



Policy Title: Winter Maintenance Policy Policy No.: 501  
Date Approved: 2020-07-20 Policy Type: Community Operations

## 1. Policy Statement

The City of Chestermere is responsible for the maintenance of public roads and pathways within the geographic boundaries of the City excluding the Trans-Canada Highway 1, its associated interchanges and intersections with City roads. This document provides guidelines for winter maintenance operations within the approved budget and the terms of this policy.

The objectives of this policy are; to provide the travelling public and pedestrians with adequate mobility under prevailing winter conditions, help minimize or reduce accidents or injuries due to winter conditions, provide for the operation of emergency services, minimize economic loss to the community resulting from restricted transportation routes and set the level of service for winter maintenance for routes dependent upon their priority ranking. Winter maintenance will be delivered in a cost effective and efficient manner.

This policy addresses most roadway and pathway winter maintenance scenarios. When unusual conditions occur, the Roads and Parks Departments of Community Operations will use discretion, experience and judgement in the application of this policy.

The Municipal Government Act, Section 18(1), gives the municipality the direction, control and management of all roads and publicly owned pathways within the municipality.

## 2. Definitions

- (a) **Arterial and Industrial Road\***: Major roadways that carry the highest traffic volumes;
- (b) **As required**: A statement which means that the level of service is not set at a predetermined number of activity occurrences per season or year;
- (c) **Boulevard**: Means the area between a roadway curb and separate sidewalk or between a roadway curb and property line where there is no sidewalk;
- (d) **Collector Road\***: Roadways that carry moderate volumes of traffic; this type of roadway carries vehicles between major and residential roadways;

- (e) **Continuous Snow Event:** means a situation in which more than five (5) centimeters is deposited on the highways whether it is fresh snowfall or blowing snow;
- (f) **Drop-off Zone:** Sections of roadway adjacent to schools where buses drop- off/pick-up students;
- (g) **Ice Control:** Means the application of sand-chips, salt or calcium either individually, in combination, in a mixture or any other mixture to a roadway surface to improve traction, reduce skidding or reduce ice formation;
- (h) **Impassable Conditions:** means extreme winter road conditions that prevent the travel and mobility of vehicles. Freezing rain resulting in extreme icy conditions or drifting of more than twenty (20) centimeters on a roadway;
- (i) **Local Residential Road\*:** A roadway that provides direct access to and collects traffic from abutting residential properties and distributes this traffic to higher standard roadways;
- (j) **Pathway:** means a multi-purpose thoroughfare controlled by the City and set aside for the use of pedestrians, cyclists and persons using wheeled conveyances, which is improved by asphalt, concrete or brick, whether or not it is located in an open space, and includes any bridge or structure with which it is contiguous;
- (k) **Rural Road:** A road that is not hard-surfaced with Hot Mix Asphalt, typically consisting of a gravel, recycled asphalt/concrete or chip seal surface;
- (l) **Rutting:** Means the formation of troughs and ridges in compacted snow or ice;
- (m) **Snow Event:** means an accumulation of 5 centimeters or more and can include drifting of snow that had fallen from a previous event;
- (n) **Snow Plowing:** means the grading/plowing of accumulated snow from roadway surfaces to another location;
- (o) **Snow Removal:** means the removal of snow from streets to another location;
- (p) **Windrowing:** means the plowing of snow into a long continuous pile for storage or to facilitate removal;

*\* In accordance with the City of Chestermere Transportation Master Plan.*

### 3. Priority Routes

- (a) Priority 1 Routes: include access for emergency services, transit stops, primary parking lots, school zones, school bus routes and major roadways into and within

Chestermere. This plan includes the new bus transit routes proposed in the City of Chestermere transit plan. Our primary objective is to provide the public with safe travel routes on major roadways and access to primary public facilities and minimize disruption from weather conditions within the City.

- (b) Priority 2 Routes: include access for school zones, transit stops, primary parking lots, secondary roads that link our main travel routes between our primary roadways. Our objective is to provide the public with safe travel routes on secondary roadways and minimize disruption from weather conditions within the City.
- (c) Priority 3 Routes: include access for neighborhood connector roads that link our main travel routes between our primary and secondary roadways. Our objective is to provide the public with safe travel routes on neighborhood connector roadways and minimize disruption from weather conditions within the City.
- (d) Priority 4 Routes: include access for rural roads that surround the outer boundary of the City. These routes may include paved and un-paved roadways. Our objective is to provide the public with safe travel routes on rural roadways and minimize disruption from weather conditions within the City.
- (e) Priority 5 Routes: include access for City owned parking lots. Our objective is to provide a reasonable level of safety for facility user groups.
- (f) Priority 6 Routes: Local residential roadways. Our objective is to plow residential roadways after all other previous priorities and routes have been completed.

#### **4. Responsibilities**

- (a) City Council shall:
  - (i) Approve by resolution this policy and any amendments;
  - (ii) Review and adopt the Winter Maintenance budget as developed by Community Operations; and
  - (iii) Set the levels of service for winter road and pathway maintenance operations.
- (b) Chief Administrative Officer shall:
  - (i) Implement this policy and approve procedures; and
  - (ii) Ensure policy and procedure reviews occur and verify the implementation of policies and procedures.
- (c) Director of Community Operations shall:
  - (i) Ensure implementation of this policy and related procedures;
  - (ii) Ensure that the application of this policy is reviewed periodically; and

- (iii) Recommend to the Chief Administrative Officer (or designate) necessary policy and/or procedure amendments.
- (d) The Roads Manager and Parks Manager shall:
  - (i) Implement and review the success of the Winter Maintenance policy and procedures while providing for safe roadway and pathway conditions during the winter months; and
  - (ii) Allocate and schedule Community Operations resources; and manage the budget.
- (e) Community Operations Employees shall:
  - (i) Understand and adhere to this policy; and
  - (ii) Conduct any assigned duties in accordance with this policy and related procedures.
- (f) Community Operations Employees shall carry out winter maintenance in accordance with the Winter Maintenance Policy and the instructions of the Roads Manager and Parks Manager respectively, or their designate.

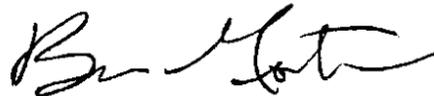
**5. Attachments**

- Appendix A – Roadway Snow Plowing Routes & Priorities
- Appendix B – Sidewalk and Pathway Routes
- Winter Maintenance Procedure

**Approved by:**



Mayor



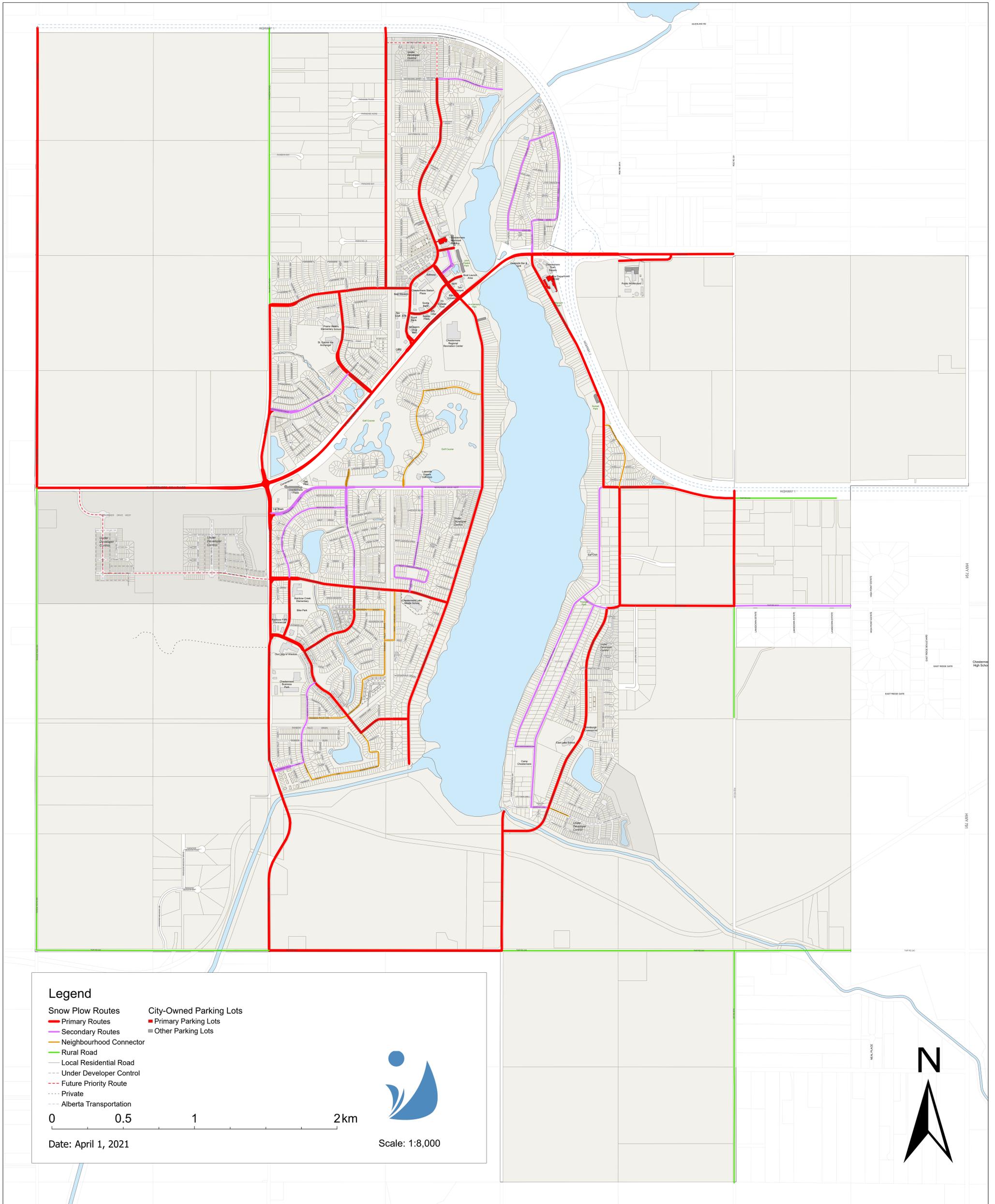
CAO

**Revision History** *(completed by Legislative Services)*

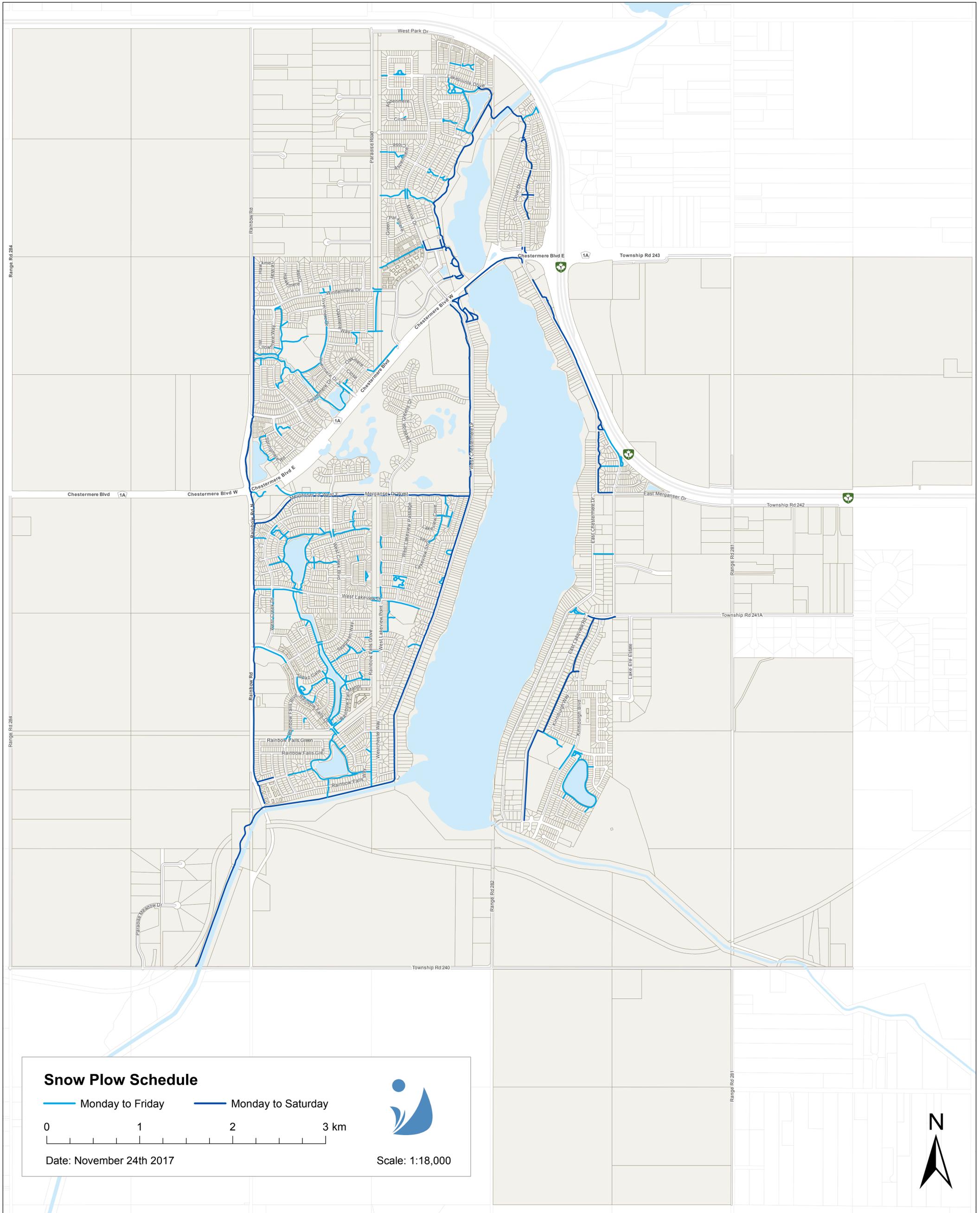
Policy Title	Date Approved	Resolution No.
Winter Maintenance Policy	2019-02-19	058-19
Winter Maintenance Policy	2012-09-17	304-12
Winter Maintenance Policy	2012-02-06	
Winter Maintenance Policy	2011-12-28	
Winter Maintenance Policy	2009-11-02	403-09
Winter Maintenance Policy	2007-02-20	061-07
Winter Maintenance Policy	1999-10-01	

Winter Maintenance Policy	1994-01-04	
Winter Maintenance Policy	1989-12-18	

# Appendix A - Roadway Snow Plowing Routes & Priorities



# Appendix B - Sidewalk and Pathway Routes



**CITY OF  
CHESTERMERE  
PROCEDURE**

<b>SECTION:</b> 500 <b>POLICY:</b> 501	<b>POLICY TITLE:</b> Winter Maintenance
<b>DEPARTMENT:</b> Roads & Parks	<b>FUNCTION:</b> Community Operations

**1. Roadway Priorities and Standards**

- 1.1 The City operates within an approved budget which are required for a number of purposes. In establishing the Winter Maintenance policy, the City must take into consideration its financial resources, its personnel and commitments under the Municipal Government Act.
- 1.2 When unusual conditions occur, the Roads and Parks departments will use discretion, experience and judgement in the application of this policy.
- 1.3 Priorities are established to provide the greatest benefit to the majority of the traveling public. In setting priorities, consideration is given to criteria such as traffic volume, emergency services, drift exposure and potential safety issues.
- 1.4 City Council has set seven (7) priority ratings for roads as follows and as shown on the map in Appendix A:

**1.4.1 Priority 1:** Primary Routes (see map for priority routes).

Priority 1 routes include access for emergency services, transit stops, primary parking lots, school zones, school bus routes, and major roadways into and within Chestermere. This plan includes the bus transit routes proposed in the City of Chestermere transit plan. Our primary objective is to provide the public with safe travel routes on major roadways and access to primary public facilities and minimize disruption from weather conditions within the City.

Roads shall be plowed and have winter maintenance activities concluded twenty-four (24) hours after the end of a weather event. Roads will be plowed to clear snow as close to the road surface and curb as possible. Snow may be deposited on sidewalks and driveways. Crews will minimize impact where possible.

Primary facilities will be initially cleared with one pass in order to provide safe access for the public. The remaining cleanup will be completed at a

later time when all other priorities have been completed.

Snow removal may be initiated so as to provide unrestricted travel lanes or to improve safety conditions. Windrows will be removed only if they exceed storage capacities, impede the safe flow of traffic, cause impassible drifting, begin to interfere with lane width, or create potential safety issues. Snow removal may be initiated at the discretion of the Roads Manager (or designate).

Ice control will be provided at major intersections, railway crossings, school zones, hills, bus shelters, curves and bridges as determined by the Roads Manager (or designate).

#### **1.4.2 Priority 2 Secondary Routes:** (see map for priority routes).

Priority 2 routes include access for school zones, transit stops, primary parking lots, secondary roads that link our main travel routes between our primary roadways. Our objective is to provide the public with safe travel routes on secondary roadways and minimize disruption from weather conditions within the City.

Roads shall be plowed and have winter maintenance activities concluded forty-eight (48) hours after the end of a weather event or completion of Priority 1 routes. Roads will be plowed to clear snow as close to the road surface and curb as possible. Snow may be deposited on sidewalks and driveways. Crews will minimize impact where possible.

Snow removal may be initiated so as to provide unrestricted travel lanes or to improve safety conditions. Windrows will be removed only if they exceed storage capacities, impede the safe flow of traffic, cause impassible drifting, begin to interfere with lane width, or create potential safety issues. Snow removal may be initiated at the discretion of the Roads Manager (or designate).

Ice control will be provided at major intersections, railway crossings, school zones, hills, curves and bridges as determined by Community Operations.

#### **1.4.3 Priority 3:** Neighbourhood Connectors (see map for priority routes).

Priority 3 routes include access for neighbourhood connector roads that link our main travel routes between our primary and secondary roadways. Our objective is to provide the public with safe travel routes on neighbourhood connector roadways and minimize disruption from weather conditions within the City.

Roads shall be plowed and have winter maintenance activities concluded seventy-two (72) hours after the end of a weather event or completion of Priority 2 routes. Roads will be plowed to clear snow as close to the road surface and curb as possible. Snow may be deposited on sidewalks and driveways. Crews will minimize impact where possible.

Snow removal may be initiated so as to provide unrestricted travel lanes or to improve safety conditions. Windrows will be removed only if they exceed storage capacities, impede the safe flow of traffic, cause impassible drifting, begin to interfere with lane width, or create potential safety issues. Snow removal may be initiated at the discretion of the Roads Manager (or designate).

Ice control will be provided at major intersections, railway crossings, hills, curves and bridges as determined by Community Operations.

#### **1.4.4 Priority 4:** Rural Roads (see map for priority routes).

Priority 4 routes include access for rural roads that surround the outer boundary of the City. These routes may include paved and un-paved roadways. Our objective is to provide the public with safe travel routes on rural roadways and minimize disruption from weather conditions within the City.

Roads shall be plowed and have winter maintenance activities concluded seventy-two (72) hours.

Snow removal may be initiated so as to provide unrestricted travel lanes or to improve safety conditions.

Ice control will be provided at major intersections, railway crossings, hills, curves and bridges as determined by Community Operations.

#### **1.4.5 Priority 5:** City-Owned Parking Lots (see map for priority and locations).

Parking areas having a paved surface will be sanded or plowed as close as possible to the road surface to minimize disruption from weather conditions.

Parking areas with a non-paved surface will be sanded or plowed, but may leave various depths of snow to minimize driving difficulties and loss of surface material.

The prime objective is to schedule this winter maintenance to be completed prior to 8:30 am on regular work days or as resources permit

after meeting the objectives of Priority 1-3 routes.

Winter Operations may be adjusted or initiated to ensure a reasonable level of safety for facility user groups. City-Owned parking lots to be maintained in the priority as shown in Appendix A.

#### 1.2.4.1 Primary City-Owned Parking Lots

Parking areas shall be plowed once so to create safe public access to our primary facilities and concluded twenty-four (24) hours after the end of a weather event. All other cleanup and maintenance activities will resume once higher Priority 4 areas in this procedure are completed.

#### 1.2.4.2 Secondary City-Owned Parking Lots

Parking areas shall be plowed once so to create safe public access to our secondary City-Owned Parking lots and concluded seventy-two (72) hours after the end of a weather event. All other cleanup and maintenance activities will resume once higher Priority 4 areas in this procedure are completed.

Parking areas having a hot mix asphalt surface will be plowed to clear snow as close as possible to the road surface. Parking areas with a surface consistent with a rural road will be plowed to clear snow, but snow of varying depths may be left in accordance with what is required to minimize driving difficulties and loss of surface material.

The current weather conditions will govern when the required maintenance is performed on parking lots. The prime objective is to schedule this winter maintenance to be completed prior to 8:30 am on regular work days or as resources permit after meeting the objectives of Priority 1-3 routes.

Community Operations will initiate sanding as required. Priorities may be adjusted to ensure a reasonable level of safety for facility user groups. Snow removal operations may be initiated when parking is compromised and ice control may be provided as required. City-owned parking areas to be maintained are shown in Appendix A.

#### **1.4.6 Priority 6:** Local Residential Roads (see map for priority routes).

Local residential roads shall be plowed and have winter maintenance activities initiated when previous priorities are completed.

Residential Roads shall be plowed and have winter maintenance activities concluded or when the road is rendered impassable, extenuating

circumstances exist or as determined by the Roads Manager (or designate).

Snow removal operations will be limited to providing unrestricted travel lanes or to improve safety conditions. Windrows will be removed only if they exceed storage capacities, impede the safe flow of traffic, cause impassible drifting, begin to interfere with lane width, or create potential safety issues. Snow removal may be initiated at the discretion of the Roads Manager (or designate).

Ice control will be provided at major intersections, hills, curves and bridges as determined by Community Operations.

#### **1.4.7 Priority 7: Complaints and Requests**

Complaints and requests received will be investigated and appropriate action will be taken based on the outcome of the investigation and the judgement of the Roads Manager (or designate).

Operation and winter maintenance best practices will be used to determine appropriate winter maintenance operations based on weather forecasts, experience and judgement in the application of this procedure.

## **2 Snow Plowing**

- 2.1 Snow plowing operations are governed by current weather conditions and by the priorities assigned to individual roadways.
- 2.2 Snow plowing operations will commence in priority order upon a snow accumulation of five (5) centimeters and in consideration of field conditions and the weather forecast.
- 2.3 When continuous weather events follow closely one after the other, operations will be repeated or continued on the highest priority until completed before moving on to the next priority.
- 2.4 Roads will be bladed flat to minimize rutting but snowpack of varying depths may be left in accordance with what is required to minimize driving difficulty when extenuating circumstances exist.
- 2.5 Snow plowing may result in windrows on both sides of the road or to the center of the road. As per Snow Removal Bylaw 018-11, the clearing of windrows in front of driveways left by equipment shall be the responsibility of the property owner or affected individual, company or corporation.

- 2.6 Varying priority routes may be combined during regular winter maintenance to reduce travel time and expense if it does not impede the conclusion target for the highest priority road receiving winter maintenance.
- 2.7 In the event where extreme conditions exist, Community Operations will utilize road right-of-way and public sidewalks in residential and commercial areas for snow storage during snow plowing operations. Public sidewalks within the road right-of-way will be cleared off when equipment and manpower become available and road conditions are stabilized as determined by the Roads Manager (or designate).

### **3 Sanding, Salting and Ice Control**

- 3.1 Ice control shall begin when plowing has cleared the roads to an extent where the applied product will not be plowed off by subsequent plowing.
- 3.2 Anti-icing products may be applied to the roads prior to snowfall event at the discretion of the Roads Manager (or designate) under the review of the forecast weather conditions.
- 3.3 Accumulation of snow of five (5) centimeters or less will be managed by the application of sand and/or salt.

### **4 Snow Removal (hauling away snow)**

- 4.1 Community Operations will implement snow removal operations when the accumulation of snow significantly impedes traffic flow.
- 4.2 City of Chestermere Fire Hydrants will be continually assessed throughout the winter season for accessibility to ensure fire protection for the community. During major snow falls where accumulation and windrows produced from equipment restricts accessibility, Community Operations staff will commence clearing of snow.
- 4.3 The Roads Manager (or designate) shall determine the need for, retaining, allocating and scheduling privately held resources to assist with snow removal.

### **5 Sand and Salt Storage**

- 5.1 Community Operations will ensure that the stockpiling and storage of sand and salt and off-loading of excess materials be conducted completely within the facility provided.
- 5.2 The amount of required sand and salt for a normal winter season shall be stockpiled, mixed and stored prior to the end of September.

## **6 Sidewalk / Pathway Snow and Ice Clearing**

- 6.1 Sidewalks and pathways, as shown in Appendix B, will be plowed to remove snow as close to the pathway surface as possible.
- 6.2 The Parks Function will plow snow from sidewalks and pathways, as shown in Appendix B, and have winter maintenance activities concluded forty-eight (48) hours after the end of a storm event. Snow is not removed on Sundays and only priority pathways are cleared on Saturdays, see Appendix B, Monday to Saturday routes.
- 6.3 As per Bylaw 018-11, the Parks Function will not remove snow, ice or slush on sidewalks which front or about the property of private or commercial properties.
- 6.4 Snow will be plowed on asphalt pathways and sidewalks to as close to the surface as possible when the accumulation of snow exceeds three (3) centimeters. Gravel pathways will not be cleared in the winter.
- 6.5 Due to constantly changing freezing and thawing conditions, salt, sand and chip will not be applied by Parks to asphalt pathways or sidewalks, however residents may access chip at the City of Chestermere Community Operations Building to apply on sidewalks fronting or abutting their property. Residents must bring their own container and shovel to access material.
- 6.6 Windrows on sidewalks or pathways may be removed so as to provide unrestricted pedestrian travel, and will be assessed and prioritized by the Parks Manager (or designate).

## **7 Parking Bans**

- 7.1 The City shall designate snow routes and mark these routes by clear signage.
- 7.2 As per Traffic Bylaw 004-11 (Section 9), after an exceptional weather event has ended, the CAO may direct the Roads Manager to declare a temporary parking ban on snow routes in order to complete snow removal dependent on the amount of snow accumulation.
- 7.3 Parking bans may be implemented along designated snow routes (Appendix C) or as otherwise required to provide for operations. Areas where parking is to be banned, designated or otherwise, will be signed twenty-four (24) hours in advance. Vehicles that do not adhere to the parking ban may be ticketed and/or towed and the owner of the vehicle shall be responsible for all associated costs in accordance with the Traffic Control Bylaw.

- 7.4 Parking bans shall be in effect between 8:00am and 4:30pm. Parking bans will be in effect as long as the temporary signs are in place with on-street parking permitted outside of the effected hours of 8:00am and 4:30pm.

## **8 Snow On-Call Schedule**

- 8.1 The Roads Manager will develop and maintain a weekly, rotational, snow on-call schedule from Mid-October to Mid-April.
- 8.2 Two Roads Operators will be on-call per shift consisting of a primary and secondary operator.
- 8.3 The primary Roads on-call operator will check the current weather conditions and determine if a visual check of the road conditions is warranted. If a visual road condition check is warranted the primary operator will conduct the condition check between 5:00 am and 6:00 am on regular work days.
- 8.4 If snow plowing is deemed necessary it is the primary Roads operator responsibility to call in the secondary operator and/or additional resources to assist and proceed with Priority 1 snow plowing. The prime objective is to have Priority 1 roadways passable by 8:00 am on regular work days.
- 8.5 Roads snow on-call staff shall be granted 24-hour access to City owned vehicles during their scheduled on-call shift in accordance with Policy 711.
- 8.6 Roads snow on-call staff will ensure current weather reports from Environment Canada are utilized on a regular basis.
- 8.7 The Parks Manager will develop and maintain a Saturday, rotational snow on-call schedule from Mid-October to mid-April, for the removal of snow from asphalt pathways and sidewalks. Two Parks operators will be on-call per shift.

## **9 Public Relations**

- 9.1 Community Operations Administration shall handle all concerns and inquiries relating winter maintenance.
- 9.2 The Roads Manager (or designate) shall investigate and prioritize complaints and requests for winter maintenance on roadways.
- 9.3 Complaints and requests will be prioritized and ranked according to earlier sections of this policy as per discretion of Roads Manager (or designate).
- 9.4 The Parks Manager (or designate) shall investigate complaints and requests for winter maintenance on asphalt pathways and sidewalks and shall respond on a priority basis.

## **10 Unsafe Conditions**

- 10.1 Unsafe conditions including but not limited to snow, blizzard, fog, freezing rain and/or sleet where visibility is limited to 30 meters or less, as per Environment Canada, will result in the recall of equipment and postponement of winter maintenance for operator safety. When unsafe conditions arise, decision making to resume are made by Roads Manager (or designate).