



Peirce Island WWTF Upgrade Construction
Public Information Meeting
November 20, 2019

Topics of Discussion

- Introductions
- Work Completed Since Last Meeting
- Work to be Completed in Coming Month
- Work Anticipated in Next 6 Months
- Project Construction Costs
- Consent Decree Schedule
- Events & Recreation
- Public Input/Comments/Concerns
- Next Meeting



Introductions

- City Staff:

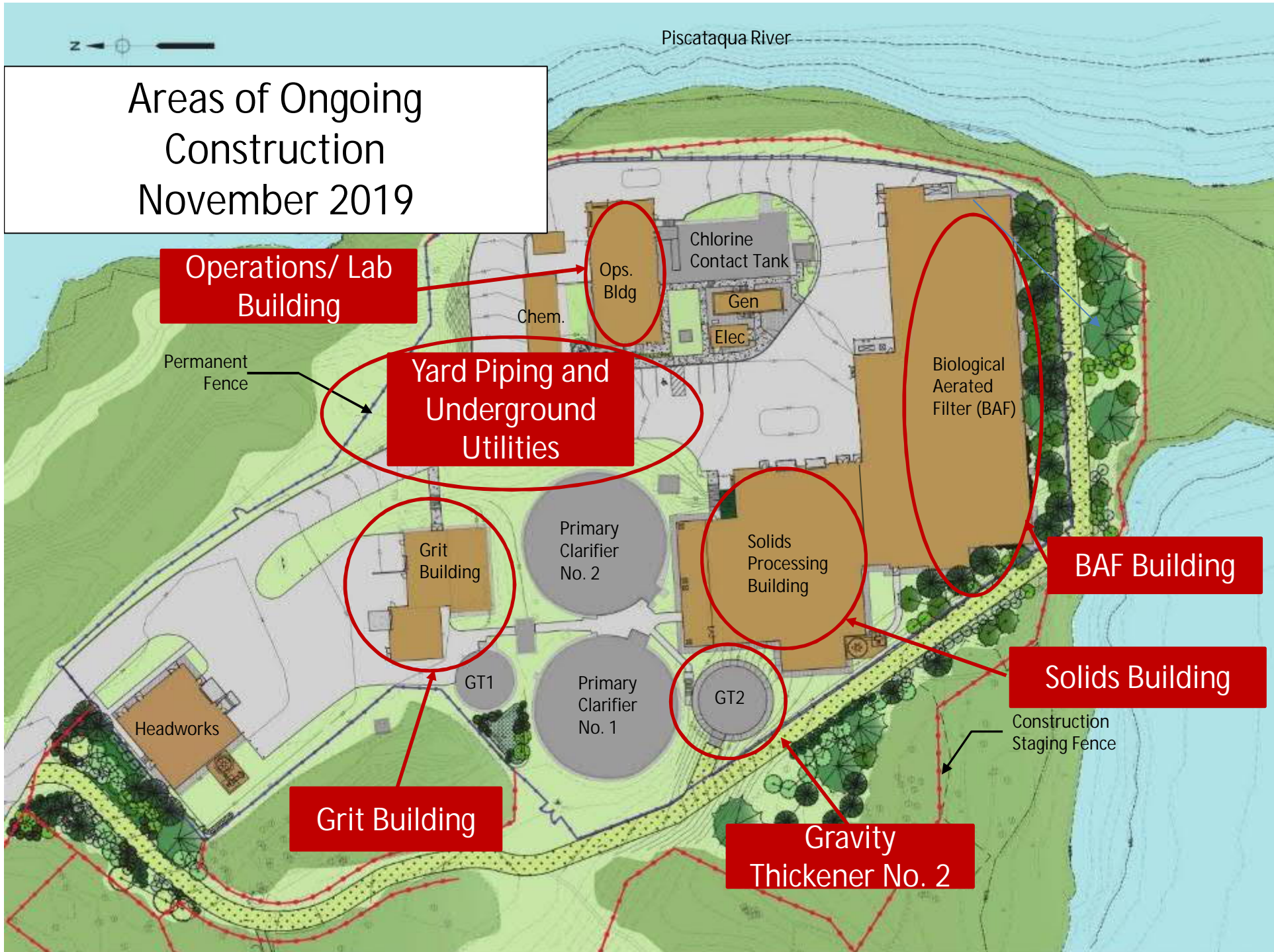
- Terry Desmarais, City Engineer, 603-766-1421
tldesmarais@cityofportsmouth.com

- Website:

<https://www.cityofportsmouth.com/publicworks/wastewater/peirce-island-wastewater-facility/peirce-island-wastewater-facility-upgrade-project>

- News and Updates
- Recreational Info
- Project Info
- Report Form
- Etc.





Site Overview November 2016



November 20, 2019



Peirce Island WWTF Upgrade Construction

5

Work Completed Since Last Meeting



November 20, 2019



Peirce Island WWTF Upgrade Construction

Work Completed Since Last Meeting



Yard Piping & Utilities



Work Completed Since Last Meeting



Grit Building



Work Completed Since Last Meeting



BAF Building



Work Completed Since Last Meeting



BAF Building

November 20, 2019



Peirce Island WWTF Upgrade Construction

10

Work Completed Since Last Meeting



BAF Building

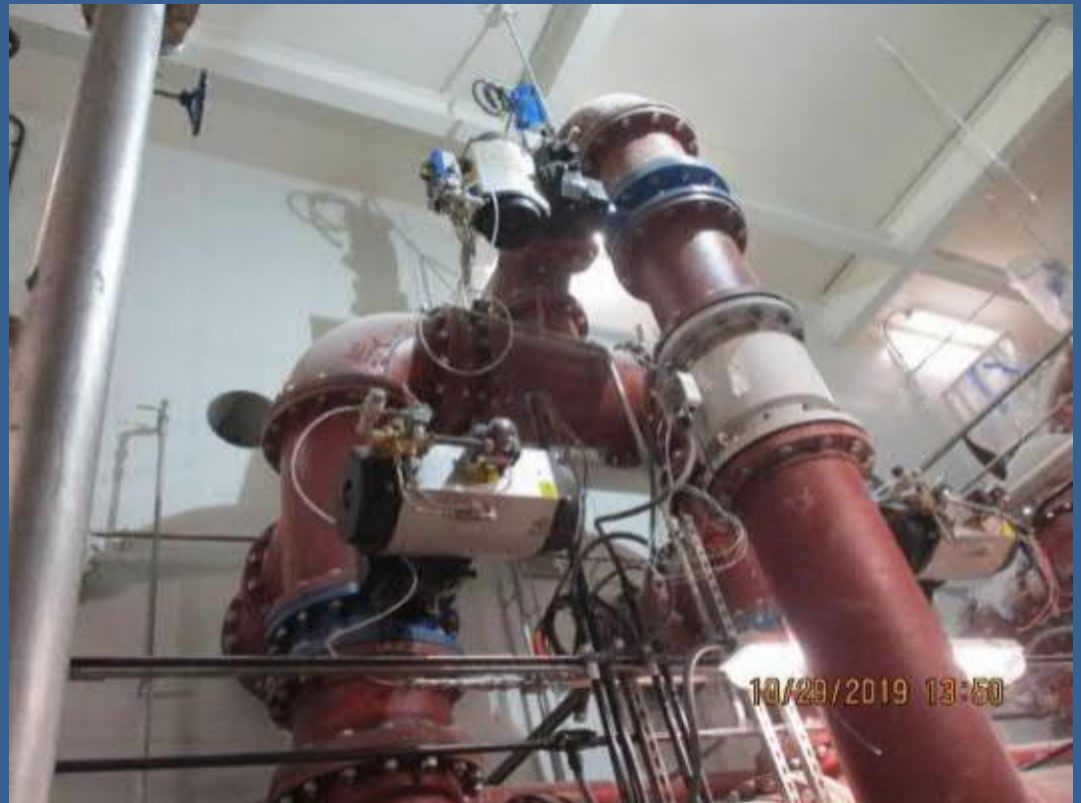
November 20, 2019



Peirce Island WWTF Upgrade Construction

11

Work Completed Since Last Meeting



BAF Building



Work Completed Since Last Meeting



BAF Building

November 20, 2019



Peirce Island WWTF Upgrade Construction

13

Work Completed Since Last Meeting



Solids Building



Work Completed Since Last Meeting



Solids Building



Work Completed Since Last Meeting



Ops/Lab Building



Work Completed Since Last Meeting



Gravity Thickener No. 2



Work Completed Since Last Meeting



Gravity Thickener No. 2

Work to be Completed in Coming Month

- Continue minor finish work at the Headworks Building
- Continue architectural, structural, mechanical process, HVAC, plumbing, and electrical construction in the Grit Building
- Continue checkout and inspection of the fire protection system in the BAF Building
- Continue mechanical and electrical work in the BAF Building
- Continue installation of stairs, railings and ladders in the BAF Building
- Continue checkout and startup of valves and equipment in the BAF Building
- Continue interior painting in the BAF Building.
- Continue integration of the BAF control system with the plant's SCADA system



Work to be Completed in Coming Month, Cont.

- Startup of BAF
- Continue installation of the building finishes such as door hardware and signage in the Solids Building
- Continue electrical, HVAC and plumbing work in Solids Building
- Continue underground piping installation between the Grit Building, Solids Building, and BAF Building
- Continue installation of Gravity Thickener No. 2 mechanism
- Continue selective demolition in the existing Sludge Processing Building
- Continue PCB abatement in the existing Sludge Processing Building





Piscataqua River

Anticipated Construction
November – May 2020

Operations/Lab Building

Ops. Bldg

Chlorine Contact Tank

Gen

Elec

Chem.

Permanent Fence

Yard Piping and Underground Utilities

Biological Aerated Filter (BAF)

BAF Building

Grit Building

Primary Clarifier No. 2

Solids Processing Building

Solids Building

Headworks

Grit Building

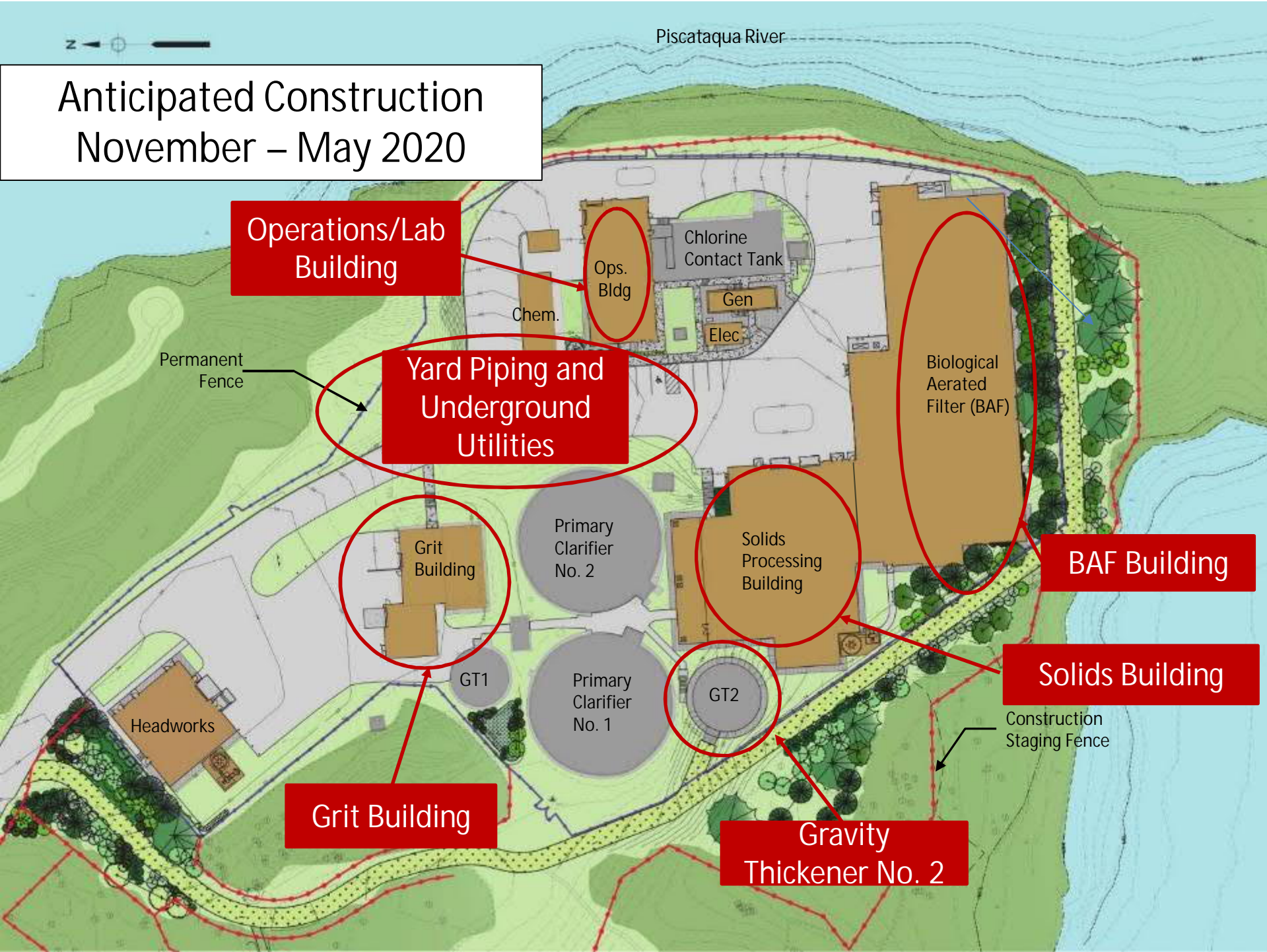
GT1

Primary Clarifier No. 1

GT2

Construction Staging Fence

Gravity Thickener No. 2



Peirce Island Bridge Inspection

Nov. 25, 2019

- The inspection includes a visual inspection of the bridge components – superstructure, deck, railings system and above-water portions of the abutments and piers
- Vehicular traffic will be limited during this time (one lane at a time)
- Pedestrian traffic will be maintained



Project Construction Costs

- 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
- Change Order No. 4: \$0.163 million
- Change Order No. 5: \$0.250 million
- Change Order No. 6: \$0.292 million
- Change Order No. 7: \$0.169 million
- Change Order No. 8: \$0.113 million
- Total Contract: \$74.780 million



Consent Decree Schedule

Milestone	Date	Status
Execute Contract to Construct Upgrades	September 1, 2016	Complete
Submit Two Additional Milestones for EPA Review and Approval	December 1, 2016	Complete
Additional Milestone 1: Transfer of the existing SCADA system to the new Headworks Building	November 21, 2017	Complete
Additional Milestone 2: Startup and testing of the Secondary Influent Pump Station in the new Solids Building	May 9, 2019	Complete
BAF Substantial Completion	December 1, 2019	On Schedule
Achieve Compliance with NPDES Permit Limits	April 1, 2020	On Schedule



Events and Recreation

- Upcoming
 - Arthritis Foundation New England Region 2019 Jingle Bell Run/Walk
 - Turkey Trot
 - Strawberry Banke Ice Rink
 - Strawberry Banke Events





Public Input / Comments / Concerns

Next Meeting

- Public Construction Meeting
 - Next Meeting: December 18, 2019, 11:00 AM



Meeting Notes

Subject	Peirce Island WWTF Upgrade – Monthly Public Construction Meeting
Date	November 20, 2019
Time	11:00 AM
Location	Portsmouth, NH

A public meeting was held at 11:00 AM on November 20, 2019 in Conference Room A 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, summary of Consent Decree milestones, events and recreation, and public input.

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

- Peter Rice, Director of Public Works
- Brian Goetz, Deputy Director of Public Works
- Terry Desmarais, City Engineer
- Jon Pearson, AECOM Project Manager
- 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.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. Terry Desmarais, City Engineer, is the point of contact for the City.

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

- Yard Piping / Utility Service
- Grit Building
- Solids Building
- Biological Aerated Filter (BAF) Building
- Gravity Thickener No. 2
- Existing Sludge Processing / New Operations/Lab Building

Jon reviewed photos of construction progress, including:

- Site Overview – Existing conditions of the Peirce Island Wastewater Treatment Facility in November 2016. Prior to construction, the treatment process consisted of the Aerated Grit Chambers, followed by the Primary Clarifiers and Chlorine Contact Tanks.
- Yard Piping and Utility Service – A majority of the yard piping and electrical ductbanks throughout the site are complete. Work to restore grade and prepare for binder course paving is in progress.
- Grit Building – Finish work is in progress, this includes but is not limited to painting of piping and walls. Work to install sidewalks is in progress. Minor punch-list items remain to be completed.
- BAF Building – Work to finish installing remaining mechanical process piping and equipment within the Pipe Gallery and mechanical process spaces is in progress. Painting of process piping is in progress. Work to finish installing electrical conduit and electrical equipment throughout the building is underway. As the BAF is a highly automated system, work to program the computer logic which operates the BAF is extensive and in progress. The Micro-C chemical system has been installed and chemical has been delivered. Work to install the cell access ladders to the cells and hand railings at the BAF Walkway and in the stairway is in progress. HVAC and plumbing work is underway.
- Solids Building – The SCADA system which operates the sludge dewatering process is in use. Work to install the Primary Effluent sampling system is in progress. Work to install and wire remaining electrical features, including but not limited to permanent lighting, throughout the building is in progress. Plumbing, HVAC, and architectural work is continuing.
- Existing Sludge Processing Building/New Operations/Lab Building – PCB abatement work is continuing. All demolished materials are being placed into dumpsters which are then covered for subsequent removal. The first floor of the building has been demolished and hazardous material abatement is near completion. Selective mechanical demolition is underway.
- Gravity Thickener No. 2 – Mechanical equipment and piping installation is underway. Work to install the walkway within the thickener is in progress. Formwork and concrete placement for the access stairs is underway.

Andy discussed work anticipated for the coming month, including:

- Continue minor finish work in the Headworks Building.
- Continue architectural, structural, mechanical process, HVAC, plumbing, and electrical construction in the Grit Building.
- Continue checkout and inspection of the fire protection system in the BAF Building.
- Continue mechanical and electrical work throughout the BAF Building.
- Continue installation of stairs, railings and ladders in the BAF Building.
- Continue checkout and startup of valves and equipment in the BAF Building.
- Continue interior painting in the BAF Building.
- Continue integration of the BAF control system with the plant's SCADA system.
- Continue installation, testing, and startup of equipment and process piping in the Solids Building.
- Startup of BAF.
- Continue installation of the building finishes, such as door hardware and signage in the Solids Building.
- Continue electrical, HVAC, and plumbing work in the Solids Building.
- Complete underground piping installation between the Grit Building, Solids Building, and BAF Building.
- Continue installation of the mechanism in Gravity Thickener No. 2.

- Continue selective demolition in the existing Sludge Processing Building.
- Continue PCB abatement in the existing Sludge Processing Building.

Andy then discussed the work anticipated through November and into May 2020, including:

- Grit Building – Complete minor punch-list items.
- BAF Building – Complete installation of mechanical, electrical, plumbing, and HVAC systems, this includes the Boiler Room, Mechanical Room, and Blower Room. Complete installation of remaining mechanical process equipment. Complete interior painting and protective coatings. Complete startup and testing of equipment BAF system and ancillary support systems. Complete installation of stairs, ladders, railings and stair towers. Complete backfilling and grading around the building and install cable trellis system on the west and south side of the building.
- Solids Building – Complete installation of yard piping and underground utilities in and around the Solids Building. Complete installation of exterior features, including the sidewalks. Complete punch-list items.
- Existing Sludge / New Operations/Lab Building – Complete hazardous materials abatement work as well as selective demolition in the lower level. Complete installation of new floor slab, including floor slab infills, membrane layer, insulation and 4” top slab. Complete installation of new structural steel. Complete exterior wall framing and sheeting, and weather depending, begin exterior masonry work. Complete installation of CMU walls and chemical containment curbs in the basement. Continue the installation of interior wall framing and sheeting. Begin mechanical process, electrical, HVAC and plumbing rough-in work.
- Existing Gravity Thickener No. 1 – Complete installation of scum trough and protective coatings.
- Gravity Thickener No. 2 – Complete installation of all interior coatings and modifications and installation of the mechanism.
- Primary Clarifiers – Complete installation of the new primary clarifier scum pumps.
- Underground Piping and Utility Services –Complete installation of utility connections to the Operations Building. Lay remainder of binder course at the Operations Building and install curbing. Begin installation of sidewalks and railings at the Operation Building. Begin landscaping and grading at the Headworks and BAF Buildings.

Jon noted that periodic inspections of the Peirce Island Bridge have been conducted to monitor its conditions. The next inspection will be occurring November 25, 2019. The inspection will include a visual inspection of the bridge superstructure, deck, railing system and above-water portions of the abutments and piers. Vehicular traffic will be limited to one lane open at a time. Pedestrian traffic will be maintained.

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
- Change Order No. 4: \$0.163 million
- Change Order No. 5: \$0.250 million
- Change Order No. 6: \$0.292 million
- Change Order No. 7: \$0.169 million

- Change Order No. 8: \$0.113 million
- Total Contract: \$74.780 million

Jon provided a summary of the project milestones set by the Consent Decree:

- Execute Contract for Construction Upgrades - Date: 9/1/2016 - Status: Complete
- Submit Two Additional Milestones for EPA Review and Approval - Date: 12/1/2016 - Status: Complete
- Additional Milestone 1: Transfer of the Existing SCADA system to the New Headworks Building - Date: 11/21/2017 - Status: Complete
- Additional Milestone 2: Startup and Testing of the Secondary Influent Pump Station in the New Solids Building - Date: 5/9/2019 - Status: Complete
- BAF Substantial Completion - Date: 12/1/2019 - Status: Pending
- Achieve Compliance with NPDES Permit Limits - Date: 4/1/2020 - Status: On Schedule

In regards to the upcoming BAF Substantial Completion Consent Decree milestone, the BAF is a large, complex system that requires the automation of many different pieces of equipment. The BAF is being worked on in order to complete the system and updates on the schedule and when the system should be complete are being received.

Jon noted that the project team is continuing to coordinate construction with community events. Upcoming events this month include the Arthritis Foundation New England Region 2019 Jingle Bell Run/Walk, Turkey Trot, Strawberry Banke Puddle Dock Ice Rink, and Strawberry Banke Events.

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

Paige Trace asked the following:

Q: Is there a mechanism that will automatically detect if wet weather flow is being bypassed around the BAF? Is it possible to notify the public when these wet weather bypass events occur?

A: Terry noted that yes, when there is a significant wet weather event, flow that has passed through the Primary Clarifiers will enter the Primary Clarifier Effluent Distribution Box where some of the flow will then be directed to the wet weather bypass line. The bypass line has been constructed with a flow meter that will record the flow through the pipe. Bypassed wet weather flow will then be combined with flow that has passed through the BAF in the Effluent Distribution Box upstream of the Chlorine Contact Tanks. All flow will pass through the Chlorine Contact Tanks. Measurements for permit compliance will be taken at the end of the Chlorine Contact Tanks. The flow that is bypassed during wet weather events will be documented and it is feasible for the public to be made aware of when this occurs. However, if there were to be an automated notification system, this would come at a cost and will need to be voted upon by the City Council. It was noted that if there were a permit exceedance, there is a protocol in place to notify the public.

Q: I believe that the delivery truck that delivered the Micro-C went on Hancock Street (not using the designated truck route) without an escort on its' way to the site.

A: Terry noted that there have been difficulties with chemical delivery trucks as they tend to use the GPS vs the instructions. These trucks are separate from the construction project, but the City has been providing them with the correct directions.

The next public construction meeting will be on December 18, 2019 at 11:00 AM in Conference Room A at Portsmouth City Hall.

These notes present a summary of the items discussed at the meeting and are not a transcript of the meeting.