

City of  
**Fitchburg**



Department of  
**Public Works**

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

**DPW Weekly Update April 27 - May 3, 2020**

Dear Mayor, Councilors, and Colleagues;

Over the past 4 weeks, DPW Streets and Parks Division personnel have been working on a 1-week on/1-week off rotating schedule in order to minimize exposure and reduce the likelihood of a COVID-19 outbreak at DPW. This 4-week period has allowed us enough time to adapt to the new realities and starting on Monday May 4, 2020 all Streets and Parks Division personnel are resuming daily work schedules. In the interest of protecting the health of our employees, the following changes will be instituted during the month of May:

1. Staggered Shift Starting Times: Day Crews will have starting times at 6:30, 7:00, and 7:30. The night street sweeping crew will start at 4:00 PM. Lunch and break times will likewise be staggered by half-an-hour. This will allow social distancing between employees and crews and decrease gatherings in the common areas.
2. Temperature Checks: Health Director Stephen Curry has arranged for nurses from the School Department to be present during check-in times to take each employee's temperature using a touchless thermometer. Anyone determined to have a temperature of 100°F or higher or is exhibiting symptoms will be sent home and the nurse will determine a course of follow-up.
3. PPE: During check-in each employee will be given one pair of disposable gloves, reusable mask, and refillable bottle of disinfectant. DPW extends our appreciation to Emergency Management Director Liberatore for continuing to supply us with PPE.
4. Trucks: During check-in each employee will be assigned a vehicle and given disinfectant spray and disposable towels to clean and disinfect the common touch surfaces of the vehicle. DPW will attempt at making sure there is only 1 employee per vehicle, but in some instances no more than 2 employees per vehicle may be necessary for logistical reasons.

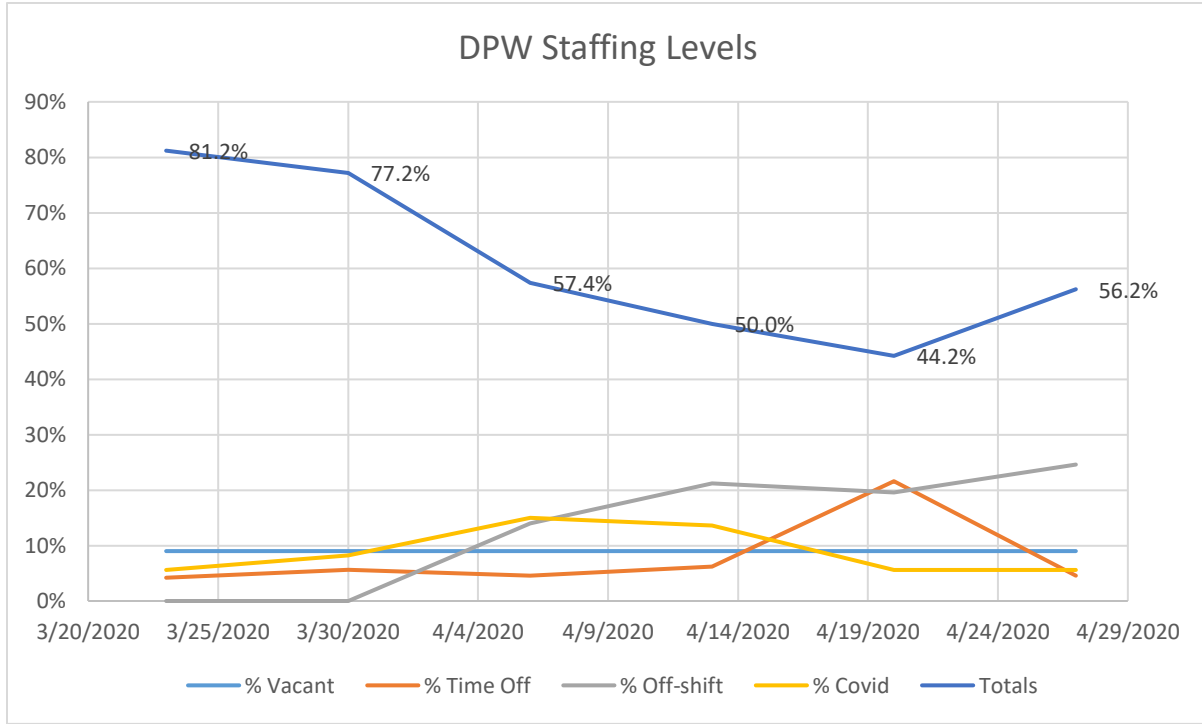
As we continue to collectively move through this pandemic situation, DPW will continue to work with the Health Department and Human Resources in developing standard operating procedures commensurate with the threat level.

Sincerely,

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

**DPW STAFFING**

DPW Staffing levels for the past week were at 56.2%, which was indicative of the 4-week reduced staffing levels due to COVID-19. As we start getting back to the new normal, we anticipate staffing levels to climb back up above 80%.



**Week of 4/27/2020 – 5/1/2020 (5 working days)**

	Vacancy	Personal Time Off (PTO)	Off-Shift	COVID	Total Off	Total Working
Person-Days	45	23	123	28	219	281
Percent	9%	5%	25%	5.6%	43.8%	56.2%

The following vacant positions are currently in the process of being filled:

1. Assistant City Engineer (Engineering Division)
2. Engineering Inspector – Seasonal (Engineering Division)
3. DPW Clerk (Streets Division)
4. Dispatcher (Streets Division)
5. Working Foreman (Streets Division)
6. Mechanic (Streets Division)
7. Laborer (Parks Division)
8. General Foreman - Collections (Wastewater Division)
9. Head Water Meter Reader (Water Division)

**STREETS DIVISION**  
Gary Withington - Superintendent

DPW continued to respond to service requests in a timely manner through the [SeeClickFix](#) program. In the past two weeks DPW received 51 new requests and closed 29 requests. The total outstanding requests backlog is now 259, an increase of 22 from the previous reporting period. Potholes filled with cold-patch are not being closed out until they are done with hot mix. Also, due to the past 4-week reduced schedule the number of outstanding requests in the backlog has increased by about 100.

<u>Reporting Period</u> 4/13/20 - 4/26/20		<u>Previous Period</u>	<u>Change</u>
<b>Previous Request Backlog</b>	<b>237</b>		
New Requests	51	54	-3
Completed Requests	29	31	-2
<b>Total Request Backlog</b>	<b>259</b>	<b>237</b>	<b>22</b>
Potholes	106	92	14
Storm Drains	70	65	5
Tree & Brush Pruning	8	8	0
Traffic, Signals, Signs	5	5	0
Berm Repairs	12	10	2
All other categories	58	57	1
<b>New Requests</b>	<b>51</b>	<b>54</b>	<b>-3</b>
Acknowledged	1	1	0
Completed & Closed	2	4	-2
Open	49	50	-1

The weather last week continued to warm up with a heavy rain event on Thursday.

	Saturday 4/25	Sunday 4/26	Monday 4/27	Tuesday 4/28	Wednesday 4/29	Thursday 4/30	Friday 5/1
Rain (in)	0.0	0.6	0.5	0.0	0.2	1.2	0.1
Hi/Lo Temp (F)	39/63	37/48	34/39	36/55	45/48	41/48	48/64

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

Street Sweeping

Ward 4	COMPLETED
Ward 5	COMPLETED
Ward 6	April 22 - May 8
Ward 1	May 11 - May 29
Ward 2	June 1 - June 12
Ward 3	June 14 - June 29

### Traffic

Line striping is being scheduled for the week of May 18<sup>th</sup>.

### Potholes

Pothole patching efforts continued during the week at various locations, including the following:

- Airport Road,
- Bennett Road,
- Colony Road,
- John Fitch Highway,
- King Street,
- Lunenburg Street,
- Madison Street,
- Main Street,
- Pearl Street,
- River Street,
- Sunrise Ave,
- Townsend Street,
- Westminster Street.

<b><u>PARKS DIVISION AND RECREATION DEPARTMENT</u></b>
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Nate LaRose – Recreation Director
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Loam was delivered and spread at the Goodrich Park sports field.

Park Crews continued cleaning up trash from parks and Main Street.

All City playgrounds, dog parks, and public bathrooms in parks are closed to the public until the COVID-19 state of emergency is lifted.

Per order of the Health Director, basketball courts are closed and rims have been boarded over.

Parks, fields, courts, and tracks continue to be open but the public is advised to avoid large gatherings. Please exercise social distancing and avoid touching common surfaces during your visit to the parks. The City's many outdoor recreation opportunities are specially important during this time as they provide an opportunity to relax, exercise, and connect with nature.

All recreation programs and events continue to be cancelled until further notice. We recognize these closures and cancellations can be disappointing and a hardship, however these decisions are being made in the best interest of the community. The Recreation Department will continue to monitor the situation with guidance from the Mayor's Office and the Board of Health.

**CEMETERIES DIVISION**  
Jaquelyn Poirier - Superintendent

Cemetery crews continued to clean up the grounds and surrounding areas.



- Checked off site cemeteries;
- Continued spring cleanup;
- Spread bark mulch and installed new mulch beds;
- Continuing thatching Forest Hill;
- Put trash barrels out for the season;
- Continuing work on database;
- Working on expansion in Forest Hill;
- Meeting with Working Foreman – spring and Memorial Day goals and expectations, scheduling and prioritizing work;
- Phone meeting with Veteran’s Agent regarding Memorial Day;
- Attended Lorman webinar;
- Communicated with Funeral Providers regarding scheduling of funerals after COVID-19 emergency;
- Scheduled fence installation for Laurel Hill;

Figure 1 - Infant Grave Area

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

Full Interments .....	1
Inurnments.....	0
Up righted monuments .....	0
Uncovered/cleaned flat monuments.....	2
Foundation marking for monuments .....	1
Catch basin repair .....	0
Trimmed Trees .....	0
Trimmed shrubs .....	0
Meeting with Families .....	2
Payments - invoiced/processed .....	0
Family Genealogy .....	2

**ENGINEERING DIVISION**  
Nicholas Erickson – Civil Engineer

Administrative

- Participated in conference call with the Central MA Regional Stormwater Coalition Steering Committee.
- Participated in conference call with Weston & Sampson to discuss next steps for the City’s Municipal Vulnerability Preparedness (MVP) Planning Grant through the Executive Office of Energy and Environmental Affairs (EOEEA).



- Participated in conference call with the Building and IT Departments to discuss the new ViewPoint Cloud permitting software and work on addressing bugs identified during implementation.
- Coordinated with Planning, Parks, and Water to identify any water management projects in the City that we would like the Central Massachusetts Mosquito Control Project (CMMCP) to assist with, such as ditch cleaning, problem beaver dams, etc. Prepared list of projects on DPW letterhead and sent to CMMCP for consideration.
- Performed plan/records search per request of HNTB, an engineering company hired by MassDOT to design a replacement bridge over the North Nashua River on Water Street, to determine ownership of wall along the North Nashua River next to Market Basket Plaza. It appears the wall is private infrastructure.
- Reviewed various invoices from Weston & Sampson for approval.
- Started working on the backlog of permits that need to be entered into ViewPoint Cloud, the new permitting software.

### Construction

- Performed construction oversight for road reconstruction on Berkley, Lenox, Garfield, and Richmond Streets. Over the past several weeks the City's contractor (PJ Albert) has performed various drain and sewer upgrades, lowered drain and sewer frames and covers, pulverized the existing pavement, applied calcium to firm up the subgrade, and graded and compacted the roadway. This week the contractor paved a 2" binder course of pavement. Next week drain and sewer frames and covers will be adjusted to finish grade, berm and curbing will be installed, and the top course will be paved (weather permitting).
- Assisted PJ Albert with laying out berm on Berkley, Lenox, Garfield, and Richmond Streets.



*Figure 2- Laying out Berms on Berkley St*

- Performed site walk with PJ Albert on Beech Street to review the upcoming road reconstruction project. The road will be repaved and new sidewalk will be installed along one side of the street from Kimball Street to Pratt Street.
- Performed site visit to Beech Street to survey the depths of various sewer and drain structures within the limits of the proposed road reconstruction project. Due to the presence of ledge, many of these structures were installed close to the surface of the road. In order to properly pulverize the roadway prior to paving, these structures will need to be adjusted to provide the necessary clearance for the pulverizing machine.

### Permits & Inspections

- Performed site visit to Water Street during a rain event to observe the performance of a recently separated combination manhole (CMH). These types of structures allow transference of flows between the drain and sanitary sewer systems, and are being eliminated by the Wastewater Division as time and resources allow. This particular CMH separation was unusually complex because of the presence of an old egg-shaped brick sewer from the former jailhouse where the Wachusett Potato Chip factory now stands. This old sewer was converted to drain a number of years ago, but it is unclear what contributes flow into it.
- Performed site visit to Ray Ave. Extension to investigate drain outfall in need of dredging.
- Performed site visit to City Hall during a rain event to observe drainage patterns and evaluate the need for a drain inlet near the proposed curbing out in front of the building.

<b>Engineering Services</b>				
		<u>Type</u>	<u>Number</u>	<u>Fees</u>
<b>PERMITS</b>		Street Occupation Permits	0	\$0
		Trench Permits	0	\$0
		Excavation/Street Opening Permits	0	\$0
		Driveway/Curb Cut Permits	0	n/a
		Sign Permits	0	n/a
		Sewer Permits	0	\$0
<b>INSPECTIONS</b>		Driveway Inspections	0	n/a
		Trench Inspections	0	n/a
		Site Inspections	9	n/a
		Dig-Safe requests	0	n/a
		Sewer/Drain Inspections	0	n/a
		Street Light Inspection	0	n/a
<b>Totals</b>			<b>9</b>	<b>\$0</b>

**WATER SUPPLY DIVISION**

John Deline - Deputy Commissioner of Water Supply

The Water Supply Division produced 28.9 million gallons of drinking water this past week. No transfer of water between reservoirs is taking place. Reservoirs continued to be inspected and patrolled.

Water Treatment

Reservoir Levels as of 5/1/20			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/Ashby	Full	- 0.84 feet	Meetinghouse
Scott	Full	Full	Mare Meadow
Lovell	Full	Full	Bickford
Water Filtration Plant Flows/Production from 4/14/20 through 4/30/20			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	7,183,000	25,518,000	32,701,000
Backwash to waste (Gal)	1,270,000	2,488,000	3,758,000
Finish Water - Treated & Distributed (Gal)	5,913,000	23,030,000	28,943,000
Capacity	(6 MGD) 17%	(12 MGD) 30%	(18 MGD) 26%
Efficiency	82%	90%	89%

- Due to the COVID-19 crisis, only required/regular maintenance is being completed in the plants as well as any emergency repairs. Treatment personnel have been permanently (for the duration of the crisis) sequestered to each treatment plant and no intermingling or transferring of treatment operators between plants will occur. Outside contractors will only be utilized for emergency repairs or for maintenance that is necessary to keep the treatment plants in good operating condition.
- The spring removal of sludge from the backwash residuals settling lagoons began this week. One load per day is being pumped from the lagoons (at total of 15-20 loads needs to be removed from each of the lagoons).
- The bi-carbonate grinder at the Falulah Plant began binding up. Personnel disassembled it and discovered bi-carb had collected/hardened on the grinder blades - upon cleaning the blades, the grinder operated correctly.
- Received the replacement solenoids for the backwash dump valves at the Falulah Plant. Stonkus Hydraulics will be scheduled to install the new solenoids (requires entry into a pit that is confined space).
- Experienced several electrical power issues in the Rindge Road area overnight Thursday into Friday that caused some issues that the Falulah Plant and Scott Pump Station. Personnel need to complete several resets on equipment but were successful in returning the equipment to service without additional issues.



## Water Distribution

- The Reservoir Caretaker and Distribution manager repaired the loading dock door to make it secure due to it setting off the intrusion alarm on windy days.
- The Reservoir Caretaker finished clearing brush on the Mare Meadow transmission line between pump station building and South Street in Westminster. Also continued working on clearing the transmission main easement from Meetinghouse Reservoir to the Regional Plant, flushing stumps and removing woody debris.



*Figure 3 - Clearing of Transmission Main*

- The Reservoir Caretaker cleaned out culverts along the access road to the Bickford Pump Station.
- On Tuesday, 4/28, the by-pass gate on Prospect Street was opened to allow water to flow from the Scott system into the High system to help with turn over the water in the Scott Tank. The chlorine residual had been slowly dropping in the tank (due to not enough water use) indicating that water was beginning to stagnate.
- 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 continued updating the blow off list (locating, cleaning boxes, take new ties, remove from list if not there anymore, etc....)
- FWD personnel renewed/replaced the water service at 31 Prospect Street from tap to curb stop due to a leak on the owner's side which was replaced by a contractor the day before. Trench was backfilled, compacted and paved.



Figure 4 - Hurd Street valve

- FWD personnel excavated and replaced an 8" water valve in front of 94 Hurd Street, while investigating discolored water this valve was found not to be operating correctly possibly restricting water flow along Hurd Street.
- Investigated a leaking water meter at the Crocker Field Clubhouse, a two-inch water meter was found to be leaking from the freeze plate gasket. A new Neptune water meter was installed in its place (it was going to be changed out eventually).
- Investigated a possible water leak at 6 Newtonville Ave. Area was checked and nothing was found to be leaking.
- Completed weekly inspections and maintenance/cleaning of Water Division vehicles and equipment.
- FWD personnel cleaned/disinfected steering wheels, shifters door handles and knobs in all water division vehicles.
- Completed housekeeping/disinfection of

common surfaces at 1200 Rindge Road throughout the course of the week.

#### Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Maintenance Completed	Painted	Flushed
1,632	2	0	2	110	5	0

- FWD personnel completed lubing/greasing hydrants on the on the Low System.

#### Administration and Meters/Billing

- Total of 5 real estate closings – final readings completed along with preparation of final bills for attorneys/realtors. Future real estate closing final readings also scheduled.
- 33 invoices totaling \$14,552.56 were processed for FY20 warrant WG20045.
- 2 purchase requisitions and 1 change order were entered into Munis for approval by Purchasing.
- Loaded 6,699 accounts into two laptops for reading the Badger meters. Also, loaded the bill run for the Neptune meters (4,269 total) which are read via the City's fixed network.
- Completed a 9/10 deposit of 7 checks in the amount of \$12,330.38.
- Completed organization of the no-charge City parks water meter accounts to facilitate seasonal turn-ons and collection of the required information/data.
- Attended the bi-monthly DPW staff meeting that is now being held virtually.

- The Fitchburg Water Division participated in the conference call that is being held weekly (this is the seventh week) with MA DEP, Massachusetts Water Works Association, and several hundred public water suppliers across the state. The Commissioner of MA DEP, Martin Suuberg, presented a status update in regard to COVID-19 and its effects/impacts on public drinking water suppliers. Mr. Suuberg also provided answers to questions submitted by public water suppliers over the past week.
- Continued working on items related to the Jewell Hill land protection project. Proposed orders, etc. were submitted to the City Clerk for the City Council meeting on 5/5. These are the final approvals needed to allow the Mayor to sign/execute documents related to the CRs on this 300-acre property in the watershed to the City's northern reservoirs.
- Completed the seasonal subscription to USGS for Nashua River flows at the gauging station that is 400 feet upstream of the Fifth Street bridge. Monitoring of this gauging station is required as part of the City's Water Management Act Permit that is regulated by MA DEP. The monitoring period is from May 1<sup>st</sup> to September 30<sup>th</sup>. The threshold flows are 62 cubic feet per second (cfs) from May 1<sup>st</sup> to June 30<sup>th</sup> and 24 cfs from July 1<sup>st</sup> to September 30<sup>th</sup>. Three consecutive days below the respective flows during these periods requires water use restrictions to be implemented.

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

<b>Water Permits and Inspections</b>	
<b>Type</b>	<b>Number</b>
Emergency DigSafe Mark-outs	0
DigSafe Mark-outs	3
Inspections of Work on Water System	1
Record Plan Updates	10
Special Permit Applications Reviewed	0
New Water Service Applications	0
View Permits reviewed	0
Curb Stops Turned off/on	4
Located/cleaned gate/curb boxes	9
Final Readings/Real Estate Closings	6
New Meter Installations	9
Backflow Preventers Tested	0
Cross Connection Surveys	0
Residential Appointments Made	0
<b>Totals</b>	<b>42</b>



**WASTE WATER DIVISION**

Jeff Murawski - Deputy Commissioner of Wastewater

The WWTF processed 82.7 million gallons of sewage during the second week of April. In total, 27.3 tons of organics and 64.7 tons of solids were removed and prevented from entering the Nashua River.

<u>Week of 4/19/2020 - 4/25/2020</u>		
Sewage Flow	82.65	Million Gallons
Rainfall	0.58	Inches
Secondary Bypass	0.36	Million Gallons
BOD <sub>in</sub> (lbs)	56,575	Pounds
BOD <sub>out</sub> (lbs)	1,885	Pounds
BOD Removal (%)	96.01%	
TSS <sub>in</sub> (lbs)	133,022	Pounds
TSS <sub>out</sub> (lbs)	3,571	Pounds
TSS Removal (%)	96.60%	

- Deputy Commissioner managing Division remotely (as of Mar. 17<sup>th</sup>).
- Daily (or more frequent, as needed) conducting video calls with Wastewater Management Team.
- Coordinated with Purchasing Department, for Wastewater procurement needs.
- Drone flights aerial photo/video capture of the Easterly and Westerly Wastewater Treatment Facilities were accomplished on Tuesday - April 28<sup>th</sup>. Later in the week (Fri. - May 1<sup>st</sup>), FATV crew came to the West Wastewater Treatment Facility to capture video of buildings' interiors (for the 'West Plant RFEI').
- Thurs. - Apr. 30<sup>th</sup>: Participated in "Industrial Pretreatment Program" conference call, in advance of EPA Audit (to be held on May 11<sup>th</sup> and May 12<sup>th</sup>).
- Wed. - Apr. 29<sup>nd</sup>: participated in group "ZOOM" call held by MassDEP Commissioner Martin Suuberg, held for Massachusetts Wastewater Professionals, regarding COVID-19 pandemic.
- On Friday, May 1<sup>st</sup>, second meeting was held with candidate for the "Sewer System General Foreman" position. Wastewater asked Human Resources to proceed to extend a job offer to the candidate.
- Friday, May 1<sup>st</sup>: sent EPA and MassDEP regulators a Fitchburg Wastewater "COVID-19 Status Update".
- 04/12/2020: "Shelter-in-Place" Plan implemented. Three (3) Treatment Operators are staying at the facility 24/7, for a 1-week period. Third rotation group began on April 26<sup>th</sup>, at 6:00 AM. As of this report (05/01/2020) the "Shelter-in-Place" Plan is going well, and the operators are healthy.
  - The First "shelter-in-place" team will be beginning their 2<sup>nd</sup> weeklong shift, on Sunday - May 3<sup>rd</sup>, at 6:00 AM.
- 04/29/2020: Participated in conference call with MassDEP about the current COVID-19 situation.
- 04/30/2020 rain event: 1.10 inches of rain produced a peak flow of 28.49 MGD and we bypassed 0.859 MG around Secondary Treatment.

## Sewer System

- Re-tapped spark plug for cement mixer to get it working properly (old threads were cross-threaded).
- Finished belts replacements and oil change on F-700 dump truck.
- Inspected 3-inch sewer bypass pump for proper operation; the pump appears to be in property working order.
- Conducted 26 manhole inspections on Hurd Street and surrounding area. No major issues were observed.
- Changed two (2) CSO meter batteries.
- Checked #31 Gillis Court to make sure it wasn't backing up after recent SSO event: appeared to be flowing properly.
- Dumped Vactor and filled the water tanks.
- Cleaned up shop and bought some new cabinets to replace old non-functioning ones
- Responded to a service call on Hurd Street: was determined to be a homeowner issue.
- Responded to an overflowing manhole at #52 Hurd Street. According to our Deed research, the manhole is private as there is no easement to the City. The issue was forwarded to the Health Department.
- One employee completed online hydraulics license training.
- Finished draft specification for Boulder Drive Sewer Project. Final stamped plans should be received this week, enabling us to proceed to Advertisement for Bids.
- Reviewed sewer connection plan for #691 Mt. Elam Road and provided comments.
- Researched record plans and made GIS edits for the Elm Street, Grove Street & Brook Street area drainage connectivity.
- Reviewed Main Street existing conditions Survey by WSP for pipe connectivity issues.
- Provided comments to developer of Cannabis Facility on Newport Street about City's Wastewater Requirements for operation.

### **DPW ADMINISTRATION**

Courtney Lamoureux – Business Manager

- Financial:
  - Reviewed all DPW Department accounts for accuracy and monitored budgets.
  - Submitted a request to the Mayor's office and City Council to allow the transfer of \$7,000 from snow and ice overtime reserves to the cemetery division. The transfer of funds will cover costs associated with the cemetery expansion project at Forest Hill Cemetery.
  - Reviewed FY20 budgets and available funds with Superintendent of Streets and Civil Engineer.
  - Started calculating the FY20 Q4 sewer industrial billings.
- Administrative:
  - Submitted DPW Department absences due to COVID-19 reasons to the human resources department.
  - Completed reviewing resumes for the DPW head clerk position. We will be coordinating with human resources to setup virtual interviews.

- Reviewed documentation from FEMA regarding tracking costs associated with public emergencies.
- Updated attendance records and completed PTO analysis for DPW Administrative and Engineering staff.
- Worked with purchasing department regarding COVID-19 supplies needed and costs to date for supplies we have purchased.

<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	21	\$ 6,470	*Note 1	\$ 394		
Cemeteries						
Parks						
Recreation						
Water Supply	33	\$ 14,553				
Waste Water	27	\$ 100,133	*Note 2	\$ 25,370		
			*Note 3			
<b>Total</b>	<b>81</b>	<b>\$ 121,156</b>		<b>\$ 25,764</b>	<b>\$ -</b>	<b>\$ -</b>
*1 - Verizon lease payment						
*2 - Septage at East Plant (Gallons)		298,471				