

M2012-154

**Date of City Council Meeting: October 16, 2012**

**To:** Mayor and City Council  
City Administrator

**From:** Brian Erickson, P.E., Assistant Public Works Director/City Engineer

**Subject:** Approve Snow Policy Revisions

**Action Requested:**

The City Council is being asked to approve the revisions *City of Northfield Snow and Ice Control Policy and Guidelines*.

**Summary Report:**

Staff has reviewed the *City of Northfield Snow and Ice Control Policy and Guidelines* which was adopted September 20, 2011. During that review several minor grammatical corrections were made. In addition the following changes are recommended:

- Addition of the adopted and revision dates at the top of the document.
- A note regarding the anticipated update of the city's website in early 2013 that may allow additional alert options.
- Addition of the City of Northfield Public Work's Facebook page which will provide an additional way to publicize snow emergencies via social media.
- Corrected information regarding trail clearing, which will not be performed as part of a call out for Public Works staff, but will be performed during normal working hours.
- Added the goal of returning calls within 48 hours.
- Noted that downtown residents who use the various public parking lots have an obligation to be knowledgeable of parking regulations and cognizant of announced snow removal operations in the downtown area.

Staff will continue to review this document annually in order to improve the safety, efficiency and public awareness of these major winter season efforts. As changes and improvements are suggested, staff will draft an update for next winter season. The ultimate goal is for this document to cover, in detail, all winter efforts performed by the Public Works Department.

**Attachments:**

1. City of Northfield Snow and Ice Control Policy and Guidelines – October 16, 2012

# **City of Northfield Snow and Ice Control Policy and Guidelines**

Adopted: September 20, 2011

Revised: October 16, 2012

1. **Purpose.** The *City of Northfield Snow and Ice Control Policy and Guidelines* is designed to be used by staff and the public alike as a general reference document.
2. **Policy.** The City of Northfield performs snow plowing, snow removal, ice control and associated winter maintenance on the local streets throughout the city as required during and following inclement winter weather. These operations are performed to provide safety to the motoring public while also considering cost, location and environmental impacts
  - 2.1. Under normal conditions the goal is to have all city streets plowed curb to curb within 12 hours of the completion of the snow event. The actual completion of plowing may exceed the 12 hours based on the actual timing of the snow fall ending.
  - 2.2. Extraordinary snow events may require additional time to complete all snow plowing operations due to heavy snow or large accumulations.
  - 2.3. The city does not clear all streets to bare pavement.
  - 2.4. Snow removal is performed in the downtown area within 48 hours after the completion of plowing.
  - 2.5. Not all trails are cleared during the winter months. Trail clearing is focused primarily on those areas near schools.
3. **Operations.**
  - 3.1. **Personnel.** The Public Works Department (PWD), Streets and Parks Division personnel provide the majority of the snow and ice control operations in the city. Other PWD divisions assist with those operations including Engineering, Water and Wastewater on an as needed basis.
  - 3.2. **Equipment.** The City of Northfield currently operates and maintains the following equipment for snow and ice control operations:
    - 3.2.1. Four (4) single axle dump trucks with 12 ft reversible plows, snow wing, underbody scrapers, sanders, and brine tanks. Sanders are calibrated annually per MnDOT specifications. The brine tanks are used to prewet the salt or salt/sand in order to aid in the activation of these products.
    - 3.2.2. Two (2) front-end loaders with 12 ft reversible plows and snow wings.
    - 3.2.3. One (1) front-end loader with 12 ft 'v' plow.
    - 3.2.4. One (1) front-end mounted snow blower for snow removal operations.
    - 3.2.5. One (1) motor grader with snow wing.
    - 3.2.6. One (1) tractor with plow.
    - 3.2.7. One (1) tractor with broom.



- 3.2.8. One (1) small lawn tractor with blower.
- 3.2.9. One (1) small lawn tractor with broom.
- 3.2.10. One (1) utility vehicle with plow or broom depending on conditions.
- 3.2.11. One (1) skid-steer with bucket or blower depending on conditions.
- 3.2.12. One (1) pickup with brine tanks for pretreating the primary snow routes.
- 3.3. **Products.** A number of different materials are used in snow plowing and removal operations. The following list is not all inclusive; however, it does include the most common items currently used. Additionally, city staff does review other potential products to reduce cost, protect the environment and ease maintenance. Evaluation of those products is performed on an as needed basis.
  - 3.3.1. Salt is contracted annually via Cooperative Purchase Venture (CPV) with the State of Minnesota. Using the CPV typically saves the City of Northfield approximately 50% and assures the city access to a minimum amount of salt.
  - 3.3.2. Sand is purchased on an as needed basis and may be mixed with salt to increase the efficiency of product.
  - 3.3.3. Salt brine is mixed in-house and is used for both pre-treatment and prewetting operations. Brine is mixed to a 23% salt to water ratio.
  - 3.3.4. Neutro-wash used to wash equipment after de-icing operations to remove salt residue.
- 3.4. **Routes.** Snow plowing and de-icing routes are reviewed annually (normally in August) in order to insure that the roads are distributed equally in each plowing district.. This distribution is necessary to minimize the amount of time required to clear all city streets. A review of trails is also conducted to account for the time necessary for clearing.
- 3.5. **Procedures.**
  - 3.5.1. During normal work hours (Monday – Friday, 7:00 AM – 3:30 PM) the Streets and Parks Supervisor shall be responsible for monitoring street, sidewalk and weather conditions. The initiation of snow and ice control and removal shall begin as directed by the Supervisor.
  - 3.5.2. After hours, and on weekends and holidays the Streets and Parks Supervisor shall work in conjunction with the Public Safety Department to keep abreast of road and/or weather conditions which would require commencement of snow and ice control. Only the Supervisor, the Assistant Public Works Director or the Public Works Director are authorized to call out PWD staff for snow and ice control operations.
    - 3.5.2.1. Callouts for minor deicing or other minor maintenance issues is still authorized to be performed by Public Safety Department personnel as needed.
    - 3.5.2.2. The Callout List is updated biweekly with time card submissions, and is forwarded to dispatch and Public Safety Department personnel as needed.

3.5.3. **Snow Emergency.** A Snow Emergency may be declared when at least two inches of snow has been received in a 24 hour period. Snow Emergencies are declared to allow snow plow crews to clear roadways for movement of fire, health, police and emergency traffic, as well as to ensure the safety of the community. Additionally, the snow emergency restricts parking in city-owned lots in the downtown area so that the snow can be removed from those parking lots. The start time for the Snow Emergency will be declared in the announcement and the emergency remains in effect for 72 hours or until all streets have been plowed curb to curb.

3.5.3.1. Regulations.

3.5.3.1.1. No parking on city streets until the snow has been plowed from curb to curb, even if the precipitation has stopped.

3.5.3.1.2. City-issued winter parking permits do **not** allow parking on the street during a snow emergency.

3.5.3.1.3. Vehicles parked in violation of snow emergency rules will be towed.

3.5.3.2. Publication/Announcement. The City of Northfield publicizes the declaration of a snow emergency in multiple locations.

3.5.3.2.1. City of Northfield website ([www.ci.northfield.mn.us](http://www.ci.northfield.mn.us)) – Look for a red banner (alerts) at the top of the home page. With the update of the city's website in 2013, additional alert options may become available.

3.5.3.2.2. City of Northfield snow emergency hotline – A 24/7 phone line with information regarding the status of snow emergencies. 507-645-3080

3.5.3.2.3. City of Northfield Public Works Twitter account – Posted as snow emergencies are declared with a link to the City's website. ([twitter.com/NfldPW](https://twitter.com/NfldPW))

3.5.3.2.4. City of Northfield Public Works Facebook Page – Alerts will be posted with a link to the City's website. (<https://www.facebook.com/pages/City-of-Northfield-Public-Works/362712025571>)

3.5.3.2.5. The Northfield News

3.5.3.2.6. KYMN radio, 1080 AM

3.5.3.2.7. Northfield Patch

3.5.4. **Pretreatment.** As the winter season begins PWD staff begins pretreatment of the primary snow plow routes. The pretreatment reduces the effort required to remove the snow from the streets due to the snow mixing with the dried salt brine on the streets and reactivating it. Pretreatment continues throughout the winter as staff time allows.

3.5.4.1. Approximately 38 lane miles of streets are pretreated.

3.5.5. **Snow Plowing.** Plowing will not normally begin until a minimum of 2 inches of snow has accumulated on the streets. Plowing may begin earlier; however, that



decision is made based on the severity of the winter event. The timing of plowing events is tied to the severity of weather, end time of snowfall and normal staff work hours. Snow removal on trails and city owned sidewalks is performed as needed; however, call outs (outside normal working hours) are not performed for this work. Management uses best judgment when scheduling after hours, weekend or holiday work to reduce impact to the traveling public while also minimizing overtime usage.

- 3.5.5.1. Process. Plow operations require multiple passes in order to clear the snow from curb to curb. As a result residents can expect plows to pass in front of each home twice. The first pass will be to move the snow from the center of the road toward the edges. The plows normally use the underbody scraper and wings to perform this operation. The second pass will be with the front-mounted plows to move the snow off the street and into the boulevard.
- 3.5.5.2. Normal Work Hours. If the snow begins during normal work hours staff will begin plowing and continue until a minimum of one pass has been completed on each city street. The operators will then be sent home for a rest period prior to returning to complete the full plowing of all city streets. That full plowing normally begins between midnight and 2:00 AM which allows staff to complete a majority of plowing prior to the residents of the city leaving their homes in the morning.
- 3.5.5.3. After Hours, Weekends, Holidays. If sufficient snow accumulates during these timeframes staff will be recalled to provide snow and ice control similar to what is noted in paragraph 3.5.5.2 above.
- 3.5.5.4. Equipment Used. Equipment is used in the following manner:
  - 3.5.5.4.1. Plow trucks perform the majority of the plowing operations as well as all deicing (salting) throughout the city. These trucks also complete the final pass (known as 'flipping') on all city streets.
  - 3.5.5.4.2. Front-end loaders perform snow plowing in cul-de-sacs since that equipment is more maneuverable and reduces or eliminates the need backing.
  - 3.5.5.4.3. Other equipment is normally used on trails and city sidewalks as necessary. Toward the end of the winter the widening of trails may require the use of front-end loaders.
- 3.5.5.5. Snow plowing on state and county roads within the city limits of Northfield is performed by a combination of city and state/county resources. The extent of city efforts are detailed in maintenance agreements between MnDOT and Rice County.
- 3.5.6. **Snow Removal.** Downtown (defined as the area encompassing 2<sup>nd</sup> Street to 7<sup>th</sup> Street and Water Street to Washington Street) snow removal is normally performed the first morning after a full plowing is completed. For example if the full plowing is completed by 11:00 Wednesday morning, downtown snow removal will begin late Wednesday evening/early Thursday morning. Areas to

have snow removed include sidewalks, roads and public parking lots (i.e. 5<sup>th</sup> and Washington Street Lot). Downtown property owners are **not** authorized to push their parking lot snow into the street in order to have the City of Northfield remove it (see paragraph 4.2 below).

- 3.5.6.1. All downtown snow removal is performed late evening and early morning to reduce the impact to businesses and the citizens living and working downtown.
- 3.5.6.2. Equipment Used. Equipment is used in the following manner.
  - 3.5.6.2.1. Front-end loader with 'v' plow used for removing snow from sidewalks and the curb line.
  - 3.5.6.2.2. Motor grader is used to windrow the snow in the center of the streets for the snow blower.
  - 3.5.6.2.3. Front-end loader with snow blower is used to load contracted hauling vehicles that move the snow to a designated location.

#### **4. Resident Information.**

- 4.1. **Complaints.** Due to the other various tasking required of the PWD, the City of Northfield responds to snow removal issues on a complaint driven basis. Residents having concerns about snow plowing/removal or ice control should contact the Streets and Parks Division at 507-645-3050. The Supervisor will respond to complaints as time allows during plow operations with the goal of returning calls within 48 hours.
- 4.2. **Public Right of Way.** The City of Northfield reminds all residents and snow removal operators that it is unlawful, under Minnesota Statute 160.2715, to deposit snow onto public roadways. This includes snow left on the roadway as a plow or snow blower enters or leaves a driveway. Piles of snow deposited onto public roadways may re-freeze and create a significant hazard to the travelling public and future snow removal operations. Other hazards created by improper placement of snow on or near a public roadway include drainage problems, drifting, sight obstruction and impaired safe accessibility. Violations are considered a misdemeanor, and civil penalties also may apply if the placement of snow creates a hazard that contributes to a motor vehicle crash and or pedestrian injury. The civil liability can extend to both the property owner and the person who places the snow.
- 4.3. **Property Damage.**
  - 4.3.1. **Sod.** Sod damaged during snow plowing operations will be repaired the following spring. The Streets & Parks Division will repair the damage using black dirt and grass seed.
  - 4.3.2. **Boulevard intrusions.** The City of Northfield accepts no responsibility for items placed or damaged on the city right-of-way as per City code. These items might be plantings, fences, landscape boulders, timbers, stakes, sprinkler systems, posts, improperly placed mailboxes, and miscellaneous loose items.
  - 4.3.3. **Mailboxes.** Where mailboxes are placed adjacent to the street it shall be the policy of the City of Northfield that snow be plowed as close as practicable to the



curb to allow for passage and mail delivery. It shall be the responsibility of the property owner to keep piled up snow away from mailboxes so mail can be delivered.

4.3.3.1. If damage occurs to a mailbox the Streets & Parks Supervisor shall investigate such damage. If it is determined that that weight of the snow caused the damage, the City of Northfield will not assume responsibility for repair of the mailbox. If evidence shows that physical contact from the snowplow was made to the mailbox the City of Northfield shall provide a \$65.00 payment to the property owner for repair or replacement. The property owner shall install the new mailbox as shown in Mailbox Policy (Attachment 1), and this will relieve the City from further future obligations. A limited number of temporary mailboxes are available; however, residents should make every effort to replace their mailboxes as soon as possible.

4.3.3.2. Failure of the property owner to upgrade the mailbox to the City of Northfield standards will relieve the City from any further liability from damage caused during snow plowing operations.

4.3.4. **Curbs.** Concrete curbs will not be replaced unless the curb back is broken.

4.3.5. **Driveway Ramps.** Damage caused to driveway aprons from snow plowing will be investigated by the City to determine if the damage was caused by plowing operations.

4.4. **Sidewalk Snow Removal.** By city ordinance (Ch. 70 Article I, §70-2) property owners are responsible for removing snow and ice from the sidewalks adjacent to their property within 12 hours after snow or ice precipitation has stopped. If snow and ice are not removed, it may be removed by authorized city personnel, and the costs for snow removal will be assessed against the property. Residents may report unclear sidewalks to the Community Development Department (507-645-3044).

4.5. **Garbage and Recycling Containers.** Efficient snow plowing requires that garbage/recycling containers be accessible for pickup, but not in the way for plowing operations. The containers shall be placed off the street to allow for snow removal. The containers may have to be placed at the end of the driveway to meet these requirements. It is the property owner's responsibility to see that the containers are not in the way during snow plowing operations while also being assessable for garbage/ recycling pickup.

4.6. **Fire Hydrants.** Fire hydrants are critical to minimize the potential loss caused from fire. After snow plowing operations or major buildup of snow around the hydrant, citizens are encouraged to clear a 5-foot area around the hydrant to allow fire access.

4.7. **Additional Information and Resources.** Attachment 2 provides additional information and resources that residents may find useful.

## 5. **Parking.**

5.1. **Ban.** The City of Northfield implements a winter parking ban on all city streets between the hours of 2:00AM and 6:00AM (Municipal Code Ch. 78, Article IV, § 78-102). The

ban starts on November 15 and ends on March 15. Any vehicles parked on the street at any time of day during a declared Snow Emergency may be towed (Municipal Code Ch. 78, Article IV, § 78-101).

5.2. **Permits.** The City offers Parking Permits during the Winter Parking Ban to residents. **These winter parking permits do not allow on-street parking during a Snow Emergency.** Interested parties must apply for the permit each year and the application must be approved by the Chief of Police or designated representative. Permit applications can be obtained from the City of Northfield website or the Engineering Office on the second floor of City Hall. It is important that applicants provide a detailed explanation of the circumstances that justify the need for a permit. Permits fall into one of three categories explained below.

5.2.1. **Downtown.** These permits are limited to downtown apartments that do not have off-street parking. The downtown winter parking permit allows those residents to park in certain city parking lots during a declared Snow Emergency. It does **not** exempt downtown residents from normal city parking regulations. Landlords are responsible for getting permits and parking instructions to their tenants. Downtown residents have an obligation to be knowledgeable of parking regulations and cognizant of announced snow removal operations which may require the relocation of their vehicle.

5.2.2. **On-Street.** Allows residents to park on the street during the Winter Parking Ban as long as a Snow Emergency has **not** been declared. Applications must be submitted to the city for approval each year. These permits are intended to cover extenuating circumstances for residential properties that do not have adequate off-street parking. Holders of On-Street permits must remove vehicles from the streets during a declared Snow Emergency.

5.2.3. **Temporary On-Street.** These permits are intended to allow on-street parking for short periods of time (up to two weeks) to accommodate visitors, construction projects, etc. These permits will have specific start and end dates. Holders of Temporary On-Street permits must remove vehicles from the streets during a declared Snow Emergency. Residents may call the Public Safety Department (507-645-4477) if they will have a visitor for 2 nights or less.

6. **Yearly Council Approval.** The City of Northfield Public Works Department shall review and update this policy annually. It shall then be presented to the City Council for adoption.

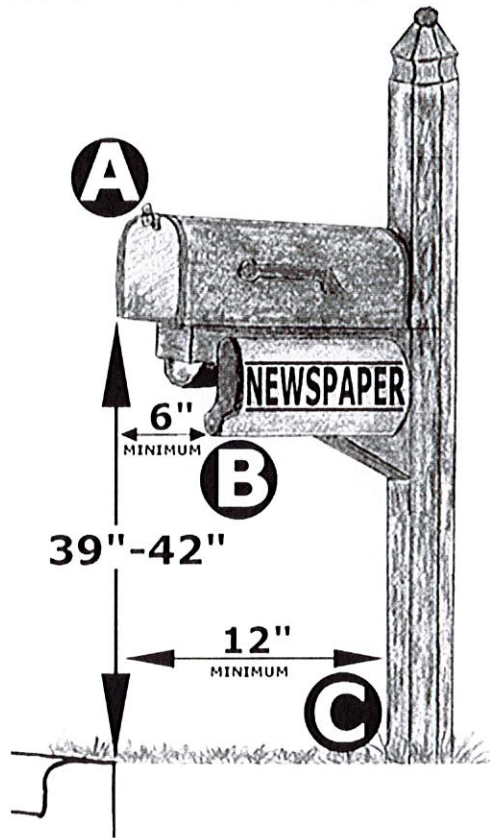


## Attachment 1

### Mailbox Policy

Northfield residents are reminded to check their mailboxes to ensure that they meet the following criteria in order to reduce the possibility of damage due to snow plowing operations:

- Front of mailbox should be flush with the back of the curb and 39" to 42" from the top of the curb to the bottom of the mailbox.
- Newspaper boxes and other containers should be set back a minimum of 6 inches from the back of the curb.
- The post should be set back a minimum of 12 inches from the back of the curb.



## Attachment 2

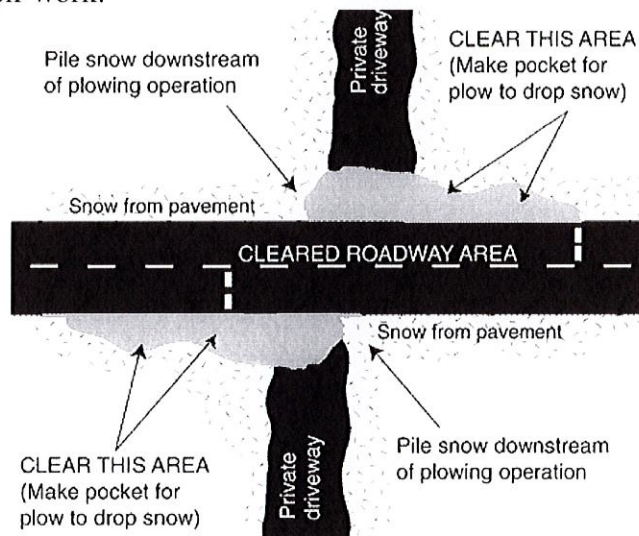
### Additional Information and Resources

#### Ordinances:

Sidewalk snow removal: Municipal Code Ch. 70 Article I, §70-2  
Winter Parking: Municipal Code Ch. 78, Article IV, § 78-102  
Winter parking: Municipal Code Ch. 78, Article IV, § 78-105  
Parking permits: Municipal Code Ch.14, Article III, Div. 3,14-123  
Dumping snow: Minnesota Statute 160.2715

#### Keeping Your Driveway Clear

The City of Northfield's snow and ice control policy is to clear the center of the roadway first and then clear the edges. As a result most residents will have a plow come by their house a minimum of two times during a snow event. The following diagram shows how property owners can clear their driveways to reduce the possibility of becoming snowbound after plows complete their work.



By shoveling or plowing snow in the same direction as traffic and making a snow collection pocket, the snow collected by the plows will accumulate in the pocket rather than into the driveway opening.

#### Additional Websites

MNDOT Work Zone Safety	<a href="http://www.dot.state.mn.us/workzone/index.html">http://www.dot.state.mn.us/workzone/index.html</a>
MNDOT Road Conditions	<a href="http://www.511mn.org/">http://www.511mn.org/</a>
MNDOT MetroTwitter	<a href="http://twitter.com/#!/mndottraffic">http://twitter.com/#!/mndottraffic</a>
National Weather Service	<a href="http://weather.noaa.gov/weather/MN_cc_us.html">http://weather.noaa.gov/weather/MN_cc_us.html</a>