DEPARTMENT OF PUBLIC WORKS ANNUAL REPORT

July 1, 2017 – June 30, 2018

The Public Works Department performs the duties of engineering, administration, highway maintenance; refuse collection and disposal as well as equipment maintenance for the Town. The Department operates out of facilities at 1000 Hartford Turnpike. This location houses the administrative offices, equipment storage, salt storage building, equipment maintenance facilities and the Bulky Waste Transfer Station.

HIGHWAY DIVISION

Highway Maintenance functions are provided for a total of 242 lane miles of improved Town roads and 0.27 miles of unimproved Town roads with a replacement value of over 430 million dollars. This includes sweeping, catch basin cleaning, roadway patching, resurfacing, tree maintenance and removal, brush cutting, mowing, drainage improvements, traffic sign installation, traffic sign maintenance, line striping and snow removal. It also includes the maintenance of all Town bridges, all Town drainage pipe, which includes approximately 3,000 catch basins, and 33 miles of sidewalks. In keeping in compliance with the Department of Energy and Environmental Protection Permits, we are scheduled to clean the 3,000 catch basins every three years (at approximately 1,000 per year) and sweep all of the roads. Contractors are utilized for special projects that the department cannot complete because it doesn’t have the equipment required, i.e. microsurfacing, crack sealing, roadway milling, paving, line striping.

The highway division, with the help of a 65-foot aerial bucket truck, maintains approximately 8200 street trees, assists Recreation and Parks in maintaining their ballpark lights and maintains the Fire Department’s preemption devices at the major roadway intersections so that the emergency vehicles ensure safe passage through busy intersections.

All traffic signs and centerline striping are maintained by this department. There are approximately 1,900 regulatory signs, 600 warning signs and 700 street signs maintained by this division.

SOLID WASTE DIVISION

Refuse Collection and Disposal includes curbside collection of refuse, recyclables, bulky waste and yard waste along with the operation of the Bulky Waste Transfer Station located at 1000 Hartford Turnpike. At this location we also collect bulky waste, metal, yard waste, waste oil, anti-freeze, fluorescent bulbs, electronics, batteries, propane tanks and tires. In FY18, we processed 2250 gallons of waste oil, 53.26 tons of electronics, 1331 pounds of fluorescent bulbs, 641 units containing freon, 802 tires, 200 propane tanks, 1377 mattresses and 192.76 tons of scrap metal.

Five full time sanitation employees provide refuse collection and disposal services to approximately 8,000 residences, small businesses and Town owned facilities. All Municipal Solid Waste (MSW) collected by
Town crews from residences and by contractors from commercial sites is disposed of at the Resource Recovery Facility in Preston, CT. During FY18, 7,284.64 tons of MSW were delivered to Preston by the Town and 4,425.71 tons by contractors for a total of 11,710 tons, a 0.3% increase from the previous year.

Our Single Stream Recycling Program continues to be a success. We collected 2242 tons of recyclables curbside representing a 0.8% decrease from last year. Every ton of recyclables removed from the waste stream resulted in a $58/ton avoided cost, or a savings of $130,036 during FY18 at the Preston SCRRRA plant. The recycling also nets a minimum $5/ton in revenue for each ton of recyclables taken to Willimantic Waste. There was $11,210 of revenue realized from single stream recycling in FY18. We continue to operate our own recycling compactor at the Bulky Waste Transfer Station and continue to transport our own recycling to Willimantic Waste for processing. The Town is also working in conjunction with SCRRRA and Willimantic Waste on new methods of raising resident awareness of what should be included with recycling materials.

Our crews made 1556 yard waste pickups during FY18. We also continue to accept brush at our transfer station, collecting $16,585 during FY18. We then have SCRRRA grind it with their tub grinder and we offer the resulting mulch free to the residents. This service is provided in lieu of paying for the disposal of the brush.

Public Works is continuing its curbside Bulky Waste Collection, with 279 stops last fiscal year for appliances, sofas, tires and other oversized materials for revenue of $8,716.

**EQUIPMENT MAINTENANCE DIVISION**

**Equipment Maintenance** functions are performed at the Public Works Complex for all Public Works, Police, Waterford Utility Commission, Recreation & Parks, Town Hall and Fire Administration vehicles. This represents approximately 190 pieces of vehicles and equipment. The equipment maintenance staff provides full service, from preventative maintenance to major overhauls. In addition, much fabrication work is performed to customize equipment for specific functions. This is particularly beneficial when emergency repairs are required. In FY18 the 5 mechanics have done 1272 repairs on town equipment.

**ENGINEERING DIVISION**

**Engineering** – The engineering function performed at Public Works is to provide engineering reviews and recommendations for the Town. This division consists of the Director and Assistant Director, who perform design reviews and administer highway construction improvement projects. It also includes engineering services in the form of plan reviews and bond estimates for Town agencies such as Planning & Zoning, Conservation Commission and Zoning Board of Appeals.

**Highway Construction & Improvement** - Projects are designed to address roadway improvements. The repairs for FY18 are as follows:

**Underground Storage Tanks (USTs)**
The USTs at the municipal complex were removed and replaced with above ground fuel tanks as required by CT DEEP due to the expiration of the 30 year life expectancy of the USTs.
Jordan Cove Road Bridge
This bridge structure and deck were replaced while reusing the existing abutments. The project was funded under the CT DOT Local Bridge Program and the Town was reimbursed for 80% of the project costs.

Oil Mill Road Culvert
This project replaced the existing deterioration culvert with a new reinforced concrete box culvert. The construction was completed in FY18.

Chip Sealing
Old Norwich Road was completed in the spring to strengthen and protect the road surface.

Milling & Paving
Upper Bartlett, Quaker Lane, Richards Grove, Wilson Road, and Kenyon Road were all milled and paved to provide a smooth and durable surface that will last several years before requiring maintenance or preservation.

Vauxhall Street Extension
The lower third of this road was milled and paved in the spring using remaining funds from some of the projects above that were completed under budget.

Municipal Complex Renovation
This project includes the proposed replacement of the Public Works garage and the Public Works and Utility Commission administrative offices. The committee continued with plans, pending approval of the project and funding.

ADMINISTRATIVE DIVISION

The Administrative Division, through the Director, Assistant Director, General Foreman, Office Coordinator and Clerk Typists, coordinate the Department functions to ensure the most reliable, cost effective service to the residents.

This office maintains the fuel records for the three fueling sites in Town. These sites are located at the Public Works Department, the Police Department and the Cohanzie Firehouse. We also perform and oversee inspections at these locations and make sure that they are in DEEP compliance. The DEEP permit registrations for these sites are also handled by our Department.

Public Works also operates the Fairbanks Scale system at the Bulky Waste Transfer Station. Together, the scale and the software, Advanced Weighing System, weighs vehicles in and out, records the information, tracks revenues received and assists in the preparation of invoices. This system tracks information for the preparation of the quarterly reports for the Transfer Station required by DEEP.

The staff in the office processes excavation permits throughout the town. A new software system was implemented for the purpose of tracking this information better. Municiy is used by many different departments throughout the town and will, at some point, offer Public Works the necessary information needed to replace the outdated software system currently in place. In FY18 we processed 196 excavation permits through this division.
This office is also responsible for keeping track of and implementing all DEEP mandates, such as the Stormwater Pollution Prevention Plans for the Miner Lane Landfill and the Municipal Complex, as well the Town wide Municipal Separate Storm Sewer Systems Permit. All of these involve sampling, monitoring, reporting, record keeping and permit renewals.

The functions of Public Works are constantly changing as new concepts, equipment and requirements are implemented. Continuously monitoring these changes, along with new and existing software, will allow our department to provide efficient, cost effective service.

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Brian Long P.E.
Director of Public Works