

# *Town of Kittery, Maine*

## *Department of Public Works*

Winter Operations  
Policy and Procedure  
February 2011

### **Introduction**

The purpose of this policy and procedure is to present a detailed plan of Winter Operations in the Town of Kittery for the employees of the Highway Department. The plan also integrates important tips and general information specifically for the residents of the Town. In Maine, the winter season generally ranges from November 1<sup>st</sup> to April 1<sup>st</sup> ; although we need to be ready to respond at any time.

All snow and ice control operations are considered emergency in nature because public safety is involved. With this in mind, the Police and Highway Department staff work very closely together before, during and after each storm event.

The Highway Department has 75 miles of roads to maintain. In order to achieve a high level of service, long range planning and equipment readiness are undertaken by the Public Works Department months before the winter season. The Highway Department staff is well trained and dedicated to plow around the clock, if necessary, to keep the roadways open and passable.

Short range operational planning is done by the Department supervisory staff every time weather forecasts indicate a potential for adverse weather. Short term advance preparation is often difficult due to the infinite variety of conditions that can occur during the winter. The rate and accumulation of snowfall, moisture content, temperature during and after a storm, pavement temperature, wind direction and velocity during and after a storm, duration of the storm, time of day, as well as day of week and intervals between storms all interact to make each storm unique. Therefore, while a plan exists and there is a standard method of operation, there must be enough flexibility within the plan to provide for any contingency as it may arise.

Generally, the greater the snow accumulation, the greater the problem and the more complicated the operational response becomes to assure proper clearance of the streets, alleys and sidewalks. However, a snow plan based on snow depth alone would be too simplistic to be effective. For example, a rapid rate of snow accumulation can close streets before plows can get to them. High winds can cause drifting and block streets; continued winds can make replowing streets necessary; a wet, heavy snow is harder to push, therefore lengthening the operation.

Timing and temperature also complicate the operation. A storm during a weekday rush

hour is harder to combat than one which occurs late on a weekday night simply because of traffic patterns and congestion. A moderate snowfall on a warm pavement may be controlled by salt, but the same snowfall during subzero weather may have to be plowed and salted to achieve the same results.

All of these factors need to be considered when staff is formulating plans for each "Operation", and again when evaluating the effectiveness of each "Operation" and its impact on the community. With the above in mind, the following are the goals and objectives of the Town of Kittery Department of Public Works Winter Operations.

## **OBJECTIVES:**

1. To minimize the hazards of slippery road conditions to the motorists and pedestrians through tried and proven methods of snow and ice control.
2. To work with the Police and Fire Departments and facilitate the handling of emergencies that arise.
3. To work with the School Department to ensure safe travel conditions for school buses and children during operational hours.
4. To reduce economic losses to the community caused by workers and business enterprise not being able to get to their jobs, businesses, or make/receive deliveries.
5. To restore safe traveling conditions on roadways and sidewalks for the convenience of the general public as soon as possible after each storm or occurrence.
6. To be mindful of the environment when using ice control chemicals due the proximity of inland waterways and watersheds.

## **GENERAL POLICY STATEMENT**

The goal of the Town of Kittery's "Winter Operations" is to achieve bare pavement surfaces on the streets as expeditiously as practical following each storm occurrence. This may be achieved through salting operations, plowing operations, or a combination of both salting and plowing.

The decision to order a salting operation, plowing operation, or a combination of both is not a straight forward matter made by the supervisor in charge. Existing conditions must be evaluated, and informed judgment made based on experience, current and forecast conditions as to the type and manner of operation to initiate.

Primary main streets will be salted first, followed by collector and residential streets. When plowing is warranted, plowing will be done with a full size type truck or loader taking the center cut and a progressively working toward the gutter cut. Plowing generally will be done as soon as practical in an effort to keep the roadways open and reduce the strain on the equipment.

Collector streets are done in conjunction with the mains. Salt is applied to these streets at each intersection, on hills and curves. Plowing is provided to keep these streets passable to normal vehicular traffic.

Residential streets are started after, and maintained in conjunction with, the main and collector streets. Plowing is provided to keep these streets passable to normal vehicular traffic.

Sidewalks are cleared with a wingback approach during the storm to remove the crusty build up of snow/ice between the curb edge and sidewalk. The day after the storm, sidewalks are cleared with a specific sidewalk plow. The Highway Department currently has one sidewalk plow, therefore priority is given to differently areas depending on the time of day, etc.

When a particular storm, or series of storms, deposits enough snow to make pedestrian travel difficult, a snow removal operation may be ordered. Snow removal is undertaken in the business district, and other essential locations. Snow removal may be ordered during regularly scheduled shifts or during the night time hours.

## **Standard Operating Procedure**

### **When The Snow Begins**

When a snowstorm begins the Department responds by treating all primary roads with salt or salt/sand mix. Treating the road surfaces serves two purposes - preventing snow and ice from bonding to the surface and to safely keep traffic flowing. Treating the roads takes approximately 2 1/2 – 3 hours.

### **During The Storm**

Depending upon the severity and type of storm, plowing operations generally begin when there is an accumulation of 2 to 4 inches of snow on road surfaces. Each vehicle is assigned to a pre-determined route and will remain there until the storm subsides unless an emergency occurs that requires reassignment of equipment from one location to another. The main objective is to keep all roads passable during the storm.

Following the roadway snow removal, crews perform the first level of winter snow removal on sidewalks before going home. The first level of sidewalk snow removal includes using the plow wing to clear the outside half of the sidewalk and the edge of the roadway, wherever possible. The following day, the sidewalk plow is used on all sidewalks to clear the remaining snow.

### **Following The Storm**

After plowing is completed, roads are given a final treatment of salt or salt/sand mix. In the days following a storm, scraping and treating of roads continues depending upon weather forecasts. If colder weather is forecasted, streets must be scraped of snow and slush to prevent icing of the surface when the temperature drops and also to widen the road edge so that drainage structures are exposed if the temperatures rise and melting occurs. As time allows, snow is removed or pushed back from intersections where sight distance is a concern.

### **Winter Parking Ban**

The Chief of Police and Public Works Foreman jointly decide on the declaration and hours of a parking ban. The Police Department is responsible for notifying the public via

a media call list. Communication is on-going between the Police Department and the Public Works Department throughout the storm.

On-street parking is prohibited overnight, from midnight to 6:00am from November 1<sup>st</sup> to April 1<sup>st</sup> each year. Vehicles that are illegally parked will be ticketed and towed at the owner's expense.

## **School Closings**

The Superintendent of Schools is responsible for initiating a school closure or a delayed opening of the schools. The decision is based on his/her experience, evaluation of the conditions, and discussions with National Weather Service, Public Works, Police, and other area Superintendents.

Once a closing, delay or early dismissal determination, is made, the Superintendent notifies Public Works and Police of his/her decision. The Superintendent also posts a message on the school website, records a phone message and notifies the media list.

The contracted bus service and town-contracted plowing operators are also an important part of this communication circle during school closings as well as during normal winter operations.

## **Transfer Station Operations (during a storm event)**

The Transfer Station is closed once a storm requires all drivers to be on their plow routes and remains closed throughout the storm event. We do not utilize the Transfer Station employees for "pretreatment" prior to the plowing operations in an effort to maintain consistent operations at the Transfer Station as long as possible during the winter season.

## **Winter Damage Reporting**

Due to the nature of winter operations, there are times when property damage occurs to mailboxes, vehicles, lawns, curbs, walks, manholes, catch basins, water stop boxes and ornamental bushes or displays. It is the responsibility of each operator to make every effort to avoid such damage. If an accident does occur, it is the operators responsibility to notify the supervisor immediately so that all the pertinent events may be accurately recorded.

1. Mailbox damage – will not be replaced or repaired by the Highway Department unless the damage occurred at our own fault (ie: avoiding a collision with an approaching vehicle).
2. Vehicular damage – no matter how minor, the damage must be reported to a supervisor immediately. The supervisor and a Police Officer should be called to the scene to investigate and provide a written record for the file for any future claims.
2. Lawn damage – will be repaired by the Highway Department. All lawn damage

will be repaired in the spring. When the existing sod cannot be used to make the repairs, the department will top dress the area with top soil and reseed the area. New sod will not be purchased to make the repairs.

3. Curb and walk damage – will be repaired by the department the following spring.
4. Infrastructure damage – Damage to manholes, catch basins, etc. will be repaired by the Highway Department as time permits. Damage that poses an immediate threat to public health or safety will be repaired immediately. If, due to the nature of the storm, repairs cannot be facilitated immediately, the affected area will be barricaded to warn travelers of the danger, and repairs will commence once the storm subsides.
5. Ornamental bushes and displays – Damage to ornamental bushes and displays will be repaired only upon request. Prior to any repairs being made, a supervisor will investigate the damage to determine if, in fact, a Town of Kittery vehicle caused the damage, and if the damaged item was out of the right of way when damaged. Items illegally protruding into the right of way will not be repaired.

# ***Town of Kittery, Maine***

## ***Department of Public Works***

### ***Residential Tips and Reminders***

***Residential Tip #1:** Please only call in with **emergency** questions during a storm event as both Public Works and Police are very busy responding to the storm. Our crews never intentionally plow you in or put an uneven amount of snow on your side of the street.*

***Residential Tip #2:** Please remember that our crews have to travel on snow covered, slippery untreated roads to get here at any hour of the day or night. Please be patient as the crews will be out as soon as possible to begin snow removal operations.*

***Residential Tip #3:** If a plow truck is riding with its plow up, please do not be misled. They may be returning to the garage for fuel or repairs or might be headed to another section of town to assist with snow removal.*

***Residential Tip #4:** Residents should not be concerned if they do not see their roadway plowed during the early part of a snowstorm. The Highway Department follows an assigned route plan. Please be patient, all town owned roads will eventually be plowed.*

*Unfortunately, it is not possible to keep the roads free of snow without filling in many driveways; therefore, when you clean the end of your driveway, deposit the excess snow to the downstream side of your driveway. This will minimize the redeposit of snow into the cleared opening when the plow makes its next pass. Please do not shovel, plow or blow snow or ice into the roadway. It is not only illegal, but can be a serious traffic hazard.*

*If you have a private contractor plowing your driveway please make sure to remind them of this as you will be held responsible for their actions. It is also advised that you or your private contractor or you wait until the town crews are finished with their road clearing operations and the storm has stopped until you shovel or plow your private driveways.*

***Residents Tip #5:** Once a school closing, delay or early dismissal is determined, each parent of a school age child and all staff are notified individually via an automated recorded telephone message that is also sent via e-mail.*

***Residential Tip #6:** Residents should not be concerned if they do not see their sidewalk plowed after a snowstorm. The Highway Department follows an assigned route plan that begins the day after the storm. Please be patient, all town owned sidewalks will be plowed.*

*Depositing driveway or private walkway snow over a town sidewalk is also illegal. For private removal of snow buildup, residents need to contract with a private snow removal company. One resource is [www.magicyellow.com](http://www.magicyellow.com), just input the topic, such as, snow removal, and your zipcode and a list of contractors will be created. In general, most landscaping and construction companies will do snow plow and removal services during the winter season.*