

Project Descriptions for June 3, 2020

Board of Trustees Meeting

Clean Water Agreements

Lawrence CW-19-21

This project consists of Phases VI through VIII of the annual SSES activities. Phases I through IV were completed in 2014 through 2017, respectively. Phase V is underway. Phases VI through VIII include flow isolation, manhole inspections, cleaning and television inspections, smoke testing and dye testing in a project area that consists of 355,000 linear feet of sanitary sewer ranging from 8-inches to 54-inches in diameter and of approximately 120 manholes. The City has periodically experienced surcharging and SSOs into the storm drain system and CSOs to the Merrimack River. This work is recommended in the 2017 SSES Summary Report and will assist in complying with the federal Consent Decree.

Lynn Water & Sewer Commission CWP-19-27

The Lynn Water and Sewer Commission has entered into a Third Modified Consent Decree with the United States Environmental Protection Agency to implement a long-term control plan to reduce combined sewer overflow discharges to local receiving waters. The West Lynn Sewer Separation project is the first of several projects included in the plan to mitigate CSO discharges into the Lynn Harbor.

The project involves sewer separation of approximately 260 acres within the western portion of Lynn, MA as well as installation of a 114 MGD stormwater pump station with a force main out to a new or reconstructed outfall into the Lynn Harbor. The project will significantly reduce SSOs and CSOs and improve the water quality of nearby water bodies.

Quincy CWP-19-29

The City of Quincy has ongoing infrastructure improvements including rehabilitation, repair and replacement of coastal manholes and sewer piping. The City is proactively implementing Phase IV for the rehabilitation of existing sewer pipe and manholes to remove infiltration and inflow of seawater in areas of the City. The City conducted multiple investigations (SSES) to identify specific problem areas, which are addressed in this PEF. To date the City completed multiple phases including Phase I - manhole rehabilitation, repair, replacements, Phase II - coastal manhole and piping and Phase III - Illicit Discharge and Elimination.

Saugus CWP-19-31

The Lincoln Avenue Wastewater Pumping Station is located at 24 Lincoln Ave in Saugus, MA and serves as the main pumping station for the Town to convey wastewater to the Lynn Regional Wastewater Treatment Facility. The station was built in 1982, has a significant amount of deficiencies, and has experienced a number of failures. Equipment failures have occurred on multiple occasions, seriously affecting the pumping stations reliability. Some improvements were made in 2018, but additional upgrades are necessary at the station. VFD replacement, new motors, power cables, control wiring, station controls, PLC, alarms, and upgrades to the 42" influent slide gate to the station are amongst the additional improvements.

Andover Emergency Drinking Water Agreements

Andover DW-19-13

As indicated in the Town Manager's Recommended Capital Improvement Program FY2020-2024, a significant portion of the Town's water distribution system consists of unlined cast iron water mains that have reduced hydraulic capacity (pressure), and water quality issues due to mineral deposits. To ensure reliability and sufficient capacity within the water distribution system, a study and analysis has identified areas of the Town with deficient water mains. The Town currently conducts annual infrastructure improvements aimed at properly maintaining and upgrading the Town's aging water distribution system to help prevent catastrophic failures, improve capacity, prevent water loss, provide adequate fire protection and improve overall water quality. Despite the Town's efforts, 154 water line leaks/breaks were reported between January 2013 and January 2019, and 542 discolored water complaints were reported between April 2015 and January 2019.