

Meeting Notes

Subject	Peirce Island WWTF Upgrade – Monthly Public Construction Meeting
Date	August 16, 2017
Time	11:00 AM
Location	Portsmouth, NH

A public meeting was held at 11:00 AM on August 16, 2017 at Portsmouth City Hall for the subject project. A record of the discussion follows:

Terry Desmarais, City Engineer, gave an introduction to the meeting and outlined the topics of discussion, including work completed since the last meeting, work to be completed in the coming month, work anticipated in the next six months, construction cost to date, events and recreation, and public input.

The members of the Project Team in attendance introduced themselves, and included:

- Brian Goetz, Deputy Director of Public Works
- Terry Desmarais, City Engineer
- Jon Pearson, AECOM Project Manager
- Robert Dahlinghaus, AECOM Resident Representative
- Andy Brodeur, Methuen Construction, Project Manager

Terry noted that to obtain additional information regarding the project, there is a project website that can be accessed through www.portsmouthwastewater.com. The website is updated weekly with news and recreational information and contains a link to a reporting form that can be used to provide feedback or notify the City of any issues associated with the project.

Jon Pearson discussed work that has been completed this month. He noted areas where work is ongoing at the site, including:

- Headworks Building
- Yard Piping / Utility Service
- Grit Building
- Gravity Thickener No. 2
- Stormwater Collection and Treatment
- Electrical Facilities
- Biological Aerated Filter (BAF) Building

Jon reviewed photos of construction progress, including:

- Headworks Building – Exterior: installation of the underground odor control piping and the underground electrical ductbanks are in progress. Interior: painting is in progress,

- mechanical, electrical, plumbing, and HVAC work are in progress, slide gates and other process equipment within the screen room have been installed.
- Electrical Facilities – Installation of underground conduits and ductbanks, foundation work for the Electrical Building, and reinforcing and formwork for the standby generator concrete pad are in progress.
 - BAF Building – Reinforcing, formwork, and concrete placement for base slabs, columns and lower walls are in progress.
 - Stormwater Collection and Treatment – Chambers for the water quality treatment unit have been placed and excavation for the outfall pipe to the Piscataqua River is in progress.
 - Gravity Thickener No. 2 – Work is in progress to allow for Gravity Thickener No. 2 to house the temporary sludge pump station.
 - Temporary Staff Housing – Work to outfit temporary trailers to provide office and control space, laboratory space, showers, etc. is in progress.

Andy Brodeur discussed work anticipated for the coming month, including:

- Continue underground piping installation between the new Headworks Building and Grit Building, including the installation of the 48" raw wastewater pipe and the extension of plant drainage, water, and sanitary water lines.
- Continue installation of buried propane tanks near the Headworks Building, construct the foundation slab and install the tanks.
- Continue to install the odor control equipment pad, piping, and ductwork at the Headworks Building.
- Continue interior work at the Headworks Building, including doors, windows, skylights, mechanical, HVAC, plumbing, and electrical.
- Install the standby generator and the precast Electrical Building structure on the completed foundation.
- Continue to install electrical manholes and ductbanks at the new Electrical Building.
- Continue to install temporary sludge pump station at Gravity Thickener No. 2 and begin to relocate pumps out of the existing Admin Building and into the temporary structure.
- Continue reinforcing, formwork, and concrete placement for the BAF Building foundation slab and walls.
- Continue to set up and outfit temporary trailers and utilities for WWTF staff.
- Continue selective demolition in the Grit Building.
- Begin structural, mechanical process, HVAC, plumbing, and electrical work construction in the Grit Building

Andy then discussed the work anticipated through the end of the 2017 calendar year and beginning of the 2018 calendar year, including:

- Headworks Building – Complete all work in and around the Headworks Building so that it can be occupied and complete all turnover activities, including training.
- Grit Building – Continue selective architectural, structural, and mechanical modifications, install the new electrical motor control center, install new electrical and communication ductbanks, complete installation of new ferric chloride and polymer systems, and continue to replace roof and roof drains.

- Gravity Thickener No. 2 – Complete installation of temporary sludge pump station, install dome cover, and continue yard piping in and around Gravity Thickener No. 2.
- Electrical Facilities – Install new switchgear, complete ductbanks, transfer power to the new underground system, and remove temporary overhead power system.
- BAF Building – Continue forming, reinforcing, and placement of concrete for the base slab, walls, columns and elevated slabs, begin masonry work at east end of building, and continue yard piping at and around the building, continue mechanical, electrical, plumbing, HVAC, and interior process piping work.
- New Solids Building/Existing Administration Building – Relocate plant personnel and systems from the existing Administration Building to the temporary trailer complex, demolish the existing Administration Building, and begin excavation for Solids Building and yard piping at, around, and underneath the building, begin formwork and concrete placement work for foundation, footings, slab, columns, and walls.
- Continue paving of existing roads, around Headworks Building, Grit Building, and down to the Stormwater Collection Treatment area.

Jon provided an update on the project construction cost:

- Original Contract: \$72.786 million
- Change Order No. 1: \$0.367 million
- Change Order No. 2: \$0.547 million
- Total Contract: \$73.700 million

Jon noted that the project team is continuing to coordinate construction with community events. Upcoming events this month include the Round Island Regatta, Professional Fire Fighters Fundraiser, National MS Bike Tour, American Foundation for Suicide Walk, My Breast Cancer Support Race, and Strawberry Banke Events.

A question and answer session then occurred, and is summarized below:

Paige Trace asked the following:

Q: What determines when a truck should receive an escort when coming into the project, who makes that determination, and how is that put into place? Ms. Trace noted that she has seen empty construction trucks leaving the site with a police detail but in two instances, she saw oversized construction trucks driving down Hancock Street at around 5:30 AM on July 10th and 6:00 AM on August 14th, without police escorts. In one case, Ms. Trace described how she helped an unescorted truck driver who was lost to access Mechanic Street through the Strawberry Banke parking lot.

A: For any oversized loads that must come in during the early morning hours, the Contractor coordinates with the Portsmouth City police to have a police detail escort the truck to the site. All the subcontractors have been given this information and the phone number of the Contractor on a number of occasions. The case where there is no police escort is a result of miscommunication between subcontractors and drivers.

Q: Where and how is the wastewater which bypasses the BAF system during intense wet weather events combined with the treated wastewater?

A: During periods of high flow, the wastewater will pass through the Headworks Building, Aerated Grit Chambers located behind the Grit Building, and pass through the Primary Clarifiers. Once the wastewater exits the clarifiers, it enters the distribution box where 9.1 MGD (or more, depending on the conditions) will be directed to the BAF for secondary treatment and nitrogen removal. Any flow not directed to the BAF will be directed through a separate pipe and blended with the effluent from the BAF prior to the chlorine contact tanks where it will undergo disinfection and dechlorination using sodium hypochlorite and sodium bisulfite. In a wet weather event, ferric chloride and polymer will be added to the primary clarifiers as is done now to promote settling. The water quality at the end of the chlorine contact tanks needs to meet the permit conditions.

Q: Has the existing Sludge (Solids) Building been demolished and has the EPA mandated report of the existing building's historical significance (including photos) been completed/written?

A: No, the building has not been demolished yet because the new Solids Building must be constructed and operational prior to decommissioning the existing pumps and demolishing, the existing building. The historical report has been written and can be found at the Portsmouth Library.

Q: Has the secondary DHR study regarding the parking lot been completed?

A: Yes, the study has been complete. The archaeologist's report is in a draft format and will be sent to DHR shortly.

Q: What is the progress of the bridge construction?

A: Currently the older of the two force mains under the bridge is being replaced due to the inability to repair the leak discovered within the pipe. Prior to this removal effort, a contractor placed a liner inside the pipe but it did not pass the pressure test. An additional liner was added, but the pipe was still leaking and therefore the pipe is now being removed and a new pipe will be installed. The pipe is being replaced due to the age related corrosion it has undergone overtime, not due to the traffic associated with this project. The pipe replacement is not part of the Peirce Island WWTF Upgrade Project.

Q: Why has the City only requested \$100K from the State Revolving Fund for a pumping station when the City has recently voted to approve \$6.9 million in spending for the Peirce Island Upgrade? Ms. Trace noted that during a hearing where she learned this information, the State had not received a request for further funding from Portsmouth for the \$6.9 million.

A: The State is aware of the pending request for additional funds. The City will be making the official request for additional funds as they now have the Borrowing Authorization.

Esther Kennedy asked the following:

Q: Ms. Kennedy asked the City to clarify whether the public meetings being held are for citizens or business people, specifically because the time of the meetings is when most citizens are at work.

A: Originally when the public meetings were set up there was a concern that the construction traffic would have an impact on the businesses along the designated route; because of this

the meeting time was set so that business or retail store managers or others affected would be able to attend the meeting.

Q: Ms. Kennedy asked additional questions regarding the amount of funding requested from the State Revolving Fund by the City, the amount of funding approved by the City in a recent City council meeting (\$6.9 million), and the intended use of the approved \$6.9 million.

A: In order to clarify the intended use of the \$6.9 million, the City stated that the project cost to complete the Peirce Island WWTF Upgrade is \$91.9 million and that the previous Borrowing Authorization was for up to \$85 million, therefore the \$6.9 million is the difference of the previously approved Borrowing Authorization and the projected cost of the project. The need for additional funding was an aspect of the project that the City was aware of and announced to the public when the project was awarded. The City made note that the authorization is up to \$6.9 million and that the number will need to be amended annually if needed.

Q: Will there be a tank to hold sewage during storms or hold combined sewer overflows?

A: As part of the Supplemental Compliance Plan, which is mandated under the Consent Decree, a Long Term Control Plan update will be completed starting in 2023 after the completion of seven projects that have sewer separation components. The Long Term Control Plan update will also involve determining what else must be done to mitigate the CSOs, which could include a storage tank. The Long Term Control Plan update will be likely be completed in 2025. Refer also to the CSO presentation to the City Council on January 7th, 2017.

Q: Ms. Kennedy wanted to confirm whether or not people could swim in the South Mill Pond.

A: The City confirmed that it is not recommended.

Q: Will there be a batch plant for concrete on the island? And if not, why? There is a concern that the high volume of heavy construction trucks transporting concrete over the bridge to the site is causing unsafe conditions and harming the integrity of the bridge. Ms. Kennedy asked whether the bridge is being monitored and if the frequency could be increased.

A: All concrete for the project will be trucked in; constructing a batch plant at the site was considered but not required because of the limited space on the island and because it is more costly than the approach currently being used. In regards to the integrity of the bridge, it was noted that the structural integrity of the bridge is being monitored every 6 months, which is the recommended frequency as part of this project. In addition, there were repairs made to the deck of the bridge prior to construction in anticipation for the increased loads passing over the bridge. Currently there is no need to increase the monitoring frequency, unless deterioration is observed. If movement of the bridge is observed when heavy trucks pass over it, it is not a definite sign of bridge deterioration. Bridges are flexible and are designed to have some movement to them as they are constructed with flexible joints on either end to allow for some movement of the deck and material expansion or contraction. If the bridge appears to be moving or shaking when a heavy truck passes over it, it is most like due to this feature in the bridge design and is not a structural concern.

Q: How long will the chlorinated wastewater be in the dechlorination tank?

A: Approximately 15 seconds. Sodium bisulfite dechlorination of sodium hypochlorite is extremely fast acting. These are the same chemicals in use now.

Q: How will stormwater from the site be collected, treated, and discharged?

A: Roughly half of the stormwater on the site will be discharged to the Piscataqua River by an existing outfall; the remaining stormwater will be discharged to the wetlands on the west side of the site. The stormwater being discharged to the river will be treated by a new water quality treatment unit. Stormwater from the west side of the site will pass through a rain garden for treatment. The rain garden will be located between Primary Clarifier and Gravity Thickener No.1.

Q: Can the City consider moving the time of the meeting to earlier in the morning or in the evening to provide the opportunity for citizens who work during the day to attend the meeting?

A: The City acknowledged this request.

The next public construction meeting will be on September 20, 2017 at 11:00 AM in Conference Room A at Portsmouth City Hall.