suitable for both a primary and replacement sewage disposal system.

 Signature of SEO Date

 Name (Print) Certification #

Telephone # _____

- (3) I certify that each lot in this subdivision is at least 1 acre in size

 (Signature of Project Applicant/Agent) Date

d. Public Sewerage Service (i.e., ownership by municipality or authority)

Based upon written documentation, I certify that the facilities proposed for use have capacity and that no overload exists or is projected within 5 years. (Attach documents.)

 (Signature of Municipal Official) Date

 Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone # _____

PROJECT NARRATIVE

Project Narrative for Timbermill, LLC
Sewage Facilities Planning Module Application Mailer

September 21, 2023

BACKGROUND

Client Name:	Timbermill, LLC
Project Name:	Timbermill
Parcel No.	5304P 0129 0000
Nature of Development:	Residential
Address/Location:	301 Reservoir Road, West Chester, PA 19380
Township/County:	East Goshen Township, Chester County
Acreage:	6.8 +/- acres
Current Sewer/Water Service:	Public Sewer and Water Service
Proposed Sewer/Water Service:	Public Sewer and Water Service
Site Drains to:	East Branch of Chester Creek, a watershed designated as a route Stocked Fishery & Migratory (TSF; MF)

Timbermill, LLC plans to subdivide the tract into five (5) lots. Proposed Lot 3 would contain the existing single-family dwelling and several outbuildings, to be renovated. Lot 2 would contain the existing barn, which may be renovated into a single-family dwelling. Proposed Lots 1, 4 and 5 and would each contain one (1) single-family dwelling. An access drive with associated access driveways as well as stormwater management infrastructure are also proposed.

EXISTING CONDITIONS

Other than the existing barn, single-family home, yards and outbuildings, the remainder of the tract is open fields with some trees.

SEWAGE FACILITY PLANNING

The existing single-family dwelling currently utilizes public sewer and public water (one (1) existing edu). Connection to public water and sewer is proposed for Lot 2 (the converted barn), as well as the additional three lots, for a total of 1,055 gallons per day (five (5) edu's at 211 gpd/edu) one of which is existing.

The proposed lots would utilize gravity to tie-in to existing Chester Creek Manhole No. C037 on Reservoir Road, to East Goshen Municipal Authority, which connects to the West Goshen Municipal Authority and eventually discharging to the West Goshen Sewage Treatment Plan.

We respectfully request an exemption from submission of a Sewage Facilities Planning Module for this project.

SEWER AVAILABILITY LETTER

From: Mark Miller <mmiller@eastgoshen.org>
Sent: Saturday, January 21, 2023 9:33 AM
To: Stacy Turner <STurner@cei-1.com>
Cc: Duane Brady <dbrady@eastgoshen.org>
Subject: Re: 301 Reservoir Road (202040)

Stacey

I spoke with Mike Moffa who is the Superintendent of the West Goshen Municipal Authority yesterday, regarding your request for sewage capacity for 301 Reservoir Rd. He did not see a problem with granting capacity.

Mark

Mark S. Miller
Director of Public Works
East Goshen Township
(610) 692-7171 x3402
mmiller@eastgoshen.org



COMMONWEALTH ENGINEERS, INC.

114 East Lancaster Avenue ~ Second Floor ~ Downingtown, PA 19335
Telephone: (610) 518-9003 ~ Fax: (610) 518-9004 ~ comeng@cei-1.com

December 8, 2022

Mr. Mark S. Miller
Director of Public Works
East Goshen Township Municipal Authority
1580 Paoli Pike
West Chester, PA 19380

Email: mmiller@eastgoshen.org
Telephone: 610 692 7171

Re: Sewer Availability Letter

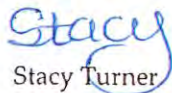
Dear Mr. Miller,

Commonwealth Engineers, Inc., hereby requests a standard *Sewer Availability Letter* for the below detailed project:

Applicant:	Planebrook Partners, LLC
Project Name:	301 Reservoir Road
Project Location:	301 Reservoir Road, West Chester
Tax Parcel No. :	5304P 0129 0000)
Township:	East Goshen Township
Project Description:	Proposed subdivision of this 6.8 +/- acre parcel into 5 lots. One lot would contain the existing single-family dwelling and outbuildings (currently utilizing public water and on-site septic), which shall remain. Connection to public sewer for the existing house is proposed. The existing barn will be converted to a single-family dwelling and the remaining 3 proposed lots will each contain 1 single-family dwelling. We are requesting an additional 1,055 gpd (5 EDU's at 211 gpd/EDU)

I've also attached a site plan for ease of reference. Please call if you have any questions or require additional information.

Sincerely,


Stacy Turner

Attachment: Sketch Plan dated November 9, 2022

cc: Michael Ellis, P.E., Municipal Division Manager, Pennoni Associates, Inc.,
121 Continental Drive, Suite 207, Newark, DE 19713 (via email: MELLIS@Pnnoni.com)

G:\ACTIVE JOBS\2020\202040 Planebrook (301 Reservoir Rd-Papa)\01 Administrative Files\03 Sewer & Water\202040 Sewer Will Serve Request 2022-12-08.doc

PROFESSIONAL CIVIL ENGINEERING

WATER AVAILABILITY LETTER



February 6, 2023

Stacy Turner
Office Manager
Commonwealth Engineers, Inc.
114 East Lancaster Avenue, 2nd Floor
Downingtown, PA 19335

Re: Water Availability
301 Reservoir Road
East Goshen, Chester County

Dear Ms. Turner:

This letter will serve as confirmation that the above referenced property is situated within Aqua Pennsylvania Inc.'s ("Aqua") service territory. Service will be provided in accordance with Aqua's Rules and Regulations.

This proposed development will require a main extension for service to be available. The required main extension will originate from Aqua's existing 8-inch main in Reservoir Road. A main extension plan, utilizing Aqua plan standards, must be prepared, and submitted to this office for review and approval. Following approval of the main extension design and plan, construction of the main extension project would be completed by the Builder under our standard Builder's Extension Agreement.

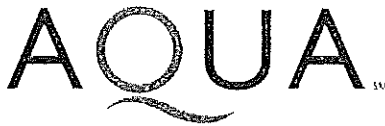
Flow data information may be obtained from our Production Department. You may email a request to SEPAflowrequest@aquaamerica.com. Your request must include the address, street, cross street and municipality and all pertinent contact information.

This letter is valid for one year from the date first written above. If I can be of further assistance, you may contact me at (610) 645-1025 or Mike Linkiewicz at 610-645-4230.

Sincerely,

A handwritten signature in cursive script that reads "Maureen E. Marrone".

Maureen E Marrone
New Business Admin



September 13, 2023

Mike Zappitelli
MAZ Construction

VIA EMAIL

Re: Water Availability
301 Reservoir Road
East Goshen, Chester County

Dear Mike:

This letter will serve as confirmation that the above referenced property is situated within Aqua Pennsylvania Inc.'s ("Aqua") service territory. Service will be provided in accordance with Aqua's Rules and Regulations.

This proposed development will require a main extension for service to be available. The required main extension will originate from Aqua's existing 8-inch main in Reservoir Road. A main extension plan, utilizing Aqua plan standards, must be prepared, and submitted to this office for review and approval. Following approval of the main extension design and plan, construction of the main extension project would be completed by the Builder under our standard Builder's Extension Agreement.

Flow data information may be obtained from our Production Department. You may email a request to SEPAflowrequest@aquaamerica.com. Your request must include the address, street, cross street and municipality and all pertinent contact information.

This letter is valid for one year from the date first written above. If I can be of further assistance, you may contact me at (610) 645-1025 or Mike Linkiewicz at 610-645-4230.

Sincerely,

Maureen E Marrone
New Business Admin



COMMONWEALTH ENGINEERS, INC.

114 East Lancaster Avenue ~ Second Floor ~ Downingtown, PA 19335
Telephone: (610) 518-9003 ~ Fax: (610) 518-9004 ~ comeng@cei-1.com

December 8, 2022

Ms. Deanna L. Ciotti
New Business Coordinator
Aqua Pennsylvania, Inc.
700 West Sproul Road
Springfield, PA 19064

Email: DLCiotti@aquaamerica.com
Phone: 610 541 4160 x54160

Re: Water Availability Request

Dear Ms. Ciotti

Commonwealth Engineers, Inc., hereby requests a standard *Water Availability Letter* for the below detailed project.

Project Name: 301 Reservoir Road

Project Location: 301 Reservoir Road, West Chester

Parcel No. 5304P 0129 0000, East Goshen Township,

Project Description: Proposed subdivision of this 6.8 +/- acre parcel into 5 lots. One lot would contain the existing single-family dwelling and outbuildings (currently utilizing public water), which shall remain. The existing barn will be converted to a single-family dwelling and the remaining 3 proposed lots will each contain 1 single-family dwelling. We are requesting an additional 844 gpd (4 EDU's at 211 gpd/EDU)

A site plan is attached for ease of reference. Please don't hesitate to contact me if you have any questions or require additional information .

Sincerely,


Stacy Turner

Attachment: Sketch Plan dated 11/9/22

G:\ACTIVE JOBS\2020\202040 Planebrook (301 Reservoir Rd-Papa)\01 Administrative Files\03 Sewer & Water\202040 Water Avail Letter 2022-12-08.doc

PROFESSIONAL CIVIL ENGINEERING

PA DEPARTMENT OF CONSERVATION & NATURAL RESOURCES

PNDI SEARCH ID: PNDI-774474

BOG TURTLE PHASE II REPORT DATED JULY 10, 2023

CLEARANCE PENDING

1. PROJECT INFORMATION

Project Name: **202040-301 Reservoir Road**

Date of Review: **6/21/2023 06:23:33 AM**

Project Category: **Development, Residential, Subdivision containing more than 2 lots and/or 2 single-family units**

Project Area: **7.22 acres**

County(s): **Chester**

Township/Municipality(s): **EAST GOSHEN TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **WEST CHESTER**

Watersheds HUC 8: **Lower Delaware**

Watersheds HUC 12: **East Branch Chester Creek**

Decimal Degrees: **39.974883, -75.548696**

Degrees Minutes Seconds: **39° 58' 29.5776" N, 75° 32' 55.3052" W**



2. SEARCH RESULTS

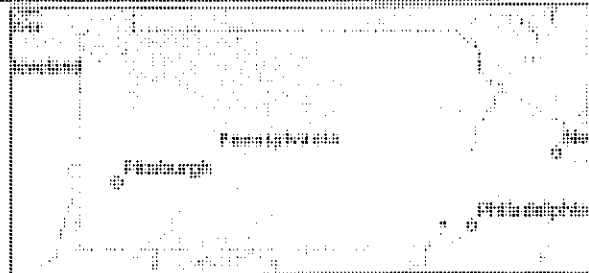
Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
U.S. Fish and Wildlife Service	Potential Impact	MORE INFORMATION REQUIRED, See Agency Response

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

202040-301 Reservoir Road

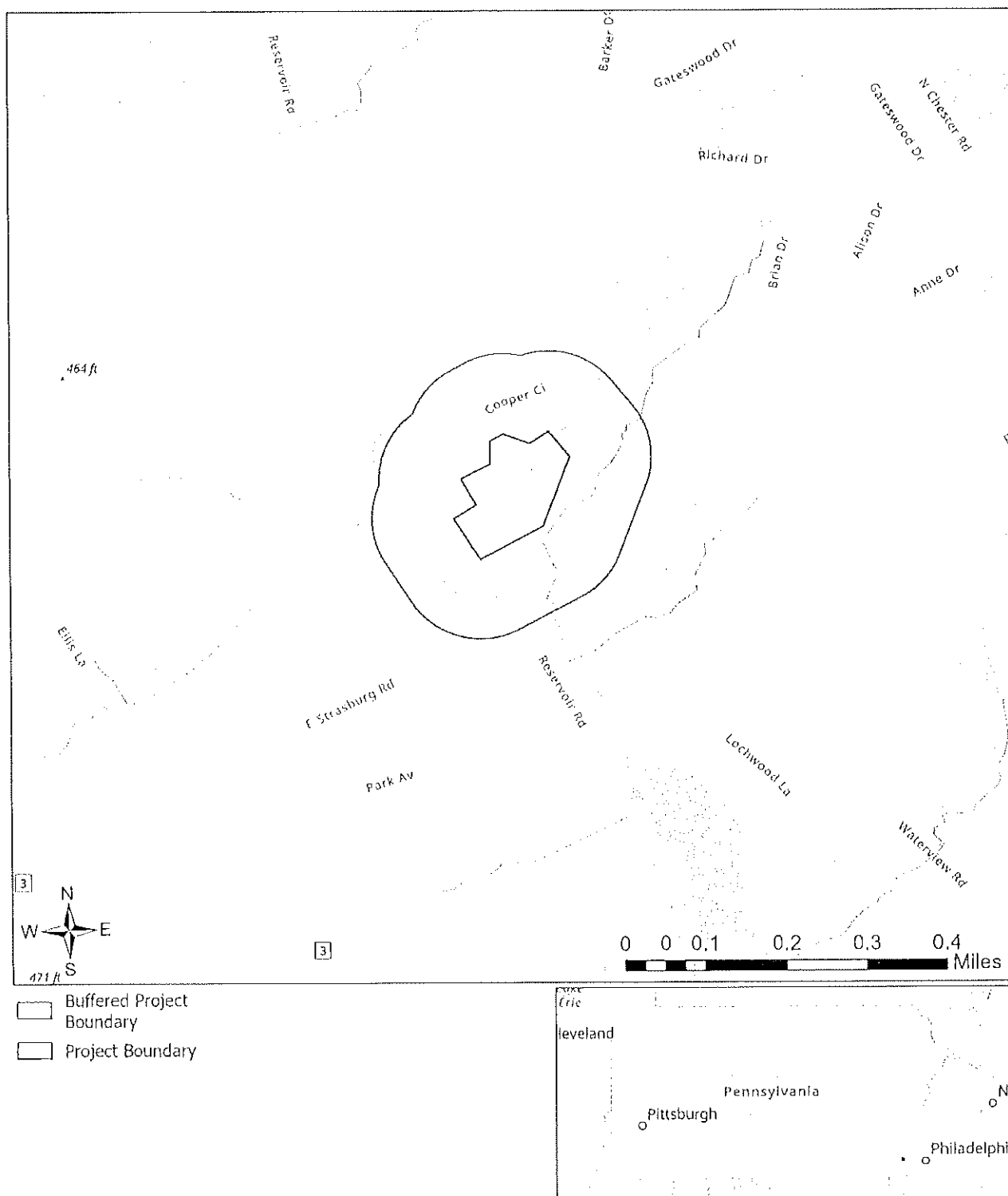


-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodataslyrolson, Rijkswaterstaat, GSA, Goeland, FEMA, Inlormap and the GIS user community

202040-301 Reservoir Road



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

RESPONSE TO QUESTION(S) ASKED

Q1: Which of the following closest describes the proposed project?

Your answer is: The proposed project will be connected to, and entirely serviced by, an existing, off-site water delivery and supply line (e.g., operated by a municipality or water company).

Q2: Describe how wastewater (effluent) will be handled (select one). For the purpose of this question, wastewater/effluent does not include stormwater runoff. If the project involves solely the renewal or modification of an existing discharge permit (e.g., NPDES permit), select from options 3, 4, 5, or 6 below.

Your answer is: All wastewater/effluent from this project/activity will be routed to an existing municipal wastewater treatment plant.

Q3: Accurately describe what is known about wetland presence in the project area or on the land parcel. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands (holding a natural resource degree or equivalent work experience) has investigated the site, and determined that wetlands ARE located in or within 300 feet of the project area. (A written report from the wetland specialist, and detailed project maps should document this.)

Q4: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands (holding a natural resource degree or equivalent work experience) has investigated the site, and determined that wetlands ARE located in or within 300 feet of the project area. (A written report from the wetland specialist, and detailed project maps should document this.)

Q5: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: No forests, woodlots or trees will be affected by the project.

Q6: Aquatic habitat (stream, river, lake, pond, etc.) is located on or adjacent to the subject property and project activities (including discharge) may occur within 300 feet of these habitats?

Your answer is: Yes

Q7: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Sensitive Species**		Threatened

U.S. Fish and Wildlife Service

RESPONSE:

Information Request: Conduct a Bog Turtle Habitat (Phase 1) Survey in accordance with USFWS Guidelines for Bog Turtle Surveys (April 2020). Evaluate all wetlands within 300 feet of the project area, which includes all areas that will be impacted by earth disturbance or project features (e.g., roads, structures, utility lines, lawns, detention basins, staging areas, etc.). IF THE PHASE 1 SURVEY IS DONE BY A QUALIFIED BOG TURTLE SURVEYOR (see [Pennsylvania Qualified Surveyors | FWS.gov](#)): 1) Send positive results to USFWS for concurrence, along with a project description documenting how impacts will be avoided. OR, conduct a Phase 2 survey and send Phase 1 and 2 results to USFWS for concurrence. 2) Send a courtesy copy of negative results to USFWS (label as "Negative Phase 1 Survey Results by Qualified Bog Turtle Surveyor: USFWS Courtesy Copy"). USFWS approval of negative results is not necessary when a qualified surveyor does the survey in full accordance with USFWS guidelines. IF THE PHASE 1 SURVEY IS NOT DONE BY A QUALIFIED SURVEYOR: Send ALL Phase 1 results to USFWS for concurrence, and if potential habitat is found, also send a project description documenting how impacts will be avoided.

As a qualified bog turtle surveyor, I _____ (name) certify that I conducted a Phase 1 survey of all wetlands in and within 300 feet of the project area on _____ (date) and determined that bog turtle habitat is absent.

_____ (Signature)

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).

*If information was requested by USFWS, applicants must email, or mail, project information to IR1_ESPenn@fws.gov to initiate a review. USFWS will not accept uploaded project materials.

Check-list of Minimum Materials to be submitted:

____ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

____ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

____ SIGNED copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

____ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

____ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Fish and Boat Commission
Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Stacy Turner
Company/Business Name: Commonwealth Engineers, Inc.
Address: 114 East Lancaster Avenue, 2nd Floor
City, State, Zip: Downingtown, PA 19335
Phone: (610) 518 9003 Fax: (n/a)
Email: sturner@cei-1.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Stacy Turner
applicant/project proponent signature

June 21, 2023
date

HA File # PA23.29
PNDI # 774474

USFWS Review Requested

**Bog Turtle (*Glyptemys muhlenbergii*) Phase II Presence/Probable
Absence Survey**

**301 Reservoir Road Project,
East Goshen Township, Chester County, Pennsylvania**



Submitted July 10, 2023

to

Wolf BioServices, Inc.
8 Red Maple Drive
Downingtown, PA 19335

by

Michael E. Torocco, Quillyn Bickley and Robert T. Zappalorti

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Plant and Wildlife Consultants
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TABLE OF CONTENTS

Introduction	1
Materials and Methods	1
Project and Site Information	5
Wetland Information	5
Results	7
Summary and Conclusions	9
Bog Turtle Life History	10
Literature Cited	12
Appendix A: PNDI Receipt	13
Appendix B: Existing Conditions Plan with Photograph Locations	21
Appendix C. Wetland Photographs	23

LIST OF TABLES

Table 1. Wetland Size and Location	5
Table 2. Summary of Phase II Survey Results	8
Table 3. List of Reptiles and Amphibians Observed	8

LIST OF FIGURES

Figure 1. USGS topographic map showing the approximate location of the project area	2
Figure 2. Satellite imagery showing the approximate location of the project area	3
Figure 3. Aerial orthophoto map showing the Designated Survey Area	6
Figure 4. An adult bog turtle from Chester County, Pennsylvania	10
Figure 5. A yearling bog turtle from Monroe County, Pennsylvania	11

INTRODUCTION

Herpetological Associates, Inc. (HA) was contracted by Wolf BioServices, Inc. to conduct a Bog Turtle (*Glyptemys muhlenbergii*) Phase II Presence/Probable Absence Survey for the 301 Reservoir Road Project. A search of the Pennsylvania Natural Diversity Inventory (PNDI) database resulted in a finding of "Potential Impact" to federally-protected species under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) for this project (PNDI# 774474; **Appendix A**). In response, a Phase I habitat assessment was performed by Wes Wolf of Wolf BioServices, which revealed the presence of potential bog turtle habitat within the project area. In order to obtain a PNDI clearance, HA was contracted to perform the Phase II survey. This report presents the findings of the Phase II survey, which is required to be submitted to USFWS for review and concurrence.

MATERIALS AND METHODS

LOCATION OF THE STUDY SITE

The approximately 7.2-acre project area (as represented on the PNDI) is located in East Goshen Township, Chester County, Pennsylvania (39.974883, -75.548696). The project area can be found on the West Chester U.S. Geological Survey (USGS) 7.5 minute quadrangle (**Figures 1 and 2**).

SURVEYORS

Phase II surveys were performed by Michael Torocco and Quillyn Bickley (both Pennsylvania Qualified Bog Turtle Surveyors [QBTS]).

PHASE II PRESENCE/PROBABLE ABSENCE SURVEY METHODS

Systematic searches for bog turtles were performed by a team of experienced herpetologists, qualified to conduct bog turtle surveys. This consisted of walking through a wetland and carefully looking for basking turtles. Searches were also conducted in shallow, muddy water; atop or amid sedge and grass hummocks; and in or on dead/decaying plant debris. Probing sticks were used to move vegetation aside and to probe into soft mud in search of hidden turtles. Additionally, shallow water and the muddy substrate was searched by muddling, or feeling around in the mud by hand (USFWS, 2020a).

Phase II survey methods follow the USFWS *Guidelines for Bog Turtle Surveys for the Northern Population Range: Phase 1 and 2 Surveys* (USFWS, 2020a). The specific methods are as follow:

1. Phase II surveys must be performed during the period from April 15 to June 15. This coincides with the period of greatest annual turtle activity (spring emergence and breeding), and is before the period when vegetation gets too dense to accurately survey. While turtles may be found outside of these dates, a result of no turtles would be considered inconclusive. Surveys beyond June also have a higher likelihood of disruption/destruction of nests or newly hatched young.
2. Ambient air temperature, at the surface and in the shade, must be at least 55° F.
3. Surveys must be performed during the day, at least one hour after sunrise and no later than one hour before sunset.

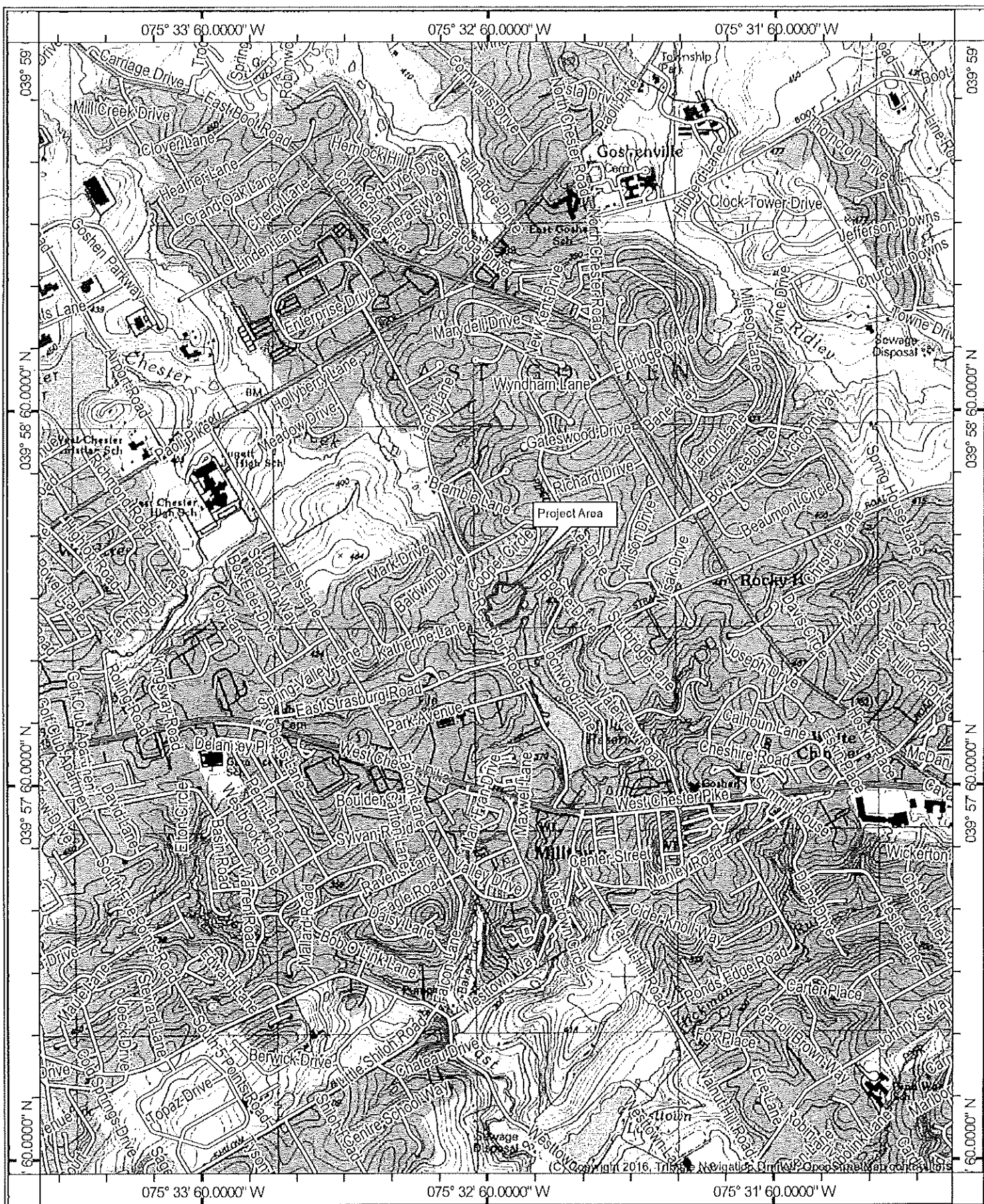


Figure 1. USGS topographic map showing the approximate location of the project area.



SCALE 1:24000

Figure 1. USGS topographic map showing the approximate location of the project area.

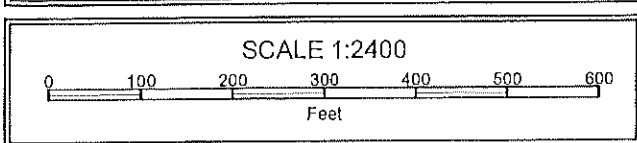
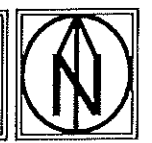


Figure 2. Aerial orthophoto map showing the approximate location of the project area.



4. Surveys may be performed when it is sunny or cloudy. In addition, surveys may be conducted during and after light to moderate rain, provided air temperature is greater than 65° F.
5. Surveys are generally performed by two - four people. Michael Toroceo and Quillyn Bickley are USFWS recognized qualified bog turtle surveyors; at least one of these individuals must be present during all surveys. All HA staff have previous experience with and have participated in surveys for bog turtles. The same surveyors must be used for each wetland to maintain a consistent survey effort and increase survey efficiency.
6. A *minimum* of four (4) surveys per wetland site must be performed to adequately assess the site for presence of bog turtles. At least two of these surveys must be performed in May. From mid-April to April 30, surveys must be separated by six or more days. From May 1 to mid-June, surveys must be separated by three or more days. The shorter period between surveys during May and June ensures that surveys are carried out during the optimum window of time (i.e., before wetland vegetation becomes too thick and while temperatures are optimal). It should be noted that bog turtles are more likely to be encountered by spreading the surveys out over a longer period. For example, erroneous survey results could be obtained if surveys were conducted on three successive days in late April due to possible late spring emergence, or during periods of extreme weather because turtles may be buried in mud and difficult to find. If turtles are found, the site does not need to be revisited.
7. Survey time must be 4-6 person-hours per acre of wetland per site visit unless a bog turtle is found before this time has elapsed.

DESIGNATED SURVEY AREA

The Designated Survey Area (DSA) for the Phase II survey is produced by delineating wetland areas that contain the most suitable, potential bog turtle habitat. The primary site characteristics that are considered include the presence/depth of mucky soil, and presence of spring-fed hydrology. These areas are defined by a Recognized Qualified Bog Turtle Surveyor.

PROJECT AND SITE INFORMATION

PROJECT / PROPERTY NAME: 301 Reservoir Road Project

PROJECT DESCRIPTION: The site is proposed for a 5-lot subdivision, with the existing house to remain (**Appendix B1**).

CURRENT LAND USE AND SETTING: The site is located within the Piedmont Upland Section of the Piedmont Physiographic Province, which is characterized by broad, rounded to flat-topped hills and shallow valleys. Local relief is low to moderate, ranging from 101 to 600 feet, while elevation of the Section ranges from 100 to 1,220 feet. Elevation of the site is approximately 400 to 540 feet.

The site is currently developed with an unoccupied single-family residence, barn, and a smaller detached residence. The remainder of the property includes undeveloped land that includes meadow, scrub and forested areas. Off site and to the north bordering the property are houses on small lots that line Cooper Circle. Undeveloped land owned by East Goshen Township borders the property to the east and south. The surrounding landscape is characterized as residential, with single-family housing dominating.

WATERSHED: The investigated wetlands are associated with an unnamed tributary to East Branch Chester Creek, which is within the East Branch Chester Creek HUC 12 subwatershed (HUC Code: 020402020603) and the Lower Delaware HUC 8 subbasin.

STREAM/WETLAND IMPACTS: There will be no direct impacts to streams or wetlands.

AREA INVESTIGATED: Since the Phase I survey was not performed by HIA, two delineated wetland areas (identified as Wetlands A and B) were examined to determine the extent of potential habitat. Two areas, corresponding to Wetlands A and B, were found to contain marginal quality bog turtle habitat. The Phase II survey focused on these area of potential habitat, which are identified as the Designated Survey Areas (DSA A = 0.10 acre; DSA B = 0.16 acre) in **Figure 3**.

WETLAND INFORMATION

The on-site wetland delineation was performed on February 20, 2023 by Wolf BioServices, Inc. Determination of the presence of wetlands was based on procedures prescribed in the U.S. Army Corps of Engineers (USACE) *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, Version 2.0* (USACE 2012).

Table 1. Wetland Size and Location

Wetland Area ID	Wetland Size* (acres)	Latitude (°N)	Longitude (°W)	Entire Wetland within Project Area?
A	0.08	39.974288	75.548260	No
B	0.4	39.974616	75.547763	No

*Delineated, on-site area only



Legend

- Designated Survey Area
- Project Area
- Parcel Data
- Local Roads



Figure 3. Location of the Designated Survey Area for Phase II surveys is indicated.

Herpetological Associates, Inc.

RESULTS

WETLAND DESCRIPTIONS

Wetland A: Wetland A is a 0.08-acre (within project area) Palustrine Emergent (PEM) wetland, which is located along the southern property boundary. The wetland extends off site, to the southeast. The wetland is bordered to the east by forested and shrub upland, and to the west by a meadow.

The source of hydrology to Wetland A is a spring house, positioned just within the property boundary. Flow is to the southeast via a linear ditch, which drains to an unnamed tributary to East Branch Chester Creek. Shallow, standing water is present throughout the ditched portion of the wetland, though flow was generally slow and intermittent. A prolonged period of low rainfall in the spring likely contributed to the low flow. The wetland corridor is narrow, with the wetted channel base approximately two feet wide, though a wider area is present at the northern end of the wetland (15 feet wide). The substrate is mucky within the northern portion of the linear ditched area, up to 12 inches deep, but the majority of the wetland can be probed to three inches or less. Dominant vegetation includes cattail (*Typha latifolia*), sensitive fern (*Onoclea sensibilis*), watercress (*Nasturtium* sp.) and jewelweed (*Impatiens capensis*).

Wetland B: Wetland B is a 0.40-acre (within project area) PEM wetland, located in the southern portion of the property. The wetland extends offsite to the east. The wetland is bordered to the south by an unnamed tributary, to the west by a dilapidated reinforcement wall, to the north by undeveloped scrub upland; and to the east by another large section of impoundment wall.

Several spring seepage areas are present along the northwestern wetland boundary at the toe of a shallow slope. Overall hydrology drains south through the wetland via shallow rivulets (1 inch), but puddles (<0.5 inches) are also scattered in the wetland. Substrate is organic, saturated and can be probed beyond three inches; primarily in the northern portion of the wetland, where maximum substrate depth reaches six inches. Dominant plants in the wetland include common reed (*Phragmites australis*), skunk cabbage (*Symplocarpus foetidus*), rice cutgrass (*Leersia oryzoides*) and other grasses.

PHASE II PRESENCE/PROBABLE ABSENCE SURVEY RESULTS

The Phase II bog turtle surveys were conducted on April 19, May 12, May 18, and May 28, 2023. A Designated Survey Area of 0.10 acre and 0.16 acre for was used for the search effort calculations, which equates to a combined minimum requirement of 4.16 person-hours of search effort for the study (1.04 person-hours per day) at a rate of 4 person-hours per acre. However, due to the secondary USFWS requirement of a minimum of 1 hour search time per day for small wetlands (4 hours total) regardless of the number of surveyors, a total of 4 hours was planned for this project. Actual search time was 5 hours spread over 4 days, or a total of 10 person-hours of search effort. No bog turtles or evidence of their presence (e.g. shells, tracks) were observed. A summary of the Phase II site visits is presented in Tables 2 and 3.

Table 2. Summary of Phase II Bog Turtle Survey Results

Date	Time	Surveyors	Search Time (Hrs)	Total Person-Hours	Weather			# Bog Turtles Found
					Variable*	In	Out	
4-19-23	1430-1545	M. Torocco Q. Bickley	1.25	2.5	AmbT (°F)	60	66	0
					RH (%)	39	29	
					Cloud (%)	0	0	
					Wind (mph)	0-15	5-15	
5-12-23	1230-1345	M. Torocco Q. Bickley	1.25	2.5	AmbT (°F)	83	82	0
					RH (%)	33	30	
					Cloud (%)	0	0	
					Wind (mph)	0-3	0-3	
5-18-23	1450-1610	M. Torocco Q. Bickley	1.25	2.5	AmbT (°F)	66	66	0
					RH (%)	34	32	
					Cloud (%)	0	0	
					Wind (mph)	0-5	0-5	
5-28-23	1050-1205	M. Torocco Q. Bickley	1.25	2.5	AmbT (°F)	68	70	0
					RH (%)	36	34	
					Cloud (%)	80	90	
					Wind (mph)	0-3	0-10	

*Amb T = Ambient Temperature, RH = Relative Humidity, Cloud = Cloud Cover, Wind = Wind Speed

REPTILES AND AMPHIBIANS OBSERVED

No bog turtles were observed, but a few common species of reptiles and amphibians were found in low abundance within Wetland 1 and are presented in Table 3.

Table 3. List of Reptiles and Amphibians Observed

Common Name	Scientific Name	Number Observed
Reptiles		
N. Water Snake	<i>Nerodia sipedon</i>	1
E. Garter Snake	<i>Thamnophis sirtalis</i>	1
Snapping Turtle	<i>Chelydra serpentina</i>	5
Painted Turtle	<i>Chrysemys picta</i>	1
Amphibians		
N. Spring Peeper	<i>Pseudacris crucifer</i>	1 calling
Pickrel Frog	<i>Lithobates palustris</i>	1
Green Frog	<i>Lithobates clamitans</i>	25+

SUMMARY AND CONCLUSIONS

IIA was contracted by Wolf BioServices, Inc. to conduct a Bog Turtle (*Glyptemys muhlenbergii*) Phase II Presence/Probable Absence Survey for the 301 Reservoir Road Project, located in East Goshen Township, Chester County, Pennsylvania. The project PNDI indicated a potential impact to federally protected species under the jurisdiction of the USFWS (PNDI# 774474).

A Phase I habitat assessment was performed by Wes Wolf of Wolf BioServices at two delineated wetlands within the project property. Potential bog turtle habitat was identified, and HA was contacted to perform the Phase II survey. HA observed marginal quality habitat in both Wetland A and B, and delineated two separate Designated Survey Areas for Phase II surveys. DSA A is 0.01 acre and corresponds to Wetland A, and DSA B is 0.16 acre and corresponds to Wetland B. Phase II surveys were conducted on April 19, May 12, May 18, and May 28, 2023. Surveys were conducted within the guidelines specified by USFWS. No bog turtles or evidence of their presence were found within the investigated areas. Based on the results of the surveys, bog turtles are not expected to be impacted as a result of this project.

BOG TURTLE LIFE HISTORY

Description

The bog turtle is classified taxonomically into the class *Reptilia*, order *Testudines*, suborder *Thecophora*, family *Emydidae*, genus *Glyptemys* [*Clemmys*], and species *muhlenbergii* (Schoepff 1792; Figures 4-5). Conant and Collins (1991) describe this turtle as small, attaining an average carapace length of 7.5-9 centimeters (3-3.5 inches), with a maximum recorded length of 11.4 centimeters (4.5 inches). The carapace is moderately domed, rather long, and slightly keeled. The scutes are often fairly deeply incised by the concentric rings of the laminae, although in older animals the shell is often worn smooth through years of burrowing in mud. In specimens which do not have

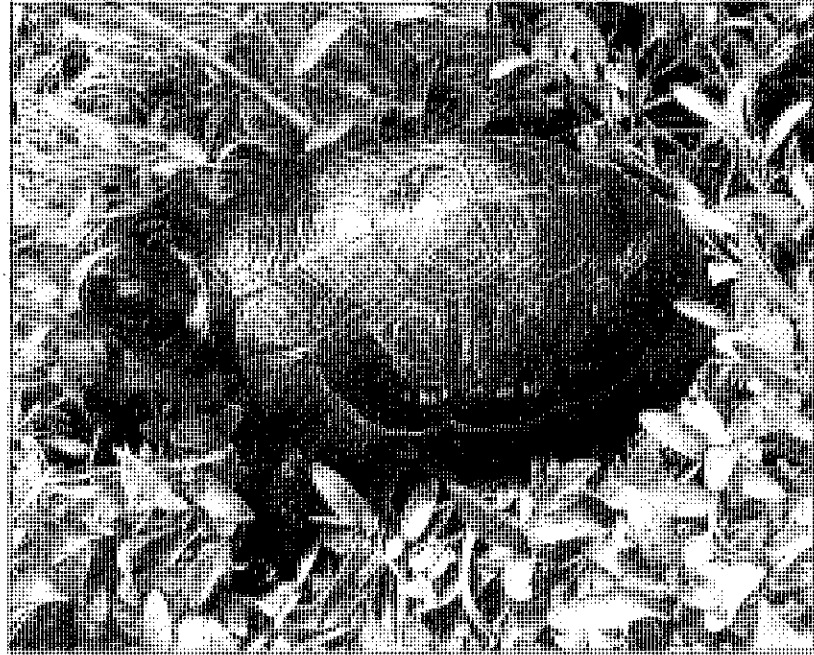


Figure 4. A bog turtle from Chester County, PA.

iron oxide or other deposits on the shell, a light "sun-burst" pattern can be seen on each scute of an otherwise brown shell. The plastron is large, and dark brown or black in color with light markings either irregularly or symmetrically arranged. The limbs are typically brown with orange or reddish beneath, and there is a conspicuous orange head blotch behind the tympanum.

Status

Pennsylvania Status - Endangered

Federal Status - Threatened

Range

Disjunct populations exist throughout the range of the bog turtle, occurring in 4 distinct areas (Conant and Collins, 1991). These separate populations occur in central New York; western Pennsylvania; eastern New York south to southern New Jersey and west to central Pennsylvania; and southern Virginia, south through western North Carolina, into extreme northern Georgia.

Habitat and Life History

Although rarely found far from water, the bog turtle is not a strong swimmer and may drown quickly if forced to stay in deep water; generally bog turtles are found wallowing in soft mud or swimming in shallow (several inches) streams and puddles. This turtle is omnivorous, and may feed on a variety of insects, earthworms, slugs, or berries. Loss of habitat through the direct destruction of wetlands, fragmentation of range as a result of long-term geologic factors (Carr, 1952), and

vegetative succession by wetland trees and invasive plants have all greatly impacted bog turtle populations.

Bog turtles generally do not move large distances and have relatively small home ranges. Not unlike other turtle species, males appear to have a larger home range than females (Lovich et al., 1992). In Pennsylvania, Ernst (1977) reports mean home range for males as 1.33 ha, and 1.26



Figure 5. A yearling bog turtle from Monroe County, PA.

ha for females. Chase, et al. (1989) is in agreement, but differences in mean home range between both sexes are larger and statistically significant for thread trailed specimens in Maryland: $\bar{x} = 0.176$ ha for males, $\bar{x} = 0.066$ ha for females. Distance traveled between locations of radiotracked bog turtles in North Carolina ranged 0-87 m ($\bar{x} = 24.3$ m) for males and 0-62 m ($\bar{x} = 15.8$ m) for females (Lovich, et al., 1992); rates of movements (distance/day) were also significantly larger for males. Movements and home range dimensions of bog turtles may be governed by the size of suitable habitat available to them.

Unlike most other chelonians, *G. muhlenbergii* do not travel to dry upland areas or the shore or beach of a pond to deposit their eggs. Instead, they select suitable slightly elevated nesting sites within their semi-aquatic marshy habitat (Zappalorti et al., 2015). Probably because of the constant saturated soil conditions in such environments, eggs are not buried in deep nest chambers. Instead, they are deposited in a shallow depression on the surface of raised grassy tussocks and are slightly covered with available humus and vegetation (Ernst et al., 1994). The elevated base of tussock-forming grasses and sedges is the preferred nesting site, but nests have also been found on moss covered stumps and *Sphagnum* clumps. Nesting areas typically have limited canopy closure, support low vegetation and provide ample solar exposure. The possibly unique nesting habits of *G. muhlenbergii* is believed to reduce high predation usually associated with upland egg-laying (Kiviat, 1978). In most chelonians and generally other K-selected vertebrates, the period of greatest vulnerability is during the early stages of life.

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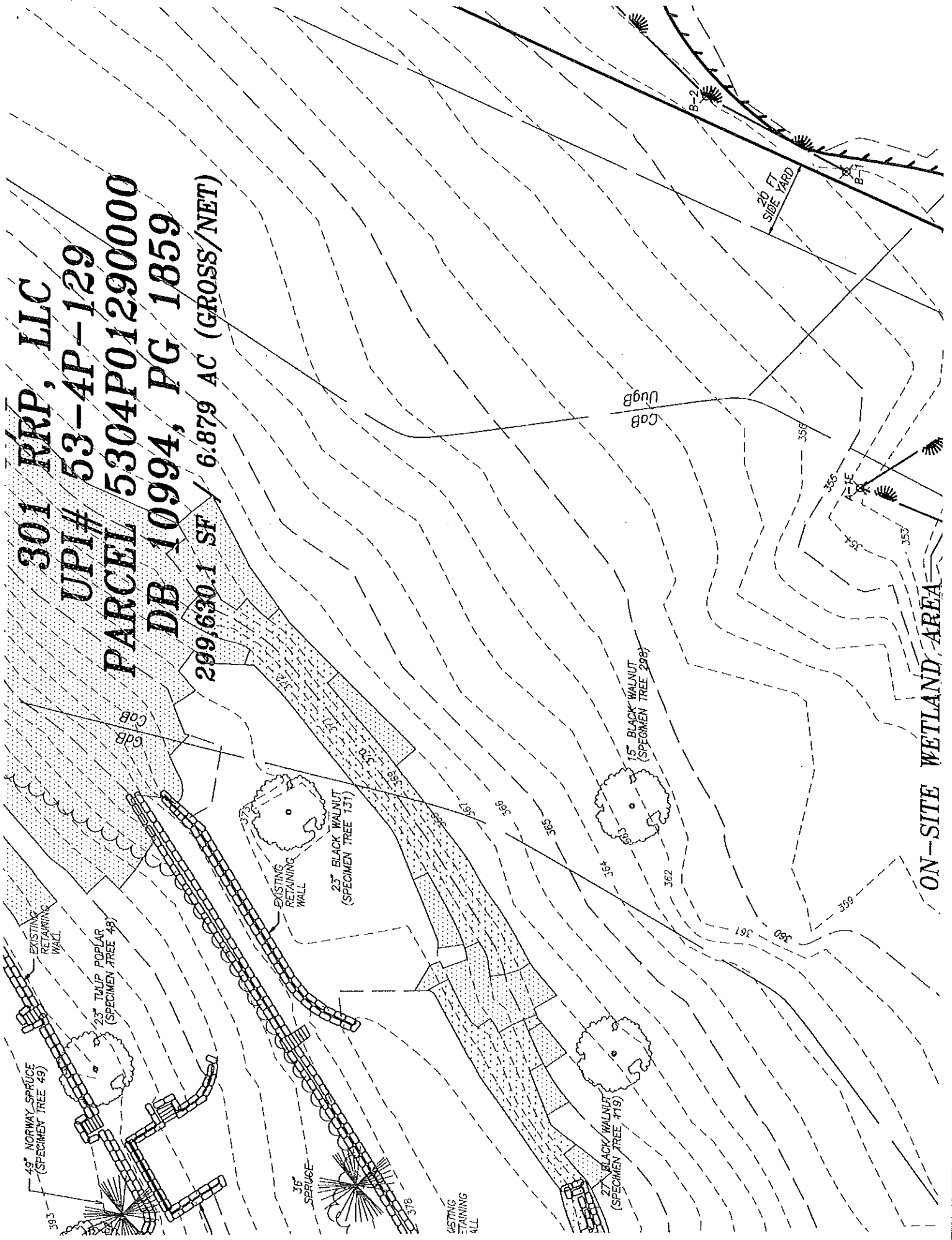
APPENDIX A

PNDI

APPENDIX B

Existing Conditions Plan with Photograph Locations

301 RRP, LLC
UPI# 53-4P-129
PARCEL 5304P01290000
DB 10994, PG 1859
299,630.1 SF / 6.879 AC (GROSS/NET)



ON-SITE WETLAND AREA

APPENDIX C

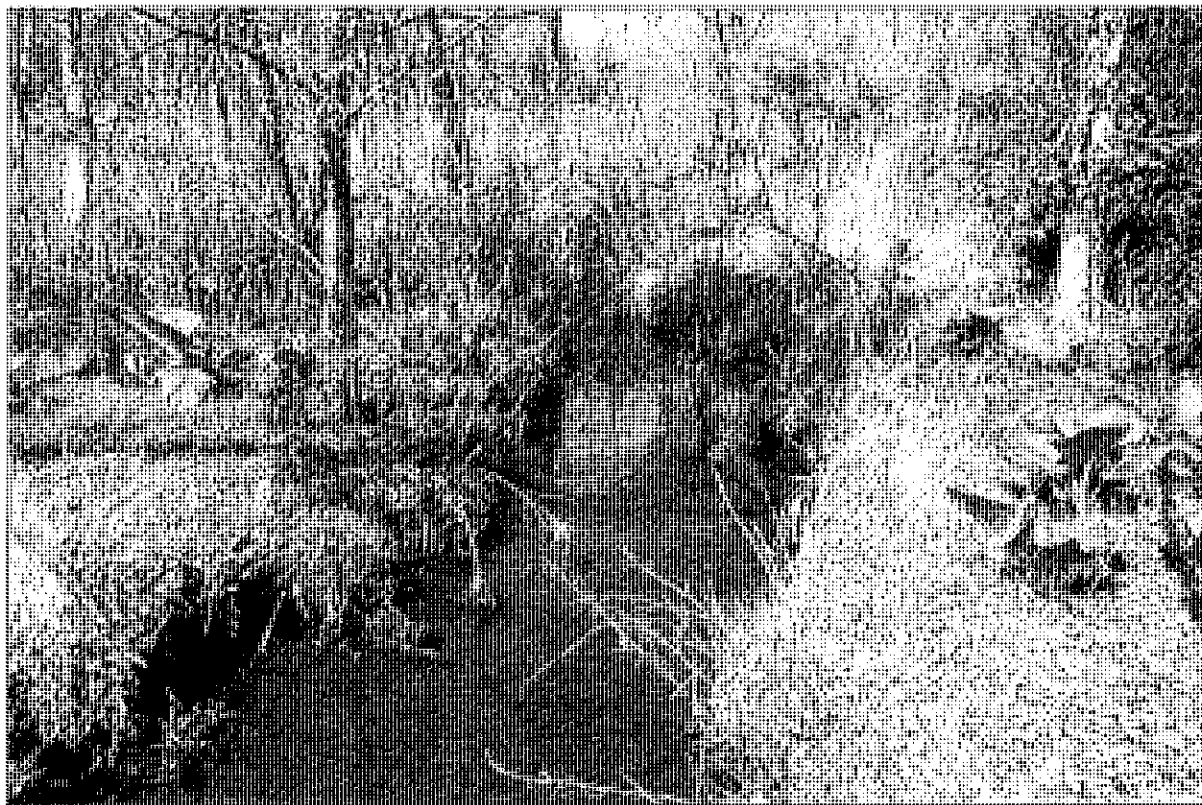
Wetland Photographs



Appendix C1. Wetland A, view looking southeast. This is the widest point of an otherwise narrow, linear, ditched wetland.



Appendix C2. Wetland A, showing the linear, ditched portion of the wetland

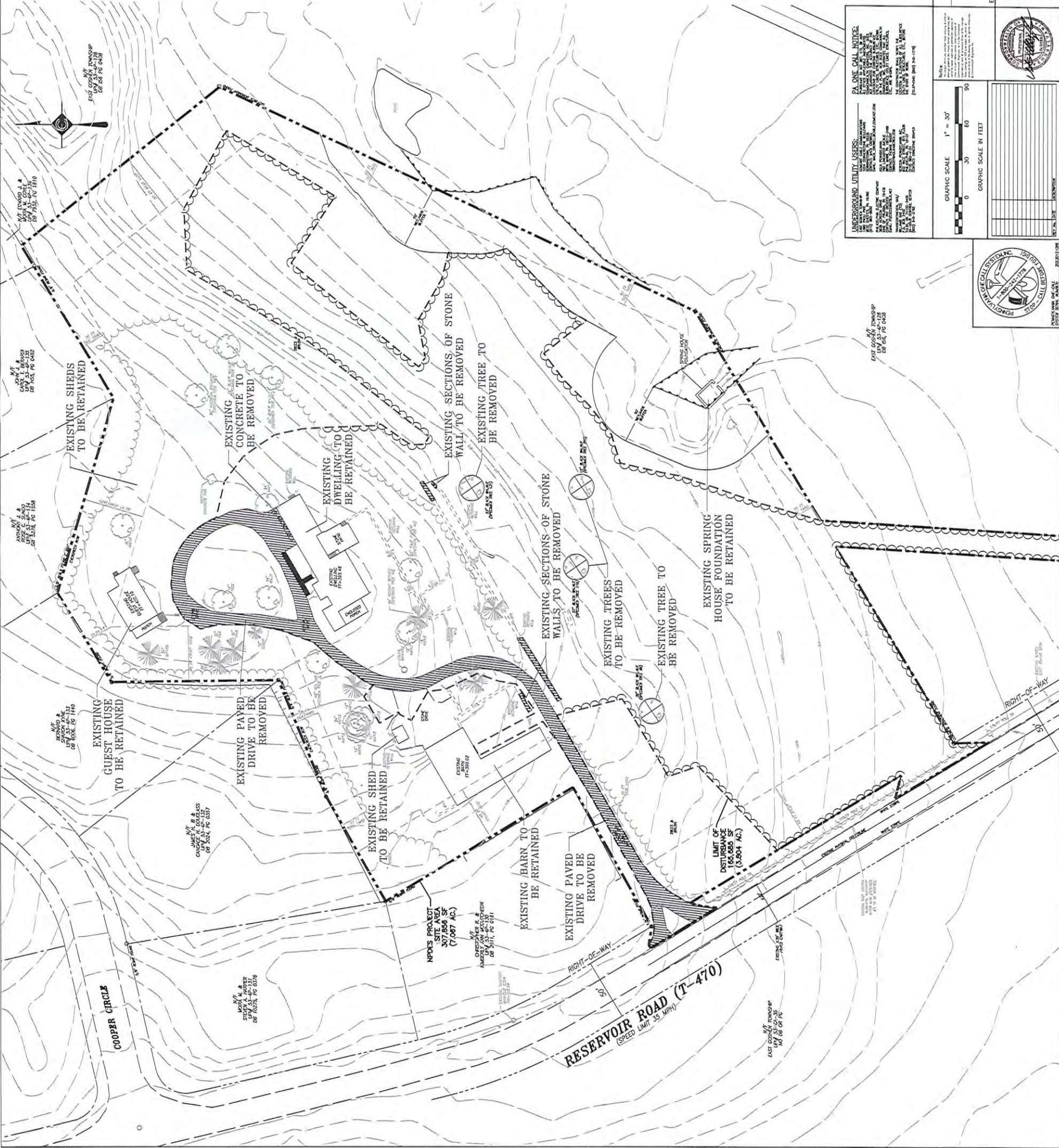


Appendix C3. Unnamed tributary to East Branch Chester Creek, as it flows through Wetland B.



Appendix C4. Wetland B, which is dominated in large part by common reed.

PLOT PLAN



SOILS REMEDIATION:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	SOILS REMEDIATION PLAN	[Signature]	REVISION 1
08/25/2023	SOILS REMEDIATION PLAN	[Signature]	REVISION 2

PERMANENT SEED MIXTURE:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	PERMANENT SEED MIXTURE	[Signature]	REVISION 1
08/25/2023	PERMANENT SEED MIXTURE	[Signature]	REVISION 2

TEMPORARY SEED MIXTURE:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	TEMPORARY SEED MIXTURE	[Signature]	REVISION 1
08/25/2023	TEMPORARY SEED MIXTURE	[Signature]	REVISION 2

MAINT. TIME FERTILIZER 500 & SEED NOTES:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	MAINT. TIME FERTILIZER 500 & SEED NOTES	[Signature]	REVISION 1
08/25/2023	MAINT. TIME FERTILIZER 500 & SEED NOTES	[Signature]	REVISION 2

DEMOLITION NOTES:

DATE	DESCRIPTION	APPROVED BY	REMARKS
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08/25/2023	DEMOLITION NOTES	[Signature]	REVISION 2

PA ONE CALL NOTICE:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	PA ONE CALL NOTICE	[Signature]	REVISION 1
08/25/2023	PA ONE CALL NOTICE	[Signature]	REVISION 2

UNDERGROUND UTILITY USERS:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	UNDERGROUND UTILITY USERS	[Signature]	REVISION 1
08/25/2023	UNDERGROUND UTILITY USERS	[Signature]	REVISION 2

SPRINGS & SEEDS NOTICE:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	SPRINGS & SEEDS NOTICE	[Signature]	REVISION 1
08/25/2023	SPRINGS & SEEDS NOTICE	[Signature]	REVISION 2

ASBESTOS REMEDIATION NOTICE:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	ASBESTOS REMEDIATION NOTICE	[Signature]	REVISION 1
08/25/2023	ASBESTOS REMEDIATION NOTICE	[Signature]	REVISION 2

UNDESIRABLE EROSION CONDITIONS:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	UNDESIRABLE EROSION CONDITIONS	[Signature]	REVISION 1
08/25/2023	UNDESIRABLE EROSION CONDITIONS	[Signature]	REVISION 2

CONSTRUCTION WASTE DISPOSAL NOTE:

DATE	DESCRIPTION	APPROVED BY	REMARKS
08/25/2023	CONSTRUCTION WASTE DISPOSAL NOTE	[Signature]	REVISION 1
08/25/2023	CONSTRUCTION WASTE DISPOSAL NOTE	[Signature]	REVISION 2

FINAL SITE STABILIZATION REQUIREMENTS:

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08/25/2023	FINAL SITE STABILIZATION REQUIREMENTS	[Signature]	REVISION 2

TEMPORARY SITE STABILIZATION REQUIREMENTS:

DATE	DESCRIPTION	APPROVED BY	REMARKS
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08/25/2023	TEMPORARY SITE STABILIZATION REQUIREMENTS	[Signature]	REVISION 2

SEEDING & MULCHING NOTES:

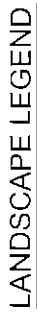
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08/25/2023	SEEDING & MULCHING NOTES	[Signature]	REVISION 2

SLOPE STABILIZATION:

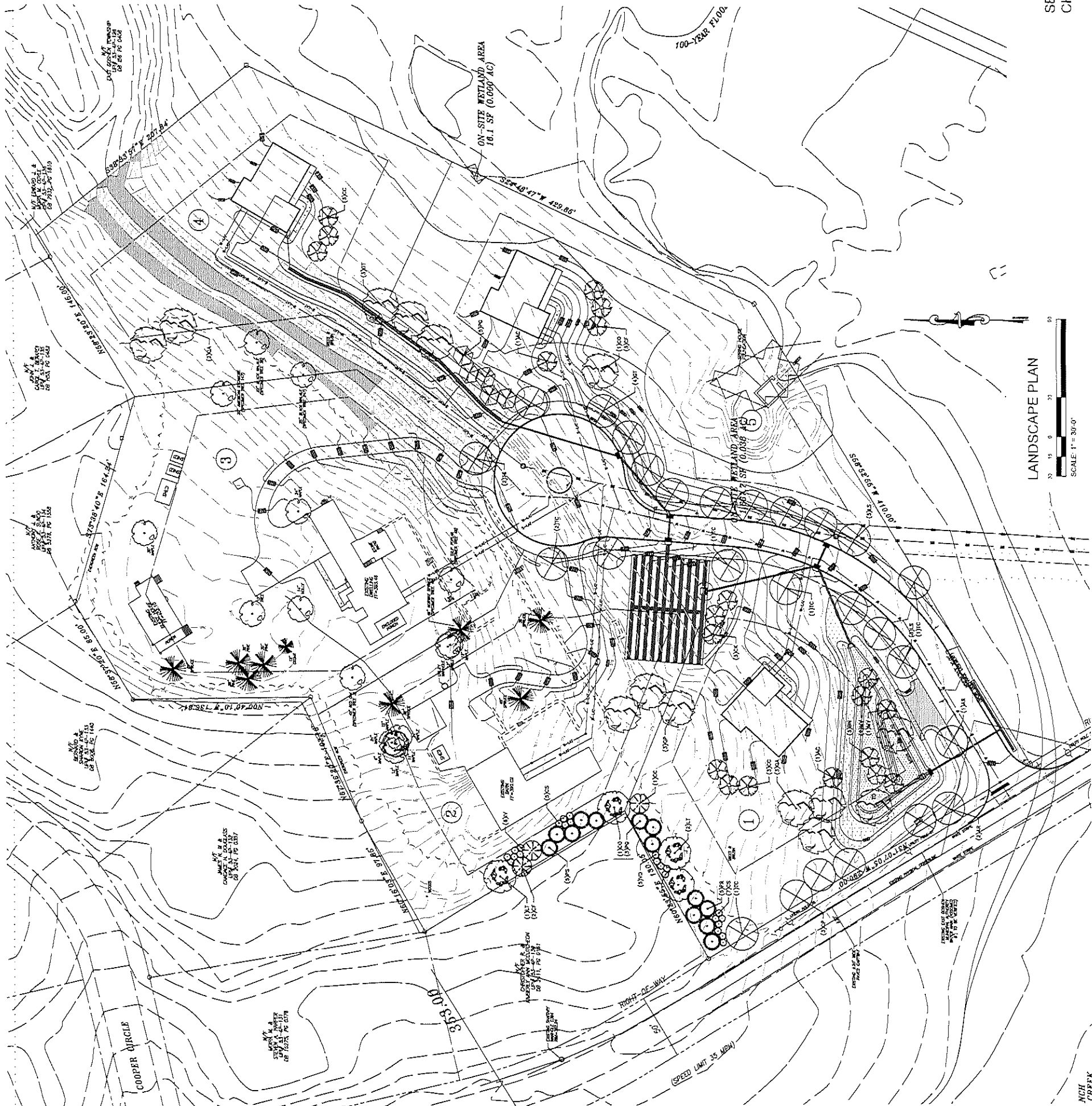
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08/25/2023	SLOPE STABILIZATION	[Signature]	REVISION 2

COMMONWEALTH ENGINEERS, INC.
111 EAST LANCASTER AVENUE - SECOND FLOOR
LANCASTER, PA 17303
TELEPHONE: (717) 398-1100
FAX: (717) 398-1101
WWW.COMENG.COM

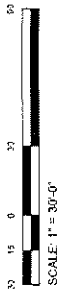
DEMOLITION PLAN
PRELIMINARY SUBDIVISION AND LAND DEVELOPMENT PLANS
FOR
TIMBERMILL, LLC
EAST COSHEN TOWNSHIP
CHESTER COUNTY, PA
DATE: SEPTEMBER 28, 2023
SHEET: 2
SCALE: AS SHOWN
BY: [Signature]
CHECKED: [Signature]
DATE: 10/10/2023



- Street tree
- Buffer Landscape
- Replacement Landscape
- Basin/ Rain Garden Floor Seeding
- Basin Slope Seeding



LANDSCAPE PLAN



SEE SHEET LP-2 LANDSCAPE COMPLIANCE
CHART, PLANT SCHEDULE AND DETAILS

CH
CH

Landscape Plan

No.	Rev's/on/Issue	Date

Focus Planning
EFFECTIVE • EFFICIENT
1100-200-727-2000

Focus Planning
1100 N BETHLEHEM FIVE, SUITE 415
SPRING HAVEN, PA 19377
P. 215-758-2549
WWW.FOCUSPLANNING.COM

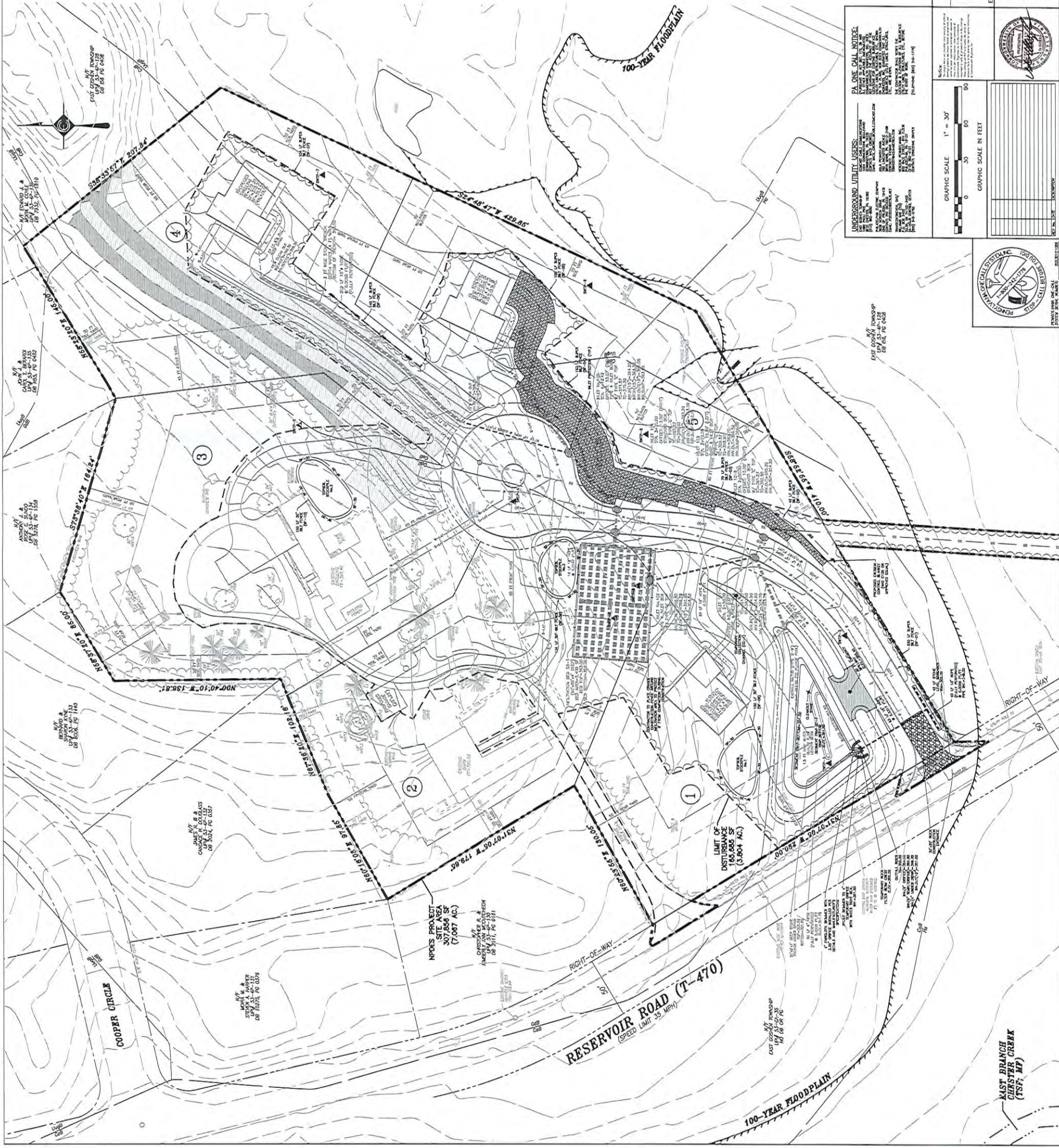
Project Name and Address
TIMBERVILL
301 RESERVOIR ROAD
EAST GOSHEN TOWNSHIP
CHESTER COUNTY, PA

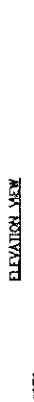
Project InFocus_23-55	Sheet LP-1 (SHEET 10 of 13)
Date 9/21/23	
Scale As Noted	

TREE REPLACEMENT SUMMARY

Visible Trees Removed within the Limit of Disturbance (greater than 6" Cal)

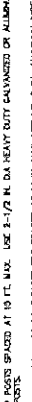
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9	4	36	Yes
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11	1	11	Yes
12	3	36	Yes
13	6	78	Yes
14	8	128	Yes
15	7	105	Yes
16	9	144	Yes
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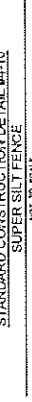


HEIGHT OF THE FENCE

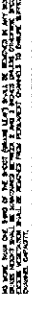
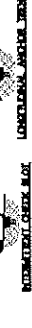
ANY SECTION OF SALT FENCE WHICH HAS BEEN UNCOVERED OR TOPPED SHALL BE



ANCHOR SHALL BE INSTALLED USING A POST HOLE DRILL



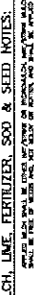
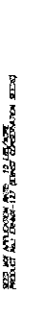
FILTER BAG INLET PROTECTION - TYPE MINNET
MFG TO SPEC



1. The following are the names of the persons who have been appointed to the various committees of the Board of Directors of the American Telephone and Telegraph Company, Inc., for the year ending December 31, 1934:



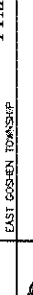
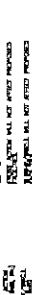
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EXCEPTION TO QUALITY SERVICE.
K. MANAGERIAL STABILITY AND EMPLOYMENT
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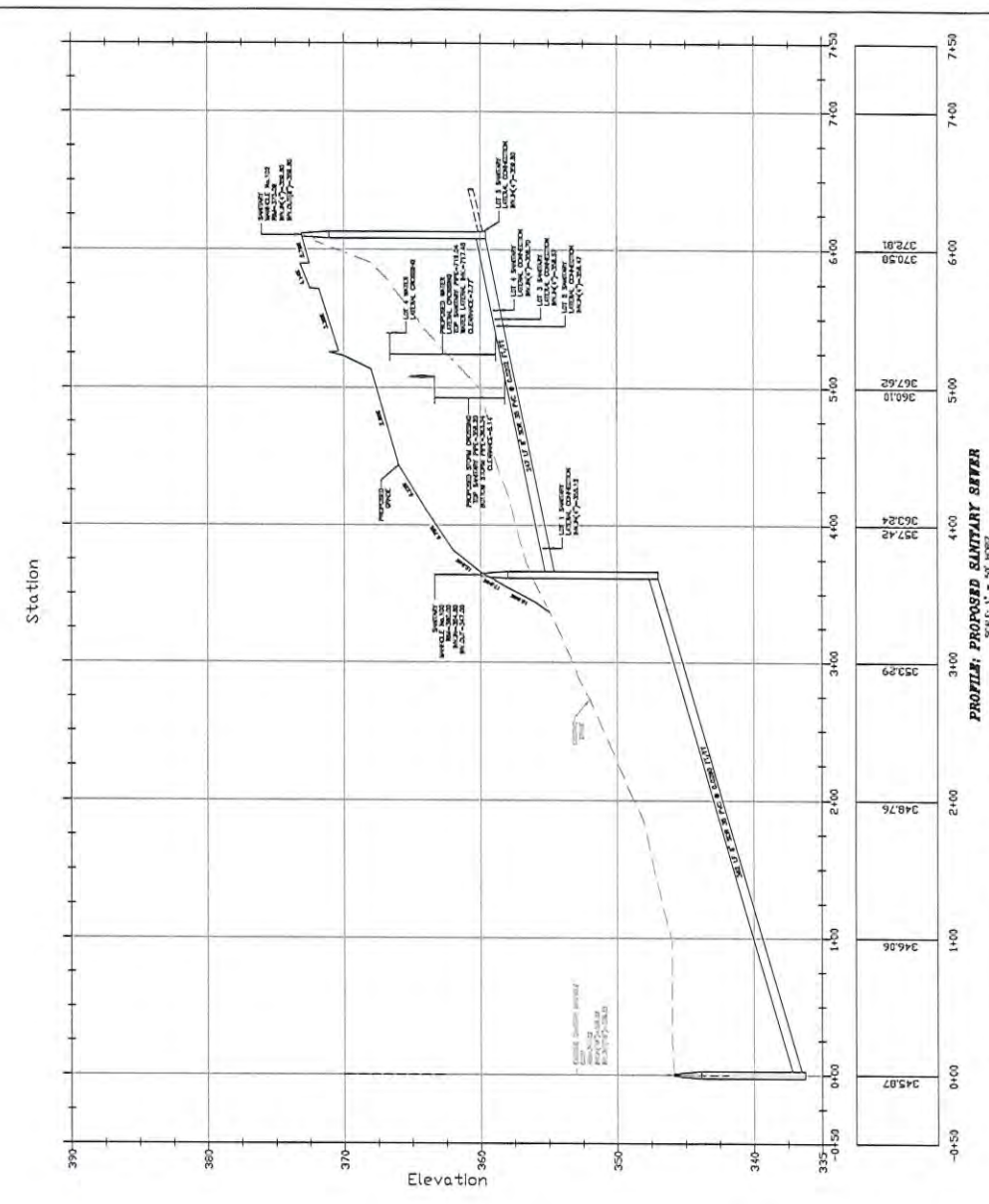
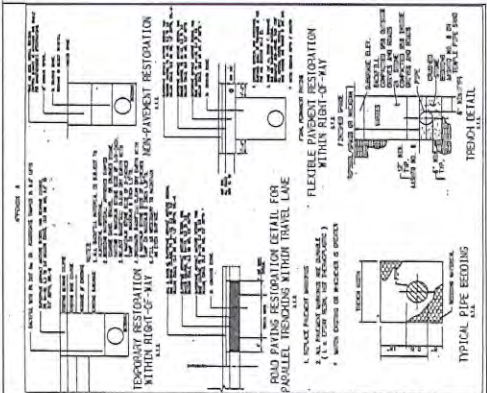
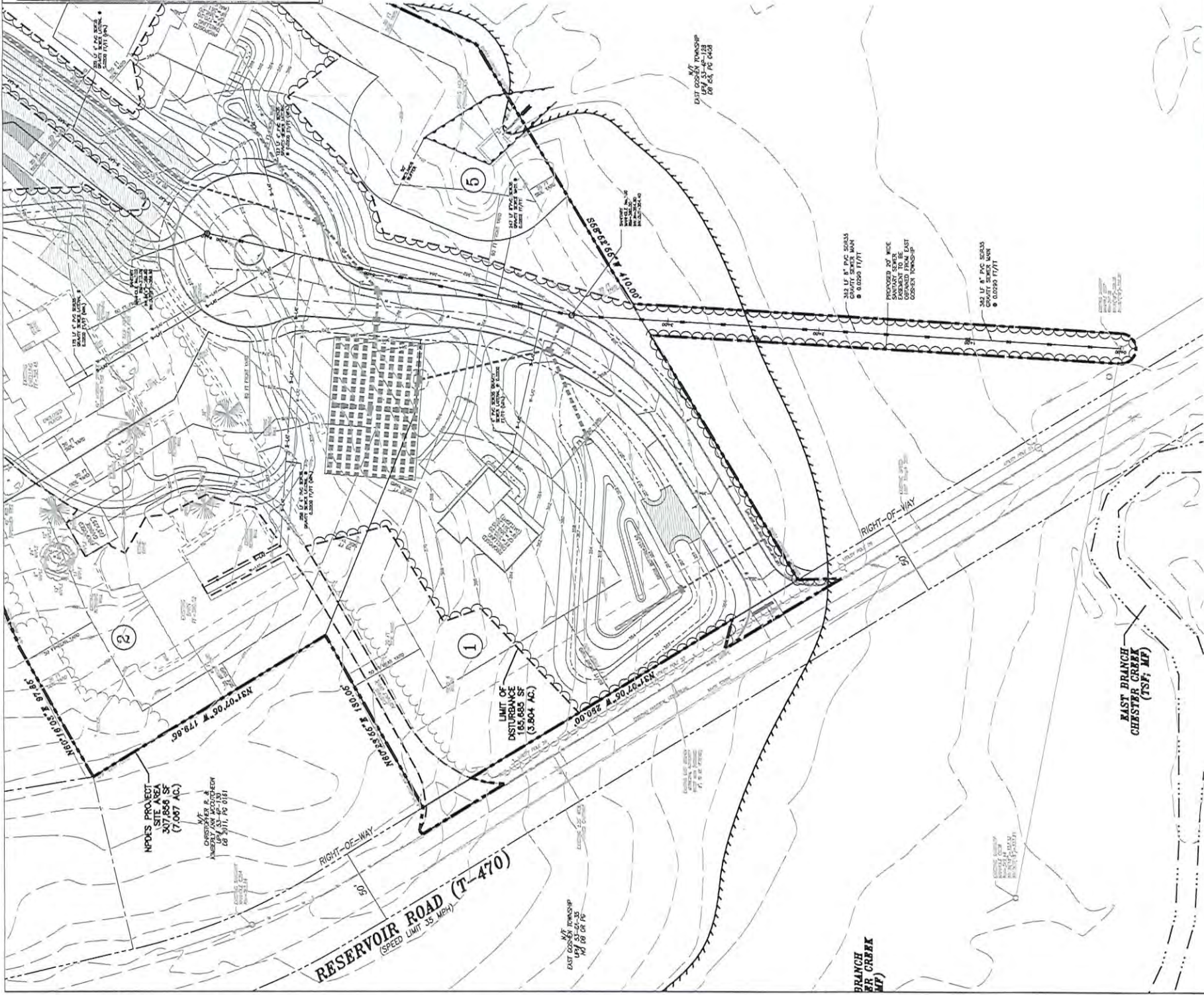


ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE



一、**總論**
 二、**基本情況**
 三、**主要問題**
 四、**建議**
 五、**附註**
 六、**附件**
 七、**參考文獻**
 八、**其他**
 九、**總結**
 十、**附錄**
 十一、**附表**
 十二、**圖表**
 十三、**照片**
 十四、**錄音**
 十五、**錄影**
 十六、**其他**
 十七、**總結**
 十八、**附錄**
 十九、**附表**
 二十、**圖表**
 二十一、**照片**
 二十二、**錄音**
 二十三、**錄影**
 二十四、**其他**
 二十五、**總結**
 二十六、**附錄**
 二十七、**附表**
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 二十九、**照片**
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PROFILES: PROPOSED SANITARY SEWER
SCALE: 1" = 5' VERTICAL

Station	Elevation	Profile
0+00	345.07	
1+00	346.06	
2+00	348.76	
3+00	352.29	
4+00	362.24	
5+00	367.62	
6+00	372.91	
7+50		

GRAPHIC SCALE 1" = 30'

GRAPHIC SCALE IN FEET

PA ONE CALL NOTICE:
Before any excavation or construction work is undertaken, the owner or contractor must call 800-488-7827 to request a utility locate. This is a legal requirement under the Pennsylvania Uniformed Fire and Emergency Use Act (P.U.F.E.U.A.). Failure to call may result in fines and penalties. The locate is valid for 14 days. If the work is not completed within this time, a new locate must be requested. The locate is only valid for the specific project and location. It is the responsibility of the owner or contractor to ensure that all utilities are located and marked before any excavation or construction work is undertaken.

UNDERGROUND UTILITY LOCUS:
The locus is a map showing the location of all underground utilities within the project area. It is a legal document that must be maintained and updated as new utilities are discovered. The locus is a map showing the location of all underground utilities within the project area. It is a legal document that must be maintained and updated as new utilities are discovered. The locus is a map showing the location of all underground utilities within the project area. It is a legal document that must be maintained and updated as new utilities are discovered.

DATE: SEPTEMBER 23, 2023 **SHEET:** 15
SCALE: AS SHOWN
DRAWN: JCD
CHECKED: JCD
DATE: 2023-09-23
BY: JCD

SANITARY PROFILE & DETAIL SHEET No. 4
PRELIMINARY SUBDIVISION AND LAND DEVELOPMENT PLANS
FOR
TIMBERMILL, LLC
COMMONWEALTH ENGINEERS, INC.
114 EAST LANCASTER AVENUE - SECOND FLOOR
LANCASTER, PA 17602
TELEPHONE: (717) 393-1000 FAX: (717) 393-1004
CHESTER COUNTY, PA
EAST GORSEN TOWNSHIP