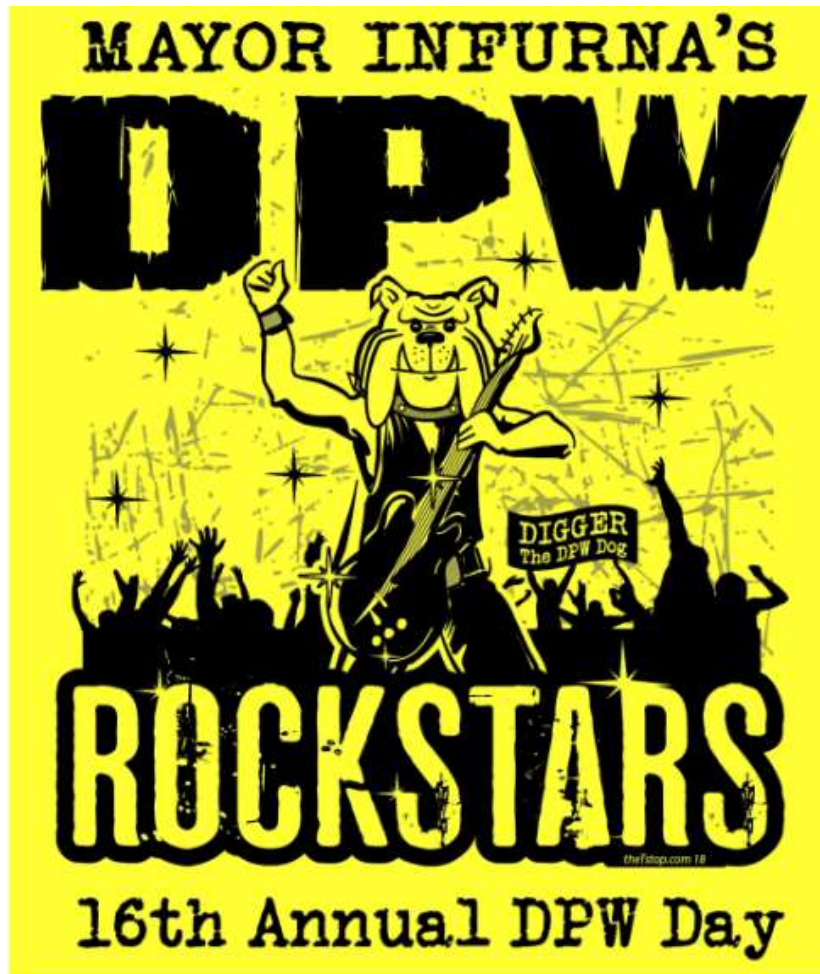


CITY OF MELROSE

Department of Public Works

Annual Report Fiscal Year 2018



Mission Statement

To maintain the city's roadways and sidewalk infrastructure for the safe and efficient movement of vehicles and pedestrians; provide dependable solid waste, recycling and yard waste pickup; promote recycling; provide safe water distribution and sewer collection; and expand and improve the city's infrastructure systems to meet the future needs of its citizenry.

John V. Scenna
Director of Public Works

Administration

Director of Public Works *John V. Scenna*
Assistant Director of Public Works *Ann Waitt*
Operations Director *Peter Pietrantonio*
Senior Account Clerk *Tina Bright*
Senior Account Clerk *Marisa Kelly*
Executive Secretary *Cindy Brickley*
Solid Waste & Recycling Coordinator *Sadie Brown*
Residential Service Representative *Lynda Garron*



Engineering Division

Director of Public Works *John V. Scenna*
City Engineer P.E., BCEE *Elena Proakis Ellis*
Staff Engineer *Rick Cantone*
Project Engineer *Larry Ereksn*
Project Engineer *Scott Dixon*
Administrative Clerk *Amy Heidebrecht*
Engineering Intern *Aslah Alshaiea*
Engineering Intern *Matthew Connolly*
Engineering Intern *Jackie Blayer*

Water Division

Director of Public Works *John V. Scenna*
Operations Director *Peter Pietrantonio*
Division Foreman *Matthew Hickey*
Working Foreman/HMEO *Joseph Brancato*
MEO *James French*
Skilled Laborer *Doug Hanlon*
Water/Sewer Foreman *John MacDonnell*
HMEO *Tom Bagarella*
Laborer *Dennis Cashman*
Skilled Laborer *Bob McKenzie*
Operator *Eric Arria*
Enterprise Fund Manager *Donna Cardillo*
Water & Sewer Administrator *Lisa Patterson*



Sewer Division

Director of Public Works *John V. Scenna*
Operations Director *Peter Pietrantonio*
Working Foreman *Robert DiVola*
MEO *Richard Merrick*
Laborer *Paul Gould*
Operator *Nick Vrooman*

Facilities Division

Division Foreman *Scott Enos*
Plumber *Ryan Means*
Tradesman *Joe DelloRusso*
Tradesman *David Filipiak*
Tradesman *Peter Hickey*
Custodian MVMMS *Kevin Cronin*
Custodian MVMMS second shift *Rachelle Lever*
Custodian High School *Will Altidor*
Custodian High School second shift *Angelo Dacova*
Custodian High School second shift *Louis Peck*
Custodian Lincoln School *Trevor Rudolph*
Custodian Hoover School *Mike Mackey*
Custodian Winthrop School *Paul Thomas*
Custodian Roosevelt School *Ed Mrozowski*
Custodian Horace Mann School *Lenny MacLean*
Custodian Franklin Early Childhood Education *Tommy Murphy*
Custodian Police, City Hall and Milano Senior Center *Jack Rizzari*
Custodian Library, City Hall and Police Station *Dan Guevin*



Sanitation

Director of Public Works *John V. Scenna*
Operations Director *Peter Pietrantonio*
Working Foreman *Nichols Heller*
Laborer *Sean Foss*

Park & Forestry Division

Director of Public Works *John V. Scenna*
Operations Director *Peter Pietrantonio*
Superintendent of Mount Hood and
Public Open Space *Joan Bell*
Park Commission Secretary *Cindy Brickley*
Division Foreman *John Doherty*
HMEO *Joe Dello Russo*
MEO *Alejandro Guerra*
MEO/Acting Foreman *Michael Sasso*
Laborer *Nick DaCova*
Laborer *Mike Nee*
Laborer *Brian West*
Tree Foreman/HMEO *Carman Sorrentino*





Cemetery

Director of Public Works *John V. Scenna*
Operations Director *Peter Pietrantonio*
Cemetery Administrator *Angela Pisacreta*
Division Foreman *Jack Rossi*
Laborer *Scott Rush*
HMEO *Ray McGrath*

Highway Division

Director of Public Works *John V. Scenna*
Operations Director *Peter Pietrantonio*
Working Foreman *Derek Lanphere*
MEO *Ryan Fusco*
HMEO *John Bartlebaugh*
Laborer *David Filipiak*



Fleet Division

Director of Public Works *John V. Scenna*
Operations Director *Peter Pietrantonio*
Mechanic/Welder *Kris Vozzella*
Mechanic/Welder *Michael Kuleszka*
JR Mechanic *Leo Norton*

Administration

The Administrative Division continues to handle issues and requests from the residents of Melrose concerning Public Works responsibilities with the assistance of E-Gov a web based technology software. Under the direction of the Director of Public Works, the Administrative Division provides necessary budget management, payroll, and clerical support services for the Department of Public Works. The employees in this division track finances, and complete administrative and clerical tasks requested by members of the City's largest department.

Curbside Collection

Melrose DPW provides curbside solid waste, recycling and yard waste pickup to all residents living in buildings with 6 or less units in the city - totaling 8,905 households. Trash and recycling service is provided weekly to residents, schools and municipal buildings by JRM. Yard waste and trash from public parks and the downtown district is collected by Public Works Department.

The City of Melrose pays a tipping fee of \$64/ton. This tip fee is set to rise annually through the end of the current contract (through 2021). In FY2018, Melrose generated 9569.81 tons of municipal trash and 3552 tons of recycling.

DPW collects curbside yard waste 15 weeks per year and Christmas trees 2 weeks per year. Residents can set out up to 10 bags or labeled barrels per week.

DPW held nine special Saturday recycling events and two Household Hazardous Waste Days. These special events included recycling of dehumidifiers, plastic bags, dried latex paint, and Styrofoam. This year two special events included the collection of motor oil, gas and antifreeze. The collection of this hazardous liquid on two additional days helped reduce the number of cars at the HHW collection days. Again this year, Melrose partnered with Stoneham and each City/Town hosted a Saturday HHW day in which residents from both Melrose and Stoneham could drop off household hazardous waste.

Items that are collected from residents at the DPW Operations Facility and Recycling Center during weekday hours of operation include rechargeable and button cell batteries, books, CFL bulbs and fluorescent tubes, electronics, eyeglasses, fire extinguishers, dried latex paint, mercury items, propane tanks, textiles and tires. In order to cover costs of proper disposal, fees do apply to some of these items, while others are free.

The City Yard and Recycle was open 36 Saturdays for drop off from April thru mid-December.

DPW Recycling Facilities

In addition to curbside trash, recycling and yard waste pickup service, Melrose DPW offers access to paper, cardboard, and commingled (plastic, glass and aluminum containers) recycling to all members of the public – including businesses – during all hours of operation at the DPW Operations Facility and Recycling Center at 72 Tremont Street. By doing so, DPW endeavors to make recycling easily available to all Melrose residents and businesses, regardless of their living situation or access to recycling pickup services at their home or business.

Residents of Melrose may also bring their yard waste (leaves and brush) to the DPW Operations Facility during all hours of operation, which include seasonal Saturdays from the beginning of April until mid-December. This yard waste is hauled by DPW to the land on Rt. 99 where it is composted and brought back to the DPW Operations Facility for free distribution to the residents.

Additional items that are collected from residents at the DPW Operations Facility and Recycling Center during weekday hours of operation include rechargeable and button cell batteries, books, CFL bulbs and fluorescent tubes, electronics, eyeglasses, fire extinguishers, dried latex paint, mercury items, propane tanks, textiles and tires. In order to cover costs of proper disposal, fees do apply to some of these items, while others are free.

Residents with curbside trash and recycling service can also purchase stickers for curbside pickup of metal items at the DPW Operations Facility or City Hall during weekday hours of operation. DPW carries out metal pickups every Tuesday of the year.

DPW Day

The Department of Public Works, together with the Melrose Mayor Gail Infurna, held its sixteenth annual DPW Day on Thursday, June 14, 2018. The theme this year was DPW Rockstars! DPW Day is a departmental open house which brought over 1100 kindergarten through second grade students from Melrose's elementary schools to the Public Works Operations Facility and Recycling Center for a day of education and enlightenment relative to our field of work, the services we provide, and the equipment we use to provide them. Children got to meet employees from all divisions of our department, experience the equipment they use and listen to what Public Works employees do, and how they accomplish their daily responsibilities. DPW partnered with D& R General Contractors, NationalGrid, Hood Ice Cream, Bay State Textiles, Stantec Inc, MWRA, Tata & Howard, Chartwells, Mass In Motion, Melrose Recycling Committee and JRM Hauling & recycling to provide a fun and educational day. Students also had the opportunity to climb on trucks, bobcats, loaders, backhoes and other equipment.



Social Media

The Department of Public Works keeps the lines of communication open with Melrose residents thru many avenues. Residents can make a requesting or report an issue by calling, emailing, or submitting a work order thru E-Gov or See Click Fix. Event information can be obtained the City of Melrose website, Twitter, Facebook and Melrose Recycles Blog. Currently the [Twitter account](#) has 866 followers, increasing by over 30% since last year. Our [Facebook page](#) has 772 people “like” (or follow). In the past year the page has increased followers by approximately 14%.

DPW utilizes the E-Gov Link work order system to keep track of requests for all its divisions. This system is available 24/7 from any computer with the internet. Work Orders can search and sort work orders by date, address, category, status, reporter, and more. The work order system has proven to be a useful tool for City employees and residents. Schools and City Departments use the on-line work order system to report and track requests. Work orders are updated as work processes and reports can see up to date information.

Another 24/7 tool that residents can use to report issues such as potholes, graffiti, trash and recycling issues is See Click Fix. See Click Fix is a digital communication system. Residents can use this mobile app to report nonemergency issue in their neighborhood. With the See Click Fix app, residents can take pictures of an issue and attached it to their requests. The picture helps the DPW staff find and correct he issue quickly and easily.

DPW continuously works to improve our technology options and ways for residents to communicate with Public Works.



Engineering Division

The City of Melrose's Engineering Division consists of five full-time staff and one to two rotating intern positions. In FY2018, the Division was staffed as follows:

City Engineer: Elena Proakis Ellis, P.E., BCEE

Staff Engineer: Rick Cantone

Project Engineers: Larry Ereksen (through April 2018) and Scott Dixon

Administrative Clerk: Amy Heidebrecht, Administrative Clerk

Engineering Interns: Matthew Connolly, June – September 2018

Aslah Alshaiea, September – December 2017

Jackie Blayer, May – August 2018

The mission of the Melrose Engineering Division is to provide all engineering functions and support for the City's infrastructure, including roadways, sidewalks, traffic signals, street lights, drainage, water distribution, wastewater collection and conveyance, and public buildings, while also supporting DPW Operations and Facilities Divisions as needed and providing support to the general public. Public interaction includes permitting and oversight of work within or impacting the City's right-of-way and/or utilities connected to the City's infrastructure, assistance with walk-in needs related to DPW functions (e.g., collecting billing discount forms, arranging metal goods pickups, etc.), and answering questions and concerns regarding the City's construction projects. Each year, the Engineering Division procures and oversees improvements to all types of City-owned infrastructure, as described herein.

Project Reviews and Permitting

In FY2018, the Engineering Division issued 223 permits for work within the right-of-way. This included 49 permits for water utility upgrades or replacement, 23 permits for sewer upgrades or replacement, 5 new service/cut and cap water and sewer permits, 102 permits for National Grid gas work (services and/or mains), 16 permits for curb cuts or other right-of-way modifications, 17 occupancy permits such as placement of Dumpsters within the right-of-way, and 11 miscellaneous permits that fell into other categories.

In addition to reviewing, issuing, and overseeing permits for small private projects, the Division also performed detailed reviews of cases submitted to the Planning Board and the Zoning Board of Appeals (ZBA). In FY2018, reviews were provided for 34 ZBA cases, as well as private development projects undergoing Planning Board review at 171 Tremont Street, 87 Essex Street, 419-429 Main Street, 844 Main Street, 880 Main Street and Lake Road. Also, the Engineering Division provided comments on seven grant of location requests to the Board of Aldermen. Lastly the Engineering Division continued to monitor construction of the Regan's Way subdivision, the Blueberry Hill Lane townhouse development, and redevelopment of buildings at 10-14 Corey Street and 524-530 Main Street.

Regulatory Compliance and Funding Reporting

The Engineering Division ensures that the City remains in compliance with many regulations applicable to DPW functions. Additionally, the City uses state and federal funding for projects that require periodic reporting. Some of these programs are noted below:

- An Annual Statistical Report is submitted to MassDEP each spring pertaining to the City's water distribution system, detailing system performance with regard to water quality, leak detection, unaccounted-for water, cross-connection control, and staffing.
- An annual Consumer Confidence Report is mailed to all water system customers via the MWRA, including community-specific information prepared by the Engineering Division in conjunction with the Director of Public Works.
- Lead and Copper Rule sampling is conducted one or two times per year, depending upon the results of past sampling events, as dictated by both state and federal regulations. In FY2018, two sampling rounds were conducted, one in September 2017 and another in March 2018 based on the September results. Due to the September results being over the lead Action Level, the City also undertook a citywide public notification program, informing residents about lead service lines, and began another year of lead service line replacements. The City fully complied with MassDEP's public notification and lead service line replacement requirements.
- The Massachusetts Lead and Copper Control Act contains guidelines for lead sampling and follow-up actions in school facilities. Over the course of FY18, the City continued to monitor lead and copper levels at select school facilities based on FY17 results, with the assistance of the Massachusetts Water Resources Authority (MWRA), and to address issues where identified.
- An annual Municipal Discharge Permit Application is submitted to the MWRA to allow for the City to discharge its wastewater to the MWRA sewer system. This application was submitted in January 2018 and the permit was issued shortly thereafter. The City has consistently maintained compliance with the provisions of this permit.
- An annual report is required to be submitted each year in accordance with the City's National Pollutant Discharge Elimination System "Phase II" stormwater permit. This report was submitted in spring 2018 and detailed measures the City is taking to improve stormwater quality such as street sweeping and catch basin cleaning.
- The City utilizes the MWRA's Grant and Loan Assistance Programs for water and sewer infrastructure upgrades. These programs require periodic reporting to continue to secure funding eligibility. These reports have been submitted to the MWRA throughout FY2018 as needed.
- The state provides roadway improvement funding through the Chapter 90 program. This program also entails frequent reporting to ensure funding disbursement. Such reports were submitted in FY2018 to receive reimbursement for all Chapter 90 roadway improvements.
- Following up on the \$50,000 604b grant received from MassDEP in FY16 and the subsequent \$6,700 rain garden design grant received from the Massachusetts Office of Coastal Zone Management (CZM) in FY17, the City received a \$50,669 CZM grant to construct rain gardens on Orient Avenue. The rain gardens were completed in June 2018 and are now providing treatment of stormwater originating on Orient Avenue, prior to its eventual discharge to Ell Pond.
- The City furthered its work on Complete Streets by submitting a Prioritization Plan in September 2017, for which a technical assistance grant had been received from the Massachusetts Department of Transportation (MassDOT). The City then applied for Tier 3 construction funding

to implement three projects identified in the Prioritization Plan. In March 2018, the City was awarded a grant for \$377,211 to implement these projects.

- The City received a \$100,000 Community Mitigation Fund grant from the Massachusetts Gaming Commission in association with the new casino being built in Everett, Massachusetts, since Melrose is a neighboring community. The first \$26,000 of this funding is being used for a corridor study for Washington Street, Pleasant Street, and West Wyoming Avenue for improvements to pedestrian and bicycle access to the Oak Grove MBTA station. The remainder of the funding is anticipated to be used in a future year to implement the recommendations of this study.

Annual Contracts

The Engineering Division procures a number of annual contracts for services and supply, to allow for continuous operation of the DPW Operations and Facilities Divisions. In FY2018, the following contracts were either bid and awarded or renewed:

Service Contracts Bid or Awarded in FY2018:

- On-Call Plumbing Services
- City Wide Elevator Repair & Maintenance
- Traffic Signal & Street Light Maintenance
- Cleaning Services
- Irrigation System Maintenance & Repairs
- Catch Basin Cleaning
- Traffic Line Painting
- Water, Sewer and Drainage Replacement & Emergency Repairs (not awarded)
- On-Call Masonry Services
- Supplying Stops & Wastes
- Supplying Diesel Fuel
- Supplying Gasoline Fuel
- Supplying Catch Basin & Manhole Frames
- Supplying Fire Hydrant & Gate Valves
- Supplying Rock Salt
- Supplying Liquid Calcium
- Supplying Digital Scan Vote Tabulators
- Athletic Field Turf Maintenance Services

Service Contracts Renewed in FY2018:

- Street Sweeping
- Tree Supplying & Planting
- Tree and Brush Grinding & Disposal
- On-Call Electrical Services & Repairs
- Pump Station & Ell Pond Floodgate Operations & Maintenance
- Citywide Roadway & Bituminous and Concrete Sidewalks Reconstruction
- Supplying Bituminous Materials
- Supplying Signage

Infrastructure

The infrastructure of the city requires continual maintenance and evaluation for adequacy. To do this efficiently, the Department of Public Works (DPW) has developed data-driven tools to evaluate infrastructure priorities in Melrose, allowing the City to make the best use of its limited funding. The DPW relies on accurate and current data and has increasingly made greater use of geographic information systems (GIS) to map and prioritize needs. In FY18, the City has continued the use of the following information sources in order to prioritize and execute work:

- 1) The City's water system Capital Efficiency Plan (Tata & Howard, February 2017) continues to be used to guide decisions regarding streets that require water main replacement or rehabilitation.
- 2) The 2016 roadway condition assessment continues to be used to determine which roadways are in need of repaving or reconstruction. This analysis considered thirteen different parameters for each segment of roadway (from cross street to cross street) and calculated a respective roadway ranking based on a formula to process the individual parameter ratings. This analysis resulted in four categories of roadway conditions: poorest, poor, fair, and good/excellent. In FY18, the City has continued to prioritize the paving of 'poorest' and 'poor' condition roadways.
- 3) The City submitted its Complete Streets Prioritization Plan with assistance from engineers from the BETA Group in August 2017 and received approval from MassDOT in September 2017. This plan guides the expenditure of Complete Streets grant fund and also dovetails with other roadway and utility projects to ensure Complete Streets goals are being met.
- 4) Working with Weston and Sampson Engineers, the City continues to identify locations with infiltration and inflow into sewer pipes and coordinates this work with other roadway and utility work where feasible.
- 5) The City receives annual GIS data updates from National Grid which show the material of gas mains throughout Melrose, to identify mains that require replacement as part of National Grid's program to replace all leak-prone pipe within its network.

The DPW and its Divisions continue to invest in upgrading data for each infrastructure system, so that objective prioritization analyses can be completed using GIS tools to guide infrastructure replacement plans. In spring 2018, the Engineering Division finalized the second year of the City's multi-year roadway and utility improvement program, aimed at holistically addressing infrastructure repair needs in select areas that present the greatest level of need based on the GIS analyses performed using these data sets.

Additionally, to ensure that private developments adhere to the same high standards applied to public works projects, the Engineering Division is continuing to work on the development of written policies, standards, and details for the installation of water, sewer, and drainage lines, as well as roadways and sidewalks. Having written policies that are adopted by the City carries more weight when working with private developers. In FY18, a demolition checklist was introduced, to ensure demolition projects are meeting Engineering and Water and Sewer Division standards.

The combination of these efforts addresses previous issues faced by the DPW when maintenance was reactionary rather than proactive. Having robust, up-to-date data ensures that DPW and its Divisions know what the status and condition of the City's infrastructure is and can effectively prioritize projects to make the best use of funding. Melrose's infrastructure systems fall into four main categories: water

distribution, wastewater collection and conveyance, stormwater management, and right-of-way/traffic management. Each of these systems is discussed herein. In addition, while the City does not own the natural gas distribution system, it plays a significant role in the City's right-of-way and is thus included in the discussion below.

FY2018 Projects

Each year, a large focus of the Engineering Division is the planning, design, bidding, and construction oversight of capital projects. These projects span the range of City-owned infrastructure and are oftentimes interrelated, such as neighborhoods that receive utility upgrades followed by roadway reconstruction. The major projects performed in FY2018 are described below by infrastructure type.

Water Distribution System

First Street Water Main Replacement Project

The water main and services were replaced on First Street from Ashcroft Road to Sixth Street in July and August of 2017. This work was performed by GTA Co., Inc., as a change order to the 2016 Tremont Street Water Main Replacement Project. This work included the replacement of 6-inch cast iron main with 8-inch cement lined ductile iron main, and the replacement of all water services from the new main to the property line with 1" copper services. In addition, the 2-inch service to the Winthrop School was replaced from the water main to the shut-off valve in front of the school. This work was completed in advance of planned paving of First Street, in conjunction with the new drop-off area constructed at the Winthrop School and the new modular school building, described elsewhere in this report.

2017 Water Main Replacement Project

The City awarded the 2017 Water Main Replacement Project to Granese & Sons in the fall of 2017. The project included replacement of water mains and services on Altamont Avenue, Day Street, and Perkins Street from Warwick Road to the Stoneham line. In addition, the project included abandoning the existing 6-inch water main on Warwick Road from Vinton Street to the Lynn Fells Parkway and conversion of all hydrants, water services, and side-street tie-ins over to the existing 16-inch water main in Warwick Road. This project was funded by MWRA Water Local Assistance Program 0% interest loans and was completed in May 2018 with a total loan amount of approximately \$930,000, covering both design and construction.

2018 Water Main Replacement Project

The City's consultant, Tata & Howard, initiated design work in FY18 on the 2018 Water Main Replacement Project, which includes replacement of water mains on Florence Street, Hurd Street from Florence to Trenton, Ashmont Street, Ashmont Park, Garfield Road, and East Emerson Street from Stratford Road to Lincoln Street. This project is to be bid and constructed in FY19 and will also be funded using the MWRA's local assistance program loans.

Water Service Replacements

City forces resolved 61 lead service work orders in FY18. Some of these were replacements, and others were confirmed in the field to not have lead materials. In addition, outside contractors replaced all substandard (non-copper) services on the following streets:

- North and South High Streets, Cleveland Street, Hancock Street, and Albion Street (performed by Commonwealth Construction)
- Spear Street (performed by N. Granese & Sons)

Water Service Line Tie Card Inventory

In FY2018, the City continued its work to develop an inventory of all water service lines serving the City’s over 8,000 water customers. Paper cards presently log water service information such as location, material, size, and date of installation. In FY2018, the Engineering Division continued to update and scan all of these service cards, linking each scan to an address. Subsequently, the most relevant data from the cards was entered into a database which will ultimately be linked to the City’s Geographic Information System (GIS) locational data. This inventory, once completed, will allow City personnel or the public to easily retrieve water service material information and to query the data to determine the number of lead service lines connecting the water mains to customers in Melrose. At the end of FY2018, the database and scanning was completed for all streets beginning with the letters A through L.

Sewer Collection System

Sewer Infiltration and Inflow (I/I) Investigations and Rehabilitation

The City of Melrose’s sewer collection system is among the oldest in the country, with many pipelines dating back over 100 years. In an effort to reduce infiltration and inflow (I/I), which contribute clean groundwater and rainwater into the City’s sewer system, the City has undertaken a comprehensive program to reduce I/I where feasible and cost effective. Following up on the spring 2016 flow metering performed throughout the City’s sewer system, the City performed follow-up investigations to identify the pipe segments contributing the highest volumes of extraneous flows to the sewer system. These investigations, called a Sewer System Evaluation Survey (SSES), focused on Subareas 3, 3A, 7, 7A, 15, 18, and 20A, and included closed circuit television inspections of sewer pipelines, measurement of nighttime flows in each pipe segment between manholes, and manhole interior inspections. This work was performed in FY2017 by Weston and Sampson Engineers, working with a subconsultant, Inland Waters, Inc. The final piece of this work, completed in FY2018 (fall 2017), was smoke testing of sewers in these subareas to look for interconnections with drainage infrastructure.

The data resulting from these investigations was then analyzed to develop a targeted construction program to reduce I/I. The first construction project was designed, bid, and largely constructed in FY2018. As part of this project, approximately 33,500 linear feet of sewers were lined by a contractor, Rapid Flow, using cast-in-place lining technology. In areas where deficiencies were identified during the SSES program that could not be lined, Weston and Sampson began to design an “open cut” sewer repair contract, which is slated to be bid and constructed in FY2019.



During the course of the cast-in-place lining project, the City encountered an area where I/I was too severe to allow for trenchless lining. Due to complications arising from this discovery, an emergency contract was bid to replace a sewer segment approximately 240 feet long on Penney Road, upstream of the Penney Road sewer pump station. This contract was awarded to C. Naughton Corporation, and the sewer replacement was ultimately accomplished using another trenchless method: pipe bursting. Sewer services were then reconnected to the new pipe using direct excavation. This construction was performed in March and April 2018.

Infiltration and Inflow Mitigation Fund

After an ordinance was passed in June 2016, the City developed policies and procedures in FY2017 to formalize the methodology for assessing and collecting the I/I Mitigation Fees specified in the ordinance. The Engineering Division now reviews all projects for which a building permit is sought which may require assessment of the I/I fee. Fees are collected prior to the issuance of a building permit, deposited in a dedicated I/I Mitigation Fund, and tracked for future reference. In FY2018 the Engineering Division collected \$134,596.24 in I/I fees.

Drainage

The City's drainage system consists of approximately 1,644 catch basins, 1,162 drainage manholes, and drainage pipes ranging in diameter from 4 to 48 inches. Several drainage projects were undertaken in FY2018, as described below.



Albion Street & Spear Street Drainage Improvements

Prior to paving roads as part of the City's annual utility and roadway improvement program, all drain lines are CCTV inspected to identify defects that require repairs. In addition, known drainage issues are addressed where infrastructure installation or replacement has been identified as the best solution.

In FY2018, drainage improvements were constructed on both Albion Street and Spear Street prior to paving. On Albion Street, a corrugated metal drain that was failing between Day Street and Melrose Street was replaced with a new plastic drain pipe. On Spear Street, at the intersection of Park Street, a new catch basin was installed to alleviate ponding in that area. Both of these improvements was constructed by D&R General Contracting under their on-call contract with the City.

Ell Pond FEMA Study

In FY2018, the City continued to work with CDM Smith to submit documentation to the Federal Emergency Management Agency (FEMA) to request lowering of the 1-percent annual chance flood elevation (100-year flood elevation) for the Ell Pond watershed. Work performed in prior years, including a hydraulic and hydrologic investigation of the pond and its watershed, concluded that the base flood elevation should be adjusted. A Letter of Map Revision (LOMR) was submitted to FEMA in December 2017 to request this change.

Orient Avenue Rain Garden Project

Following up on the prior MassDEP 604b grant to investigate stormwater quality within a portion of the drainage watershed that is tributary to Ell Pond, and a later design grant from the Massachusetts Office of Coastal Zone Management to develop final design documents for four rain gardens within the Ell Pond watershed, a construction grant was received for installation of the rain gardens. Stormwater collection and discharge typically does not include treatment, and the system upstream of Ell Pond is no exception. The CZM construction grant was ultimately used to install three above-ground rain gardens and one underground stormwater treatment system within the City-owned grass strips on Orient Avenue. A T P Environmental provided consulting support for this project, and the Canniff Company performed the installation. The systems installed are now providing stormwater quality improvements for runoff from Orient Avenue that eventually flows into Ell Pond. During the course of this project, the City also received free technical assistance from the Trust for Public Land in developing renderings of the proposed rain garden plantings, to aid with public discussion about the project.

Natural Hazards Mitigation Plan Update and Municipal Vulnerability Preparedness Program

In October 2017, the City signed an agreement with CDM Smith to update the outdated 2004 Natural Hazards Mitigation Plan (HMP). Once updated, the City will once again qualify for FEMA grant funding for projects identified within the plan. Tied to this initiative was participation in the state's Municipal Vulnerability Preparedness (MVP) program, for which the City held two workshops in spring 2018 to discuss vulnerabilities and mitigation strategies to respond to climate change-related hazards. The MVP program was funded through a \$19,000 state grant and was completed with a final report submitted in June 2017. This initiative was spearheaded through combined efforts of the Engineering Division and the Office of Planning and Community Development. The HMP project will continue into FY2019 as the City, along with CDM Smith, progresses toward completion of the planning and documentation for current and future natural hazards and mitigation measures.

Roadway/Sidewalks

Several major right-of-way projects were either completed or started in FY2018, as described below. Many of the project components follow a "Complete Streets" design aesthetic, which is also described herein. All of the construction projects described below were performed using the City's on-call contractors, including D&R General Contracting (paving, curbing, and sidewalks), HiWay Safety Systems (line painting), and Permaline (sign materials).

Melrose Complete Streets Policy

Melrose's Complete Streets program strives to safely connect people to where they want to go. The City's goal is to enhance the transportation network for all modes by connecting home, work, school,

shopping, dining, recreation and more. In June 2016, the City adopted a Complete Streets Policy which was subsequently approved by the state. In order to qualify for state grant funding to assist in the implementation of our Complete Streets goals, the City completed a Prioritization Plan, identifying the top ranked projects recommended for construction. These projects were discussed by the City's Complete Streets Working Group, and a Prioritization Plan was submitted to MassDOT for approval in August 2017. Funding for technical assistance for the Prioritization Plan, which was performed by the BETA Group, was provided by a "Tier 2" Complete Streets grant from MassDOT.

After receiving approval for the Prioritization Plan, the City submitted a Tier 3 construction grant application in September 2017 for the following projects:

- High School/Middle School Pedestrian and Bicycle Improvements
- North-South Bike Route (Wakefield line to Wyoming Avenue)
- Howard Street Improvements (Green Street to Nelson Road/Ruggles Street)

The City was informed in spring 2018 that a Tier 3 Complete Streets grant of \$377,211 was awarded to Melrose to implement these three projects. Following the grant award, the City began design of each project, which is being funded through both operating funds and a FY2019 Road Bond, approved in spring 2018 for \$1,685,000. Design input for the High School/Middle School project was supplemented via free technical assistance through the Mass in Motion program.

Tremont Street (Lynn Fells Parkway to Lake Avenue) and Cleveland Street

Following gas and water main improvements on Tremont Street in prior years, final paving was performed on Tremont Street from the Lynn Fells Parkway to Lake Avenue in August 2017, wrapping up several years of ongoing construction in this neighborhood.

At the same time, Cleveland Street was also paved. Cleveland Street had been identified as a "poorest" condition roadway and had some drainage infrastructure replaced in FY2017 prior to sidewalk improvements and final paving in August 2017.

Spear and Hancock Streets

Following the completion of drainage improvements, water service replacement, and gas main and service replacements, Spear and Hancock Streets were paved as part of the City's roadway and utility improvements project. Curbing, berm, and the binder course of pavement were placed in October 2017, and the top course of pavement was placed in May 2018. In addition to this work, sidewalks were extended between Meachem Street and Hancock Street on Spear Street, and along the entirety of Hancock Street. While sidewalks could not feasibly be installed on both sides of the road along this corridor to provide much needed pedestrian safety improvements. Compliant curb ramps were also installed at crossings, and repairs to existing sidewalks were undertaken where necessary. Lastly, one new segment of sidewalk was also installed on Spear Street near the corner of Park Street.



North and South High Streets

Improvements to the neighborhood of North and South High Streets had long been discussed. In FY2018, the City undertook improvements to this neighborhood including water service replacement, sidewalk reconstruction and addition, installation of bituminous berm, and roadway pulverization and repaving. This work was largely performed in May and June of 2018.



First Street (Ashcroft Road to Sixth Street), Sixth Street (First Street to East Foster), Winthrop School Drop-off Area

In August 2017, following the completion of water main work in the neighborhood, First Street was repaved between Ashcroft Road and Sixth Street. In addition, the City designed and constructed a new drop-off driveway at the Winthrop School along this block, in conjunction with the addition of new modular classrooms on the school site. Major sidewalk improvements were also made along First Street. Also, the teacher parking lot at the Winthrop School was modified to add additional parking spaces.

In April and May 2018, as an extension of this project, the City added sidewalks to the west side of Sixth Street, between East Foster Street and First Street, as this is a highly traveled area located one block from the Winthrop School. Accessible curb ramps were also added at street crossings.

Albion and Day Streets

Following the completion of drain work and sewer service replacement on Albion Street and water main replacement on Day Street, both streets were paved. Albion Street had binder course placed in October 2017, and both streets had a final top course placed in May 2018.

Upham Street Restriping Project

In order to provide traffic calming on Upham Street, the City's line painting contractor, with technical assistance from traffic consultants at Stantec, restriped Upham Street to narrow travel lanes and shift parking lanes to the most frequently used areas. Travel lanes in both directions were narrowed to 11-feet, deemed appropriate to encourage slower speeds while still allowing for the large vehicles such as MBTA buses that use this roadway. This work was performed in October 2017.

Other Paving Projects

Finally, as a follow-up to work performed by National Grid's contractors, the following additional streets were paved by D&R General Contracting via the City's contract, but funded by National Grid:

- York Terrace
- West Hill Avenue
- Aaron Street

Traffic Commission

In addition to the roadway work described above, the Engineering Division participated in four quarterly meetings of the Melrose Traffic Commission, with the City Engineer serving as the Chair and another Division employee serving as the Committee's Clerk. The Traffic Commission continues to address requests from the public or City personnel for regulatory changes to the City's Traffic Code. Also in FY2018, the Engineering Division reviewed all available meeting minutes from meetings since 2009 in order to update the Traffic Code. Final updates to the code are still in progress and are anticipated to be completed in FY2019.

National Grid Work

The Engineering Division supervised the following National Grid Gas work in FY2018, most of which was performed by National Grid's contractor RJ Deveraux Corporation:

- West Hill Avenue, York Terrace and Botolph Street (West Hill to York) – completed in July 2017
- First Street (Sixth Street to Ashcroft) – completed in July 2017
- Altamont Avenue (the first 200 feet) – completed in July 2017
- Aaron Street – completed in August 2017
- Spear Street and Hancock Street – completed in October 2017
- Warwick Road, Vinton Street (Warwick Road to Glen Street) and North Cedar Park – completed in November 2017
- Frances Street and Bartlett Street – completed in November 2017
- Sheffield Road and Porter Street (Meadowview to Woodcrest) – completed in January 2018
- Florence Street (Wyoming Avenue to Foster Street) and Sanford Street (Florence Street to Cleveland Street) – completed in February 2018
- East Emerson Street (Bellevue to Stratford) and Stratford Street – completed in February 2018
- Lebanon Street at Forest Street – completed in February 2018
- North and South High Streets and Vinton Street (West Foster Street to West Emerson Street) – completed in May 2018
- Perkins Street (Stoneham line to Lynn Fells Parkway) – started in April 2018, extended into FY2019

- Portions of Beech Avenue, Granite Avenue and Wheeler Road – started in April 2018, extended into FY19
- Swains Pond Avenue, Goss Avenue, and Staples Street– started in June 2018, extended into FY2019
- Blueberry Hill Lane, Portion of Forest Street and Hunts Terrace – started in April 2018, extended into FY2019

Due to an employee “lockout” within the National Grid organization in June 2018, work was stopped at that time and is expected to resume when National Grid has resolved contract negotiations.

Wyoming Cemetery

Digitization Project

Following up on the FY2017 digitization of all cemetery plots and the drone flyover to confirm plot and headstone locations, the City continued its record digitization project by having all remaining burial cards and lot cards scanned. This work was performed in spring 2018 by Boston Scanning Company. This work was done in preparation for linking scanned images to GIS plot records, which is planned for a future fiscal year.

Capital Improvement Plan Paving

In addition, in May 2018, D&R General Contracting continued the cemetery’s Capital Improvement Plan by paving three streets within the cemetery: Memorial, Sylvan, and Evergreen.

Wyoming Cemetery Wall Restoration

In the spring of 2018, the City of Melrose received a \$100,000 grant to restore the Wyoming Cemetery wall, which was originally constructed in 1937. The Engineering Division worked with the Operations Division to oversee and manage the repair of the historical wall with our on-call contractor Build Max Inc.

Facilities

The Engineering Division provided assistance as needed with four projects related to City facilities in FY2018:

- Pine Banks Dog Park
- Winthrop and Hoover Elementary School Modular Classrooms
- Public Safety Building Study
- Memorial Hall Study



Water and Sewer Division

The objective of Melrose's water distribution system is to distribute clean, safe water effectively throughout the City for residential and commercial use, and to provide water for fire emergencies. The City obtains water from the Massachusetts Water Resources Authority (MWRA). Water is distributed via natural (gravitational) flow throughout most of the City. The exception is at high elevation areas in which the water is distributed through two pumping stations, as described below.

There are approximately 82 miles of water mains in the Melrose water distribution system ranging in size from 2 to 16 inches in diameter. These pipes receive water from several large MWRA transmission mains in Melrose and are the responsibility of the City to operate and maintain. Pipe materials include cement lined ductile iron (CLDI), unlined and cement lined cast iron, and copper. Most water mains installed after approximately 1975 (representing 30 percent of all mains in the City) are CLDI pipe, which is the current industry standard. The remaining piping network is mostly comprised of unlined cast iron, with some copper pipes typically of smaller diameters.

The purpose of Melrose's wastewater collection and conveyance system is to remove wastewater coming from residential and commercial properties and convey it to the MWRA's wastewater interceptor pipes. The MWRA treats Melrose's wastewater at the Deer Island Wastewater Treatment Facility and charges the City by metering the volume both entering and leaving Melrose and calculating the difference. There are roughly 76 miles of sewer mains in the City, ranging in size from 4 to 24 inches, approximately 2,286 sewer manholes, and 5 City-owned sewer pump stations. The current standard pipe for wastewater conveyance is polyvinyl chloride (PVC) pipe. However, many of Melrose's sewer pipes are made of clay.

Water and Sewer Pump Stations

The City owns and maintains two water booster stations to provide additional pressure and volume to customers in areas of the City located at high elevations. These are in the northwest (Botolph Street and surrounding areas) and southeast (Park Street and surrounding areas) corners of the City, and the booster stations are located on Greenwood Street and Glendower Road, respectively. The high-pressure service systems are small, representing only about 10 percent of the total system demand. Both pumping stations were replaced by new facilities in the summer of 2003 and are operating as intended. Water Division personnel inspect the stations weekly, and an outside contractor (Weston & Sampson) provides detailed monthly inspections.

The City also owns and maintains five sewer pump stations. These stations convey wastewater from low lying areas via force mains up to the gravity sewer system. All sewer flows in Melrose ultimately flow to the MWRA collection system and to the Deer Island Wastewater Treatment Facility. Similar to the water booster stations, City personnel inspect the sewer stations weekly, and Weston & Sampson inspects them monthly.

City inspections follow written protocols established by the Engineering Division and include confirmation of normal operation of facility equipment and a lack of alarm conditions. Consultant inspections include more detailed preventative maintenance of equipment and equipment replacement when needed.

Major pump station repair items undertaken in FY2018 included the following:

- Abandoned fuel tanks were removed from the Upham and Fellsway sewer stations in July 2017 to comply with new state regulations
- New motor and gear reducer for the Upham Street sewer station's grinder
- Pressure valve rebuilt at the Glendower water booster station
- New radiators installed at both the Greenwood and Glendower water booster stations
- Penney Road pump station grease removal and rail repairs
- New Mission board installation at Penney Road pump station



In addition, the City owns and maintains the Ell Pond Flood Gate, which controls the elevation within the pond, allowing for the pond level to be adjusted as needed to minimize flooding within the City. City personnel check the elevation of the pond weekly and make adjustments prior to predicted heavy rain storms. Weston and Sampson also inspects the flood gate monthly along with their pump station inspections.

Preventative Maintenance and Repairs

City personnel respond year-round to address water and sewer system preventative maintenance needs and respond to system emergencies. Through the City's work order system, activities are tracked and brought to closure. In FY2018, the following items were addressed:

- 5 water leak repairs
- 11 sewer blockages
- 61 water service replacements or resolutions
- Weekly bacteria sampling of the City's drinking water in nine locations
- Two rounds of lead and copper drinking water sampling at 15 residential locations and two schools
- Additional lead testing in drinking water at City-owned school facilities
- Testing of all backflow devices two times annually through a private contractor (Water Safety Services, Inc.)
- Monthly inspections of known locations of sewer main issues (43 locations) and drainage pipe and catch basin issues (26 locations)
- Monthly inspections of major drainage system outfalls (6 locations)
- Catch basin cleaning covering approximately one half of the City's total catch basins annually

Each year, the City brings in a private contractor to perform a comprehensive leak detection survey throughout the City. This survey was performed in December 2017 to January 2018, and the issues identified in the subsequent report were then addressed by the Water Division.

Unidirectional water main flushing is performed every two years and was completed most recently in fall 2017. This work includes flushing all water mains in the City to improve water quality, as well as exercising many valves and hydrants, allowing an opportunity to identify any deficiencies requiring repairs. Hydrant caps are also lubricated at this time. The 2017 flushing program was newly designed and overseen by Tata & Howard Engineers and was implemented using City personnel, with oversight and technical documentation performed by combination of Engineering Division and Tata & Howard staff.

Water and Sewer Billing

Manage the water, sewer and trash billing program; process and input billing, review quarterly reads, process waivers and discounts. Respond promptly, sensitively and constructively to citizen inquiries, requests or complaints; provide customer service with tact, courtesy, sensitivity and discretion in all dealings with internal and external customers. Cooperatively work with the Meter Reader on a daily basis, scheduling and reviewing water meter readings, shutoffs, installations, water mark-outs and finals. Analyze high consumption accounts' data to minimize customer's leaks.

Special Projects

- City wide meter replacement project for 8200 accounts
- Getting new mobile drive by unit reading equipment up and running
- Started reading Municipal Water accounts monthly as opposed to quarterly
- Senior Citizen Discount Program, currently have 567 seniors receiving the water/sewer discount, 275 receiving trash discount
- Introduced a condo credit to seniors living in a condo who don't receive a water bill, 88 participants

Projects in Progress

- City wide meter replacement for commercial accounts, problem accounts, and 2nd meters
- Implemented Opt-In monthly billing city wide, 630 participants and growing
- City of Melrose introduced a new on-line bill payment system that includes access to review and print their bill. This is helpful when customers need a copy of their bill.
- 2nd meter moratorium was lifted, added 50 new meters
- Fiscal year rates now effective on bills dated 10/1 not 7/1
- For FY2019, introduced a Manual Read Fee for residents who have not replaced their meter
- Went from a 3-tiered rate structure to a 2-tiered rate structure
- Charging sewer based on 90% consumption, down from 100%

Facilities Division

FY18 brought new classrooms at the Hoover and Winthrop, a renovation project at the Horace Mann, two Green Communities Projects, High School elevators hydraulic cylinder replacements, 950 work orders, assisting with two elections, a classroom split and learning and training opportunities.

The Facilities Division completed over 950 work orders while maintaining 15 municipal buildings and schools covering 1.5 million square feet. We continued to increase the number and type of projects that we completed in-house. In-house projects included: roof repairs, thermal imaging and reporting, mason repairs: MVMMS court yard railing, Beebe steps, and Library steps; larger paint projects, fence building, and doors and frames installation. Work orders ranged from window repair to adjusting faucets. Work orders in municipal building included shelf projects at the Library, installation of a new door and frame at Engine 2, and the painting of the Health Department and City Clerk's office.

Depending on the work order requested and building the work is being performed in, facilities employees have staggered shifts in order to make the repair without disruption to the occupant's regular schedule. Our staff starts as early as 6:00 AM and end their shift as late as 10:30 PM. The early shift gives us the opportunity to solve issues before buildings open and the later shift allows us to do work in buildings after the regular day has ended.

During the summer, regular PM and annual testing occurred and included: generators, grease traps, genie lifts, kitchen hood, bleacher and stands, rigging, boilers, fire extinguisher, fire alarm and sprinkler testing, science labs fume hoods, pest control, emergency shower and eyewash stations. Crews and vendors cleaned carpets and rugs; moved furniture; painted classrooms, halls, and gyms; and cleaned and sanitized building. We refinished gym floors, the APR floor and classrooms at the Winthrop, made roof repairs, purchased and installed a new shed at the Horace Mann, rekeyed the exterior of the Lincoln, repaired windows, and replaced sidewalk panels. We also assisted the Office of Planning with the construction of modular classrooms and Horace Mann renovation. We provided support for such events as Friends of the Library Book Sales, Grad Night and High School sporting events.

With funding from a Green Communities Grant, we did projects at the MVMMS and Milano Senior Center. A retro-commissioning project of the Middle School helped us realize significant electricity and natural gas savings while increasing comfort for building occupants. The project at the Milano Senior Center revitalized uninvents HVAC units in order to better modulate the fresh air intake into the spaces and save unnecessary heating and cooling.

We continued load shedding at the Middle School and High School. Load shedding is a concept where buildings make an effort to consume less energy on days when energy usage normally peaks to save money. Since the power company has to account for the maximum capacity of power usage, lowering the peak consumption helps reduce rates for the entire year. We utilize the Energy Management System to help us manage our load shed and minimize the effect on people's comfort. We save thousands of dollars yearly by load shedding.

Although March was very snowy and kept the Green Team and Operations staff busy, they were still able to help facilities complete a long list of cleaning, ceiling tile replacement, supply deliveries, custodian vacation coverage, painting, and equipment and furniture moves. They have proven to be invaluable to our buildings operations.

Training continued to be a top priority for staff. We continued to work on our procedures, staff and methods to keep our buildings as clean, safe and running as smoothly as possible. During April School vacation, the custodians and tradesmen again attended an all-day facilities training thru the Mass Facilities Administrators Association to which helped improve their skills, cleaning methods and safety practices. We also purchased equipment to help our staff be more efficient.



Parks & Forestry Division

There are 81 sites that the Park Department maintains from parks, street islands and public buildings. The Forestry Division maintains 6000 street trees that are on public property. They take down trees, trim, plant and have a pruning program in place.

In FY18 we built three more boxes for the Community Garden, installed metal shelving for the Steele Storage building, planted new trees throughout the city and worked on irrigation at Bellevue Island and Hospital Square. We also installed Memorial benches at Lewis Monk, Ell Pond and Mt. Hood. In addition, slats were repaired on a Buddy bend at Horace Mann. An Adopt a site sign inventory was done and 12 adopt a site signs were replaced. Friends of Ell Pond hosted their annual cleanup day, spear headed by Dave Dickerson. We also replaced trail markers on the Trail at Mt. Hood and nine Road Races were organized with the help of DPW and the Melrose Police Department.



Our department had a very unique opportunity to be part of granting a wish for Ryan Feeney, a seven year old Melrose resident. We worked closely with the Make-A-Wish Foundation to turn Ryan Feeney's backyard into a football field for a very special visit from Rob Gronkowski. Another moment we were proud to be a part of was the celebration of the 100th Anniversary of the Melrose Symphony. On September 9th, 2017 over 5,000 people gathered on Morelli Baseball Field and Fred Green Football Field to watch the Melrose Symphony Orchestra perform.

Below are work orders completed in the fiscal year and park department responsibility:

- Cut Grass daily
- Irrigation installations and repairs
- Seed fields and islands
- Fertilize fields and islands
- Install spring flowers in 10 locations
- Install fall flowers in 10 locations
- Repair playground equipment and installing
- 226 Tree assessments
- 142 Tree removals
- 210 Tree trims
- 87 trees planted
- 214 Stumps ground
- Water the city hanging plants in spring and summer
- Decorated downtown for the holidays
- Replaced Main Street banner 16 times
- Line fields and painting for High school and youth in the spring and fall
- Mulch at the beginning of the school year and the beginning of spring was dropped and spread

Other notable projects performed are as follows:

Gazebo

- Replaced rotted wood
- Painted

Foss Park

- Infield worked on
- 3 benches painted

Horace Mann

- Playground parts replaced
- Handicap belts replaced
- Infield work done
- Painted storage boxes

Conant Park

- Repaired batting cage

Lebanon Park

- 2 benches painted



Dog Park

- Solar Lights installed
- Groomed mulch back from fence and weed wacked
- Spread 30 yards of mulch.
- 1 bench painted



Dunton Park

- Worked with Class of '58 to redo Dunton Memorial
- Replaced fence

Morelli Field

- Aerating, vericutting, infield mix, sand
- Painted Dugout
- Clay bin added next to dugout
- Fence Repaired

Common

- Built larger Sandbox
- Conditioner on softball infields

Lincoln

- Replaced basketball rims
- Repaired fencing at Tot Lot



Fred Green

- Netting added
- Field Turf repairs and conditioning was done

Gooch Park

- New Tire Swing installed
- Bushes planted

Knoll

- Peace Garden created
- West Knoll bleachers painted
- East Knoll aerated, verticutting

Lewis Monk

- Batting Cages repaired
- Gates repaired
- Wooden Fence rebuilt



Cemetery Division

The mission of the Wyoming Cemetery is to serve the citizens of Melrose by meeting their final needs with compassion and dignity. The Wyoming Cemetery Commission and staff continued their commitment, as always, to serving the needs of the Melrose community. Fiscal year 2018 saw many improvements to the Wyoming Cemetery grounds and facilities.

The City of Melrose received a grant in the amount of \$100,000.00 to repair the historical wall at the cemetery in the spring of 2018. The stone wall at the Wyoming Cemetery was constructed in 1937 by the Works Progress Administration (WPA), and the cemetery boundaries have remained unchanged since the final land acquisition of 1891. The funding came as result of an earmark sponsored by Senator Jason Lewis and Representative Paul Brodeur.



The Wyoming Cemetery Commission approved funding to refurbish the following roadways within the cemetery:

- Lakeside Avenue
- Ledge Avenue
- Wisteria Avenue
- Veterans Avenue

This road work project was completed in May of 2018.

With the assistance of Cemetery Commissioner Douglas E. MacDonald, who completed an on-site survey of all the roads in the cemetery, it was determined that 80 street signs along with posts were needed within cemetery. The additional signage would help the patrons navigate without difficulty throughout the cemetery. It would also help general public locate, with ease, family grave sites within the cemetery. Perma-Line Signs of Brockton fabricated the double sided signs and the City of Melrose, Department of Public Work employees installed the signs and posts in late June of 2018.

The fencing bordering the cemetery and the newly established Pine Banks Dog Park was replaced with a new five foot black chain link fence. The fence was installed as requested with a commitment by the Pine Banks Board of Trustees to further explore and discuss landscaping options in the area where the park borders the cemetery.

Another major administrative accomplishment of the Cemetery Department was as follow software plan that was initiated continued in FY 2018. The funds allocated for the project to date, covered the cost of the aerial site flyover, the scanning of documents and the digitization of the maps. Boston Scanning Company went to the cemetery office in mid-April Of 2018 and scanned all pertinent documents. Elena Proakis Ellis, the City Engineer informed the commission that the first phase of GIS records project has been completed. The paper maps of all sections of the cemetery have been superimposed over aerial views of the cemetery. The next phase to be realized would be linking the scanned data to the maps.

During the fiscal year 2018 the Wyoming Cemetery had a total of 134 burials. Of which, 80 of them were casket burials and 54 were cremation burials.

The Cemetery Division of the Department of Public Works maintains the cemetery on a daily basis. In addition to burials, the cemetery crew is responsible for the cutting and watering of the grass at reasonable intervals, the raking and cleaning of the grounds, the planting seasonal displays of flowers, the pruning of shrubs and trees, the placement of foundations, the installing of flat markers and veterans government issued headstones.

Memorial Day activities this year included the following:

- The Cemetery Office was opened on Saturday from 8:00 a.m. to 3:00 p.m. and Sunday from 9:00 a.m. to 3:00 p.m. for the convenience of volunteers and visitors.
- Flags were placed on veterans graves on Saturday, May 26th by volunteers.
- Flag Burning Ceremony took place on Saturday, May 26th.
- The Parade took place on Sunday, May 27th concluding at the cemetery. A tent and chairs was setup for elderly participants.
- On Monday, May 28th flags were lowered at sunrise and raised at 12:00 noon

In preparation of the Memorial Day holiday, outside of the regular mowing and maintenance the following took place:

- The Administration Building gutters, windows and awnings were cleaned.
- The Administration Building landscaping was redesigned and new shrubs were planted.
- The center island at the cemetery entrance on Sylvan Street was transformed into a beautiful rock garden.
- Design plans for the placement of pavers at front walkway of the Administration Building were put into place.
- All roadways were swept within the cemetery.

Flower Program

The usual seasonal displays of flowers enhanced the cemetery grounds, in particular, the wonderful summer flowering displays of large canna, impatiens, begonias, petunias, etc.

This year the shrub/flower gardens around the administration building were upgraded. The beds were edged, mulched and the lawn in front of the building was loamed and seeded. An irrigation system provides water to that area.

The beds at the Lebanon Street entrance of the cemetery were also landscaped.

Perpetual Care Flower Fund Program

Twice-yearly seasonal tributes are placed on designated graves of those who subscribed to the Perpetual Care Flower Fund. Baskets of mixed plants are placed on graves in time for Memorial Day, in addition to a winter basket of holiday greens in mid-December. This year the cemetery staff placed sixty (60) baskets of each.



Memorial Bench Program

The commission determined that the cost for family members wishing to participate in the Memorial Bench Program would be \$1,100.00. This would include an epitaph on the bench seat. The cemetery will choose a location as close as possible to the family's desired location.

Although there was considerably interest, no benches were installed this year.

Memorial Tree Program

The cost for family members wishing to participate in Memorial Tree Planting Program is \$600.00. This includes a granite marker that is placed at the base of each tree that is planted. No trees were planted this season.



Highway Division

We have 83.5 miles of streets and 170 miles of sidewalks that consist of concrete, asphalt and grass. The Highway Division is also responsible for street signs, potholes, fences, line painting, street sweeping, snow plow damage, traffic signals, street lights, curb side compost collection, trash pickup at all parks, street receptacle's and schools.

Street sweeping has a fall cleaning schedule done by wards and main drags. This program is done by an outside contract for the months of November and December. We sweep in house every Friday for the months of April to October.

Below is the number of work orders done by this department for the fiscal year.

- Working on all city events: 100th Anniversary of the Melrose Symphony Orchestra, Victorian Fair, Summer Stroll, Four Corners Concert, Memorial Day Parade, Fourth of July Parade, Trick or Treat Downtown, Home for the Holidays, etc.
- 91 Signs
- 15 Traffic signs we did in house
- 476 Potholes
- 5 Sinkholes
- 1 Trench
- 28 Sidewalk repairs/assessments
- 83 Snow damage
- 1 Victorian pole replaced
- 3 Fence repairs in parks & schools
- Street sweeping program
- 831 Curb side metal goods pickup
- 38 Block parties
- 230 Crosswalks painted
- Blocking of streets for 18 events
- 17 weeks of curbside compost pick up
- 100 bicycle symbols with sharrows painted



Fleet Division

The Public Works Fleet Division is responsible for maintenance, repairs, specifications and disposal of all DPW equipment. There are approximately 140 vehicles in our fleet consisting of front end loaders, dump trucks, garbage compactors, recycling trucks, leaf vacuums, tractors, street sweeper, wood chipper, pickup trucks, vans and automobiles. We're also responsible for small equipment such as chainsaws, lawnmowers, weed whackers, etc. In addition, we maintain sixteen vehicles for the Melrose Police Department. Mechanics are involved with the equipment repair and maintenance process. The Fleet is also responsible for the seasonal change-over of equipment for snow and ice control, leaf collection, street cleaning and other projects completed by DPW. The Fleet Division also has a preventive maintenance program and tracking system to record parts and labor expended on each piece of equipment, identify mechanical issues and determine when equipment should be replaced. The Fleet Division is in the implementation phase for a computerized asset management system that will improve record keeping and inventory for fleet activities. Our average age for our fleet is 12 years old.

The Fleet Division is also responsible for preparing specifications for the purchase of new and replacement equipment each year when there is money available. After new equipment is received, it is verified that it meets all bid specifications. Through initiatives from the Melrose Energy Commission and Energy Efficiency Manager, Marth Grover Public Works purchased a Ford Fusco Electric Vehicle. The vehicle is shared amongst City employees.

Wish list for next year:

- Case backhoe
- Water utility truck
- Sewer utility truck

