Project Descriptions for July 8, 2020

Board of Trustees Meeting

Clean Water Commitments

Billerica CW-19-09

This construction project includes modifications and additions to the existing WWTF aimed at improving functionality, safety, & treatment. Aging chemical tanks will be replaced to maintain a safe environment at the WWTF. A Vactor truck unloading station will be installed to alleviate the operator-intensive set up currently in place. A new plant-wise emergency generator will be installed & the existing generator will be removed.

Sludge conveyors will be installed to improve the ease of hauling sludge. Additionally, several buildings will be renovated to increase lab space, machine shop area of maintenance of collection system equipment and for storage for vehicles. The Salem Road pump station will also be upgraded to replace aging equipment.

Fitchburg CW-20-03

Sewer Separation and Rehabilitation: This nutrient removal project will separate 4,800 linear feet (LF) of combined sewers (the installation of 4,500 LF of new sewers and 1,600 LF of new drains) and the closure of 3 regulators (CSO 007, 039, and 048).. The project will include approximately 2,700 LF of sewer replacement and 18,500 linear feet of trenchless rehabilitation to reduce infiltration/inflow upstream of the 3 regulators. This project will reduce nutrient loading to the North Nashua River by removing untreated CSO discharges from the 3 CSO regulators.

Quincy CW-19-28

The Pump Station was built late 1990's and reached its design life. Recent coastal storms and power outages have caused pump station failure

and inundation has led to flooded neighborhoods. SSOs and water quality concerns from the events are further detailed in this application. Quincy

DPW has also addressed a sewer force main break which indicated the 20-year-old DI sewer force main is corroding and pitting

Project Focus

- 1. Replacing the standby generator with a more modern, efficient generator;
- 2. Modifying the electrical system to reduce the frequency and duration power outages;
- 3. Expanding the sewer pumping capacity;
- 4. Replacing the sewer force main with HDPE; and
- 5. Elevation increase to be above future forecasted BFE

Drinking Water Commitments

Barnstable DW-19-28

Design purchase and installation of interim activated carbon filtration units at Airport well and Straightway Facility.

Peabody DW-20-03

The proposed project addresses the lack of redundant water supply to the West Peabody High Service System, presently served by the Winona Water Treatment Plant. It will provide water supply to about 1/3 of the City of Peabody if the treatment plant is out of service, either due to failure or during proposed future renovations. It includes the installation of 24,400 feet (4.6 miles) of 20-, 16-, and 12-inch water main on various streets from Lynn Street near the Coolidge Avenue Water Treatment Plant to Route 1 in West Peabody, and the construction of a drinking water pump station near the High School. All lead services (approximately 50) encountered along the proposed pipeline path will be removed and replaced to the meter or building.

Water Supply District of Acton DW-19-16

The project includes the construction of a new water treatment facility and water mains for the Conant No. 1 and No. 2 Wells in accordance with MassDEP requirements. The new water treatment facility will include media filtration, aeration tower, chemical feed, and a clearwell. The completed project will improve drinking water quality by reducing high manganese (above the ORSGL of 0.30 mg/L) and iron concentrations.

Clean Water Agreements

Billerica CWP-19-09

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Billerica CWP-19-09-A

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Chicopee CWP-19-42

Project includes sewer rehabilitation measures and other corrective action in the Meadowbrook Underdrain area to eliminate contamination of surface waters, reduce infiltration and inflow and improve/renovate conveyance. The Town is under an EPA Administrative Order on Consent to complete the work included in this project.

Northampton CWP-19-38

The project is the first phase of a plan to upgrade and modernize the Northampton Wastewater Treatment Plant (WWTP). The City recently

completed a long-term wastewater planning study, entitled the Comprehensive Wastewater Management Plan (CWMP), that included

recommended improvements to the WWTP to extend its lifespan and ensure long-term functionality and permit compliance (federal and state).

Taunton CWP-19-53

The Taunton WWTF receives all of its flow from the Main Lift Pump Station, and improvements to the station are required to provide reliable

operation. Contract S-2020-1 will include new force mains and influent sewer. The primary goals of the project are to provide more reliable

pumping service, increase capacity, and reduce CSOs to the Taunton River. Currently, when flows exceed the capacity of the existing Main Lift station, the system surcharges and excess flow overflows into the river untreated. Pumps frequently clog with debris, which would be reduced with

the installation of non-clog pumps. This project is being done in conjunction with future upgrades to the WWTF.

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Drinking Water Agreements

Auburn Water District DWP-19-19

This project includes the construction of a new 1 million gallon capacity water storage tank to replace an existing 2 million gallon capacity water storage tank. The new tank is necessary to replace aging and deteriorating infrastructure, reduce excess storage capacity, and improve water quality by reducing water age and adding water mixing capabilities.

Barnstable DWP-19-28

Design purchase and installation of interim activated carbon filtration units at Airport well and Straightway Facility.

Peabody DWP-19-11

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