

# SNOW AND ICE CONTROL POLICIES AND PROCEDURES 

Reviewed and Recommended By:
Public Works and Utilities Committee
November 13, 2018

Approved By:
Common Council
November 27, 2018

## I. Introduction

The intent of this policy is to establish responsibilities, expectations, and procedures for snow related job functions. All being completed with the best interest of the residents of the City of Plymouth. This policy will guide the Department of Public Works personnel with those job functions.
II. Objective
a. Provide for more efficient, cost effective and responsive winter operations.
b. Reduce the risk to the traveling public on City maintained roads, sidewalks, and parking lots.

## III. Background

The City of Plymouth has approximately 45 centerline miles within the corporate boundary limits.

The City determined that in the best interest of the residents that some classification of employees shall have residency requirements. The Municipal Code Section 2-1-9 Residence of Employees as the following:

For purposes of this section, "Emergency Personnel" shall include the City Administrator/Utilities Manager, Director of Public Works/City Engineer, Electrical Operations Manager, Wastewater Superintendent, Water Foreman, and all other Plymouth Utilities non-administrative staff, snow plow drivers, and any employee determined by the City Administrator/Utilities Manager to be necessary for the public safety in the event of an emergency.

Any sworn police or fire department employees, or emergency personnel of the City of Plymouth, shall within six (6) months after commencement of employment, or following any required probationary period, whichever is later, establish and maintain residence at a distance not greater than 15 miles from the nearest corporate boundary of the City.

## IV. Operational Resources

a. Equipment Resources -

Public Works Department uses dump trucks with snowplow, wing and salter, loaders with snowplow and wing, grader with snowplow and wing, pickup truck with snow plow and a snow blower that is used in the snow and ice removal process. Other small equipment is used to remove snow from sidewalks and other areas within the City Limits. The vehicle list is shown in Exhibit: Equipment List.

Annual inspection and calibration of the vehicles are performed each year prior to the snow season. This helps reduce unnecessary equipment failures during snow plowing operations.
b. Personnel Resources

The City staff that performs snow plowing operations is:

| CLASSIFICATION | NUMBER OF <br> EMPLOYEES |
| :--- | :---: |
| Street Superintendent | 1 |
| Mechanic | 1 |
| Heavy Equipment Operator | 3 |
| DPW Laborer | 3 |
| Utility Employee (time billed to City) | 2 |

Normal work hours are between 7:00 A.M. and 3:30 P.M. Outside of these hours everything is considered overtime and will be compensated per the City of Plymouth Personnel Manual for overtime.
c. Material

The salt storage facility is located at the DPW garage and has a maximum capacity of 650 tons. The City purchases salt under the State Contract and can receive delivery's before and during the snow season.

## V. Call-In Procedure

The Street Superintendent is the designated authority that is responsible to monitor the conditions and weather forecasts. However outside of normal working hours, the Department of Public Works relies heavily on the observations of the Police Department personnel as they are on patrol. The implementation of the policy shall be dictated by actual road conditions. Two inches or more accumulation will typically begin plowing operations.

Once it has been determined by the Street Superintendent, he/she will call in personnel as needed for the existing snow/ice conditions. The Public Works Crew shall be on a rotation list based on how much overtime hours each employee has received up to that point during the calendar year (employee with least amount of overtime hours is at the top and the employee with the most overtime hours at the bottom). The Street Superintendent will start call in from the top of the list and work his/her way to the bottom. This list is updated after each and any overtime event (not strictly snow/ice overtime).

## VI. Salting Operation

It is typical that all snow events will begin as a salting operation. After snow has started to accumulate on the roadway and travel conditions are becoming hazardous, employees will be called in to start the salting operation. All roads and intersections receive the salting operations to ensure safe travel conditions and to reduce snow packing on the roadways.

When snow becomes snow packed, typical plowing operations will not be able to remove the snow and it becomes a hazard until weather temperatures allow it to melt.

During normal working hours prior to an anticipated snow event, trucks are inspected and loaded with salt to help expedite the timeframe of getting salters / plow drivers on the roadways once they have been called-in.

## VII. Snow Plowing Operation

It must be recognized that although this policy sets guidelines to be followed for each storm, each storm has different conditions (wind, extreme temperatures, timing, duration, moisture content, etc.). This policy must remain flexible and allow staff to make the necessary decisions based on current conditions.

With the City's Winter No Parking Ordinance, the most ideal time to plow is between 2:00 A.M. and 6:00 A.M. as no cars are allowed to be parked on the street.

The highways are completed first with two snow plows assigned to each highway. Highways are plowed in tandem to minimize snow windrows. After their assigned highways are cleared they procced their respective routes (color coded). After a driver completes their route they radio to the other drivers to identify other areas that still need to be plowed.
a. Minor Snow Event (1 inch -4 inches)

Snow plowing will occur between the hours of 2:00 A.M. and 6:00 A.M. or after snow has stopped. If there is a school located within the driver's route, they will ensure that it is cleared prior to the start of school day traffic.

On average all roads are cleared within 6-7 hours.
b. Moderate Snow Event (4 inches - 8 inches)

Once approximately 1.5 inches have accumulated and if more snow is expected, 5 employees shall be called in to work to perform an intermediate plowing operation.

Intermediate plowing operation is described as below:
One employee will plow with a loader the hills on the west side and the downtown areas. (Exhibit - Intermediate Plow Routes).

1. W. Mill Street
2. Summit Street
3. Fond Du Lac Avenue
4. Fremont Street
5. Franklin Street
6. N. Park Street
7. E. Mill Street
8. Smith Street
9. Stafford Street
10. Division Street

The other 4 employees will plow in tandem the following streets:

1. Eastern Avenue
2. N. Highland Avenue
3. S. Highland Avenue
4. N. Pleasantview Road
5. S. Pleasantview Road
6. Fairview Drive
7. South Street
8. Western Avenue
9. Sunset Drive
10. N. Milwaukee Street
11. S. Milwaukee Street
12. Collins Street
13. Thayer Street
14. E. Clifford Street
15. S. Bruns Avenue
16. Adrian Court
17. North Street
18. Bruhy Street
19. E. Edna Street
20. Suhrke Road - Sunset Drive to N. Milwaukee Street

Other streets will be plowed as conditions change and the timing of the storm.
The latest an intermediate plowing will commence is 7:00 P.M. An intermediate plowing operation takes approximately 2 hours. This will allow employees time to rest prior to returning to work at 2:00 A.M. for a full plow run. However, if
hazardous conditions continue DPW will assess and preform salting and plowing operations as conditions warrant.
c. Heavy Snow Event (8 inches + )

Snow removal will occur as conditions warrants and will typically follow the moderate snow event procedure. However, when heavy / high intensity snows are occurring during peak travel times main streets will be continually patrolled. Low volume residential streets may not be plowed until the snow intensity lessens and as the snow event intensity allows.

## VIII. Snow Emergency

The Director of Public Works shall follow Section 2-7 of the Municipal Code for declaring any type of emergency. Historically, the City does not issue Snow Emergencies due to the fact that parking is not allowed on the streets between 2:00 A.M. and 6:00 A.M from December $1^{\text {st }}$ to March $15^{\text {th }}$.

However, if weather conditions warrant a snow emergency may be issued. If that occurs, the Director of Public Works will provide and assist the Mayor in issuing the snow emergency. The Director of Public Works shall also communicate with the Police Department, as their assistance will be needed to ensure vehicles are not parked on the street.

## IX. Snow Removal for Downtown Areas

The downtown area is defined as the streets between the Mullet River, Main Street and Western Avenue, Stafford Street.

The City will be clearing snow banks in identified locations when more than six (6) inches accumulated. It is the responsibility of the Director of Public Works or the Street Superintendent to determine when snow shall be removed from the areas.

Once it has been determined that DPW will be removing snow, the Street Superintendent will notify the Police Department, as they may need to assist in removing any parked cars on the street that morning.

Staff will prepare the necessary equipment/vehicles during normal working hours the day prior to the actually clearing will occur. Two crews are used for this operation. The first crew begins between midnight and 2:00AM to pull the snow banks out into the roadway (using grader, front end loader, and shovels). The snow is then placed in windrows in the street. One to two hours later the second crew starts. Using the snow blower (Sno-Go) the snow in placed into the dump trucks and
hauled to the nearest dump site. The dump site is City Park or as approved / directed by the Director of Public Works.

Snow hauling / snow removal will continue each night until all areas have been cleared or the Director of Public Works has determined no additional removals are necessary.

Highways, cul-de-sacs, and other areas of concerns may have snow banks removed as needed.

## X. City Owned Parking Lots

The City makes every effort to clear the lots in a timely manner. (Exhibit Downtown Parking)
The City plows the following parking lots:
a. East Municipal Lot (Stayer Park Area)
b. West Municipal Lot (American Legion Parking Lot)
c. Municipal Parking Structure (Upper deck only)
d. Library Parking Lot
e. City Hall Lower Parking Lot (by EOC)
f. Police Department Upper Parking Lot
g. Fairview School Parking Area
h. NE Corner of E Mill Street and Smith Street

## XI. City Maintained Sidewalks

City maintained sidewalks will be cleared by DPW after street plowing is complete and during normal working hours. The City uses two tractors, walk behind snow blowers and shovels. No overtime is allocated for the clearing of sidewalks.

## XII. Sand Barrels

The City will place sand barrels out as directed by the Director of Public Works. It is the intent of DPW to have placed barrels by November $30^{\text {th }}$ of each year. (Exhibit Sand Barrel Placement Map).

## XIII. Mailbox Replacement

It is possible that during snow plowing operations damage to a mailbox may occur. DPW tries to plow as close to the curbs as possible without causing damage to them, however mailboxes are occasionally damaged due to their placement.

DPW will no longer replace damaged mailboxes or posts. Instead they will provide reimbursement up to a maximum of $\$ 75.00$ (copies of receipts are needed) when the following criteria has been met:

- Determined that we did indeed damaged the mailbox
- The mailbox was properly installed (meeting the US Postal Service guidelines as listed below.

Additionally, the City will not be responsible for damage to mailboxes with inadequate materials such as rotted wood posts or cracked posts. Property owners should perform inspections and routine maintenance to ensure the mailbox is within standards.

In general, property owners should avoid installation of flower planters or decorative attachments beneath the mailbox. If these items are installed they should be set back at least 10 -inches from the front of the mailbox. The City will not be responsible for damage to these items.

All claims by the regarding damage shall be submitted to the Street Superintendent within 48 -hours after damage occurs. In the event that the City determines they did damage to the mailbox, a temporary mailbox will be provided to the resident until May $15^{\text {th }}$ or until they have replaced their mailbox, whichever comes first.

## US Postal Service Guidelines

a. Position your mailbox $41^{\prime \prime}$ to 45 " from the road surface to the bottom of the mailbox or point of mail entry.
b. Place your mailbox $6^{\prime \prime}$ to $8^{\prime \prime}$ back from the curb. If you do not have a raised curb, contact your local postmaster for guidance.


## XIV. Public Information

## a. Winter All-Night Parking

## Section 10-1-50 of the Municipal Code:

From December 1st to March 15th inclusive of each year, no person shall permit any vehicle to be parked on any street or alley in the City of Plymouth between the
hours of 2:00 a.m. and 6:00 a.m. This Section does not apply to licensed physicians or surgeons engaged in the treatment of patients on any emergency basis.

## b. Snow Blowing into Street

## Section 6-2-7 of the Municipal Code:

No person shall push, shove or in any way deposit any snow or ice onto any public streets, alley, sidewalk or public lands dedicated to public use. Snow from public sidewalks shall not be stored in any manner which will obstruct or limit vehicular or pedestrian vision, movement or access. No person in clearing snow from driveways, parking lots, filling stations, garage entrances, used car lots or other large areas used or business purposes shall pile or distribute snow in the streets or alleys of the City in such a way so as to narrow the traveled portion of the street block, limit the vision of the motorists at intersections, prevent parking at the curb, or cover or interfere with the use of fire hydrants. The deposit of any snow or ice upon any sidewalk, alley or street of the City, contrary to the provisions of this Section, is a nuisance; and in addition to the penalty provided for violation of this Section, the City may summarily remove and transport from the site any snow or ice so deposited and cause the cost of said removal to be charged to the owner of the property from which said snow or ice had been removed.

## c. Sidewalks Snow and Ice Clearing

## Section 6-2-7 of the Municipal Code:

The owner, occupant or person in charge of any parcel or lot which fronts upon or abuts any sidewalk shall keep said sidewalk clear of all snow and ice. In the event of snow accumulating on said sidewalk due to natural means and/or by any other means, said sidewalks shall be cleared of all accumulated snow and/or ice within twenty-four (24) hours from the time the snow ceases to accumulate on said sidewalk. In the event that ice has formed on any sidewalk in such a manner that it cannot be removed, the owner, occupant or person in charge of the parcel or lot which fronts upon or adjoins said sidewalk shall keep the sidewalk sprinkled with material to accelerate melting or prevent slipping.

| $\begin{array}{\|c} \hline \begin{array}{c} \text { Equipment } \\ \text { Type } \end{array} \\ \hline \end{array}$ | Description | Fleet No. | Make | Model | Vechicle ID | License Plate No. | Used for Snow Plow Operations ( $\mathrm{Y} / \mathrm{N}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CAR | Street Superintendent Vehicle | 637 | FORD | taurus X | 1FMDK02W48GA05424 | 26081 | N |
| van | paint van |  | FORD | Econoline | E11BHCC2425 | 26059 | N |
| Utility | Dump Box-4x4 | 636 | Chevrolet | Silverado WT | 1GDHK24U56E179707 | 26035 | Y |
| PICKUP | City Hall / Library vehicle | 622 | DODGE | dakota | 1B7GL22X6WS662447 | 51131 | N |
| Jeep | PLOW - 4 WD | 639 | willys |  | 145885 | 26055 | Y |
| PICKUP | 3/4 TON BOX - PLOW - 4 WD w/tom. Lift | 640 | Chevrolet | SİERADO | 1GCHK24U32E217358 | 60937 | Y |
| PICKUP | Cemetery $3 / 4$ TON BOX | 641 | FORD | F250 | 1FTNF20575EC45982 | 68043 | N |
| PICKUP | 3/4 TON BOX W/Tommy lift | 627 | DODGE | Ram $25004 \times 4$ | 3C6LR5ATOHG698990 | 96745 | Y |
| PICKUP | Golf Course $1 / 2$ TON BOX | 634 | FORD | F-150 | 1FTZF1720WNB21447 | 51069 | N |
| PICKUP | PARKS | 635 | Chevolet | Silverado WT | 1 GCNCPEASDZ265621 | 85280 | N |
| SUV | DIRECTOR OF PUBLIC WORKS | 601 | Ford | Explorer | 1FM5K8AR4FGB91414 | 98680 | N |
| TRUCK | dump box - PLow - Spreader wing | 623 | internatl | 7400 | 1HTWDAAR75J037746 | 66053 | Y |
| TRUCK | duMp Box - PLow - Spreader-wing | 624 | internatl | 4900 | 1HTSDAAR6SH647591 | 45353 | Y |
| TRUCK | dump box - PLow - Spreader - wing | 626 | STERLING | L7501 | 2FZAATDCX7AY49416 | 72667 | Y |
| TRUCK | duMp box - PLow - Spreader-wing | 620 | STERLING | L7500 | 2FZAATAK13AL89536 | 63311 | Y |
| TRUCK | DUMP BOX - PLOW - SPREADER | 625 | Internatl | 4700 | 1HTMMMMLOJH644251 | 97091 | Y |
| TRUCK | dUMP BOX - PLOW - SPREADER - WING | 628 | internatl | 7400SFA | 1HTWDAZR2CH538973 | 83282 | Y |
| TRUCK | DUMP BOX - PLOW - SPREADER | 631 | internatl | 4900 | 1HTMMAAL52H516012 | 59848 | Y |
| TRUCK | DUMP BOX - PLOW - SPREADER - WING | 638 | FREIGHTLINER | CLASS 2 | 1FVAC3BSO9HAH0742 | 78895 | Y |
| DPW | FLAIL MOWER/TRACTOR |  | NEW Holland |  | off road |  | N |
| DPW | Industrial mower |  | Stiener |  | off road |  | Y |
| PARK | Industrial mower |  | кивотА |  | off road |  | Y |
| Park | INDUSTRAIL MOWER |  | кUBOTA |  | off road |  | Y |
| CEmetery | Industrial mower |  | Stiener |  | off road |  | N |
| DPW | STREET SWEEPER | 633 | Johnston |  | on road |  | N |
| DPW | MOTOR GRADER | 629 | John DEERE | 670-B | on road |  | Y |
| DPW | FRont end loader | 630 | volvo | L90-C | on road |  | Y |
| DPW | TRACTOR/LOADER |  | FORD |  | on road |  | N |
| DPW | front end loader | 632 | volvo | L70 | on road |  | Y |
| DPW | STUMP GINDER ATTACHMENT |  | Stump grinder |  | equipment |  | N |
| DPW | SNOW BLOWER (8ft.) |  | Snogo |  | equipment |  | Y |
| DPW | BRUSH CHIPPER |  | brush bandit |  | equipment |  | N |
| DPW | leaf loader |  | ODB |  | equipment |  | N |
| DPW | leaf loader |  | ext vac |  | equipment |  | N |
| DPW | AIR COMPRESSOR |  |  |  | equipment |  | N |
| DPW | SPRAYER |  | john bean |  | equipment |  | N |
| DPW | ROLLER |  | CASE |  | equipment |  | N |
| DPW | Stump Grinder |  | Rayco | RG1620 | equipment |  | N |



INTERMEDIATE SNOW PLOW ROUTES 2018



