

DEPARTMENT OF PUBLIC WORKS



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Weston received 25 inches of snow. The winter snow operations included eight major plowing events plus three scraping events and 30 road de-icing events while expending \$1,134,900 to keep the roads and walkways safe.

REPORT OF THE DEPARTMENT OF PUBLIC WORKS

Mission Statement

The mission of the Town of Weston's Department of Public Works is:

- To construct and maintain the physical infrastructure that provides for the public's health and safety
- To protect the environment
- To enhance the quality of life, and to ensure that Weston continues to be a desirable place in which to live and conduct business

The mission of the Department will be accomplished through an equitable and cost effective delivery of the following services and products:

Activities to ensure community health and protect the environment:

- provision of water;
- drainage of surface water;
- street sweeping of roadways;
- disposal of waste refuse;
- recycling of waste;
- composting of leaves and yard waste; and
- maintenance of parks, cemeteries and recreation areas.

Activities to provide for the safety of pedestrians and motorists:

- construction and maintenance of roads and sidewalks;
- provision of street signs, traffic signals, and pavement markings;
- response to wind and rain emergency events to clear roadways and drainage infrastructure; and
- sanding/de-icing, plowing, and removal of snow.

Public Works Administration

The Administration is responsible for the budgeting, planning, construction, maintenance and overall management of the entire scope of services provided to the citizens of Weston by this Department. The success of the Department would not occur without the talent and commitment that exists within its workforce, the support and guidance that is provided by the Town Manager and Board of Selectmen, and the cooperation that exists between Town departments.

Snow and Ice Operations

The management of snow and ice operations is considered one of the most important functions of the Department. During the winter of 2014-2015 the town experienced a record-breaking winter. Weston received in excess of 94 inches of snow during this period with the majority falling within a 30-day period. The season's largest snow event occurred Monday, January 26th through Wednesday, January 28th, in which Weston received 25 inches of snow. The winter snow operations included eight major plowing events plus three scraping events and 30 road de-icing events while expending \$1,134,900 to keep the roads and walkways safe.

Construction Projects

Road Paving – The roadway reconstructions completed totaled 2.24 miles and included the entire lengths of Lawrence Road, Pine Street, Winter Street (portion between Highland Street and Route 30), Fields Pond Road, River Road (portion), Gatehouse Lane, Circle Drive, Wildwood Lane, Pineroft Road (portion from Montvale Road to end), and Pond Brook Circle (to binder). Resurfacing included 0.3 miles of pavement overlay on Love Lane (from Highland Street to approximately house no. 58) and 0.6 miles of pavement overlay on Highland Street (from approximately house no. 223 to 355).

Guardrail Replacement - No guardrails were replaced this year because the aesthetics of the available materials is currently being reviewed by the Planning Board.

Drainage Rehabilitations - As part of the capital drainage improvement program, the Department completed the design, permitting, and construction of the several drainage improvement projects, including drainage repairs at North Avenue (from Viles Street to Hobbs Brook Road), Pine Street, Lawrence Road, Pond Brook Circle (Phase I of a multi-phase Southside Drainage Improvement Project), Longmeadow Road, Winter Street (near house no. 15), Summer Street (two locations near house nos. 11 and 37), Concord Road (near College Pond), and Westerly Road (near house no. 91). The design, permitting and coordination efforts are ongoing for Newton Street and Fairview Road.

Wellesley Street at Brown Street Intersection Improvement (Signalization) - This project was approved by 2014 Annual Town Meeting and was expedited through our Town Engineer's office. The design and construction inspection were conducted by the Town-hired consultant with the contract being awarded to Charles Contracting out of Watertown, Mass. for a contract value of \$322,722. The scope of the project involved a slight widening of the intersection of Wellesley and Brown streets, installation of curbing, the installation of signal infrastructure (i.e. foundations, conduits, posts, signal heads, etc.), sidewalk resurfacing, pavement resurfacing at the intersection, and installation of new pavement markings. Construction was completed before the start of the 2015 school year.

Route 30 (South Avenue) at Wellesley Street Intersection Signal Improvements - This project is a state Transportation Improvement Program (TIP) project, which was expedited through our Town Engineer's office. The design and permitting was conducted by the Town-hired consultant and was completed in September 2014. The right-of-way was the responsibility of the community and was completed in September 2014. The project was advertised and bids were opened in December 2015. Construction management will be completed by the Massachusetts Department of Transportation and is anticipated to begin in the spring of 2016 and completed by fall of 2016.

Water Main Replacements - The design and permitting of fiscal year's 2016 water main project, Old Colony Road (from Ferndale to Ridgeway Road), is ongoing. The project is anticipated to be advertised in February 2016. The scope of the project includes the replacement of the existing hydrants and water services within the project limits. The replacement of approximately 1,400 linear feet of 8-inch cement-lined ductile iron water main was conducted on Pond Brook Circle, as part of the drainage project, and Warren Avenue as part of a Facilities project.

Hydrant Replacements and/or Rehabilitations - During the 2015 construction season, 12 out-of-service fire hydrants were replaced and another 10 fire hydrants were rehabilitated to modern specifications. Additionally, in an effort to continue to improve water quality, three new fire hydrants were added to the distribution system that will be used during our annual flushing program.

Black Oak Booster Pump Station Improvements - As part of the capital water improvement program, the Department completed the design and permitting of the Black Oak Booster Pump Station, which has improved water pressure and provided redundancy to this pump station. The project was expedited through our Town Engineer's office. The design was conducted by the Town-hired consultant and was completed in August of 2014. The contract was awarded to Barbato Construction Company Inc. out of Middleboro, Mass. for a contract value of \$688,414. The Public Work's Administration, working with the Town's Finance Director, completed, filed and obtained a 10-year, interest free loan from the Massachusetts Water Resources Authority's financial assistance program, which will result in a potential debt savings to the community of approximately \$300,000. This project was substantially completed in December 2015.

The following division reports contain our accomplishments for the year:

REPORT OF THE ENGINEERING DIVISION

The Engineering Division is responsible for the implementation of the Capital Improvements Program for the Department of Public Works, including water, roadway and drainage system improvements; implementation of the GIS program; and assistance to various other departments and boards. This division consists of the Town Engineer and the Assistant Town Engineer / Stormwater Engineer.

Capital improvement projects constructed in 2015 included:

- drainage improvements in several locations including North Avenue between Viles Street and Hobbs Brook Road, Pine Street at South Avenue, Highland and Winter streets, Summer Street near Route 20, Longmeadow Road at Bakers Hill Road, Westerly Road (easement work), and Concord Road at College Pond. Water and drainage improvements were also constructed on Pond Brook Circle as Phase 1 of the Southside Drainage Project.
- the traffic signal construction at the intersection of Brown and Wellesley streets, which began in 2014, was completed
- the Wellesley Street / South Avenue Transportation Improvement Project, funded by Massachusetts Department of Transportation, received bids in December and construction is anticipated to begin in 2016
- the Black Oak Water Booster Station was installed and the Black Oak Storage Tank demolished
- construction of a new sidewalk on Brown Street and Winter Street is planned for 2016, subject to the availability of funds

Ongoing design and planning projects include drainage and roadway improvements for Newton Street, the Fairview/Montvale/Pinecroft Road area, Silver Hill Road, and the Westland Road/Merriam Street area, as well as several scattered drainage issues. Water main improvements on Old Colony Road, Ferndale Road, and Boston Post Road By-pass are also being designed and planned to replace old asbestos cement water mains.

Other activities and ongoing projects included:

- serving on Traffic and Sidewalk Committee
- monitoring the Cook's Pond Pump and Dam
- oversight of the environmental monitoring at the former landfill
- serving as the point of contact between the Town and the vendor for installation of a solar photovoltaic array on the closed landfill which was completed in 2015
- serving on the Stormwater Permitting Authority
- management of the Environmental Protection Agency Phase II Stormwater permit

The Engineering Division appreciates the cooperation and collaboration with the other Public Works divisions to make these improvements throughout Weston. It is a team effort.

REPORT OF THE HIGHWAY DIVISION

The Highway Division is responsible for the maintenance and care of the roads and sidewalks in Town as well as all street signage, guardrails, and pavement markings. The six individuals that make up this division accomplished the following special projects this past year:

- Road preparation and supervision for the full depth reclamation, grading and paving of Lawrence Road, Pine Street, Winter Street (Highland Street to South Avenue), Fields Pond Road, Gatehouse Lane, River Road (between house nos. 121 and 139), Circle Drive, Wildwood Lane, and Pinecroft Road (Montvale Road to the end). Necessary signage and pavement marking improvements followed the road work.
- Prepared and supervised the pavement overlays of two sections of the roadway on Love Lane (Highland Street to house no. 36) and Highland Street (between house nos. 215 and 376) using state aid money for pothole recovery after the harsh winter season
- Worked with the Stormwater Division to rebuild and/or replace existing drainage structures on the 2015 Capital Reconstruction project list prior to the road reconstruction, and other drainage structure repairs/replacements
- Assisted the Stormwater Division with the rebuilding and/or replacement of 29 drainage structures on Town roadways that were associated with the Capital Roadway Program, as well as others that were in need of work
- Assisted the Water Division with the installation of a new upgraded water service, two new hydrants, and one replacement hydrant per the Capital Roadway Program
- Assisted the Water Division with the emergency water breaks and nine scheduled fire hydrant replacements

In addition to the above special projects, the Division maintained road conditions by patching potholes; cutting back vegetation from the sides of Town roads; and removing tree limbs hanging over roads and sidewalks in order to maintain safe vehicular and pedestrian travel in Town. The Division also responds to after-hour emergencies, such as snow and ice conditions, downed trees, and roadway hazards such as potholes.

REPORT OF THE PARK AND CEMETERY DIVISION

The primary responsibility of the Park and Cemetery staff is the care, maintenance, and operation of the Town's cemeteries. This includes planning funeral arrangements with residents, carrying out interment and committal services, and tending to perpetual care of the landscape. This same group of dedicated employees also cares for several scenic parks, the Town Green, and the grounds at an assortment of Town buildings including Town Hall.

Linwood Cemetery sits on 35 acres of rolling terrain, winding paths, native shrubs, specimen trees, and is a well maintained example of the park-like, romantic style cemetery that became popular in the late 19th century. Dating from 1873, it is Weston's largest and only active burial ground. This Division is committed to providing exceptional service to the residents of Weston and their families in guiding them through the daunting and often emotionally challenging process of selecting burial plots, making funeral arrangements, and carrying out committal services. We also tend to their needs during the grief and aftercare period with assistance in choosing memorials, plantings, and any other specific requests they might have. It is our goal to assist people in getting through one of the most difficult periods in their lives and ensure that when a family comes to Linwood Cemetery, their experience is as pleasant and well managed as possible.

The 2015 Arbor Day activities included a most generous donation of new tree to Case Park by the Tree Advisory Group in a continuing effort to improve the Case Campus landscape. It is our intention to help revitalize and maintain the landscape for future generations to come. The installation took place on a cold spring day in a collaborated effort between the Tree Advisory Group and the Park and Cemetery grounds crew with former Selectman Edward Coburn reciting the Arbor Day Proclamation.

In conjunction with the Public Spaces Committee, Garden Clubs, and the Tree Advisory group, we are pleased to have the opportunity to continue ongoing improvements and maintenance of the Town Green. The efforts of many dedicated individuals are evident in the resulting landscape. Much thought and care is taken in these decisions in order to protect and preserve this preeminent treasure.

Memorial Day and Graduation festivities on the Green and Linwood Cemetery were both very successful this year with the added benefit of sunny and pleasant weather. The Town Green continues to be the center stage for many important events and we wish to thank all those who help to keep the area clean and beautiful for all to enjoy. When Weston celebrated its bicentennial in the spring of 1913, the 1914 Annual Town Meeting gave the Selectmen and Park and Cemetery Commissioners approval to take the 11 acres by eminent domain to forever secure what we now have and hold dear.

The Weston Garden Club, as they have been doing for many years, placed wonderful hand-made Christmas wreaths on municipal buildings and Town offices. Members of the Garden Club take cuttings from evergreen shrubs around town and make each wreath individually. This same group is also responsible for the beautiful and seasonal displays at the historic watering trough in the center of town.

We would again like to thank all of the many Garden Club members, traffic island sponsors, and other residents who donate their time and knowledge towards the betterment of our surroundings. The Town continues to benefit from this sense of community pride and spirit. There are many unseen hands involved in the planting, care, and watering of the trees, gardens, planters, and landscaped areas around town that all deserve our appreciation.

The Division's fiscal year 2015 statistics are as follows:

Interments - 40

Casket - 32

Cremation - 31

Interment Fees Collected - \$29,750

Lot Sale Fees Collected:

Perpetual Care Trust Fund - \$10,560

Sale of Lots Fund - \$15,840

Town Clerk Recording Fees - \$50.00

Memorials

Monuments - 19

Markers - 28

Fees Collected - \$7,710

Total Cemetery Revenue - \$63,910



REPORT OF THE SOLID WASTE AND RECYCLING DIVISION

In the fall of 2015, after signing a contract with Ameresco Inc., a leading provider of renewable energy solutions, the construction of the Solar Photovoltaic Array on the landfill cap commenced, with no upfront cost to the Town. Due to a tight construction schedule, constant communication and cooperation between the Public Works Department and Ameresco representatives was a key factor in completing the installation in a timely fashion without disruption to Transfer Station operations. According to Selectman Michael Harrity, Weston will enjoy very favorable electricity rates over the next 20 year, which will save the town about \$250,000 annually and produce about 38 percent of municipal annual electricity usage from the sun.



On a trial basis per a recommendation from the former Recycling and Solid Waste Committee and with the approval of the Board of Selectmen, a voluntary pilot Pay As You Throw (PAYT) trash disposal program was initiated to test the theory that Weston can reduce its waste and recycle more. PAYT is a system in which residents pay for the actual quantity of trash discarded, rather than paying a fixed fee per household. It is similar to paying by the kilowatt hour for electricity. As residents pay directly for the quantity of trash produce, a financial incentive is set to reduce waste through recycling, composting, and source reduction. Households generating less trash will pay less than those generating more. The

results of the pilot test will be available in 2016.

The Division is continuing an initiative to collect recyclable products from municipal and school buildings and process them through the Transfer Station. By doing so we help to ensure that these materials are removed from the waste stream and processed according to Department of Environmental Protection regulations, while at the same time lowering overall disposal costs and increasing the Town's recycling rate.

Fiscal Year 2015 solid waste and recycling numbers by comparison:

	FY15 (+/- from previous FY)	FY14 (+/- from previous FY)	FY13 (+/- from previous FY)	FY12 (+/- from previous FY)
Annual Recycling Rate	45.74%	41.91%	43.55%	
Recycling Rate Excluding Yard Waste	33.69%	31.44%	30.58%	30.71%
Average Cost to Process Recycled Product	\$31.71/ton (+ \$5.14)	\$26.57/ton (+ \$.43)	\$26.14/t on (+ \$6.81)	\$19.33/ton (+\$2.77)
Average Cost to Process Solid Waste	104.42/t on (- \$2.18)	\$106.6/t on (+ \$3.67)	\$102.97/ton (+ \$1.94)	\$100.53/ton (+\$.89)
Overall Processing Cost of Solid Waste and Recycling	\$71.16/ton (- \$1.90)	\$73.06/ton (+ \$3.83)	\$69.23/ton (+ \$3.30)	\$65.93/ton (+ \$.71)
Tons of Total Recycling Material	1,469	1,319	1,489	1,532
Tons of Total Solid Waste	1,742	1,829	1,930	2,064
Tons of Total Materials Processed	3,211	3,148	3,419	3,596
Recycling Revenue Generated	\$11,019	\$22,222	\$17,152	\$35,687
Recycling Savings (Avoided Disposal Costs)	\$106,804	\$105,520	\$113,655	\$124,398

Recycling generated \$11,019 in revenue and saved a total of \$106,804 in avoided disposal costs. It not only helps to protect and preserve our environment, but also reflects a substantial cost savings to the Town. In efforts to assist residents to recycle more, residential yard waste (brush, leaves, grass and other yard

trimmings) is collected at the Transfer Station, as well as glass containers, newspaper, mixed paper, cardboard, all metals, tin cans, deposit containers, and plastic. We also provide a collection area for televisions, computer monitors, and electronic components, as well as fluorescent light bulbs. Donated clothing (even tattered and worn out, old linens and drapes, stuffed animals, and old sneakers), household goods, book, and bicycles for several charities are accepted at the Transfer Station and all of which keep recyclables out of the solid waste stream. Removal of these items from the waste stream will result in a continued reduction of expenditures on Solid Waste and Recycling Operations as well as aiding us in our goal for a cleaner and healthier environment.

Thank you to all individuals and families that continue to recycle. Our recycling program is a success because of your enthusiastic effort!

The Solid Waste and Recycling Division's Revenue for fiscal year 2015:

Resident Permit Sales: \$360,129
Commercial Haulers: \$ 445
Recycling Proceeds: \$ 11,019
Total Solid Waste and Recycling: \$371,593

REPORT OF THE STORMWATER DIVISION

The Stormwater Division is responsible for the maintenance of the Town's storm drains and waterways and the promotion of stormwater management as prescribed in the Environmental Protection Act. This division consists of three individuals whose responsibilities also include street sweeping, catch basin cleaning, repairs to catch basins and drainage systems, and clearing brush and debris from brooks, streams and other waterways. The Stormwater Division also responds to snow and ice emergencies as well as all reports of flooding in the Town.

Operational highlights of 2015 included:

- rebuilding and/or replacement of five existing drainage structures in connection with the Capital Roadway Program and 24 existing drainage structures on Town roadways not a part of the Capital Reconstruction Program
- assisting the Engineering Division with problematic drainage issues throughout the town by investigating the problems and helping during construction, as needed
- pipe cleaning (jetting) and inspection of all existing drainage systems on the roads scheduled to be reconstructed or repaved
- working with the Highway Division to prepare and execute the full depth reclamation, grading and paving of Lawrence Road, Pine Street, Winter Street (Highland Street to South Avenue), Fields Pond Road, Gatehouse Lane, River Road (between house nos. 121 to 139), Circle Drive, Wildwood Lane, and Pincroft Road (Montvale Road to the end)
- working with the Highway Division to prepare and execute the pavement overlays of two sections of the roadway on Love Lane (Highland Street to house no. 36) and Highland Street (between house nos. 215 and 376)
- the removal of approximately 140 tons of debris from approximately 1,500 catch basins
- street sweeping 92 miles of roadway with many of the roads, such as problematic low areas, Weston Center, and the main roads being swept multiple times throughout the year
- working with the Town Engineer, Board of Health and Conservation Commission to eliminate stormwater, wetland and pollution problems
- assisting the Water Division with the installation of one new upgraded water service, two new hydrants, and the replacement of one hydrant, per the Capital Roadway Program

- assisting the Water Division with emergency water breaks and nine scheduled fire hydrant replacements
- assisting the Highway Division during emergencies and day-to-day operations, including the Road Resurfacing Program

REPORT OF THE TREE WARDEN

The role and authority of a Tree Warden are defined under Massachusetts General Laws, Chapter 87, Sections 1-13 and is more commonly referred to as The Public Shade Tree Act. Responsibilities include the care and protection of public shade trees through the identification and removal of hazardous trees within the public right-of-way, as well as serving as an advisor to the Tree Advisory Group.

The Tree Warden is responsible for setting up public hearings with the Board of Selectmen when a public shade tree is proposed for removal. If the public shade tree is located within the right-of-way on a designated scenic road, the Planning Board must hold a hearing for the proposed removal. If a public shade tree endangers travelers on a public way and the Tree Warden deems the tree to be an imminent hazard, it may be trimmed, cut or removed without notice or hearing.

In 2015 the Town of Weston was again designated as Tree City USA by the National Arbor Day Foundation for the 12th straight year. On April 23rd, the town held a special Arbor Day celebration at Weston's Case Park in commemoration of the planting of a *nyssa sylvatica*, a native tree with brilliant foliage. The tree was purchased with Tree Warden funds.

The preservation of the health and beauty of shade trees along Weston's public roads is essential to the rural character of the town. The Tree Warden is grateful to the employees of the Highway Division and Park and Cemetery Division for their hard work and commitment during all hours and weather conditions in order to address emergency tree problems.

REPORT OF THE VEHICLE MAINTENANCE DIVISION

The Vehicle Maintenance Division is responsible for the maintenance and care of most of the vehicles owned and operated by the Town of Weston, as well as responds to after hour emergencies such as snow and ice conditions, water breaks, and vehicle break downs. The four individuals that make up this division accomplished the following this past year:

- Performed the maintenance and up-keep on 61 registered Public Works vehicles, 18 registered Police Department vehicles, and 31 registered vehicles for the School Transportation Department. Funding for this work is provided by this division's annual budget.
- Performed the maintenance and up-keep on four registered Recreation Department vehicles, one Council of Aging Department bus, one Building Department sedan, and six registered vehicles for the School Buildings and Grounds Department. Funding for this work is provided by the individual departments that own and operate the vehicles. The Division adsorbs normal labor expenses except if overtime is involved, in which case that expense is funded by the respective department.
- Assisted other divisions within the Public Works Department as well as other Town departments with the maintenance of small equipment such as lawn mowers, leaf blowers, etc. The maintenance responsibilities lay with the specific division or department that owns the small equipment.
- Assisted with the Capital Equipment Budget and then ultimately the specification and purchase of all Public Works equipment.

- Supervisee the maintenance and up-keep of the municipal fuel station, which pumped approximately 48,000 gallons of gasoline and 68,000 gallons of diesel fuel.

REPORT OF THE WATER DIVISION

The Water Division is responsible for the provision of safe and potable drinking water to 3,644 residents of Weston and responds to all water system emergencies including system leaks, loss of service, poor water quality, and low water pressure. The four individuals that make up the division maintained over 116 miles of water main, 961 hydrants, the Wellesley Street Pump Station, and three water storage tanks that contain 2,621,000 gallons of water in total. The Town's water is supplied by the Massachusetts Water Resources Authority, which uses ozone treatment as the primary disinfectant and chloramines for residual disinfection in order to provide the safest drinking water possible. Water Division personnel also serve the community by performing a variety of public works related tasks, including snow and ice emergencies.

Operational highlights of 2015 included:

- emergency repair of nine water main breaks
- the replacement of 12 fire hydrants with an additional 10 refurbished or rehabilitated to meet modern specifications
- working with the Highway and Stormwater divisions to replace one main-to-curb water service on Lawrence Road prior to the roadway reconstruction project
- performing inspections on the replacement of 1,400 linear feet of 8-inch diameter, cement-lined ductile iron water main on Pond Brook Circle and Warren Avenue as part of the Capital Improvement Program
- a full comprehensive leak detection survey of the Water Distribution System, which found two fire hydrant leaks and one service leak that was promptly repaired and which will reduce the amount of unaccounted water
- performing pre-excavation Dig-Safe mark-outs to over 2,500 locations
- continuing the cross-connection control and prevention maintenance program as required by the Department of Environmental Protection
- upgrading 110 water meters to modern metering equipment
- adding three new fire hydrants to the system, one each on Circle Drive, Wildwood Lane, and Old River Road
- overseeing and assisting the installation of the new Black Oak Booster Pumping Station

During 2015, Weston consumed 704,392,080 gallons of water, which was an increase of over 62,004,080 million gallons from the previous year. The average daily consumption was 1.931 million gallons with the greatest amount of water pumped in one day being 4,339,959 gallons on August 3rd.

The Division collected over 120 bacteria, lead, and copper samples to ensure that the quality of water provided met U. S. Environmental Protection Agency and Massachusetts Department of Environmental Protection drinking water standards.