

City of  
**Fitchburg**



Department of  
**Public Works**

**301 Broad Street  
Fitchburg, MA 01420  
Phone: 978-829-1900**

**DPW Weekly Update September 22 - September 29, 2019**

Dear Mayor, Councilors, and Colleagues:

This past week I attended the MMA Policy Committee on Public Works, Transportation and Public Utilities. I have been a member of this committee for several years to advocate for increased municipal transportation funding. The MMA also held its legislative breakfast meeting in Fitchburg on Friday. Generally, there were positive news being announced by the MMA as a result of our continued advocacy:

- An additional \$40 Million for local roads (Ch. 90) in the Governor's supplemental FY 2019 budget. This translates to approximately \$240,000 for Fitchburg.
- As part of the Governor's proposed \$18 Billion Transportation Bond Bill, there is a reported \$490 Million in municipal transportation funding:
  - \$200 Million one-year Chapter 90 (level funding)
  - \$20 Million for Complete Streets Grants (decrease of \$30 Million)
  - \$70 Million for the Small Bridge/Culvert Grants (increase of \$20 Million)
  - \$100 Million for a new program entitled Municipal Pavement Partnership Program;
  - \$100 Million balance in funding was not reported.

Perhaps the best news is the Municipal Pavement Partnership Program, which will allow MassDOT to pave state numbered routes (aka National Highway System) currently owned by municipalities. For example, this would include Route 12 (Water Street, Main Street, Boulder Drive) and Route 2A (Laurel Street, Kimball Street, River Street, and Westminster Street). It has long been our argument that municipalities should not have to use the meager Ch. 90 funds to maintain the pavement on NHS roadways. While the details of the new program are still being worked out, it is a positive move towards improving our roadways.

Sincerely,

Nicolas H. Bosonetto, PE  
Commissioner of Public Works/City Engineer

## CONSTITUENT SERVICES

DPW continued to respond to service requests in a timely manner through the [SeeClickFix](#) program. In the past two weeks DPW received 54 new requests and completed 116 requests. The total outstanding requests backlog is now 299, a majority of which are for potholes, storm drains, and tree/brush trimming.

<u>Reporting Period</u> <u>9/16/19 - 9/29/19</u>		<u>Previous</u>	<u>Change</u>
<b>Previous Request Backlog</b>	<b>361</b>		
New Requests	54	60	-6
Completed Requests	116	54	+62
<b>Total Request Backlog</b>	<b>299</b>	<b>361</b>	<b>-62</b>
Potholes	66	129	-63
Storm Drains	82	84	+2
Tree & Brush Pruning	49	48	+1
Traffic, Signals, Signs	17	14	+3
Berm Repairs	13	13	0
All other categories	72	73	-1
New Requests	54	60	-6
Acknowledged	40	55	-15
Completed & Closed	13	5	+8
Open	41	55	-14

## ROADWAYS

### Traffic Signs, Signals, and Striping

Speed zoning along the following roadways has been researched and inspected for speed sign compliance. New signs will be ordered and erected as necessary.

- Boutelle Street
- Pine Street
- Shea Street
- Airport/Crawford
- Clarendon
- Oak Hill
- Route 2A (not quite sure where these sections are)
- Wallace Road
- Mount Elam Road

Crosswalks were painted on Water Street and Kimball Street.

### Sidewalks

Repaired sidewalks on Lunenburg Street and Summer Street.

The ADA ramp into the Senior Center was repaired and resurfaced to assure everyone can access the great events.



Figure 1 - Senior Center Ramp Repairs

### Potholes

Pothole patching efforts continued this week with approximately 600 potholes<sup>1</sup> filled at various locations, including the following:

- Tibbett Circle,
- Pearl Street,
- Charlton Street,
- Columbia Ave,
- Russell Street,
- River Street,
- Fifth Mass Turnpike,
- Seneca Street,
- Pratt Street,
- St Andrew Street,
- Romano Ave,
- Townsend Street,
- Plymouth Street,
- Maple Street, and
- Exeter Street.

Supported Sewer Division by paving around reconstructed manhole covers at the following locations:

- Will Thompson Way,
- Airport Road.

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<sup>1</sup> Based on average pothole size of 3.5 inches depth and 1.5 foot wide by 1.5 foot long (volume of 0.66 cubic feet or 0.02 cubic yards)

Crack Sealing

Crack Sealing continued last week on Canton Road and Ashburnham Hill Road. Our contractor has completed approximately 80% of the work so far and will continue to work throughout the city in the coming weeks.

**STORM WATER**

Catch Basins

The catch basin on Mechanic Street at Romes Way was rebuilt. Started rebuilding catch basin on Kyle Road.

**PARKS & RECREATION**

The necropsy of the swan that passed away at Coggshall Park in August has been released, showing the swan died of an infection caused by Pasteurella Multocida Septicemia bacteria. This bacteria is very common in birds and mammals but is not usually fatal. Testing laboratories contacted by Recreation Director LaRose have confirmed that since the bacteria is so prevalent in nature and in animals, no testing is available because there are no set limits for the bacteria. Mirror Lake is not used for swimming or for potable water, so regulations for testing of recreational swimming ponds do not apply. As such, it is the opinion of DPW that the water at Mirror Lake does not pose a health hazard to the public.

DPW crews continued to cut grass and pick up trash from parks, the Common and Main Street. Picked up brush at Gateway Park and removed bees nest at Coggshall Park.

**CEMETERIES**

Groundwater levels continue to be monitored at the Forest Hill expansion site next to the columbarium. Monitoring well #3 has been replaced. Levels are below six feet, DPW will continue to monitor and design expansion accordingly.

The cemetery crews continued to maintain the grounds by mowing, trimming, cleaning graves and monuments, picking up litter and painting.

In addition to routine maintenance and administration tasks, the following were completed:

Interments .....	0
Up righted monuments.....	0
Uncovered/cleaned flat monuments.....	10
Foundation marking for monuments.....	4
Catch basin repair .....	0
Trimmed Trees .....	0
Trimmed shrubs.....	0
Meeting with Families.....	8
Payments - invoiced/processed.....	8
Family Genealogy .....	7

**WATER SUPPLY**

Water Treatment

Reservoir Levels as of 9/26/19			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/Ashby	-2.48 feet	-0.96 feet	Meetinghouse
Scott	-2.30 feet	-3.73 feet	Mare Meadow
Lovell	-1.32 feet	-0.22 feet	Bickford
Water Filtration Plant Flows/Production from 9/19 through 9/26			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	8,959,000	29,956,000	38,915,000
Backwash to waste (Gal)	880,000	3,317,000	4,197,000
Finish Water - Treated & Distributed (Gal)	8,079,000	26,639,000	34,718,000
Efficiency	90%	89%	89.2%

Completed annual test of the fire pump and controls at the Lacava Pump Station.

Weston & Sampson Services replaced the second pump at the Lacava Pump Station (the other one was replaced last year), laser aligned it, and put it into service. Everything went well and the pump appears to be operating correctly. With these new pumps (higher horsepower, improved pump curve) we will be able to increase pressure to the Great Wolf facility by 10-15 psi. Pressures will be slowly increased next week after the facility has been reopened (opened back up on evening of 9/27) for a few days.

Met with representatives of Great Wolf, Johnson Controls, and Ruel Electric to determine method of providing signal to Great Wolf regarding the status of the fire pump at the Lacava Pump Station. It was decided that we will need to get in contact with the fire pump transfer switch company to see if they are able to monitor the fire pump for energized/non-energized at Great Wolf.

Equalization pump #1 (there are two pumps) at the Falulah plant began making noise this week. It sounds like something (pebble or other small piece of debris?) may be caught inside the pump. Will cycle it on/off and monitor to determine whether it continues, gets worse, etc. - if noise continues a contractor will be needed to remove/repair pump.

Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Painted	Flushed
1,632	2	0	2	9	0

## Water Distribution

- FWD personnel checked hydrants that FFD used for the fire at 7 Beekman Street. All functioned correctly, no hydrant issues during the fire.
- FWD personnel excavated and replaced a hydrant on Myrtle Avenue at Green Street, a new hydrant, barrel, and shoe were installed.
- FWD personnel rebuilt the training hydrant at Central Fire Station.
- FWD personnel excavated and removed gate box on valve at corner of Willow Street and Main Street to remove a piece of metal that was stuck in the box. Crews installed a new gate box and backfilled.
- FWD personnel prepped and paved trenches on Connors Street, Myrtle Avenue, Willow Street, and Pearl Hill Road.
- FWD personnel excavated/ repaired a water service leak (city side) at 49 Kimball Road.
- FWD personnel completely weekly inspections, maintenance, cleaning of vehicles and building.
- Steve Neal and on-call personnel (treatment and distribution) came in Sunday evening for the fire on Beekman Street to assist the FD with establishing a good water supply.
- Representative from Northeast Shoring came to the Water Division and taught a class to distribution personnel on the assembly and use of the new hydraulic trench shoring.
- Investigated issue with pressure sensing line at the Lacava pump station, the existing line appears to be plugged. Will investigate a way of cleaning this out to return water flow of installing a new water line.

In addition to routine maintenance and administrative tasks, the following services were completed:

Water Permits and Inspections	
Type	Number
Emergency DigSafe Markouts	0
DigSafe Markouts	22
Inspections of Work on Water System	5
Record Plan Updates	9
Curb Stops Turned off/on	11
Located/cleaned gate/curb boxes	13
Final Readings/Real Estate Closings	27
New Meter Installations	12
Backflow Preventers Tested	9
Residential Appointments Made	0
Totals	108

## WASTE WATER

### Sewer System

- Replaced 10 defective locking frames and covers on Will Thompson Way with new sewer covers.
- Replaced 2 collapsing sewer manholes on Airport Road.
- Sawcut trench on Airport Road where we will be installing a new sewer line.
- Paved all sewer manhole covers we reset in-house.
- Re-paved cover at 110 Depot Street.
- Assembled our new trench box.
- CSO Checks: no activations were found.
- Located two buried manholes off of the Burma Road Trail; will raise the manhole frames in the coming weeks.
- Reviewed Boulder Drive Combined Sewer Separation Survey from Whitman and Bingham.
- Reviewed plan for Valley Street development and provided comments to developer.
- Attended Conservation Commission Meeting for CSO-39 Project; will proceed with an RDA to save permitting time and costs.
- Continued with edits and finalization of on-call construction services contract.
- ADS spent a day in town to troubleshoot ECHO down-looking sensors. May need to swap modems.
- Vactor truck was towed to Camerotta Truck Parts for engine repair.
- National Water Main removed 12 tons of debris from the trunk sewer under the Westminster Street Bridge over Phillips Brook.



Figure 2 - NWMCC, Sewer Cleaning

## Plant Operations

Due to the recent dry weather, there were no bypass events at the plant. Plant maintenance continued with preventative on the various elements of the treatment system.

<b><u>Work Order Report September 20th - September 26th</u></b>					
<b>Demand Statistics</b>		<b>PM Statistics</b>		<b>Averages</b>	
Rejected Work Orders	0	Rejected Work Orders	0	% Total Work Orders Completed On Time	94.40%
Demand Work Orders	6	PM Work Orders	12	Avg. Days Late / All Work Orders	.1
Demand Work Orders Completed Late	0	PM Work Orders Completed Late	1	Avg. Days to Complete / All Work Orders	4.1
Demand Work Orders Completed On Time	6	PM Work Orders Completed On Time	11	Total Man Hours	248
% Demand Work Orders Completed On Time	100.00%	% PM Work Orders Completed On Time	91.70%		
Avg. Days Late / Demand Work Order	0	Avg. Days Late / PM Work Order	.1		
Avg. Days to Complete / Demand Work Order	26	Avg. Days to Complete / PM Work Order	8.29		

A solar domestic hot water system has been started this week. The mounting frames have been installed on the roof and storage tanks installed in the basement. The piping and connections will be installed this coming week.



*Figure 3 - Rooftop Mounting Frame Install for Solar Hot Water Project*

## ENGINEERING

### Oak Hill at Franklin Road

DPW Engineering staff conducted speed and inclinometer study of Franklin Road curves from Depot Street to Revolution Drive. The results of this study will determine advisory speed limits for this stretch of roadways. Warning signs for the curves will be designed and reviewed with the FPD prior to installation.

## Board of Survey

The Board of Survey was convened by the Building Commissioner last week. Per Chapter 143 Section 8 of the MGLs, the Board of Survey inspects buildings that have been previously declared unsafe by the Building Commissioner, but for which the owners of the building have not made the necessary improvements. The Board is comprised of Fire Chief Roy, City Engineer Bosonetto, and Anthony Tiesse (member of the public). On Friday September 27 the Board convened and inspected three buildings at: 7 Beekman Street, 44 Plymouth, and 8 Woodland Street. A follow up meeting was held at the fire station to make recommendations on each of the buildings.

## Pavement Management Plans

DPW Engineering, Administration and Streets Divisions met with the Mayor to discuss paving plans.

## Asset Management

StreetScan has completed the sidewalk and street data collection efforts. The raw data collected is currently being analyzed and going through QA/QC. We anticipate receiving the data in late October.

<b>Engineering Services</b>			
	<u>Type</u>	<u>Number</u>	<u>Fees</u>
<b>PERMITS</b>	Dumpster Permits	1	
	Trench Permits	1	\$ 75.00
	Excavation Permits	41	\$3,800.00
	Driveway Permits	0	
	Sign Permits	0	
	Sewer Permits	0	
<b>INSPECTIONS</b>	Driveway Inspections	1	n/a
	Trench Inspections	12	n/a
	Site Inspections		n/a
	Dig-Safe requests	6	n/a
	Sewer/Drain Inspections	8	n/a
	New Address Assignments		n/a
	Parcel Updates		
	Planning Reviews	1	n/a
	<b>Totals</b>	<b>71</b>	<b>\$3,875.00</b>

**ADMINISTRATION**

- Winter operations:
  - Completed rate analysis to project the financial impact of a rate increase for plow contractors.
  - Spoke with several contractors interested in coming back to plow for the City. Most are interested in our rates and insurance requirements.
- Completed MassDOT Chapter 90 reimbursement request package for inspection services and assistance with the Small Bridge Program Grant application for the Westminster Hill Bridge. Reimbursement request totals \$10,068.
- Reviewed all DPW Department accounts for accuracy and monitored budgets.
- Attended meeting with Wachusett Mountain to discuss our arrangement for purchasing water for snow making operations.
- All DPW divisions are working on the accumulated absence reports that are due by October 2<sup>nd</sup> for the period thru June 30, 2019. Reports are due twice a year.

<b>Invoicing, Warrants, and Payrolls</b>						
	<b>Invoices</b>		<b>Deposits</b>		<b>Billings</b>	<b>Payroll</b>
<u>Division</u>	<u>Number</u>	<u>Total \$</u>	<u>Number</u>	<u>Total \$</u>		
Streets/Admin/Engineering	84	\$ 237,135	*Note 1	\$ 3,875		\$ 65,757
Cemeteries	4	\$ 594				\$ 11,295
Parks						\$ 7,240
Recreation	7	\$ 2,621				\$ 20,871
Water Supply	28	\$ 130,980				\$ 56,150
Waste Water	99	\$ 313,995	*Note 2	\$ 34,780		\$ 79,001
<b>Total</b>	<b>222</b>	<b>\$ 685,326</b>	<b>-</b>	<b>\$ 38,655</b>	<b>\$ -</b>	<b>\$240,314</b>
*1 - Engineering Permits		2				
*2 - Septage at East Plant (Gallons)		409,176				