

PROGRESS REPORT

WASTEWATER TREATMENT PLANT UPGRADE AND LITTLE HARBOR/ATLANTIC AVENUE/JERUSALEM ROAD SEWER EXPANSION

In June 2007 the Sewer Commission through its Project Manager, Coughlin Environmental Services, LLC (CES), bid two major wastewater projects: (1) the Wastewater Treatment Plant (WWTP) Expansion and (2) the Little Harbor/Atlantic Avenue/Jerusalem Road Sewer Expansion. Both projects were developed to address the final element of the Second Amended Final Judgment with the State which mandated remediation of septic system pollution within the Little Harbor watershed. The low bidder for the treatment plant upgrade was D&C Construction of Rockland, MA. D&C was previously the Town's contractor for a portion of the North Cohasset sewer expansion project in the late 1990's. The low bidder for the sewer expansion project was LM Holdings, LLC of Westford, MA. Contracts were executed and work began in the fall of 2007.

The sewer expansion project was combined with two other town construction activities in the area, namely water system upgrade work and drainage improvement work, in an attempt to conserve funds and minimize impacts to area residents. The construction projects also would allow more comprehensive roadway improvements to be conducted after all work was complete. Out of a concern that substandard water mains would be impacted by upcoming winter temperatures, priority was given for water work in the fall of 2007. Difficulties activating and maintaining temporary water by-pass piping hindered water work progress and with freezing weather, water work was temporarily suspended. During the winter, sewer construction was actively pursued especially in the priority area of Deep Run and Rust Way. Winter weather and snow periodically hindered operations and prevented suitable repaving of trenches, but sewer work progressed. Significant ledge removal requirements and the relative hardness of the ledge did pose an initial problem for the contractor, but this was eventually resolved by the mobilization of more powerful ledge removal equipment. In summary, the fall and winter progress was below anticipated levels, but more recently, work has begun to accelerate. It is still believed the construction will be completed within the contract time ending in August 2009. At this stage, work is approximately 12%-15% complete. Water and drainage work is also progressing but additional drainage issues are also unfolding as excavation revealed existing drainage piping which is in poor condition. Additional funding may be required to resolve these unanticipated drainage problems.

The treatment plant expansion involves equipment modification and replacement to accommodate an increase in average daily flow from 300,000 GPD to 450,000 GPD. Peak flow issues at the WWTP caused by Infiltration and Inflow (I/I) into the existing collection system caused the plant to exceed its peak capacity on several occasions with overflow into Jacobs Meadow. In the late fall, construction was initiated on an extreme flow pipe, which was completed in March 2008. This pipe will allow the plant to operate at high capacity, while diverting excess flow into the plant which cannot be handled by the membrane filtration system. This diverted, excess flow will be disinfected with hydrogen peroxide and channeled through the ultra-violet treatment system before being discharged through the normal, permitted discharge pipe directly into Cohasset Harbor. Other aspects of the upgrade were done in a sequenced manner which allows the WWTP to maintain full treatment of wastewater flows. Membrane upgrades will be initiated in the summer of 2008 when seasonal flows are at their lowest, allowing for this replacement activity. Work is anticipated to be complete by the fall of 2008 and is currently 15% complete.