

City of
Fitchburg



Department of
Public Works

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

DPW Weekly Update March 2 - March 8, 2020

Dear Mayor, Councilors, and Colleagues;

Last week the Massachusetts House passed two important bills to fund transportation projects throughout the Commonwealth:

House Bill 4508 (amended as H 4530) passed the House 113-40 on Wednesday and proposes to raise between \$500 and \$600 Million per year for transportation revenue through a 5¢ gas tax increase, a 9¢ diesel tax increase, excise taxes on corporate vehicles, and fees on share-ride apps. The bill only allocates \$27 Million/year towards the MBTA and regional transit; leaving the bulk of the revenue to increase expenditures under the bond bill (see below). This measure replaces the Governor's Transportation Climate Initiative (TCI) as the source of about \$500 Million/year funding source in the bond bill. The TCI is a proposed regional carbon cap system that some argue would simply pass the costs to the consumer through increased gas prices. The TCI was removed from the bond bill as a revenue source by the Legislature Transportation Committee. The Governor therefore opposes this revenue measure and it is unclear when/if the Senate will schedule a vote.

House Bill 4506 (amended to H 4547) passed the House 150-1 on Thursday and proposes to spend \$18.2 Billion over the 10-year period on various programs. The bond bill originated with the Governor and MassDOT, but the House added amendments and earmarks to reflect the revenue bill priorities with a total of \$18 Billion in funding (\$14 Billion from bonding and the rest from tax revenue or TCI - see above). The bond bill as adopted includes a one-year Chapter 90 appropriation of \$300M (a 50% increase), and multiple municipal assistance programs including \$100M for a new Municipal Pavement Partnership Program, \$70M for the small bridge program, and \$50M for the complete street program.

Overall, regardless of whether the ultimate funding mechanism is a gas tax or TCI, the increasing investments into our transportation infrastructure is a welcomed sign. As always we thank Senator Tran, Representative Hay and the Mayor for their continued advocacy and support in our city's infrastructure modernization efforts.

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 28 new requests and closed 14 requests. The total outstanding requests backlog is now 165, an increase of 14 from the previous reporting period. We will continue to work on the backlog request in preparation for the spring season.

	<u>Reporting Period</u> 2/24/20 - 3/8/20	<u>Previous Period</u>	<u>Change</u>
Previous Request Backlog	151		
New Requests	28	14	14
Completed Requests	14	29	-15
Total Request Backlog	165	151	14
Potholes	35	25	10
Storm Drains	49	48	1
Tree & Brush Pruning	14	14	0
Traffic, Signals, Signs	5	6	-1
Berm Repairs	6	6	0
All other categories	56	52	4
New Requests	28	14	14
Acknowledged	4	6	-2
Completed & Closed	1	3	-2
Open	27	11	16

ROADWAYS

	Saturday 2/29	Sunday 3/1	Monday 3/2	Tuesday 3/3	Wednesday 3/4	Thursday 3/5	Friday 3/6
Rain (in)	0.01	0.0	0.0	0.1	0.0	0.0	0.0
Snow (in)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hi/Lo Temp (F)	16/30	14/30	23/54	41/59	36/46	34/46	32/45

Sources: <https://www.cocorahs.org/ViewData/ListDailyPrecipReports.aspx> (STA MA-WR-22)
<https://www.timeanddate.com/weather/@4936825/historic>

Streetsweeping

With the arrival of spring weather, DPW switched from snow operations to streetsweeping. The streetsweepers started cleaning up the following main lines:

- Mechanic Street,
- John Fitch Highway,
- Lunenburg Street,
- Summer Street,
- Bemis Road,
- Airport Road,
- Princeton Road,
- Westminster Street,
- Main Street,
- Boulder Drive,
- Newton Street, and
- All the bridges off of Boulder Drive

After the mainlines are completed, side streets will be swept on a ward-by ward basis. The schedule rotates every year, so that the first ward done in one year is moved to the bottom of the list in the following year. For 2020, wards will be swept in the following order:

Ward 4.....	March 30 - April 8
Ward 5.....	April 9 -April 17
Ward 6.....	April 20 - April 29
Ward 1.....	April 30 - May 6
Ward 2.....	May 7 - May 15
Ward 3.....	May 18 - May 29

Please keep in mind that the schedule is subject to change due to weather or equipment problems. This year the DPW is trying to speed up the time it takes to sweep the entire city by sweeping in two shifts: 11:00 PM to 7:00 AM as well as 7:00 AM to 3:00 PM. Residents are asked to sweep sidewalks in front of their homes. Sand should be placed in wind rows- not in piles - so that the equipment can successfully remove it.

If you would like to schedule your ward clean up day to coincide with the streetsweepers, please contact us.

Traffic Signs & Signals

Installed parking meter in lot behind Espresso's Pizza for parking control.
Transferred no parking signs on Klondike Avenue from old poles to new ones.
Repaired Do Not Enter sign on Main Street.

Stormwater

DPW Streets continued cleaning out swales and culverts on Fisher Road, Pearl Hill Road, and High Rock Road.

Potholes

Pothole patching efforts continued during the week using cold-patch and the hot box at various locations, including the following:

- Alice Ave,
- Alpine Road,
- Ashburnham Street,
- Bernadette Street,
- Cathy Street,
- Fairmount Street,
- Hollywood Street,
- Industrial Road,
- Jeanette Street,
- John Fitch Highway,
- Lunenburg Street,
- Pearl Street,
- Pine Street,
- Rollstone Street.
- Shea Street,
- South Street,
- Stickney Road,
- Theresa Street,
- Townsend Street,
- Vine Street,
- Water Street,
- Will Thompson Way.

Graded Caldwell Road.

Repaired fences on Mt Elam Road and Rollstone Road and Elizabeth Street.

PARKS AND RECREATION

- Installed two dog poop-bag stations at Gateway Park and Coolidge Park.
- Picked up two downed trees on Coggshall Park.
- Started spring clean up in parks by picking up leaves and branches.
- Bid League Elem. Division Final regular Season Games were on March 5, 2020
- Scheduled Senior Center for upcoming FATV/Fitchburg Rec Spring Vacation Movie Night on April 21, 2020. Working out details with FATV on double feature movies.
- Scheduled annual Amazing Egg Race Family Fun Day at Fitchburg Senior Center. Contacted FHS to seek volunteers to support Arts & Crafts, Games and Challenges.
- Attended Coaches Meeting with Bid League Elementary School Coaches on 3/3/2020 to discuss season so far and playoff schedule.
- Completed Marketing for Concerts on the Common with the following schedule:
 - A Night of Zeppelin - July 1
 - Jim Weeks Band - July 8
 - The Outcrops - July 15
 - Blue Honey - July 22
 - Maximum Recoil - July 29
 - The Might King Snakes - Aug 5
 - 4EverFab - Aug 12
 - Celebration of the Lizard - Aug 19
 - Fellowship of the King - Aug 26
- Completed Scheduling and Poster for Friday Night Movie Series:
 - Frozen II - July 17
 - Dora and the Lost City of Gold - July 24
 - Little Giants - July 31
 - Toy Story 4 - Aug 7
 - Inside Out - Aug 14
 - Star Wars the Force Awakens - Aug 21
 - Awaiting Final Confirmation due to DVD Release Dates:
 - Jumanji: The Next Level - July 10
 - Mulan (2020) - Aug 28
- Summer Playground Program
 - Jobs have been posted since 2/19/2020. Online applications opened on March 6, 2020.
 - The Summer Playground program is open to children ages 2-17. Participants 6 and under must be accompanied by an adult.
 - This program is offered to Fitchburg residents at NO COST.
 - Free lunch included for those 17 and under through the USDA Summer Food Service Program.
 - The program runs July 6th through August 21st, Monday – Friday from 9:30am – 2:30pm, weather permitting.
 - Online Registration is available now at <http://fitchburgma.gov/activities>. Registrations forms will be sent to schools in April.
 - Interviews will begin on a rolling basis starting the week of March 9, 2020.

CEMETERIES

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

Full Interments	0
Inurnments.....	0
Up righted monuments	0
Uncovered/cleaned flat monuments.....	2
Foundation marking for monuments	2
Catch basin repair	0
Trimmed Trees	0
Trimmed shrubs	0
Meeting with Families	8
Payments - invoiced/processed	11
Family Genealogy	3

ENGINEERING

- Continued to provide ongoing assistance to MassIT Field Technician with E-911 address assignments and address confirmations for the state-wide emergency database.
- Attended the 3/5 City Council meeting to represent DPW during the discussion of McTaggart's Pond Dam. A petition had been filed to repair the dam and refill the pond, but it was held until consultant completed an Alternatives Analysis to help the City determine the best path forward for the dam. DPW Engineering presented results of the Alternatives Analysis to the Public Works Committee and explained that due to the cost, ecological value, and other factors, the most logical option is to remove the dam. The Public Works Committee voted to withdraw the petition and, after some discussion, City Council voted in accordance with the Public Works Committee.
- Provided the McTaggart's Pond Alternatives Analysis to the City's Conservation Agent for distribution to the Conservation Commission. DPW Engineering will attend the March 31st Conservation Commission meeting to present the results of the analysis.
- Prepared a Notice to Proceed for Weston & Sampson to conduct two follow-up inspection of McTaggart's Pond Dam and sent to Purchasing for review and approval. These inspections are required every three months due to the poor condition of the dam.
- Responded to additional questions from prospective bidders on the Water Division's Supervisory Control and Data Acquisition (SCADA) Upgrade Project.
- Wrote two recommendation letters for the summer interns we had this past year, Connor St. Germain and Kevin Barbara. Both were outstanding employees and we wish them all the best.
- Sent MassDOT two hydrologic & hydraulic studies that were performed by DPW Engineering several years ago for Lunenburg Street between Boutelle Street and John Fitch

Highway to help identify the cause of sewer system backups downstream of this area and evaluate various remedial action alternatives.

- Attended the bi-weekly DPW staff meeting.
- Met with Hoyle, Tanner & Associates to discuss possible ways they could assist with Municipal Vulnerability Preparedness action grant applications.
- Attended the Economic Development Task Force meeting to discuss a proposed drive through window at the Honey Land store on the corner of Boutelle Street and Summer Street.
- Participated in conference call to discuss Two-Way Main Street and Boulder Drive.
- Reviewed approved plans for proposed parking lot construction across from 196 Water Street. Conducted field visit to determine if it had been constructed per approved plan. It appeared that little work had been done on-site and nothing had been constructed per approved plan.
- Worked with Brian Woodbury of Lightsmart Energy Consultants, LLC, to begin drafting a step-by-step Standard Operating Procedure for diagnosing issues with our streetlights.

Road Construction

- Met with the Mayor's office to discuss StreetScan data and Spring 2020 paving. DPW Engineering plans to attend an April City Council meeting to present the StreetScan data.

Planning Reviews

- Reviewed Special Permit applications for the following projects ahead of the March 10, 2020 meeting:
 - 128-144 Fairmount Street
 - 226 Westminster Street
 - 34 Kimball Place
 - 50 Whalon Street
 - 431 Westminster Street

GIS/Asset Management

- Attended the monthly DPW GIS user group meeting. This is a group of GIS users in the City that meet regularly to discuss software and hardware issues, asset management, and other GIS-related topics.

Permits & Inspections

- Provided construction oversight and inspectional services for sidewalk construction at the intersection of Oak Hill Road and Franklin Road.

- Issued two trench permits to the Water Division
- Issued dumpster/street occupation permits for the following:
 - Grove Street and Elm Street (Fitchburg District Court)
 - 98 Nashua Street
 - 655 Main Street (Dario's)

Streetlights

- Street light inspections:
 - 79 River Street to investigate a knock down
 - 5 Pleasant Street to investigate a day burner
 - 49 Valley Street to investigate a day burner
 - 10 Lunenburg Street to investigate a light not working
- Performed an inventory of concrete light poles on Main Street and Boulder Drive that are in need of replacement. There are 18 on Main Street and 10 on Boulder Drive. These may be replaced as part of the Main Street/Boulder Drive Two-Way Conversion Project.
- Closed SeeClickFix ticket for 139 Electric Ave., this is a privately owned light.

Miscellaneous

Engineering Services				
		<u>Type</u>	<u>Number</u>	<u>Fees</u>
PERMITS		Dumpster Permits	3	\$0
		Trench Permits	2	\$0
		Excavation Permits	0	\$0
		Driveway Permits	0	n/a
		Sign Permits	0	n/a
		Sewer Permits	0	\$0
INSPECTIONS		Driveway Inspections	0	n/a
		Trench Inspections	0	n/a
		Site Inspections	1	n/a
		Dig-Safe requests	7	n/a
		Sewer/Drain Inspections	0	n/a
		Street Light Inspection	4	n/a
Totals			17	\$0

WATER SUPPLY

The Water Supply Division produced 29.2 million gallons of drinking water this past week. No transfer of water between reservoirs is taking place. Reservoirs continued to be inspected and patrolled.

Wyman Pond gate was opened to 8 inches to compensate for the rainfall/snowmelt that occurred in an effort to maintain the 2-foot drawdown for the winter months. The Reservoir Caretaker is monitoring the level on a daily basis and opening/closing the discharge gate as needed to maintain seasonal drawdown. Reservoir will be refilled by April 1st. in accordance with the Order of Conditions with the Westminster Conservation Commission.

Water Treatment

Reservoir Levels as of 3/6/20			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/Ashby	Full	-0.61 feet	Meetinghouse
Scott	Full	Full	Mare Meadow
Lovell	Full	Full	Bickford
Water Filtration Plant Flows/Production from 2/28/20 through 3/5/20			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	6,260,000	26,495,000	32,755,000
Backwash to waste (Gal)	1,080,000	2,433,000	3,513,000
Finish Water - Treated & Distributed (Gal)	5,180,000	24,062,000	29,242,000
Capacity	(6 MGD) 15%	(12 MGD) 32%	(18 MGD) 26%
Efficiency	83%	91%	89%

- Laviollette Controls was in on 3/3/20 to address MA DEP data reporting software issue. He added a second data acquisition point to act as a redundancy.
- Lab staff attended a MA DEP training seminar held at the Falulah Water Treatment Plant on 3/3/20. The seminar addressed PFAS/PFOA sampling with respect to sampling technique, bottles used, properly filling out a COC, and storage and shipping. MA DEP personnel all provided guidance on applying for MA DEP's Free Sampling Initiative for PFAS testing, which offers free sampling at all entry points to the distribution system.
- Bruce Walker was in on 3/4/20 to install a new motherboard in Cl2 scale module #2 at the Falulah Plant. The motherboard for the Cl2 module #2 was damaged as a result of a power blip/surge a couple weeks ago. Scale module #1 and #2 were calibrated as well.
- Natrium Products delivered 25 tons of sodium bicarbonate to the Regional Plant.
- Cogswell Sprinkler completed repairs on the fire protection system at Specialty Products, Industrial Road. FWD personnel isolated the fire pump at the Montachusett Industrial Park while this work was being completed to avoid unneeded activation of this pump.

Water Distribution

- Wyman Pond level was checked throughout the week. Gate is open 8 inches.
- FWD crews located and cleaned out curb stop boxes throughout the week to prepare for possible service line shut downs for meter replacements. Service lines that have been determined to be, or potentially be, iron pipe are likely to require shut downs.
- Completed shut downs of water service lines throughout the week to allow the meter replacement contractor to replace meters which had iron services and/or wheel valves that the contractor determined might fail if operated.
- During the course of the week, FWD crews checked/maintained all water trenches repaired with cold patch (final restoration will be completed in the spring when the weather improves and local asphalt plants reopen).
- FWD personnel excavated and repaired/replaced a curb stop box at 342 Cathy Street.
- FWD personnel excavated and installed a new curb stop at 362 Wanoosnoc Road.
- FWD personnel excavated and installed a curb box extension at 140 Hollywood Street.
- FWD personnel repaired a hydrant at 399 Clarendon Street, Hydra-Tech Inc. removed a frozen seat ring with a hydraulic impact gun, a new seat ring and break-away-kit was installed and hydrant put back in service.
- FWD personnel excavated and repaired a water service leak at 50 Klondike Ave. Leak was found at the tap.
- Completed several shut-offs at vacant buildings in which water lines/plumbing had frozen and were discovered leaking by owners, etc.
- Continued checking for frozen hydrants and wintering hydrants as needed throughout the course of the week.
- FWD personnel assisted all week in the meter department covering a vacant position.
- FWD personnel picked up cold patch from Keating's.
- Completed weekly inspections and maintenance/cleaning of Water Division vehicles and equipment.
- Completed housekeeping duties at 1200 Rindge Road.

Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Painted	Flushed	Winterized
1,632	2	0	1	12	0	31

Administration and Meters/Billing

- Total of 10 real estate closings – final readings completed along with preparation of final bills for attorneys/realtors. Future real estate closing final readings also scheduled.
- 21 invoices totaling \$76,544.48 were processed for FY20 warrant WG20037.
- 3 purchase requisitions and 3 change order entered into Munis for approval by Purchasing.
- Scheduled backflow tests. Made changes to backflow database with new owner information. Personnel continued conducting monthly backflow device testing.
- Changed 274 meters in Munis to Neptune. This is time intensive as well as being time sensitive.

- Began calling accounts that have been non-responsive to the meter change letter.
- After unloading 7553 Badger meters from the meter reading laptops there were 571 missed readings. Went through the missed reading report and identified which accounts were actually missed and which were due to a glitch with the Badger Meter software. 111 accounts were true missed readings. The accounts were reloaded onto the laptop and the readings were obtained by various staff members driving the collection routes and comparing the accounts that had been highlighted as missed readings to ensure that these readings were collected by the laptop. A help desk ticket was submitted to IT in hopes that they can find a way to work around this. Hopefully, it can be resolved before the next bill run load at the end of March.
- Completed the agenda for the March Water/Wastewater meeting and sent to City Clerk for posting. It was also posted on the City website.
- Attended the bi-monthly DPW staff meeting.
- Attended the MA DEP Spring Seminar held at Devens Common.
- The weekly progress meeting conference call was held regarding the WaterSmart software program with FWD personnel, City IT personnel, and representatives of Weston & Sampson, Ti-Sales, and WaterSmart. Continued progress is being made on implementing this software.

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

Water Permits and Inspections	
Type	Number
Emergency DigSafe Mark-outs	2
DigSafe Mark-outs	10
Inspections of Work on Water System	2
Record Plan Updates	8
Special Permit Applications Reviewed	4
New Water Service Applications	0
View Permits reviewed	0
Curb Stops Turned off/on	14
Located/cleaned gate/curb boxes	49
Final Readings/Real Estate Closings	10
New Meter Installations	12
Backflow Preventers Tested	36
Cross Connection Surveys	0
Residential Appointments Made	0
Totals	147

WASTE WATER

The WWTF processed 64.68 million gallons of sewage. In total, 37.5 tons of organics and 58.2 tons of solids were removed and prevented from entering the Nashua River.

<u>Week of 2/23/2020 - 2/29/2020</u>		
Sewage Flow	64.68	Million Gallons
Rainfall	1.06	Inches
Secondary Bypass	1.41	Million Gallons
BOD _{in} (lbs)	82,735	Pounds
BOD _{out} (lbs)	7,700	Pounds
BOD Removal (%)	91.87%	
TSS _{in} (lbs)	128,468	Pounds
TSS _{out} (lbs)	12,178	Pounds
TSS Removal (%)	91.60%	

- Collaborating with Fitchburg Public Schools (District STEM Support Specialist, Longsjo STEM Resource Coach, and Longsjo 7th Grade Students Team) to develop a “Virtual Tour” of the East Wastewater Treatment Facility, for the FPS’s “Engineering the Future, STEM Gala” at FSU on Thursday – March 12th.
- Participated in Monthly Construction Progress Meeting for the “Secondary Systems Upgrades Project”, on Thursday – March 5th.
- Participated in monthly engineering services meeting, with Wastewater’s engineering services consultant (Weston & Sampson Engineers), on Friday – March 6th.
- Presented to City Council on the West Wastewater Treatment Facility “repurposing” procurement being undertaken, with assistance from West Group Law, on Thursday – March 5th.

Sewer System

- Checked Plymouth Street, Townsend Street, Jerry Street, Jackson Street, and Upham Street problem areas. No major issues except Plymouth Street will need jetting.
- Checked reported “sewer smell” at #18 Matthew Street. No odors were noticed in the reported area.
- #17 Senna Road service call; was determined to be a “homeowner issue”.
- #133 Bel Air Drive: 2 gallon sanitary sewer overflow at 133 Bel Air Drive backed up into a pit in the basement. CCTV revealed just a flat spot in pipe might have caused the issue. Will add manhole to problem area checklist.
- Reset sinking sewer frame and cover at #34 Bernard Street and paved base course. Had to cut very large patch as the whole area was sinking.
- Dye Test at #800 South Street. Building is not tied into sewer, confirmed to be on septic. Also located 3 manholes on a private sewer adjacent to #800 South Street.
- Conducted CCTV and cleaning on Proctor Ave where homeowner is having lateral lined. Determined tap connection should be reinstated due to root intrusion.

- CCTV and cleaned line on Townsend Street, cleaned remaining debris out of line; sewer is flowing well now.
- Investigated sewer line behind Zeda's Pizza. Determined sewer manhole has no invert and is causing sinkhole near building. Will rebuild invert as part of combined sewer separation project this Spring 2020.
- Checked CSOs overflow regulators: there were no discovered activations.
- Conducted four Planning Board reviews.
- Reviewed plans for Westminster Hill Road bridge repair for sewer issues/accuracy. Plans appear to be in order.

DPW ADMINISTRATION

- Winter operations:
 - Calculated the total costs to date for snow and ice operations and reconciled our spreadsheets to MUNIS.
- Financial:
 - Received more requests from internal auditors for backup documentation for water department land purchases in FY19. Reviewed files for information related to the request. Will compile all documents and send to Melanson-Heath early next week.
 - Reconciled DPW Unutil accounts that were showing variances. Correspondence with Unutil to correct checks that appear to have been posted to incorrect accounts. They will make the adjustments which should show on the next billings.
 - Reviewed all DPW Department accounts for accuracy and monitored budgets.
- Administrative:
 - Reviewed and made revisions to the DPW Head Clerk job description for position to be posted by HR.
 - Continued correspondence with potential designers for the DPW roof. Requests for proposal are due by 3/20/20.

Invoicing, Warrants, and Payrolls						
	Invoices		Deposits		Billings	Payroll
<u>Division</u>	<u>Number</u>	<u>Total \$</u>	<u>Number</u>	<u>Total \$</u>		
Streets/Admin/Engineering	78	\$ 49,901	*Note 1	\$ 5,825		
Cemeteries	8	\$ 1,600				
Parks						
Recreation	7	\$ 336				
Water Supply	21	\$ 76,544				
Waste Water	42	\$ 66,787	*Note 2	\$ 18,060		
			*Note 3			
Total	156	\$ 195,169		\$ 23,885	\$ -	\$ -
*1 - Engineering Permits & Performance Bonds						
*2 - Septage at East Plant (Gallons)		212,471				
*3 - Industrial Billing Payments						