



Peirce Island WWTF Upgrade Construction
Public Information Meeting
February 19, 2020

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:

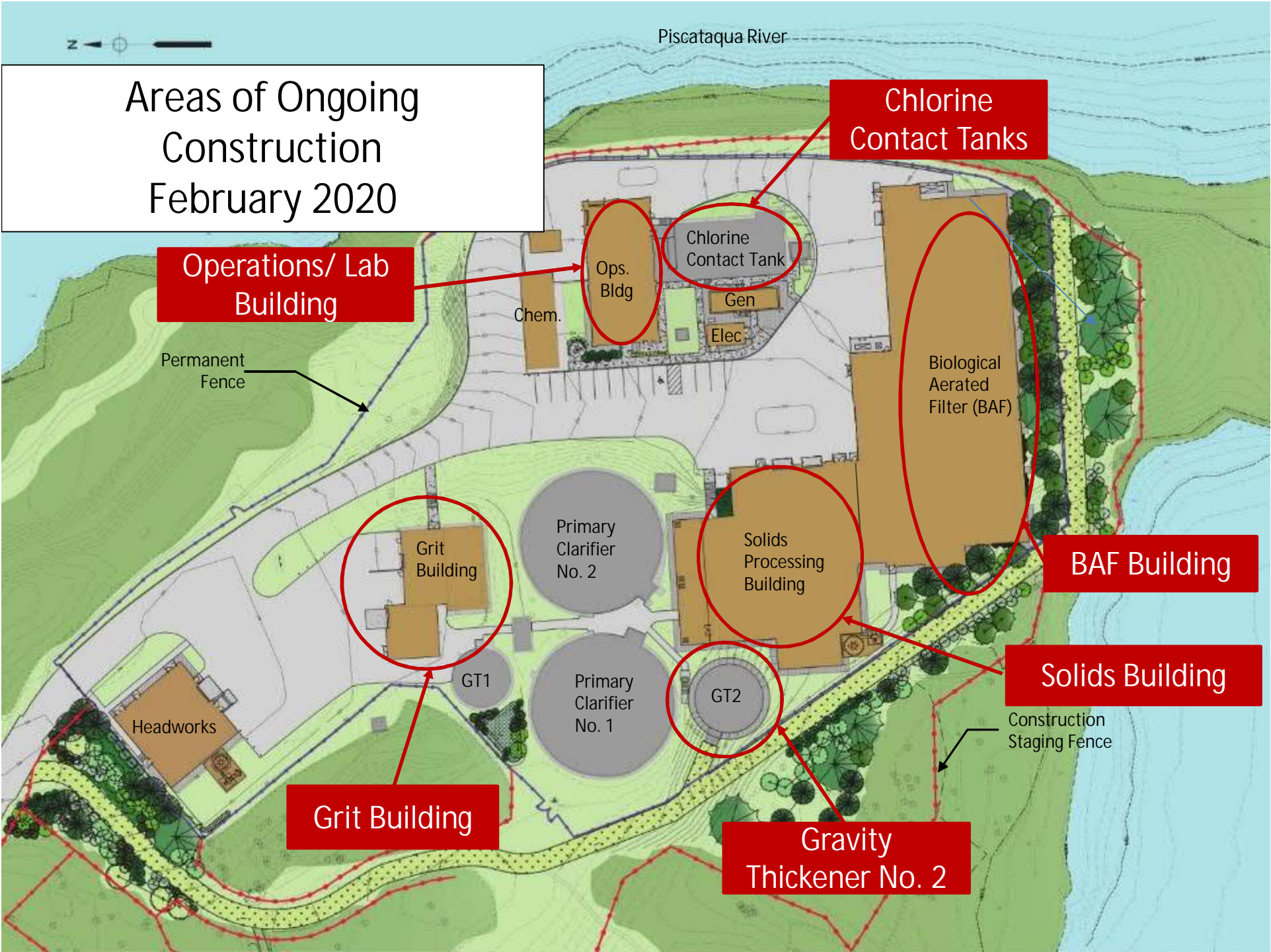
- Terry Desmarais, City Engineer, 603-766-1421
tldesmarais@cityofportsmouth.com

- 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.





Areas of Ongoing Construction
February 2020

Operations/ Lab Building

Chlorine Contact Tanks

Ops. Bldg

Chlorine Contact Tank

Chem.

Gen

Elec

Permanent Fence

Biological Aerated Filter (BAF)

Grit Building

Primary Clarifier No. 2

Solids Processing Building

BAF Building

Headworks

GT1

Primary Clarifier No. 1

GT2

Solids Building

Grit Building

Construction Staging Fence

Gravity Thickener No. 2

Site Overview November 2016



February 19, 2020



Peirce Island WWTF Upgrade Construction

Work Completed Since Last Meeting



February 19, 2020



Peirce Island WWTF Upgrade Construction

Work Completed Since Last Meeting



BAF Building

February 19, 2020



Peirce Island WWTf Upgrade Construction

Work Completed Since Last Meeting



BAF Building

February 19, 2020



Peirce Island WWTF Upgrade Construction

8

Work Completed Since Last Meeting



BAF Building



Work Completed Since Last Meeting



February 19, 2020



Peirce Island WWTF Upgrade Construction

BAF Building

10

Work Completed Since Last Meeting



Primary Clarifier



Work Completed Since Last Meeting



Ops/Lab Building



Work Completed Since Last Meeting



Chlorine Contact Tanks

Work Completed Since Last Meeting



Chlorine Contact Tanks

February 19, 2020



Peirce Island WWTF Upgrade Construction

14

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, Grit Building, Solids Building, and BAF Building
- Continue startup of the BAF Building process
- Continue minor interior touch up painting in the BAF, Solids and Grit Buildings
- Continue integration of the BAF control system with the plant's SCADA system
- Continue installation, check out, and startup of Gravity Thickener No. 2 mechanism and scum pumps
- Continue selective demolition in the existing Sludge Processing Building and Chlorine Contact Tank

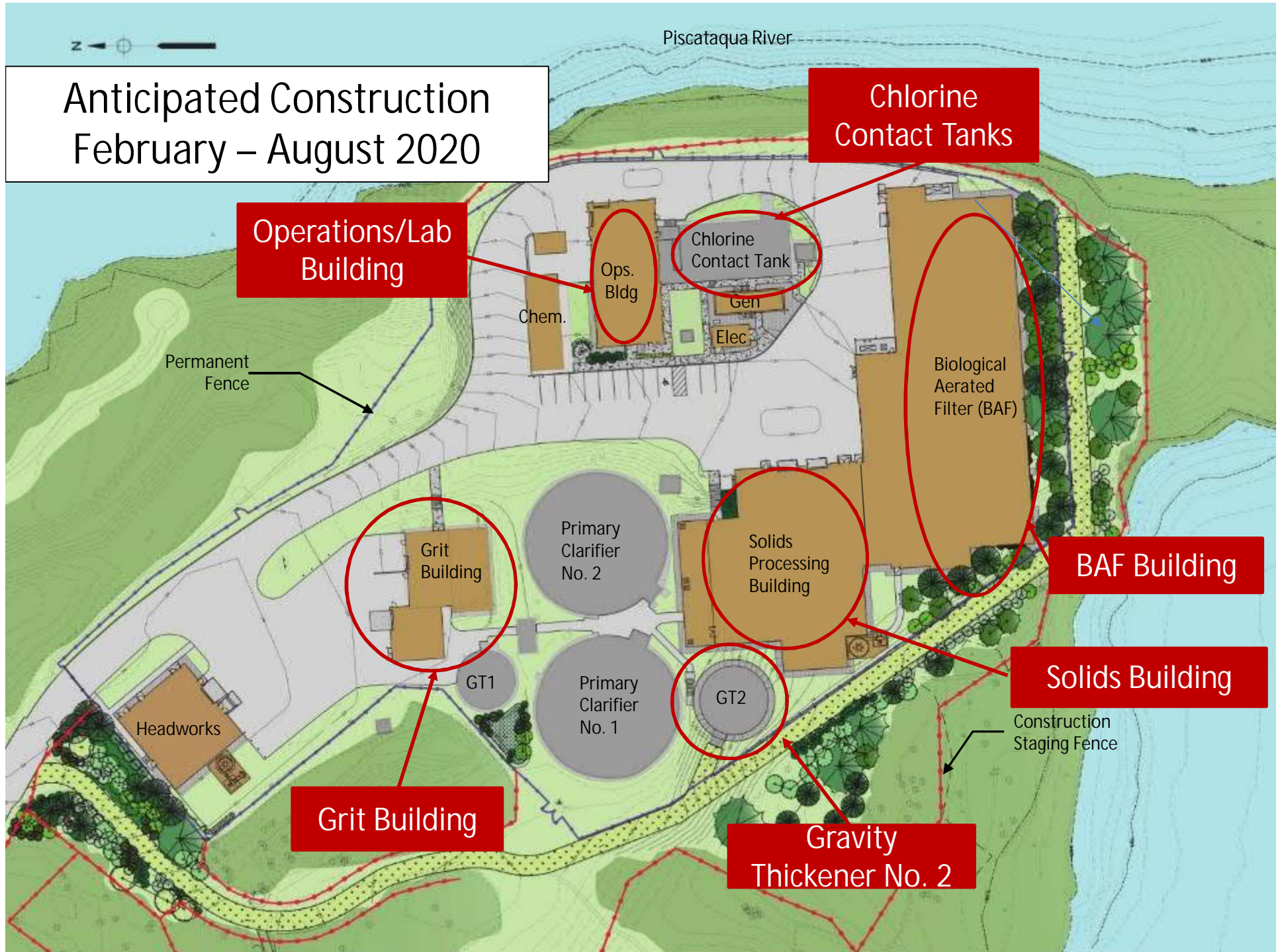


Work to be Completed in Coming Month, Cont.

- Continue structural repair and modifications to the new Operations/Lab Building
- Complete installation and startup of the scum pumps at the Primary Clarifiers



Anticipated Construction
February – August 2020



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 December 31, 2019	Complete
Achieve Compliance with NPDES Permit Limits	April 1, 2020	On Schedule



Events and Recreation

- Upcoming
 - Strawberry Banke Events





Public Input / Comments / Concerns

Next Meeting

- Public Construction Meeting
 - Next Meeting: March 18, 2020, 11:00 AM



Meeting Notes

Subject	Peirce Island WWTF Upgrade – Monthly Public Construction Meeting
Date	February 19, 2020
Time	11:00 AM
Location	Portsmouth, NH

A public meeting was held at 11:00 AM on February 19, 2020 in Conference Room A at Portsmouth City Hall for the subject project. A record of the discussion follows:

Peter Rice, Director of Public Works, 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
- Jon Pearson, AECOM Project Manager
- Andy Brodeur, Methuen Construction, Project Manager

Peter 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:

- Grit Building
- Solids Building
- Biological Aerated Filter (BAF) Building
- Gravity Thickener No. 2
- Existing Sludge Processing / New Operations/Lab Building
- Chlorine Contact Tanks

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.
- BAF Building – The BAF system is now receiving wastewater flow and biomass development is continuing. The netting that covers the nozzle decks has been installed, the netting will help prevent algae growth on the nozzle decks. Load testing of the monorail in the BAF Gallery has been completed. Work to install the two wet chemistry analyzers, additional monitoring probes and the BAF sample sink is underway. Samples from the BAF Stage 1 influent, stage 1 effluent, and Stage 2 effluent will be directed to the sample sink adjacent to the wet chemistry analyzers. The analyzers and other probes installed in the sample sink will monitor the sample for important parameters such as dissolved oxygen, pH, and other criteria. This information will be relayed to the plant SCADA system and BAF operating system in real time to aid in operation. Other finish work such as installing piping insulation and painting is in progress.
- Primary Clarifiers – Work to install the sludge blanket level monitoring equipment is complete, this will allow for plant staff to see in real time the sludge level in the Primary Clarifiers. Work to install the scum pumps and associated piping is in progress.
- Existing Sludge Processing Building/New Operations/Lab Building – The first floor of the building has been demolished and PCB abatement is nearing completion. All demolished materials are being placed into dumpsters which are then covered for subsequent removal. Selective mechanical demolition and concrete repair of deteriorated concrete is underway. Structural work has begun in the lower level of the building so that it can be converted from its previous use as a Sludge Processing Building to its new use as the Operations/Lab Building.
- Chlorine Contact Tanks – Work to modify the existing Chlorine Contact Tanks is underway, this includes but is not limited to concrete wall and slab modifications/repairs and the installation of a new concrete slab. In addition to the concrete work, there are also mechanical piping modifications being completed.
- Gravity Thickener No. 2 – Installation and manufacturer check-out of the gravity thickener mechanism has been completed. At the base of the thickener, grout has been installed so that the thickener floor matches the contours of the rake arm, this work has been completed and the concrete is curing. The dome that covers the gravity thickener has been reinstalled.

Andy discussed work anticipated for the coming month, including:

- Continue minor finish work in the Headworks Building, Grit Building, Solids Building, and BAF Building.
- Continue startup of the BAF Building process.
- Continue minor touch up painting in the BAF, Solids, and Grit Buildings.
- Continue integration of the BAF control system with the plant's SCADA system.
- Continue installation, check out, and startup of Gravity Thickener No. 2 mechanism and scum pumps.
- Continue selective demolition in the existing Sludge Processing Building and Chlorine Contact Tanks.
- Continue structural repair and modifications to the new Operations/Lab Building.
- Complete installation and startup of the scum pumps at the Primary Clarifiers.

Andy then discussed the work anticipated through February and into August 2020, including:

- Grit Building – Complete minor punch-list items.

- BAF Building – Complete minor punch-list items. Complete backfilling and grading around the building and begin landscaping on the west and south sides of the building. In addition, install the cable trellis system/plantings on the west and south side of the building.
- Solids Building – Complete punch-list items. Begin landscaping on the west side of the building.
- 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” topping slab. Complete installation of new structural steel, including roof beams, truss system and decking. Complete exterior wall framing and sheeting, and exterior masonry work. Complete installation of the new roof system. 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.
- Gravity Thickener No. 2 – Complete hand railings and finishes at Gravity Thickener No. 2.
- Primary Clarifiers – Complete installation of the new primary clarifier scum pumps and scum pump station. Complete painting and installation of turnbuckles. Complete installation of grating at the Primary Clarifier Effluent Distribution box.
- Underground Piping and Utility Services – Complete installation of utility connections to the Operations/Lab Building. Construct remainder of binder course pavement at the Operations/Lab Building and install curbing. Begin installation of sidewalks, stairs and railings at the Operations/Lab Building. Final grading and landscaping activities will resume, this includes but is not limited to, grading for asphalt walkways and stone mowing strips; installation of the 12’ vegetated maintenance corridor; installation of the rain garden and installation of the permanent WWTF perimeter fence.

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: ~~4/24/2019~~ 12/31/2019 - Status: Complete
- Achieve Compliance with NPDES Permit Limits - Date: 4/1/2020 - Status: On Schedule

As noted in previous meetings, the BAF Substantial Completion Consent Decree milestone was achieved on December 31st, 2019 in compliance with the Consent Decree schedule. The BAF is in the startup phase with primary effluent flowing through the BAF cells, and the biomass development process is continuing.

Jon noted that the project team is continuing to coordinate construction with community events. Upcoming events this month include Strawberry Banke Events.

There were no questions from the public.

The next public construction meeting will be on March 18, 2020 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.