

TECHNICAL COMMITTEE MEETING MINUTES Wednesday, July 12, 2023 4:30PM

Via VIDEO/TELECONFERENCE

Attendees:

Merritt Nesin Chairman, Technical Committee

Ed Kelly Committee Member
Steve Bagwin Committee Member

William Brink, PE Executive Director, WPCA

Ann Brown, P.E. Supervising Engineer, WPCA Robert Pudelka Plant Supervisor, WPCA

Steve Pietrzyk Collection System Supervisor, WPCA

- 1. Call to Order and Roll Call— M. Nesin called the meeting to order at 4:30PM and announced the attendees as listed above.
- 2. **Approval of June 21, 2023 Meeting Minutes** E. Kelly made a motion to approve the minutes of the June 21, 2023 Technical Committee Meeting; seconded by S. Bagwin. Motion carried 3-0-0.
- 3. Public Comments None
- 4. Discussion on Property Owner at 108 Westover Rd Extending the Sewer to Connect to the System A. Brown presented a request from the homeowner at 108 Westover Road to extend the sanitary sewer on Westover Road approximately 265 LF and connect a lateral from his house. The septic is not performing well and the soils in this area have high ground water levels. The lateral would service one house only. The surrounding homes are already connected to the sanitary sewer system. The sewer extension will not affect the private development of Westover Park as this property is not a part of the Westover Association. The homeowner would have to fund 100% of the construction and agree to maintenance for a 1-year period. This will be outlined in an agreement similar to the Bayberrie Drive sewer extension constructed a few years ago. The Committee saw no issue with the homeowner's proposal.
- 5. Approval of Bid Waiver for Fleet Pump and Service in the amount of \$65,324.00 to Upgrade the Communication Systems and Controllers at (4) Four Pump Stations A. Brown presented a quote from Fleet in the amount of \$65,324.00 to replace the current SCADA communication system, which transmits alarms and pump station status via radio signal, with the FlygtCloud cellular communication system for the Cove Island, Hobson, Burwood and Clay Hill Pump Stations. The WPCA has had issues communicating with several pump stations in the past. Fleet has installed this system at the Carriage Drive pump station, and S. Pietrzyk's staff has found it to be reliable and user friendly. WPCA is looking to install this system at four (4) pump stations. M. Nesin asked if we would be replacing the systems at the other pump stations over the next five years. The plan is to do these 4 this fiscal year and then move to do

- a few each year until the equipment is standardized throughout the system. The Committee agreed to recommend approval of a bid waiver and proposal presented at the meeting to the full Board.
- 6. Approval of a Bid Waiver for Aquilla & Neptune LLC in the amount of \$63,092.72 for two (2) Electric Actuators for the Underflow Gates at Aeration Basin Train One A. Brown presented a quote from Aquilla & Neptune in the amount of \$63,092.72 to replace two (2) of the existing manual underflow gate operators with electric actuators. WPCA replaced the actuators in the aeration basin Train 2 which was successful and has improved operation and now would like to do the same in Train 1. R. Pudelka explained that it takes the mechanics over 200 turns to open or close the valve making it very difficult to operate them manually. If the gate does not slide up and down in the guides evenly, the gate gets jammed. The shaft will be replaced with a larger shaft and the electric actuator helps to overcome this issue. Committee agreed to recommend approval of a bid waiver and the proposal presented at the meeting to the full Board.
- 7. **Discussion on Collection System** S. Pietrzyk provided a summary of the Monthly Pump Station and Collection Systems Activities, which is attached and made part of these minutes.
- 8. **Discussion on Plant Operations** R. Pudelka reviewed the Monthly Operating Report and Equipment Update with the Committee, which is attached and made part of these minutes. R. Pudelka explained the process of cleaning the diesel fuel for the generators. The generator fuel tanks are full and ready for an emergency. If not used, the fuel can sit in the tanks for years. He explained to the Committee the process of filtering or polishing the fuel. After it runs through filters which takes several hours, the fuel is tested to see if it meets clean fuel standards. If the test results show it is not yet clean, the company returns to repolish until it meets the standards. The fuel for the main generator has been filtered twice. We are waiting for testing results to see if it needs further polishing.
- 9. **Update on Engineering Studies and Designs** A. Brown provided the committee with a Capital Projects Update including engineering studies and designs, which is attached and made part of these minutes.
- 10. **Update on Construction Projects** A. Brown provided the committee with a Capital Projects Update including construction projects, which is attached and made part of these minutes.
- 11. Old Business None
- 12. New Business None

There being no further issues to discuss, E. Kelly made a motion to adjourn the meeting, seconded by S. Bagwin; motion carried 3-0-0. The meeting adjourned at 5:23pm.

Monthly Activities (06/20/23 to 07/10/23)

Collection and Pump Station Division

Overview of Pump Station and Gravity Collection Systems:

- 1. Pump station inspections for 22-sanitary sewer and 4-stormwater stations (72)
- 2. Pump station call-out activities (12)
- 3. Manhole Inspections (236)
- 4. Gravity line service calls investigated (2)
- 5. Private lateral investigations and repairs in City ROW (1)
- 6. Sewer line repair (0)
- 7. Manhole repair(s) (0)
- 8. CCTV sanitary sewer lines (0 LF)
- 9. Sewer line cleaning (1.36 miles)

Pump Stations:

- 1. Performed monthly landscape maintenance activities at pump stations.
- 2. Exercised portable generators.
- 3. Performed electrical preventative maintenance inspections at various pump stations.
- 4. Crew completed the installation of wet well safety hatch at Carter DR. pump station.

Collection System:

- 1. Crew jetted lines on Edice RD.; Coachlamp LN.; CT BLVD.; Stillwater Ave., East Main ST., Spring ST., Stamford Ave., Broad ST., Main ST., Summer ST. Ext., Broad ST.
- 2. Crew investigated 1120 East Main ST. private lateral conveyance issue.

Training:

1. Training two (2) new mechanics in training (MITs) on pump station and collection system work related activities and use of the computer maintenance and management system (CMMS).

Miscellaneous:

- 1. Continue to work with CDMSmith on the GIS upgrade project.
- 2. Provided sanitary sewer plan sheet information to various civil engineers and/or contractors working on City development projects.
- 3. Worked with City's legal counsel in reviewing reimbursement claims against the City regarding damaged private laterals in City Row and/or property damages associated with private laterals damaged in the ROW and/or public sanitary sewer lines.

Overview of Regulatory Compliance:

- 1. Initial building permit reviews (8)
- 2. Re-review of building permit applications (24)
- 3. Sanitary sewer tie-in plan reviews (0)
- 4. Zoning permit application reviews (1)
- 5. Initial Food Service Establishment (FSEs) Inspections (4)
- 6. FSE Follow-up Inspections (10)
- 7. Notice of violations (NOVs) Issued (1)
- 8. CTDEEP General Permit plan reviews or applications (1)

Work performed by outside contractors:

1. Vitti Construction completed private lateral repair in City ROW; 1120 East Main ST.



July 2023 TECHNICAL COMMITTEE REPORT

Monthly Operating Report data:	June Results			
			Historical	
	This month	Last month	June	Permit Limit
	(June)	(May)	Monthly	
	(50.1.5)	(,)	AVG	
Q (FLOW) DAILY AVG MGD	13.5	17.4	16	24 MGD DESIGN AVG
Q MAXIMUM DAILY AVG MGD	14.5	29.9	20	58 MGD MAX AVG
BOD INFLUENT AVG MG/L	313	212	231	
BOD INFLUENT AVG LBS/D	35,241	30,765		
BOD EFFLUENT AVG MG/L	2	2	3	
BOD EFFLUENT MAX MG/L	2	2		20 mg/L
BOD REMOVAL %	99.4	99	98.5	85%
TSS INFLUENT AVG MG/L	384	280	331	
TSS INFLUENT AVG LBS/D	43,235	40,632		
TSS EFFLUENT AVG MG/L	3	3	8	
TSS EFFLUENT MAX MG/L	6	5		20 MG/I
TSS REMOVAL %	99.1	98.5	97.3	85%
TOTAL N INFLUENT AVG MG/L	41.9	29.5	33.8	
TOTAL N INFLUENT AVG LBS/D	4718	4281	4438	
TOTAL N EFFLUENT AVG MG/L	1.97	2.14	2.55	
TOTAL N EFFLUENT AVG LBS/D	226	320	345	926 LBS/D
N REMOVAL %	95.3	92.7	92.0	
TOTAL P INFLUENT AVG MG/L	5.47	3.94	4.88	
TOTAL P EFFLUENT AVG MG/L	0.66	0.46	0.78	
P REMOVAL %	88	88.3	84.0	
UV EXCEEDANCES <30 mJ/cm2	0	0		

Plant Equipment Update

BFP#1 Roller Shaft broke, part on order

Main Generator Deisel Tanks - fuel polishing, fuel testing, rebuild of fuel pump

STP #2 VFD Replacement VFD ordered

Plant Flowmeters Final Effluent meters calibrated as per permit; new controller ordered

RSPS Pumps #4 & #5 Temperature sensors on motor need R/R



UPDATE OF CAPITAL PROJECTS TECHNICAL COMMITTEE MEETING July 12, 2023

UPDATE ON ENGINEERING STUDIES AND DESIGNS:

1. Infiltration Inflow Study

We met with the Contractor, and they are scheduled to start on Monday, 7/17. They will begin with jetting and CCTV inspection of the sewers.

2. Sludge Management Plan

Hazen's scope of services for the Sludge Management Plan is complete. They will remain as consultants for sludge management as there are funds remaining in the contract. The Technical Committee approved Hazen's proposal for a primary sludge fermentation study. This is moving ahead.

3. Plant Water, Return Activated Sludge (RAS) and Waste Activated Sludge (WAS)

Gannett Fleming has submitted a design fee proposal which is under review by WPCA.

4. RFQ for Evaluation of the Alvord Lane, Commerce Rd, and Saddle Rock Pump Stations

Basis of Design Report for the pump station upgrades is underway. We expect to have a report by the end of the summer.

5. RFP for the Design and Supply of a Standby Generator at Clay Hill Pump Station and West Avenue Pump Station

WPCA added West Avenue Pump Station to this project. Technical specifications are almost complete for purchasing to advertise for bids.

6. Perna Lane, Phase I Collection Sewers

Tighe & Bond is working on the design of the sewer system and pump stations based on discussions with WPCA. They completed traffic plans and submitted them to CTDOT for approval. Surveying of the pump station area has been done.

7. RFP for Architectural Services for New Building for Collection System Staff and SWPCF Existing Locker Room Renovations

The RFP for architectural services to design a small building for the collection system staff and the electricians has been cancelled. The City has informed WPCA that they plan on a full roof replacement for this building by the end of the year. They also received a grant to remediate the environmental issues inside the building. Once this is done, WPCA can move back into the building. This work should be done within a year. The trailers are on site, and we are waiting for the electric to be connected so we can occupy the buildings.

8. Structural Evaluation of the Columns in the Sludge Dewatering Building

Preparing bid documents for the repair.

9. Bid for Repair of Storm Water Pumps #1 and 3 at Cummings Pump Station

The bid was awarded to New England Pump and Valve. We are waiting for signed contracts to begin work.



10. Bid for Painting of Final Clarifiers # 1, 2 and 4

We received five (5) bids for the Painting of Final Clarifiers No. 1, 2 and 4. The bids ranged from \$239,355.00 to \$1,260,000.00. After checking references, we recommended award to the low bidder, MacKenzie Painting, in the amount of \$239,355.00. Purchasing is obtaining the required contract documents.

UPDATE ON CONSTRUCTION PROJECTS:

1. Design-Build Standby Generator for the Greenwich Ave. Pump Station

Preparing the bid documents to purchase and install a generator for Greenwich Ave pump Station. The controls will be provided by the WPCA.

2. Electrical Preventive Maintenance / Arc Flash

We have been in contact with Siemens regarding the information still needed for the arc flash study. We will schedule a meeting with Siemens to go over the required additional information.

3. Sludge Degritting System Upgrade

CH Nickerson has mobilized on site. The are working on the following:

- Soft excavation/test pits to check for conflicts between the micro piles and existing underground piping.
- Installing new odor control ductwork.

PAYMENT/CHANGE ORDER LOG AS OF 7/12/2023

<u>Sludge Degritting System Upgrade (Contractor – CH Nickerson)</u>

Original Value of the Contract =\$ 8,908,350.00

Total Approved CO Amount = \$0

Contract Sum to Date = \$8,908,350.00