

**To:** Mayor William Martin  
**From:** Don Ouellette, P.E.  
DPW Director

Update # 23

**Date of Report:** November 30, 2016

**Period Covered:** October 28, 2016 to November 30, 2016

**Re:** Items of Interest

Highway Issues:

1) **Chapter 90**

We have completed the program for this year.

2) **Nash's Mill Bridge**

We have an on-site meeting scheduled for December 15. This meeting is called a utility meeting and it's to discuss the locations of telephone poles and any other utility such as gas lines, water lines and sewer lines. We are also in the process of doing an extensive review of the city clerk files to see if the property surrounding the bridge was ever declared as parkland. We did this once in house and we could not find any documentation however it was requested that it be done again with the city clerk. When we complete this search we hope to be able to declare that this property was never declared as parkland and therefore we may be able to avoid the article 97 issues. The town lawyer will write a statement of fact stating that this property has never been determined to be parkland and that should be enough to satisfy the state.

3) **Fixed Network Meter Program**

We are developing the presentation for this project which we have requested funding for Fiscal year 2018. The intention would be to start this project on or about July 1, 2017 and it is expected to be a two-year project. This program would replace 70% of the existing water meters. It would also install transmitters on 100% of the houses that would relay the water readings to a receiver which would collect the data for water meter readings. We just recently ran a report and found that 1900 meters are older than 25 years. We also found that 2886 meters were older than 20 years old. 4000 meters are older than 15 years. The expected life of a water meter is 12 to 15 years old depending on the amount of flow that has gone through this meter. The fixed network system is a proven technology that will save the town a substantial amount of money. (No Change)

4) **Capital Equipment List**

We have been awarded the MIAA grant to do a Comprehensive Vehicle Study. The grant is 100% paid for by MIAA. The grant will be used to determine what vehicles we should have and what vehicles we should get rid of. It should also help us establish a long-term vehicle capital plan that makes sense. I just got the notice about the grant today so I don't have a lot more details to offer at this time.

5) **Wiley Russell Dam**

This will be on next year's Capital Plan. We had a sewer leak at the siphon located on Meridian Street. To repair this leak we had to clear-cut a 25 foot swath of vegetation down to the river. By doing that we uncovered a lot of old rubble left from the sluice way. We are now working with conservation with the intent of cleaning up that entire area to make it safer. This is all part of an infrastructure that has been abandoned for 50 years but not removed. The siphon itself was in good shape however the manhole/chamber needed a lot of repairs. These repairs were completed and we have the siphon back online. We've added this to a five year cycle to be cleaned and inspected. This whole area needs a long-term plan/vision. (No Change)

6) **Trees and beautifications**

I am reapplying for both grants that were applied for last year. One is a grant for approximately \$30,000 from the DCR. The other grant is a Forest Tree Grant which will provide the town 300 trees a year for three years. Our only contribution required is to plant trees. The larger grant also provides for a project manager to assist in the dig safes and the coordination between the residences. Hopefully we have better luck than we had last year. As far as planting trees, we are done for the year. (No change)

7) **Maple Brook Culvert Sewer Repairs.**

We have inspected 5000 feet. The 5000 feet of video and all of the field notes are being evaluated so that we can develop a scope of work and begin the repair work. A significant amount of this work was bid. The bid opening was September 1 and the approximate cost was \$400,000. This project is being delayed until October while we wait for the small cities grant approval. This is not a concern because most of this work can be done late fall early winter. The Engineering Staff has developed a stationing plan that we will use to facilitate the culvert repairs. \$600,000 was approved by the Town Council on March 16<sup>th</sup>. The repair work will start sometimes this fall. (No Change)

8) **Rocky Mountain Water Tank**

This project is nearly complete. The liner is installed and is curing. We are waiting on the contractor to disinfect and fill the tank. This is been delayed until the second week in December. We should be completed with this project by December 10. We are going to replace the old dilapidated fence next spring. The DPW installed the new BILCO hatches. We are hopeful that this project will extend the life of this tank for another 25 years.

9) **Silver Street Project**

The city council has approved the funding for this project in the October 19, 2016 council meeting. The Engineering Department is fine tuning the design and this project will be advertised in late February with a bid opening in early March. Our intent is to start this projects as soon as possible in the Spring (No Change)

10) **West Street Project**

While inspecting the sewer and drain pipes on West Street we found that the sewer pipe is un-repairable and that the water main was installed in 1917. This has been submitted as a CDBG project for next summer (No Change)

11) **Automated Sign Machine**

The Policy/Agreement with several other towns is complete. We are currently using this machine to assist in the wayfarer initiative and all of the new parking signs. Conservatively this machine is going to save the town approximately \$50,000 this year. (No Change)

12) **Reconstruction of Wisdom Way**

A meeting was held September 2 with members of the FRCOG, Mass. Highway, Fuss and O'Neill and the Town Engineer Chris Stoddard. The discussion was how to get Wisdom Way listed as a TIP project. The state had originally ranked this as a 37 which was close. After the site visit they were convinced that this had a more regional impact. It also has the potential for a bike way. We would reduce the travel lanes to 10 feet to make this happen. We have heard back from Mass Highway that this project is being recommended to be added to the TIP. It still needs official approval from FRCOG and they seem excited about supporting this project. The funding for this project is very similar to the Nash's Mill Project in that we are responsible for the design and the construction costs will be paid by the State. Expect the design costs to be somewhere in the neighborhood of \$375,000-\$400,000. The construction cost for this roadway will be somewhere around 3 ½ million dollars to \$4 million. If we are aggressive and get this design completed we could possibly see this road completed in three years instead of five. The design money is on the Capital Plan for this year. (No Change)

13) **Shelburne Road Washout**

Chris Stoddard and I are looking at ways to repair this washout on Shelburne Road. We now think that we can do this project in-house with a couple of vendors. Our intent right now is to develop a plan using pre-built blocks such as Redi Rock to construct a new 16 foot high retaining wall. The challenges to this project is first build a firm foundation at the bottom of the ravine most likely a concrete footing pinned into the existing ledge and then to tie back into the ledge. The small box culvert also needs to be replaced. We will need a crane and operator to place the blocks and box culvert. Also a tracked excavator to do about half of the excavation. An Engineering Firm to develop a footing plan and a pinning system for the wall. Our rough estimates for this work, is about \$500,000. This estimate is only for the bad washout that happened in 2001. There are two other culverts that need to be repaired but we feel we can do this in-house. (No Change)

The entire road will have to be reclaimed and paved and my rough estimate would be another \$300-\$400,000 to complete everything. This work is very similar to work that I have done in other communities. The road would be closed for two months.

Borings were completed and this project is on hold until we receive either a grant or local funding. (No change)

14) **School Street Sidewalks**

We are working with the Planning Department and have designed a sidewalk plan for construction next year. (No change)

15) **Clean-up at the Bendix site**

There are several large piles of debris located at this site. We are just beginning to assess the amount of work that needs to be completed. As soon as a Scope of Work is developed an RFP will be advertised for the removal of this material. (No change)

16) **Capital Projects for FY 17**

The following projects will begin soon;

- Replacement of the headworks at the Wastewater Treatment Plant. This has been bid out and we have a lead time for the new equipment of 22 weeks. We expect delivery early January 2017. Once the equipment is delivered we will start preparing the area for installing this new equipment.
- Replacement of three wastewater pump stations, we had hoped that we could eliminate one of the pump stations; however the proposed design for the new library impacts our ability to eliminate that pump station so it appears today that we will have to replace all three. Two of those stations are currently in design, the Eastside pump station and Leyden Woods Pump Station will be put out for bid in January 2017. The construction should happen early spring as soon as the frost and the snow are gone. The one pump station near the fire station will have to be engineered and then put out to bid separately. We are still hoping that we can eliminate this station however with the proposed sighting of the new library we may not be able to go to a gravity feed system. This area does have high I/I and we plan to do extensive investigation starting in November for this area
- The guardrail and sidewalk projects. This work is nearly complete. We still have work to do on Silver and Conway and that should be completed by December 9<sup>th</sup>.
- Maple Brook culvert repairs. Preliminary inspections are completed and we have bid out the first phase of this work. We are now waiting for a grant approval so the work should start mid October. (No Change)
- I/I repair work is an ongoing effort.
- Crushing concrete should have a contractor on site late November
- Install a new above ground fuel tank. Currently this is on hold while we look into a gas card system.

18) **Consent Order from DEP**

We have received a Draft Consent Order from the DEP concerning our I/I issues. After review of the Order it appears that the DPW is working on all of their concerns. There are several reporting requirements and we have to be aggressive and work on eliminating I/I. (No change)

19) **I/I study**

This study has been completed by Tata and Howard Engineering Company. We are now reviewing it and developing our I/I plan for next year and the next five years.

This study was a DEP requirement and the DPW office will be submitting its first annual I/I report to the DEP for approval in December.

20) **I/I Work**

We have sent out 834 I/I letters and received 388 call backs. Alan has completed 349 initial inspections. 184 sites were in compliance and 165 were not. 46 have come into compliance and we need to re-contact 39 sites and re-inspect 119 sites. We have reimbursed \$16,853.39 to date. All of the original letters have been sent out. Once Alan has caught up and we verify that we have funding we will send out a second reminded.

21) **Capital Plan for FY 2018**

We have submitted the DPW requests and it is on the WEB page titled “as 5 Year Capital Plan FY 2018”. This plan still needs to go through the approval process. Two projects from last year plan appear to be on the Transportation Improvement Program (TIP) list which means that 6.5 million will be removed off the total capital cost for the town.

22) **Future focus**

Completing the Rocky Mountain Water Tank Project, the three wastewater treatment plant pump stations are in design. Developing a capital plan for 2017 through 2022, developing new routes for snow plowing, trash and recycling collection, and buttoning up all projects prior to the start of winter. We are also looking into using a credit card system for fuel and eliminating the underground tanks at the DPW. Developing the DPW operating budgets for FY 2018.