



*ARTICLE 3*  
*Town of Lunenburg*  
DPW FACILITY  
STUDY/PROPOSAL

Prepared by: DPW Facility Study Committee  
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# AERIAL VIEW



# ALTERNATIVE LOCATIONS

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- After consideration of several possible alternate locations, it was determined by the Committee that the expense of rebuilding what currently exists of the DPW Facility was not economically prudent.

# PUBLIC SAFETY

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It is imperative that the public understand how critical a role the DPW plays within the community. Public works personnel are “first responders” to weather related emergencies year round. Initially it was the DPW who confronted the extreme conditions of the December 11<sup>th</sup> ice storm, later joined by all public safety employees, residents, the National Guard, and local contractors in what was arguably one of the proudest moments in the history of the community. By controlling significant snow events during the initial two week clean-up of the ice storm, public works allowed for safe passage of the general public along with the continued tireless efforts of so many dedicated individuals, employees and volunteers.

Public Works is responsible for 200 lane miles of roadway and sidewalks, public buildings and grounds, sewer, and drainage lines, and the repair of Police, Highway, Park, Cemetery and School vehicles. All DPW workers are on call 24 hours a day for emergency response to: snow and ice, flooding, sewer backups and pump station failures, downed trees and road obstructions, dead animals, public buildings alarms, HVAC issues, leaks and all utility failures as well as providing assistance to Police and Fire.

# DPW OPERATIONS

The Department of Public Works (DPW) is responsible for the roads, parks, cemeteries, sewer and facilities including:

## HIGHWAY

- Maintain 200 lane miles of paved roads, shoulders and sidewalks
- Perform snow/ice operations in winter
- Drainage culverts, catch basins and manholes
- Street signs, street lights, and traffic signs
- Pothole repair
- Traffic signals and striping
- Maintain stock and distribute Town trash bags to area vendors
- Provide fueling station for all Town vehicles

## SEWER

- Sewer inspections, maintenance, repairs
- Operation of 10 Municipal pumping stations
- Operation of approx. 15 miles of sewer lines

## FACILITIES

- Maintain 11 Municipal buildings
- Schedule and oversee preventive maintenance
- Perform daily repairs as needed
- Review annual contracts and solicit quotes

## PARK

- Maintain all athletic fields and playgrounds excluding school properties
- Maintain Town Common and Town Beach

## CEMETERY

- Maintain 16 acres of grounds at 2 Cemeteries
- Meet with clients interested in purchasing burial lots
- Maintain burial lot records and provide genealogy research as requested

## VEHICLE MAINTENANCE

- Maintenance of all DPW vehicles and equipment, Police cruisers and School vehicles
- Repair and maintain all motorized equipment from lawnmowers to highly technical Police apparatus

# CURRENT FACILITY STATISTICS

- Location: 520 Chase Road
- Lot size: 8.75 Acres
- Original structure built: 1970
- Orig. Sq. ft 6160
- 2<sup>nd</sup> floor mezzanine 1,170 Sq. ft.
- Addition built 1979 (1620 Sq. ft)
- Current 8950 Sq. ft.
- Heat source: Gas and Oil
- Lighting: Fluorescent
- Ventilation: 3 Roof exhaust fans
- Fire Prevention: Handheld Extinguishers
- Roof: Rubber/gravel
- Septic System: Precast concrete leaching slabs



measurements based on exterior dimensions

# CURRENT FACILITY USES

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- Provide storage for DPW vehicles and equipment.
- Houses the mechanics bay for vehicle repairs.
- Houses the administrative offices of the DPW excluding the Park and Cemetery Divisions.
- Provides a break room and changing facilities for employees.
- Serves as fueling station for all Municipal vehicles.
- Provide storage and distribution of Municipal trash bags.
- Store custodial supplies for all Municipal buildings

# CURRENT DEFICIENCIES/INADEQUACIES

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- Insufficient and outdated space to support operations
  - Lack of equipment storage
  - Lack of proper administration space
  - Lack of adequate employee support space
- Employee health and safety
  - Facilities lack proper ventilation
  - Facilities lack proper heating/air conditioning
  - Facilities lack proper egress
  - Non-compliant Title V system
- Environmental Compliance
  - Inadequate grading, paving and drainage (Dept. of Environmental Protection)
  - Potential threat to groundwater due to inadequate vehicle storage and run off from vehicle washing
- Code Compliance Inadequacies
  - Built to 1970 building codes
  - Fire and Life safety deficiencies
  - Occupational Safety Health Act and Dept. of Environmental Protection deficiencies
    - OSHA deficiencies 1910.24 (fixed industrial stairs), 1910.38 (exit routes), 1910.1000 (limits for air contaminants)
    - DEP deficiencies
- Security
  - Un-gated facility frequented by residents 24/7 for cardboard recycling and winter sand
  - Inadequate outdoor security lighting
  - Up to 10 School buses parked on property daily plus drivers' vehicles

# CURRENT PARK FACILITY

## 23 WEST STREET

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# CURRENT CEMETERY FACILITY

## 71 HOLMAN STREET

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# CURRENT USE: Administrative Offices

- The development of the DPW was intended to bring together the personnel and equipment of various departments in order to provide supervision of personnel, proper management of finances, efficiency of services and the ability to cross train and utilize personnel in all DPW functions. Currently the Park and Cemetery offices remain in separate locations throughout town.
- The “administrative” office space in the current building consists of one large office shared by the DPW Director and Facilities Manager, abutted by and open to an office for the Administrative Assistant which then abutts the Mechanics bay. There is a small office on the second floor for the Highway Manager as well as an enclosure in the garage for the Mechanic.
- The current offices are plagued by excessive noise, poor ventilation and an inadequate heating/cooling system. There is no space available to accommodate Department meetings or employee training.



# CURRENT USE: Employee Facilities

- The employee break room is located on the second floor and is inadequately heated/ventilated. It has neither appropriate height requirements or adequate egress. Both of which are serious safety violations.
- There is not sufficient seating to accommodate all employees at any one time.
- There is no rest area for plow operators who may work as many as 36 hours during a snow emergency. Currently they must rest in their own personal vehicles.
- There is a single shower and bathroom.



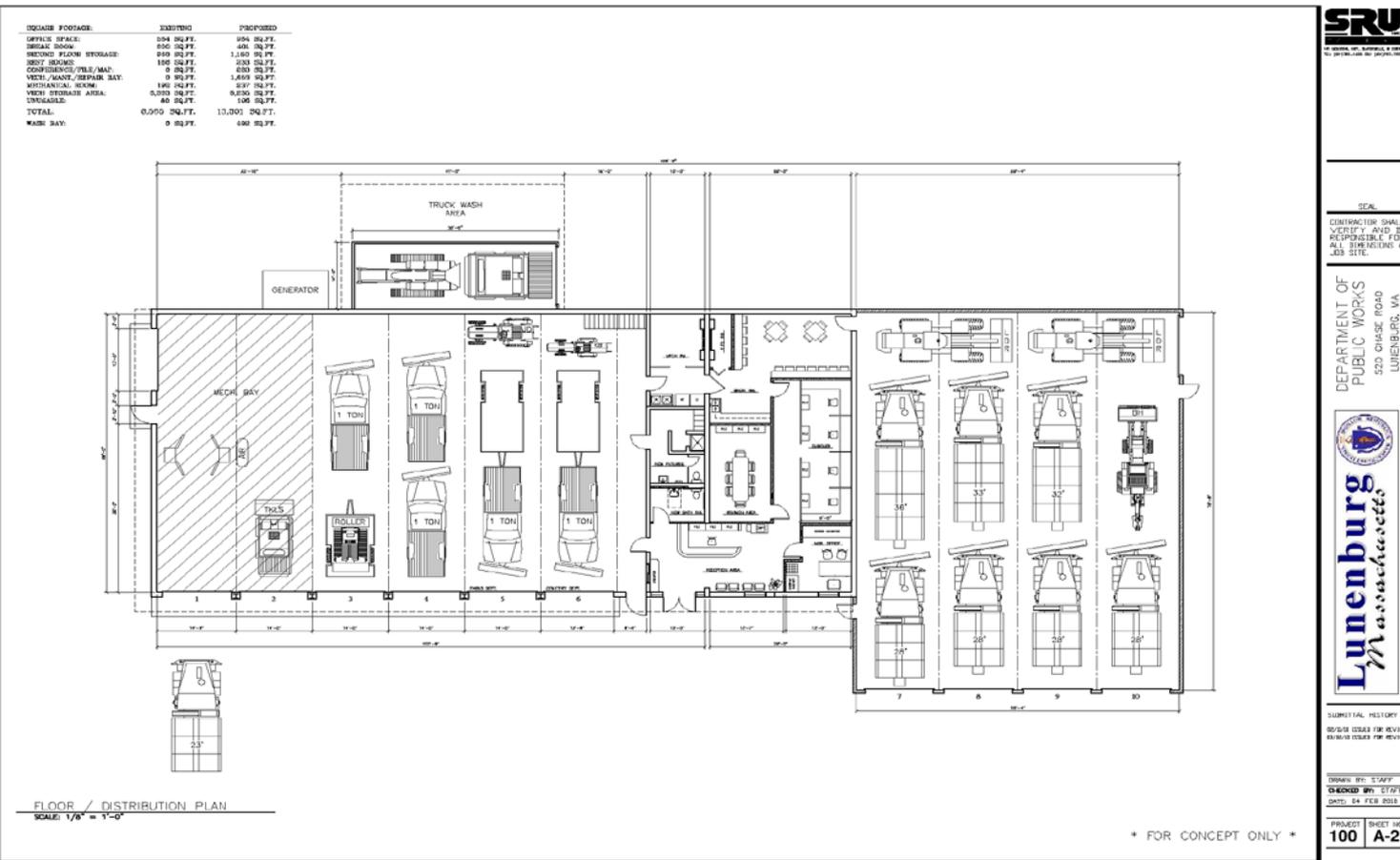
# CURRENT USE:

## Vehicle Maintenance & Storage

- The current facility was originally built in 1970 to house the Highway Department and its entire fleet of vehicles.
- In 2001 a DPW was formed consolidating the Highway, Sewer, Cemetery and Park Departments. Since then it has expanded to include a Municipal Facilities Department. The current facility now houses 14 vehicles and miscellaneous equipment.
- One bay is used during the work day as a “mechanics” bay with equipment spread throughout the building to allow for as many vehicles to be housed inside as possible.
- During winter months storage of vehicles does not allow passage through the garage. At a minimum, 3 vehicles are parked outside and seasonal equipment (i.e. paving roller and trailer) are housed in a bay on West Street, a small tractor at the Cemetery facility and sweeper and chipper in an outdoor shed.



# CONCEPTUAL FLOOR PLAN OF PROPOSED RENOVATIONS (With Vehicles)



# BENEFITS OF INDOOR STORAGE OF VEHICLES AND EQUIPMENT

- **Improved Emergency Response Time:** When DPW vehicles are stored outside in the winter, response time increases by 15-30 minutes per vehicle. The vehicles require sufficient time to warm up and must be cleared of snow and ice. Problems can occur, including: frozen fuel lines, jelled diesel fuel, frozen air lines, reduced hydraulic oil flow and frozen windshield wiper blades. Also, the sander belts on the de-icing trucks and the lift pistons on plows will not move until hydraulic fluid warms to a proper viscosity. The resulting delays in getting snowplows, sanders, and other vehicles on the road can mean more accidents during snowstorms.
- **Improved Employee Safety:** There is a greater risk of employee injury from climbing up on these large trucks to clear ice and snow. With inside storage, employees can attach plow blades and other equipment in a dry, sheltered area, out of the snow and cold.
- **Improved Productivity:** When vehicles are stored outside, every day the staff must load and unload tools, equipment, trailers and materials that could otherwise be left on the vehicles if they were stored in a secure and covered location. These tasks can reduce productivity by 15-30 minutes a day per employee.
- **Reduced Vehicle Maintenance Costs:** The extreme temperature and precipitation fluctuations of New England weather are one of the primary causes of the premature deterioration of vehicle bodies and components, rubber parts and tires, paint oxidation and drive train components (due to cold/low flow lubrication). Brakes, axles, springs and exhaust systems are significantly compromised by outside storage as well. DPW vehicles can spend as much as seventy-five percent of their useful life parked in the open and unprotected from the elements, waiting to be placed in service. Preventive maintenance is also increased with outside storage due to lubrication fluid and grease breakdown caused by extreme temperatures. The DPW's vehicle fleet is valued at over 2 million. The average lifespan of a DPW vehicle is 15-20 years, depending on the type of vehicle. It is estimated that by storing the vehicle inside, that lifespan will increase by approximately 2-5 years, which will result in future cost savings for the Town.
- **Reduced Environmental Impacts:** Vehicles stored outside are at risk of leaking polluting fluids into the environment and could spill amounts that are reportable and in violation of EPA standards during equipment malfunction. The proposed vehicle storage building will be equipped with floor drains and containment tanks that will be managed in accordance with environmental regulations and will eliminate hazardous spills. Vehicles stored outside must be warmed up for an additional 15-30 minutes in cold weather. This excess idling increases fuel usage, emissions, and our carbon footprint.

# WHY SHOULD DPW VEHICLES BE STORED DIFFERENTLY THAN CONSTRUCTION VEHICLES?

- The DPW provides a wide array of public services (removal of solid waste, maintenance of roads, sidewalks and parks etc.) which require that various types of equipment be used during different seasons performing multiple and diverse tasks.
- Unlike construction vehicles, DPW vehicles have to perform a variety of tasks under time pressure. Storing vehicles inside allows for the re-fitting of equipment for the need of the moment and allows workers to get going quickly even when the weather is bad.
- While a trucking company, for example, runs its trucks almost continuously, DPW vehicles are generally used 40 hours/week, except during emergencies, and are parked the rest of the time. Thus, unlike trucking vehicles, DPW vehicles cool down and gather snow pack.
- Vehicles used in the trucking and construction industries generally are not parked in the middle of a residential neighborhood, which is the case for the DPW vehicles. As a result, there is a need to minimize noise and pollution impacts on abutters.
- Finally, the inside storage facility is not simply a place to store vehicles, it is a place where people work. This building is much more than just a shelter or garage, it must have HVAC, drainage, and pumping systems that can handle air, exhaust, fluids, etc. in an environmentally safe manner.