

# Sewer Works

Fall 2018

Newsletter of the Hull Sewer Department



## A Message from John J. Struzziery, P.E. Director of Wastewater Operations

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The Sewer Department has continued to be busy over the past few months, in some cases completing work that was started earlier in the year. In addition to the projects noted below, there have been many other jobs that take significant planning, since many projects depend on something else being done in advance or coordination with operations. We continue to prioritize projects to achieve **reliability, redundancy, and resiliency**.

**Billing:** The sidebar summarizes our prior change of the billing method and the start of quarterly billing with this sewer bill. We hope you agree that quarterly billing is preferred.

**Funding:** The Sewer Department is continuing to pursue outside funding. We submitted the four projects previously voted at the May Town Meeting for the State Revolving Fund (SRF) loan program that will finance much of our work through low interest, long term bonding. Projects include wastewater treatment facility (WWTF) and sewer system upgrades and improvements; implementing recommendations made in the WWTF facilities plan, performing the sewer system evaluation survey that will help identify locations of infiltration and inflow (excess water in the sewer system) as well condition assessments of underground piping and the outfall at the WWTF and performing the reliability centered maintenance program. In addition, we will likely be pursuing a FEMA Hazard Mitigation project in January. Due to the competitiveness and limited availability of funding, we are evaluating what makes sense for this program. We also plan on submitting a CZM Coastal Zone Resiliency grant application in early 2019.

You'll be seeing sewer cleaning and inspection equipment in various areas of Town this fall and next spring, and for portions of the next several years as we conduct condition assessments of our system in advance of the Town's roadway pavement management capital plan. We have also been doing corrective and preventative maintenance of many sewer manhole frames and covers and repairing broken asphalt around the manholes. We continue to make progress and improvements and look to you for support and patience during any of this work.

## Work Completed/Ongoing:

### Capital Planning/Capital Projects

- Design submittals for project financing approval by the State were made for the sewer interceptor rehabilitation project along Nantasket Avenue and Fitzpatrick Way and the Atlantic Avenue/Gunrock Area pipeline renewal project. We expect approvals by April 2019. Construction for both projects is planned in 2019.
- We are reviewing the Town's pavement management capital plan to coordinate sewer inspections in advance of any paving work. These inspections will help determine if any sewer repairs or replacements are needed before the roads are paved.

## Quarterly Sewer Billing

The last billing reflected a change in our rate structure to help provide a more sustainable revenue source for operations and capital projects by creating a base fee. We have now moved to quarterly billing as indicated in the current sewer bill. With this we expect to provide a steadier source of revenue over the year while making it easier for our customers to pay each bill.

For information, the average annual sewer bill is \$1,090, based on 70 units of water used. By dividing these amounts by four, you can see how your bill compares to the average, \$272.50 and 17.5 units, respectively.

If your water usage is significantly greater than prior usage for a comparable time-frame for no apparent reason, you may want to check your plumbing systems for leaks.

Please note that a lien will be placed on any unpaid sewer bills from FY 2017 and FY 2018 on the FY 19 Real Estate bill due February 4, 2019.

## Winter Closings

If you close your property over the winter, or leave it unattended for an extended period, especially in cold weather, be sure to winterize your plumbing system to prevent freeze ups and unnecessary water and sewer repairs and associated high bills.

## Check out our website and New Facebook page.



[www.town.hull.ma.us/sewerdepartment](http://www.town.hull.ma.us/sewerdepartment)



Hull Sewer Department

- In November, we will be replacing the two pumps at Pump Station No. 1 on Atlantic Avenue. In addition, we will conduct training with Hull Fire Department to coordinate the work and confined space conditions, so they know in advance what to expect in the event of an emergency at any of our pumping stations.
- Other work underway includes further assessing the secondary clarifiers to determine if repairs to a hole in the return sludge piping about 16 feet underground can be made without considerable demolition and reconstruction. We are also testing one of the clarifiers to determine if a different operation approach can be used without the use of that piping. If this approach works, we can bypass the piping and make repairs to one clarifier while we plan on replacing all mechanical equipment in the other one.



**Secondary clarifier which treats wastewater and settles solids for further processing.**

### Plant Resiliency

- A new HVAC system has been designed for the first and second floor of the Administration Building. However, we've asked the consultants if we can relocate the mechanical systems to the second floor and stay within our budget. Construction is still targeted for early/mid 2019.
- We removed the 40+ year old underground fuel storage tank and are preparing to install an above ground and elevated tank. A temporary above ground tank has been in place most of this year to provide diesel fuel for our generators and pumps.
- Work is underway to relocate and elevate our ground-mounted electrical transformer, funded by a 50% match grant through the State Coastal Zone Management. Construction is planned for early/mid 2019.
- Flood-proofing remedial measures in the effluent pump room are expected by year-end. This will prevent water from finding its way into other areas of the plant in the event of a failure of some sort in that room.



**Fuel storage tank after it was removed from the ground—no soil or groundwater contamination was found.**

### Odor Control

- We continue to be proactive in addressing odors by anticipating what work activities might generate odors—such as tank cleanings—using chemicals in the collection system to minimize odor potential. The odor scrubber filter material is currently being replaced.

### Technology Enhancements

- We continue to enhance our GIS sewer mapping and documentation system and the Town received a regional grant to advance this effort. The State grant project is in the process of being completed at which point we will update our base mapping for the system we now use.
- The Town was also part of a regional effort to obtain new GIS and orthographic mapping, which provides the most recent surface features and will be useful to many Town departments. The mapping was just completed, and we are coordinating to update the relevant systems.
- The State's energy grant project is in progress and should be completed by early November. Efficiency improvements include aeration system modifications, odor control optimization, and generator block heater. These improvements are expected to result in substantial energy savings.

We continue to get emergency calls for clogged pipes, pumps and equipment. Many of these result in wastewater discharges to the ground which could have been avoided. Such discharges must be reported to numerous local, state, and federal agencies and could result in fines. Our goal is to avoid any discharges, fines and violations.

### **PLEASE DO YOUR PART BY KNOWING WHAT NOT TO PUT IN THE SEWER**

**NO WIPES IN THE PIPES:** Wipes, rags and other debris not intended to be in the sewer (even if labeled as Disposable and Flushable), are a major source of sewer backups and clogged pipes. **Wipes create blockages in pipes.**

**THE DRAIN IS NOT A DUMP: Fats, Oils & Grease (FOG) also clog sewer pipes.** Do your part by **NOT** disposing of FOG down the drain; rather, can it and let it solidify, and then dispose in the trash.

**REMEMBER THE 3 PS: NOTHING DOWN THE TOILET BUT PAPER, PEE AND POO!!**