

## Meeting Notes

Subject	Peirce Island WWTF Upgrade – Monthly Public Construction Meeting
Date	September 20, 2017
Time	11:00 AM
Location	Portsmouth, NH

A public meeting was held at 11:00 AM on September 20, 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:

- Peter Rice, 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 new project website that can be accessed through [www.cityofportsmouth.com/publicworks/wastewater/peirce-island-wastewater-facility/peirce-island-wastewater-facility-upgrade-project](http://www.cityofportsmouth.com/publicworks/wastewater/peirce-island-wastewater-facility/peirce-island-wastewater-facility-upgrade-project). 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: concrete placement for the Odor Control Unit concrete pad has been completed, the concrete pad for the propane tanks has been laid and the tanks have been installed on the pad, installation of underground conduits and ductbanks are in progress, installation of 48” force main conveying wastewater to the Grit Building from the Headworks Building is in progress.
- Grit Building – Interior: selective demolition is in progress.
- Stormwater Collection and Treatment – Catch basins behind the existing Sludge Processing Building have been installed.
- Electrical Facilities – Installation of the new Electrical Building structure and switchgear within the building have been completed and the standby generator has been delivered and set on the concrete pad.
- BAF Building – Reinforcing, formwork, and concrete placement for elevated slabs, columns and above ground walls are in progress.
- Gravity Thickener No. 2 – The structure of the temporary building to house the sludge pumps has been completed, interior work in the building is in progress, work to move the sludge pumps is in progress.
- Temporary Housing for WWTF Staff – 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 near the Grit Building, including the installation of the 48” raw wastewater pipe.
- Continue to install the odor control equipment and ductwork at the Headworks Building.
- Continue interior work at the Headworks Building, including doors, windows, skylights, mechanical, HVAC, plumbing, and electrical.
- Continue interior work at the new Electrical Building, including installation of fire alarms and electrical panels.
- Continue to install electrical manholes and ductbank system down towards the Electrical Building.
- Complete installation of the temporary primary sludge pump station in Gravity Thickener No. 2 and begin to relocate pumps out of the existing Administration Building and into the temporary structure.
- Continue to set up and outfit temporary trailers and utilities for WWTF staff and relocate staff to temporary offices once complete.
- Begin demolition of the existing Administration Building.
- Continue reinforcing, formwork, and concrete placement for the BAF Building elevated slabs, columns and walls.
- Continue selective demolition in the Grit Building.
- Continue 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, into February 2018, including:

- Headworks Building – Complete all work in and around the Headworks Building, including underground piping, electrical and communication ductbanks, exterior envelope treatments,

- exterior mechanical equipment, interior mechanical, electrical, HVAC and plumbing, setup of the SCADA system, and complete training and turnover activities so that the building can be put into service.
- Headworks Building Surface Treatments – Complete all exterior surface treatments, including sidewalks and mowing strips (this does not include landscaping).
  - Odor Control – Complete installation of odor control equipment at the Headworks Building.
  - Propane Tanks – Complete installation of underground propane tanks, including underground piping.
  - Grit Building – Continue selective architectural, structural, and mechanical modifications, complete installation of new ferric chloride and polymer systems, continue to replace roof and roof drains, continue installation of interior process piping and equipment, continue installation of the electrical control, fire alarm wiring, and equipment.
  - Gravity Thickener No. 2 – Install permanent dome cover and continue yard piping in and around the structure.
  - Electrical Facilities – Continue installation of remaining switchgear elements, electrical equipment, HVAC, and fire alarm equipment, complete electrical ductbank work, and grounding all systems, transfer power to new underground systems, and remove temporary generator and existing overhead electrical system.
  - BAF Building – Continue forming, reinforcing, and placement of concrete for the elevated slabs, walls, and columns, continue backfill around perimeter of the building, continue masonry work at the east end of the building and begin staircase work. Continue yard piping at and around the building, continue mechanical, electrical, plumbing, HVAC work, begin installation of precast roof panels, and begin installation of piping under nozzle decks.
  - New Solids Building/Existing Administration Building – Demolish the existing Administration Building, and begin excavation for the new Solids Building and yard piping and utilities at, around, and underneath the building, complete installation of concrete encased piping, begin formwork and concrete placement work for foundation at the northwest corner of the building.
  - Place binder course pavement on existing roads around the 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
- Change Order No. 3: \$0.093 million
- Total Contract: \$73.793 million

Jon noted that the project team is continuing to coordinate construction with community events. Upcoming events this month include the Fairy House Tour, Maritime Folk Festival, Alzheimer's Walk, and Strawberry Banke Events. No work will occur on site on September 22<sup>nd</sup> due to the Ferry House Tours.

Terry noted that the City has received and is investigating odor complaints from the Goat Island side of the WWTF. There are temporary odor control systems installed and the City is investigating the circumstances which may have caused the odor complaints.

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

Paige Trace asked the following:

Q: What was the cause for Change Order No.3 and what will the \$0.093 million be used for?

A: The City responded that there instances during the course of the project construction phase where the cost of an item or task varies from what was anticipated, this causes the cost of the project to change in either a positive or negative way. All the cost adjustments are documented as proposed change orders and there are times where the City must go through and reconcile the proposed change orders. This recent change order is a reconciliation of several of these proposed change order. To give further clarification Jon responded that two of the larger items in Change Order No. 3 involved adding more reinforcing steel to the BAF Building and its elements based on information received from Kruger, and the addition of a tapping sleeve and valve due to a nonfunctional valve in the existing piping system. In addition, there was another minor reinforcement change that resulted in a small credit for the City.

Q: Has the meeting schedule changed and will there be a meeting next month?

A: The meeting schedule has not changed and there will be a meeting next month.

Q: Has the placement of the fence on the east side of the site changed? There are two fence lines shown on the site layout slide, one closer to the ridge line and one closer to the WWTF.

A: The fence line is not moving closer to the ridge, the two fence lines being shown on the site layout are the temporary and permanent fence lines. The temporary fencing on the site is closer to the ridge and is depicted on the site layout as so; it will come down after construction. The permanent fencing is the other fence line shown on the site layout and it is closer to the WWTF on the east side of the site.

Q: What is the weight limit set for vehicles passing over the Prescott Memorial Bridge, also referred to as the Peirce Island Road Bridge? Does the City get to set the weight limit that passes over an E2 bridge?

A: Jon responded that in anticipation of the project, a structural evaluation was completed in order to assess the condition of the bridge. Based on the findings of the study, the deck of the bridge was replaced prior to the start of work at the WWTF; this was done to improve the condition and carrying capacity of the bridge. The bridge is rated as an E2 Bridge by the state, which permits 80,000 lb. loads to pass over it. Peter added that if there is a load that exceeds the set weight limit, the hauler must submit information on the load so it can be evaluated. There have been a couple instances during the project where this has occurred. Jon added that an example of this process occurred when the standby generator was being delivered as it exceeded the weight limit. AECOM receives the truck configuration from the hauler and a structural engineer completes an evaluation to determine if any measures have to be taken for the load to safely pass over the bridge. In the case of the generator, no additional steps were required because the generator was brought over the bridge on a trailer with a large bed and multiple axles.

Q: Have all the force main leaks been resolved? What kind of support system is the pipe supported by?

A: Terry noted that of the two force mains, one is in service and it directs wastewater to the WWTF. The other force main is not in service currently and has been replaced with a new force main. Once the expansion couplings for the force main have been received they will be installed, after which the second force main can be put into service. To remove the old force main and install the new one, the new force main was installed on rollers so that it could be set in place. Once the force main has been set, it will be held by supports which are anchored into the bridge, the pipe itself is not directly attached to the bridge.

Q: Percentage wise, roughly how much of the concrete has been poured to complete the BAF Building? When is the concrete work for the BAF Building anticipated to be complete?

A: Andy responded that roughly half of the concrete has been poured. The initial timeline for the BAF Building concrete work was 16 to 18 months; this is all dependent on the weather conditions. Work has been going well timewise.

Q: Is the project on schedule to meet the dates set by the Consent Decree?

A: Yes, it is on schedule.

Q: Is there any concern with meeting the NPDES permit during high wet weather events when bypassing the secondary treatment system will occur? Can bypassing the secondary treatment system occur during anytime, even when there is not a high wet weather event?

A: Terry noted that during periods of high flow, the permit still applies to the WWTF effluent as it is leaving the final effluent outfall just as it would during normal weather events. The permit requires that the effluent quality be measured after the wastewater which has undergone secondary treatment and the wastewater which bypasses secondary treatment have been combined together and undergone disinfection. There is no concern in meeting the permit requirements. Bypass of the secondary treatment process can only occur when necessary, such as during a high wet weather event.

Peter Whalen asked the following:

Q: Will all the flow leaving the WWTF receive secondary treatment?

A: Jon responded that due to the presence of combined sewers in the collection system, during high flows caused by wet weather events where the influent flow surpasses the capacity of the secondary treatment system, a portion of the flow will undergo secondary treatment and any additional flow will bypass the secondary treatment process. The two streams will then be blended together for the disinfection process.

Q: Is there a guarantee from AECOM that the WWTF will meet the 2007 NPDES permit?

A: There is no guarantee from AECOM that the WWTF will meet the permit requirements; there is a performance guarantee from Kruger (vendor for the BAF system) for the quality of the secondary effluent and that it will meet the secondary effluent requirements specified in the contract documents.

Q: If final effluent of the WWTF does not meet the requirements of the permit in the future, what will occur and who is liable? Peter Whalen stressed the importance of the WWTF meeting the requirements set by the permit even during wet weather events due to the large amount of tax payer money that has gone into the completion of the WWTF upgrade. He also

noted concern over potential ramifications if the EPA changes its policy on bypassing and blending.

A: Peter indicated that it is a legal issue in regards to what party will be liable if the WWTF does not meet the requirements once it is complete and it is not possible to comment on that issue during the public meeting. However, the City is confident that the effluent will meet the permit requirements. The City and AECOM have worked with DES and EPA in the design process and are comfortable with the design chosen. The WWTF has been oversized so that it can handle large amounts of flow during wet weather events. If the EPA changes their interpretation of how the bypassing and blending occurs, the City could be affected by that decision and so would many other municipalities in Region 1. The City understands the importance of the WWTF meeting the requirements and the money that taxpayers have spent on the completion of the project.

Q: In future presentations, can there be a construction timeline with project milestones and Consent Decree dates identified?

A: Terry noted that there are monthly reports sent to the EPA with information as to whether the project is on schedule to meet the milestones set in the contract and milestones that are a result of the Consent Decree. This information is posted online and will also be added to future public meeting presentations. The City and AECOM understand the importance of meeting the deadlines and are diligent to keep track of the progress being made.

Q: After the BAF system is complete and running, how long will Kruger be at the site to supervise the system and help ensure its performance?

A: Jon noted that it is anticipated that Kruger will be present at the site for 3 months in order to help optimize the system.

The next public construction meeting will be on October 18, 2017 at 11:00 AM in Conference Room A at Portsmouth City Hall.