

City of  
**Fitchburg**



Department of  
**Public Works**

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

**DPW Weekly Update January 13 – January 20, 2020**

Dear Mayor, Councilors, and Colleagues;

Managing and planning for the City's future infrastructure needs is a critical component of DPW's mission. To this end, the Wastewater Division has been developing a Comprehensive Wastewater Management Plan (CWMP) that will help current and future officials manage the City's growth over the next 20-years. The planning process includes a public participation component and on-going coordination with the Mayor's Office and the Community Development Department. By having an approved CWMP, the City will also become eligible to receive 0% interest financing through MassDEP's Clean Water State Revolving Fund, which can potentially save millions of dollars in interest over the course of a large project loan.

The first limiting factor to the City's wastewater system is the treatment plant's capacity, which is designed for average flows of 12 million gallons per day (MGD). For comparison, in the last week of December the treatment plant had an average flow of 9.15 MGD and peak flows of 15 MGD during rain/snowmelt events. The ongoing combined sewer separation projects will remove significant amounts of stormwater from entering the treatment system, but inflow and infiltration (I/I) will always be present to a certain degree.

The City's treatment plant therefore has about 3 MGD spare capacity that needs to be managed and allocated between the city's growth needs, excess capacity sold to Westminster and Lunenburg, industrial needs including the city's water treatment plants, and reserve capacity for storm events. The CWMP will determine these needs and suggested allocations.

The second limiting factor of the City's wastewater system is the sewer service area. There are large parts of the city that are currently unsewered, but also feature high-water tables, low permeability soils or other impediments to traditional septic systems. The CWMP will evaluate these areas and determine the feasibility for on-site wastewater disposal options for future growth.

We will keep you posted on progress on this important long-range plan.

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 21 new requests and closed 214 requests. The total outstanding requests backlog is now 144, a decrease of 193 from the previous reporting period. The reason for the large increase in closed-out requests is that after a busy December, we were able to catch up on the paperwork and outstanding tasks. We will continue to work on the backlog request in preparation for the spring season.

Reporting Period 1/6/20 - 1/19/20		Previous Period	Change
<b>Previous Request Backlog</b>	<b>337</b>		
New Requests	21	25	-4
Completed Requests	214	19	<b>195</b>
<b>Total Request Backlog</b>	<b>144</b>	<b>337</b>	<b>-193</b>
Potholes	16	92	<b>-76</b>
Storm Drains	40	66	<b>-26</b>
Tree & Brush Pruning	15	51	<b>-36</b>
Traffic, Signals, Signs	7	20	<b>-13</b>
Berm Repairs	7	12	<b>-5</b>
All other categories	59	96	<b>-37</b>
<b>New Requests</b>	<b>21</b>	<b>25</b>	-4
Acknowledged	9	4	5
Completed & Closed	14	6	8
Open	7	19	-12

## ROADWAYS

### Snow Operations

	Saturday 1/11	Sunday 1/12	Monday 1/13	Tuesday 1/14	Wednesday 1/15	Thursday 1/16	Friday 1/17
Rain (in)	0.0	0.0	Trace	0.0	<b>0.3</b>	0.0	0.0
Snow (in)	0.0	0.0	Trace	0.0	<b>2.8</b>	0.0	0.0
Hi/Lo Temp (F)	63/46	64/30	34/28	37/32	43/34	37/21	19/10

Sources:

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

- Salted and Sanded streets due to almost 3-inches of snow on Wednesday/Thursday.
- Hauled snow from Fire Station parking lot.
- Sand was hauled from Airport Pit to DPW yard.
- Additional salt was ordered and delivered into the salt shed.
- Trucks and plows continued to be maintained and fixed. Three of our larger sanders are being serviced and should be ready for next weekend's storm.

## Traffic Signs and Signals

DPW Street crews took advantage of the nice weather to complete some outstanding traffic sign work including:

- Removed one-way signs from Green Street from Day to Blossom to correspond with city ordinances.
- Changed Stop sign at Highland and Lunenburg Street.
- Realigned signal head at Water and Main St intersection.
- Replaced Stop sign at Albee and Krysiak St intersection.
- Fixed Stop Ahead sign on Charles St.
- Replaced Street sign pole at Abbott Ave and Connors St intersection.
- Replaced Pedestrian sign at 875 JFH.
- Fixed Pedestrian sign at 532 Main St.
- Fixed signs at roundabout at JFH and Ashby State and Mechanic St.

## Drainage

Rebuilt and paved catch basin in DPW yard.

Cleaned drainage swales along Williams Road.

## Potholes

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

- Airport Road,
- Almount Street
- Brigham Street,
- Canton Street,
- Duckmill Road,
- Fisher Road,
- George Street,
- Kimball Street,
- Kinsman Road,
- Kyle Road,
- Marshall Road,
- Middle Street,
- North Street,
- North Street,
- Patton Street,
- Pearl Hill Road,
- Pratt Street,
- Richardson Road,
- Rollstone Street,
- Temple Street,
- Townsend Street,
- Wendell Street.

Picked up pieces of broken asphalt on St Andrews Street.

Paved patches in two locations for the Water Supply Division.

## **PARKS & RECREATION**

Biddy League PeeWee Games began on Tuesday, January 14, 2020. Elementary Division games continued on Thursday, January 16, 2020.

Recreation Director attended Meeting with the Mayor on January to present and discuss the proposed Fitchburg Trails Vision Plan produced by the Fitchburg Trails Visioning Committee.

Recreation Director met with FATV on Friday, January 17, 2020 to discuss possible event partnership during the public schools February vacation.

Fitchburg State welcomes Fitchburg residents of all ages to walk or jog on the 1/11th of a mile track, which is suspended above the gymnasium on the second floor. Minors must be accompanied by an adult. Starting on October 1, 2019, the program is open Mondays through Fridays from 6:00 AM to 12:00 PM, Saturdays from 10:00 AM to 3:00 PM and Sundays from 3:00 PM to 10:00 PM. The walking club ends on April 1, 2020. Registration is required and is now available in the City of Fitchburg Recreation Department.



DPW Parks crews cut up and hauled away a large pine tree that had fallen over during last week's storm.

Cut and removed brush from Caldwell Park and Sadie Quatral Park.

Plowed parking lots of Coolidge, Coggshall, and Park Hill parks during recent snow storms.

*Figure 1 – Fallen Tree at Coolidge Park*

## **CEMETERIES**

Cemeteries crews aided in the ice and snow storm clean up by plowing the cemetery properties, sidewalks and roadways. 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 .....	0
Foundation marking for monuments.....	0
Catch basin repair .....	0
Trimmed Trees .....	0
Trimmed shrubs.....	0
Meeting with Families.....	5
Payments - invoiced/processed.....	6
Family Genealogy .....	2

## **ENGINEERING**

- Commissioner attended meeting with Mayor, Community Development Director, FSU, and MassDOT District 3 to coordinate Water Street Bridge replacement project. Discussions included coordination with the Main Street 2-way conversion project, construction phases, traffic configurations, and aesthetic components to the bridge.
- Attended a Steering Committee meeting for the Central MA Stormwater Coalition (CMRSWC). DPW Civil Engineer Nick Erickson currently sits on the Steering Committee.
- Assisted MassIT with E-911 address assignments and address confirmations for the state wide emergency database.
- Worked with stormwater consultant, Arcadis, to begin performing site visits and interviews of facility managers for City-owned facilities. Information obtained from the site visits and interviews will be used alongside the mapping data described above to prepare Stormwater Pollution Prevention Plans and Operation & Maintenance Plans for each facility.
- Finished a draft Request for Qualifications (RFQ) for Phase 2 of the Supervisory Control and Data Acquisition (SCADA) Upgrade project for the City's water system. The scope of the project is to provide complete design, bidding, and construction administration services for telemetry and control system upgrades at the City's two water treatment facilities as well as 13 remote sites based on an initial Feasibility Study, which was completed during Phase 1 of the project. The preliminary estimated cost for construction is \$3.2 million.
- Assisted a mortgage company with historical spellings of Rodimon Ave. There were concerns about mortgage documents with various spellings. DPW Engineering confirmed that "Rodimon" is the correct spelling, and that it has never officially been spelled any other way.
- Assigned address #560 to a barn on Rollstone Road that was split off of the original lot #546.
- Sent a sewer connection letter to various City departments for connection of #85 Damon Road via force main.
- Attended the Cemetery Trustees meeting to discuss possible sites for the proposed cemetery expansion project. Based upon a GIS analysis conducted by DPW Engineering, it does not appear that there are any suitable sites currently available in the City aside from the City-owned parcel located across Electric Avenue from the Forest Hill Cemetery. Included in the discussion was an overview of efforts to monitor ground water levels in the high water area of Forest Hill Cemetery, where some additional expansion may be possible.
- Began compiling a new paving list for 2020. This list is based on paving contributions from completed infrastructure work throughout the City, presence of underground utilities, Pavement Condition Index (PCI), and a number of other factors. Once the list is finalized it will be reviewed by Commissioner Bosonetto.

## Project Reviews

- Conducted a plan search for lot 209-9-1 at 0 Ashburnham Street (located between #640 and #680 Ashburnham Street) to determine if the property has access to City sewer. This plan review was conducted per request by Planning due to foreclosure/tax lien.
- Began reviewing the 25% Design Submission for the Twin Cities Rail Trail project, which is being designed by Stantec through MassDOT. Once review comments are finalized they will be provided to MassDOT/Stantec for consideration.

## GIS/Asset Management

- Worked on GIS mapping of stormwater assets located at City-owned facilities (e.g. parks, schools, etc.). Eventually the mapping will be incorporated into Stormwater Pollution Prevention Plans and Operation & Maintenance Plans for each facility.
- Hosted a meeting for the City's GIS users to discuss asset management and data centralization. This group of GIS users will continue to meet on a regular basis to facilitate coordination and sharing of the City's GIS data and refine/improve the use of GIS resources throughout the City.
- Began reviewing deliverables from StreetScan for accuracy and completeness. Several issues were identified, and final payment will be withheld until the issues are rectified. StreetScan is a software tool recently purchased by DPW to assist with management of its roads and sidewalks. The program piggybacks off of GIS and will be used by DPW Engineering to prioritize roadway maintenance and reconstruction.
- Performed 1 parcel update for an Approval Not Required (ANR) plan for Pan-Am Railways at 180 River Street per request from the Assessor's Office.
- Completed an update of the City's state-compliant Level 3 Assessor's Parcel Mapping layers in GIS and uploaded to the FITCHSQL geodatabase. These layers must follow strict specifications for formatting and quality assurance/quality control, and this update represents the culmination of a significant amount of work over the past several months by DPW Engineering and the Assessor's Office. This update will be incorporated into the City's CAI Tech AxisGIS web portal, which allows users to view the City's parcel data (<https://www.axisgis.com/fitchburgma/>).

## Permits & Inspections

DPW Engineering reviewed 1 permit application, including:

- Driveway/Street Occupation Permit
  - 323 Rollstone Street - Denied due to forecasted snow/emergency parking ban

DPW Engineering performed 43 inspections/site visits, including:

- Digsafe
  - 1 inspection/site visit to 31 Bond Street for a porch installation per request of the Building Department.
  - 23 inspections/site visits for Utilil pole installations at various locations.

- Streetlights
  - 2 inspections/site visits to the proposed parking area for the Twin Cities Rail Trail on Caldwell St. new the Division of Water Supply's pump station to determine new streetlight location(s).
  - 1 inspection/site visit to 12 Lunenburg St. for Pole ID for reported outage.
  - 1 inspection/site visit to Macintosh/Cortland Streets to spec light pole replacement to be completed by the City's subcontractor, MuniTech.
- Miscellaneous
  - 1 inspection/site visit to 340 Mt. Vernon St. to determine distance/location of nearest sewer manhole for property with failed septic.
  - 1 inspection/site visit to 83 Kimball Street to investigate reports of a sink hole.

Engineering Services			
	Type	Number	Fees
PERMITS	Dumpster Permits	1	\$ 0
	Trench Permits	0	\$ 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	11	n/a
	Dig-Safe requests	24	n/a
	Sewer/Drain Inspections	1	n/a
	Street Light Inspection	6	n/a
<b>Totals</b>		<b>43</b>	<b>\$ 0</b>

## WATER SUPPLY

The Water Supply Division produced 28.5 million gallons of drinking water this past week. No transfer of water between reservoirs is taking place. Reservoirs continued to be monitored and patrolled.

Wyman Pond gate was closed to 7 inches as runoff due to previous rain events and snow melt have decreased over the course of the week. The Reservoir Caretaker is monitoring the level on a daily basis and opening/closing the discharge gate as needed to maintain the 2-foot drawdown for the winter months.

## Reservoir Levels and Water Treatment

Reservoir Levels as of 1/17/20			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/ Ashby	Full	Full	Meetinghouse
Scott	Full	Full	Mare Meadow
Lovell	Full	Full	Bickford

Water Filtration Plant Flows/Production from 1/10/20 through 1/16/20			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	5,385,000	27,811,000	33,196,000
Backwash to waste (Gal)	1,099,000	3,579,000	4,678,000
Finish Water - Treated & Distributed (Gal)	4,286,000	24,232,000	28,518,000
Capacity	(6 MGD) 13%	(12 MGD) 33%	(18 MGD) 26%
Efficiency	80%	87%	86%

- Experienced communication issues with the 9 Verizon “legs” to outlying stations beginning on Monday - there have been issues ongoing for some time but this is the first time that all 9 dropped out at the same time (and there were no weather-related causes that it could be attributed to). Trouble tickets were called in on Monday for each line but, although Verizon techs had completed some work, all lines were still down as of Wednesday. Additional calls were placed to “higher ups” at Verizon as well a complaint filed with the office of the state (MA) that deals with these types of issues. Work completed by Verizon techs on Thursday/Friday resulted in restoration of 8 of the 9 “legs”/communication points. As of Friday afternoon, Laviolette Controls was called in to diagnose/restore the last communication point (to the Overlook Water Storage Tank) as Verizon claimed that it was not “coming back” due to an issue with our equipment (Laviolette Controls and FWD personnel were working on the issue at the time of this report).
- Experienced issues with high turbidity at Falulah overnight Sunday into Monday after an issue developed with the chemical feed system for PAC. The plant was shut down and all demand/flow was switched over to the Regional Plant. After determining that the injector and backpressure valve for the PAC had plugged up, this feed system was dismantled and cleaned and the plant was restarted on Tuesday. It is believed that the lack of plant run time due to extremely low system demand resulting in chemical flow stoppages that cause the injector and back pressure valve to plug up. Although maintenance had already been increased on this feed system previously, it does not appear adequate and cleaning of the injector and backpressure valve will now be done bi-weekly in hopes of eliminating this issue in the future. Additional backwashes of the clarifiers/filters needed to “recover” the plant resulted in an overall lower treatment efficiency for this plant over the course of this week.
- Piper Electric was able to determine the location of the breaker for the solenoids for the residuals basin valves (FCV 520 and FCV 521) that need to be repaired/built at the Falulah plant. This work required confined space entry in order to trace the electric lines from the solenoids back to the respective electric panel. It was determined that other equipment is on the same breakers so two, new breakers were installed in the panel and the lines to the

solenoids were swapped over so that they can be shut off without impacting the operation of other equipment (and vice versa). The next steps are to have a company repair/rebuild the solenoids/valves, now that power to them can be safely shut off, and return them to service.

#### Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Painted	Flushed	Winterized
1,632	2	0	2	0	0	80

- Tuesday 1/14, FWD crews repaired the hydrant at 1 Oak Hill Road with a new breakaway kit, hydrant had been hit by vehicle. Fire Department was notified that the hydrant was returned to service.
- Wednesday, 1/15, FWD crews attempted to complete a repair of the hydrant opposite 562 South Street which had developed a leak. Crews removed the barrel from the shoe and replaced the gaskets/bolts but when the hydrant was turned back on it still leaked. The hydrant, valve, and hydrant branch will have to be completed replaced but to do so will require that it be relocated due to conflicts with existing, underground telephone conduits/lines.
- Thursday, 1/16, FWD personnel completed a repair of a hydrant at the entrance to the Civic Center. Hydrant had been hit on Monday, 1/13 - it was taken out of service (written notice was delivered to the FFD). Hydrant was returned to service following repair and FFD was notified.

#### Water Distribution

- Completed weekly inspections and maintenance/cleaning of vehicles and equipment.
- Completed housekeeping duties at 1200 Rindge Road, all trash removed from building before weekend.
- Completed monthly inspections of fire extinguishers in Water Division buildings.
- Checked recent excavations to verify that there are no issues with the patch failing/settling (permanent trench restorations are to be completed in the spring).
- FWD personnel (generally two employees each day) inspected/winterized fire hydrants on the High System pressure zone.
- Picked up load of cold patch from Keating.
- Investigated low pressure complaint at 1199 Franklin Road following meter replacement, issue was determined to be a clogged aerator.
- Tuesday, 1/14, FWD crews excavated and straightened the curb stop box at 178 Newtonville Avenue.
- Tuesday, 1/14, FWD crews prepped and paved the trench at 505 John Fitch Highway (water service was replaced from water main to property line).
- Tuesday, 1/14, installed a curb stop box extension at 97 Hurd Street.
- Wednesday, 1/15, FWD crews prepped and paved the trench from a water system repair at 56 Franklin Road.

- Wednesday, 1/15, FWD personnel completed a shut-down of the water main on Valley Street in order for a private contractor to install a gate valve pipe at the end of the water main for a water main extension to serve a development. FWD personnel then turned on and flushed the water main to remove air and discolored water.
- Plowed/sanded Water Division facilities during course of week as needed due to winter storms.

Administration, Meters, and Billing

- Total of 8 real estate closings – final readings completed along with preparation of final bills for attorneys/realtors. Future real estate closing final readings also scheduled.
- 27 invoices totaling \$86,798.83 were processed for FY20 warrant WG20030.
- 5 purchase requisitions and 2 change order entered into Munis for approval by Purchasing.
- Completed bi-weekly payroll for week ending 1/24/20, total payroll was \$56,754.75, of which a total of \$5,448.85 was overtime.
- Entered new data into Munis for 254 accounts that had meters replaced as part of meter upgrade project.
- Received new meter and MIU shipments from Ti-Sales.
- Inspected meters that were on the tamper list from the monthly meter reads.
- Updated the backflow device database, including entering new backflow devices installed in the system.
- Finalized/submitted the application for a MA DEP 2020 Drinking Water Supply Protection Grant to purchase (fee sale) one property and purchase a conservation restriction on another property in the watershed to the City's northern water supply reservoirs.

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

Water Permits and Inspections	
Type	Number
Emergency DigSafe Mark-outs	4
DigSafe Mark-outs	12
Inspections of Work on Water System	3
Record Plan Updates	7
Curb Stops Turned off/on	37
Located/cleaned gate/curb boxes	10
Final Readings/Real Estate Closings	8
New Meter Installations	13
Backflow Preventers Tested	35
Residential Appointments Made	5
<b>Totals</b>	<b>134</b>

## WASTE WATER

The WWTF processed 68.7 million gallons of sewage. In total, 50.9 tons of organics and 73.1 tons of solids were removed and prevented from entering the Nashua River.

Week of 1/5/2020 - 1/11/2020		
Sewage Flow	68.7	Million Gallons
Rainfall	0.05	Inches
Secondary Bypass	0.0	Million Gallons
BOD <sub>in</sub> (lbs)	107,164	Pounds
BOD <sub>out</sub> (lbs)	5,274	Pounds
BOD Removal (%)	95%	
TSS <sub>in</sub> (lbs)	153,608	Pounds
TSS <sub>out</sub> (lbs)	7,235	Pounds
TSS Removal (%)	95%	

- Held meeting on Comprehensive Wastewater Management Plan (CWMP) with consultants Tighe & Bond, Mayor's Office, DPW, and Community Development.
- Working with Fitchburg Legal Department, for a short-term time extension of the Fitchburg/Westminster Intermunicipal Agreement for Sewer Service.
- Coordinated with Unitil for the gas service replacement project for the East WWTF. The gas line was inserted under the North Nashua River and is now being tied into the treatment plant system.

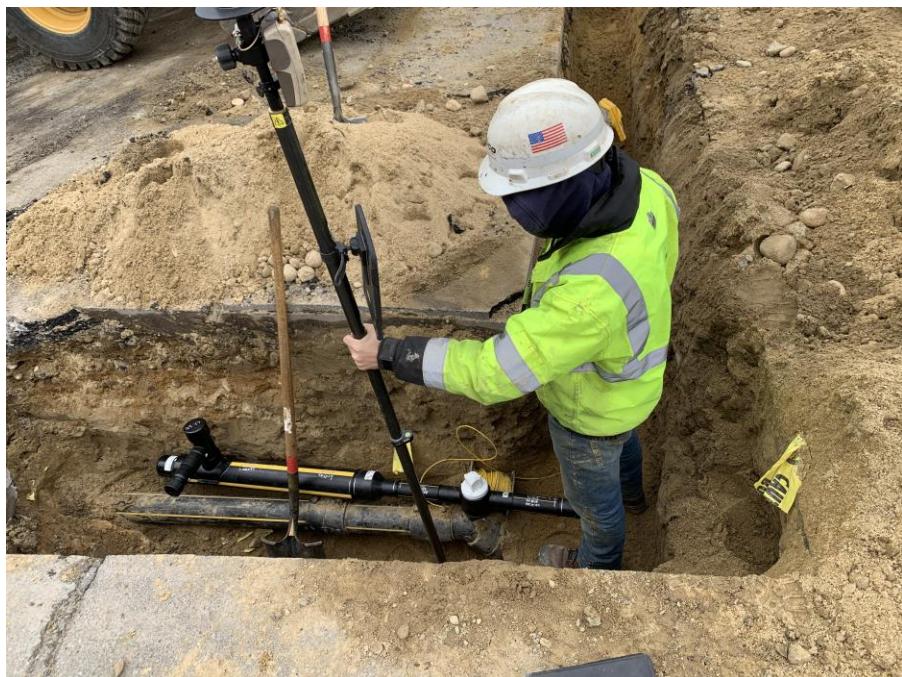


Figure 2 - Tie-in gas line project

## Sewer System

- CSO checks due to rain event – one activation at Water St at Walnut St
- Located a manhole on Olin Drive easement. Manhole has a large concrete cover that will need to be replaced in Spring.
- Conducted CCTV sewer assessment on Rollstone Street - 3,000 feet of sewer televised. Cleaned out a forming blockage of rags and grease.
- Cut brush at Airport on trunk sewer easement with help of inmates – cleared about 500 feet of thick trees and brush from atop the 54" diameter trunk sewer. Keeping easements clear of trees and brush is important to prevent root intrusion into the sewers, but also to provide quick access to the sewers in an emergency.
- Bi-weekly check on Problem Areas – only issue was at John Fitch Highway near Putts Pond. We removed heavy roots from manhole to minimize blockage potential until manhole is replaced in spring. Manhole was the cause of a large sanitary sewer overflow event this fall.
- Weekly pump station checks – no issues were noted.
- Changed two cracked manhole covers on Rollstone Street and swapped a drain cover for a sewer cover on Boulder Drive at Wood Place
- Siphon Cleaning bid package was sent to Purchasing for review and to be placed out to bid. 160 cubic yards of material are expected to be removed from the 5 sewer siphons in the City, at an estimated cost of \$650,000. The more sewer separation that is completed, the less sand and grit debris will enter the sanitary system, reducing the necessary cleaning frequency.
- Reviewed plans for Boulder Drive sewer project and provided comments to design engineer. Conducted field investigations and utility review to ensure that project changes during construction are minimized. Project consists of approximately 700 feet of 8-inch sewer on Wood Place and Boulder Drive to remove 7 stormwater catch basins from entering the sanitary sewer system. It is estimated that 30,000 gallons of stormwater will be removed from the sanitary system in a 1-inch storm event as a result of the project.



Figure 3 - Clearing of airport easement

## ADMINISTRATION

- Winter operations:
  - Processed the invoices for payment that were turned in by plow contractors. Contacted any plow contractors who have not sent us an invoice for payment yet this year to ensure they were paid.
  - Calculated the costs associated with winter operations to date. This week we had a winter weather event on Wednesday night into Thursday morning that required salting by DPW crews.
  - Ordered a total of 24 loads of salt this week from Eastern Salt (approx. 800 tons). 12 loads were delivered with the additional 12 loads being delivered on Monday January 20<sup>th</sup> (MLK day).
  - This week the finance committee approved the request for \$300,000 for snow and ice operations.
  - Corresponded with insurance agents to secure certificates of insurance for plow contractors who have expired or expiring insurance policies.
  - Met with 2 contractors interested in plowing for the City. We are currently not accepting new applications for this plowing season. Information on prospective contractors has been added to the listing for next season.
- Budgets:
  - Business Manager attended Municipal Finance & Budget training course offered by UMass Transportation Center/Baystate Roads. The course covered MA finance laws governing creation of general fund budgets and also provided planning tools for public works departments to use in preparation of a long term capital improvement plan (vehicles/equipment, pavement management, etc).
  - Began completing FY20 projections for departmental accounts and started FY21 budget prep.
  - Reviewed all DPW Department accounts for accuracy and monitored budgets.

Invoicing, Warrants, and Payrolls						
	Invoices		Deposits		Billings	Payroll
Division	Number	Total \$	Number	Total \$		
Streets/Admin/Engineering	108	\$ 46,638	*Note 1			\$ 77,337
Cemeteries	10	\$ 1,732				\$ 10,746
Parks						\$ 6,997
Recreation	5	\$ 550				\$ 3,131
Water Supply	29	\$ 86,913			\$ 334,538	\$ 56,755
Waste Water	35	\$ 103,560	*Note 2	\$ 27,390	\$ 747,542	\$ 74,405
<b>Total</b>	<b>187</b>	<b>\$ 239,392</b>		<b>\$ 27,390</b>	<b>\$ 1,082,079</b>	<b>\$229,369</b>
*1 - Engineering Permits & Performance Bonds						
*2 - Septage at East Plant (Gallons)		322,235				