

Hubbardston Department of Public Works



Winter Operations Plan

2023 - 2024

This plan will try to address the DPW's operations for snow and ice control for the town roads, sidewalks, public office parking lots, and school areas. It will also address some of the police, fire and school issues that may arise. These are general guidelines for regular winter events. Operations will change depending on the severity of the storm and equipment breakdowns.

Travis Brown

DPW Director

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General Overview

The Town of Hubbardston DPW has the responsibility of maintaining service for 87 miles of accepted town roads (80 miles paved and 7 miles of dirt) school parking lots and public offices and 2 miles of sidewalks, also some private roads.

The DPW Director is directly responsible for daily operations of the DPW, under the direction and authority of the Selectboard. The Group Leader will lead and be responsible for winter operations in absence of the DPW Director.

The DPW is committed to having all roads opened for reasonably safe passage. This will, however, take some time with the limited personnel, equipment, and other resources available to the DPW.

Resources Used by the DPW in the Planning of Winter Operations

In order to determine when streets will be cleared in a timely manner before and after the storm, the DPW uses such resources as:

Channel 4, 5, and 7 TV and Radar Systems will be what the DPW uses to determine how to fight storms.

Road conditions are also monitored by our local Police Department, normally, between the hours of 3:00 p.m. – 7:00 am. and on weekends. The DPW uses the information from the Police Department to provide the best possible response in making our roadways reasonably safe.

It is important that the DPW is informed by the Police Department on the following information:

1. Is the problem town wide? Is it restricted to one area? Problem areas need to be described as accurately as possible.
2. What is the nature of the problem?
 - Snow – How much on road and at what rate is it falling?
 - Ice – How bad and what locations?
 - Debris – What size? Is it blocking traffic? Is Loader needed? Are wires involved?
 - Washouts – How large of an area? Are signs and barrels needed? Are cones needed? Are there potholes?
 - Emergency Access – Police, Fire, Ambulance, Rescue cannot get to a certain location because of a specific road condition.
 - Police Personnel – Is an officer able to stay until Highway personnel arrive?
3. The DPW will determine how and what will be needed to correct the issue, but any assistance from the Police Department and/or Fire Department will be greatly appreciated to help with a more timely and precise response.
4. When a DPW employee arrives on duty, that person will be in immediate contact with the

Police Department to inform them from the beginning of the problem to the end of the problem.

Town Road and Sidewalk Operations

Winter Period Definitions

Winter is generally defined from November 15th to April 15th. This time frame will be directed mostly for snow and ice operations.

Operation procedures include:

- a. Pre-winter Preparations (training and equipment)
- b. Winter Storm Operations
- c. Winter Operations during Non-storm Periods
- d. Post Winter

Items 1-4 are covered below:

1. Pre-Winter Preparations

- a) The operation plan is updated annually and can be based on the previous year's experiences. The DPW informs Police, Fire, and the school of the winter plan.
- b) Employees need to know plow and 3-1 sand routes.
 - All employees are familiarized with their plow and sand routes before winter so they know where road conditions exist such as obstacles, cold spots, or any other conditions on that route. This should be done yearly because road conditions change from year to year. Every employee becomes generally familiar with all routes in case of another employee's absence.
 - Employees will know where drains, waterways, catch basins, dropped inlets, obstacles, and curbs are and mark same before winter.
 - The DPW will plan sanding routes and plow routes by using the trucks to best utilize its load of material. This saves time and fuel if done correctly.
- c) Review call-list for employees, including calendars and police dispatch procedures.
 - Make sure radios are in working order.
 - Inform crew what weather forecast we will be using to judge our operations.
- d) Equipment Operation and Maintenance:
 - Train employees thoroughly on use of their equipment.

- All equipment will be calibrated to put out the correct amount of salt required.
- Each employee will be assigned to a specific piece of equipment. This will ensure that employees are more effective in that piece of equipment which will make the equipment last longer, cost less to maintain, and do the job in a safe and timely manner.
- All equipment needs to be checked on a regular basis. This includes plows, wings, spreaders, and hydraulic systems. Items will be replaced if needed. Inspect condition of all moldboards and cutting edges on all plows. Replace edges as needed and weld as needed.
- We will mount and test all spreaders before winter arrives. Check conveyors, spinners, and all movable parts to ensure its in working order. Each employee will become familiar with his own spreader controls, which will include the setting inside the cab, door gate adjustment and when it will be used as directed by the DPW Director. Each truck has different control settings.
- Make sure all lights are working correctly and all wires are replaced, if corroded.
- Tire chains will be inspected and repaired as needed.
- To always keep equipment in top condition, which includes washing and greasing equipment after use.
- We will inventory and order all parts in the autumn so the items will be on hand, as needed. Trying to have a small inventory on parts such as headlights, hoses, nuts and bolts, filters, etc. is beneficial because these parts are hard to locate during a storm.

e. **Materials**

- We will ensure that a winter stockpile will be on hand during the month of November, which will normally be 2,000 cubic yards of screened sand, approximately 3/8 minus. 3/4" washed stone for dirt roads will be purchased as needed.
- We will have access to salt before winter months. An average of 1,500 – 2,000 tons of treated salt will be used.
- There will be 6,000 gallons of brine on hand.
- Some gravel and rip rap will be stored at the highway garage, in case of washouts.
- Training sessions on material applications will be in effect. Example: How salt works, when to use extra salt, special storm situations, special ways to de-ice certain problems.

2. **Winter Storm Operations**

Judgment by the DPW Director will determine the timing of when the department will perform snow and ice control.

DPW personnel will be called in accordingly from the call-in list procedure as outlined in

the Union contract.

The DPW will determine its operation by using the Channel 4, 5 and 7 TV and Radar Systems. A somewhat detailed plan will be determined, but each storm differs so much that a set of guidelines is impossible to follow or enforce. A larger amount of discretion will be asserted by the DPW Director.

Snow Plowing and Treating Operations

The DPW has organized its equipment into six major treating routes. The DPW has organized its equipment to have eight major plowing routes, providing there is winter seasonal help, otherwise there will be six plow routes. Each route will be approximately 15 miles. Routes will be listed on separate sets of maps.

- We will provide highest priority coverage to roads with the heaviest usage. Route 68 and Route 62, as being major numbered routes. Secondary main roads are Williamsville Road, New Templeton Road, New Westminster Road, Barre Road, Elm Street, Brigham Street, and Burnshirt Road.
- During snow and ice storms, plow trucks (normally within their own plow routes) will give priority to clearing roadways for emergency calls such as ambulance, fire, or police matters.
- Mile Road will be plowed and sanded by a private contractor, if available.
- Plow routes will be designed for right-handed turns to avoid windrows on the intersections. The object is to keep all main roads on all plow routes open. Side roads, dead ends and cul-de-sacs will be cleared immediately following the main roads.

Depending on the size of the storm, some of the side roads etc., will be cleared as soon as possible.

The extended time or duration of the storm may determine which roads will be cleared; manpower may also have an effect (breakdowns, people being sick, status of part-time seasonal help, etc.).

- Sidewalks will be cleared that day or the day after the storm.
- School areas may not be cleared until after the storm cleanup is finished.
- Town offices may not be cleared until after the storm. Access to the Police and Fire will be maintained by the DPW, with assistance from the Fire Department, when available.
- During storms, special attention will be given to commuter traffic and school bus traffic.
- Snow removal will begin after crew has rested and are able to come in on their next shift. Center of town, intersections, and main roads will be pushed back or windrows shelved to make room for upcoming storms and to push snow back before it freezes.

3. Winter Operations during Non-Storm Periods

- a) After storms or winter events, all equipment will be checked and cleaned for next storm. Repairs will be made as needed. Special attention will be given to tires, brakes, lights, spreaders, and snow plows.
- b) Materials such as salt and sand may need to be re-ordered.
- c) Plow routes will need to be checked for problems. Example: Illegal private contractor plowing across town roads, problem mailboxes, snow forts, and/or basketball hoops. It is the responsibility of each driver to report these problems to DPW Director.
- d) We will haul snow to the cemetery location when snow removal is in progress.
- e) Roadway drains and catch basins will be opened as soon as possible for snow and ice melting and runoff.
- f) Following storms, hopefully within 24-48 hours, all concerns received will be checked by the DPW Director. DPW Director will then make a phone call or visit the complainant.
- g) Fire hydrants will be maintained by the Fire Department unless assistance is needed at the request of the fire chief or deputy.

4. Post Winter

- a) The DPW will review all winter operations with its employees to obtain input for improvements for the next year.
- b) All equipment will be checked and all snow equipment will be given the maintenance needed to be put away for the spring, summer, and autumn months.
- c) Evaluate equipment to see if any new purchases are needed.
- d) Ensure employees are familiar with snow fighting techniques.
- e) Every year a new technique comes into effect and employees will be kept informed of them with proper training classes.

Equipment

The Town has the following equipment for snow and ice control:

- 1. Four heavy-duty dump trucks with eight cubic-yard spreader bodies and power angle plows. One heavy duty dump truck with 6 cubic yard slide in spreader and a power angle plow. One heavy-duty Oshkosh with a ten cubic yard spreader, power angle plow and a wing plow attachment.

2. One 2014 F450 truck with angle plow.
3. One 2021 F550 truck with angle plow and stainless spreader.
4. One 2007 Volvo Grader with wing used for plowing, emergency snow clearing, and special ice situations.
5. One 2015 John Deere loader with one-way plow, when needed.
6. One 2006 MT5T Trackless sidewalk plow.
7. One 1984 Hough wheel loader for pulling out stuck equipment and loading trucks, in emergencies.
8. One 2006 Case 580 Backhoe for clearing snow and loading sand trucks in emergencies.
9. One 1983 International Spray truck for applying brine during the winter months and applying dust control during the summer months

Emergency Situations

If it becomes impossible to handle an emergency and more equipment is needed, local contractors will be used and assistance of out-of-town equipment may be called in. Also, Civil Defense, National Guard, or other means that is allowed by the Selectboard may be acquired.

Town By-Laws - Public Awareness

1. During storms and snow clearing, it is very important that trash bins and motor vehicles are not parked or impede snow plowing or treating of public streets so as not to allow emergency services to be administered. Vehicles will be towed if operations are impeded at owner's expense.
2. Town by-law prohibits the pushing, shoveling, snow blowing, or discarding of snow across the roadway into a public way. Also, building of snow forts or tunnels on public rights of way, including sidewalks, is prohibited.
3. Town by-law (Chapter XVII, Section 2, Group C) states that there shall be no obstruction of snow removal.
4. Town by-law XVII restricts parking more than one hour between the hours of 11:00 p.m. and 6:00 am. from December 1~ to March 31~. The DPW will notify the Police Department to take appropriate action against any violation of these said by-laws.
5. Snow should not be pushed or shoveled onto or in front of fire hydrants to block access and view of the hydrants.

Communication and Public Information

1. Any concerns that the public may have, regarding conditions of roads, should be directed to the DPW, located at 68 Worcester Road, Hubbardston, MA 01452 or by telephone at 978-928-1408, between the normal working hours of 7:00 a.m. and 3:00 p.m. Monday-Friday.

Emergency requests during non-working hours should be directed to the Police Department on Main Street, Hubbardston, MA 01452, or by telephone at 978-928-1405.

The dispatcher will then call the on-call DPW employee and he will call in DPW personnel as outlined in the call-out procedure posted at the Dispatch Center.

2. All complaints will be answered, normally, within a 24-48-hour period after the storm. Every effort will be given to correct any concerns.
3. Sometimes there are concerns about damage to private property.
 - The town's policy regarding the usage of the town's right-of-way is that it will be at the owner's risk and the town will not assume liability if something is damaged. Example: Fences, flower pots, basketball hoops, garbage containers, mail boxes, etc.
 - The town authorizes the usage of mailboxes in rural areas, which is located on a public way. The town has jurisdiction over these areas.
 - The town will fix or replace a mailbox if it is determined by the DPW Director that a plow physically hit the mailbox. The determination will be made by observing marks, paint removal from plow, wheel tracks, witnesses, etc.
 - Most times heavy snow being discarded from the plow will knock over and damage mailboxes that have not been secured, braced correctly or when a door has been left open. The town will not fix or replace mailboxes in this situation.
 - When town equipment is damaged due to objects placed in the town's right-of-way, the town may recover damages from the property owner.

Emergency Announcements

When conditions are severe, the DPW Director, Police Chief, Fire Chief, Town Administrator and/or the Select Board may issue a snow emergency statement, via the Code RED Alert system, advising that a state of emergency is in effect and roads are only open to emergency vehicles.

School Closings/Late Start/Early Dismissal

School announcements will be broadcast on the following:

1. Television Stations: channels 4 (WBZ - Boston), 5 (WCVB - Boston), 7 (WWLP – Springfield) and Fox 25 News in Boston

2. Radio Stations: AM channels: WTAG (580) FM channels: WSRS (96.1)
3. QRSD website: (www.qrsd.org)
4. Twitter: @superqrsd
5. Facebook : Hubbardston DPW

Procedures for Snow Removal

1. Set up all warning devices such as signs, flashing lights, vests, etc.
2. Do not use excessive speeds for equipment and conditions.
3. Be alert for obstructions, curbs, headwalls, etc.
4. Plow in direction of travel.
5. Be careful of traffic coming from behind.

Guidelines for Snow and Ice Clearing

1. Timing is critical when applying treated salt. We must begin Anti –icing techniques before the snow hits the pavement so it will prevent bonding to the roadway as snow accumulates.
2. Route 68 will use treated salt using the 1995 Oshkosh
3. Route 62, Barre Road, and Elm Street will use treated salt using the 2009 Sterling.
4. Williamsville Road and Burnshirt Road will use treated salt using the 1997 Oshkosh.
5. Brigham Street, and New Westminster Road will use a treated salt using the 2015 Freightliner.
6. New Templeton Road will use treated salt using the 2018 Freightliner.
7. All other paved roads will use a treated salt. All dirt roads will have a 3-1 sand salt mix applied where needed. This may change according to weather conditions.
8. Once main roads have been treated, the DPW will then monitor roadways and begin plowing when necessary.
9. After the storm and once all roads are plowed and pushed back, the roads will be treated with treated salt as necessary.
10. The DPW crew will maintain roads and shoulders during and after storms, so if another storm occurs in a few days only fresh snow will need to be plowed.
11. Once snow has stopped, a truck will check problem areas such as drifting and will clear roadways before snow freezes. Anti-icing materials may need to be applied.
12. Snow will be removed from intersections and places where views are obstructed.

13. Treated Salt needs time to work. If it is applied early enough so traffic and sun can get onto the roadway, it will create a brine that will be easier to clean off.
14. Extra salt may be needed during the nighttime and cloudy days.
15. When temperatures are in the single to negative digits, treated salt will be slow to none to work until temperatures rise.
16. There will be no gaps left on roads while treating them with treated salt

DPW Personnel

All personnel of the DPW are on a 24-hour a day on-call basis. All Drivers will be responsible for their routes. These are the operating instructions that will be observed.

1. All trucks will always keep in contact with the DPW Director especially when leaving the truck.
2. All trucks will be checked and fueled every night or after every storm before the driver leaves to go home.
3. Notify the DPW Director and/or Mechanic immediately if there is a breakdown.
4. Check lights, plow blades, and general condition of equipment during storm and after plowing. Any issues will be reported to the DPW Director and/or Mechanic to address them.
5. Check lights and tires before leaving garage.
6. Drivers will use chains when snow becomes wet and packed or when traction cannot be attained during storm.
7. Drivers will maintain a responsible rate of speed when plowing. When there is wet, heavy snow, drivers will be extra careful so mailboxes will not get knocked over.
8. Treating the roads will normally be done at a speed of 15-18 mph. This will keep a tight pattern of material in roadway. All personnel are requested to be always courteous to the public.

Winter Sand for Town Residents

A maximum of two, five-gallon pails of sand may be taken for walkway and stair use. Town sand will not be available for driveways, as it is the homeowner's responsibility for acquiring the materials for that use. The sand is available at the entrance to the old Recycling Center driveway just south of the DPW Garage entrance, located at 68 Worcester Road, 24 hours a day.