



2 King Street East, P. O. Box 70, St.-Charles, ON, P0M 2W0

WINTER MAINTENANCE POLICY

Policy Record

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PURPOSE:

The Municipality of St.-Charles is committed to providing safe and sustainable winter maintenance operations while continuing to improve those operations to provide safety and mobility for the traveling public. The Municipality of St.-Charles' Public Works staff will strive, insofar as reasonably practicable, to provide safe winter road conditions for vehicular and pedestrian traffic.

The Municipality of St.-Charles will provide sufficient resources to meet the level of service set out in this Policy for a low volume, predominantly rural road system during those times of the year when winter conditions can be expected. The Municipality of St.-Charles will adhere to meeting the requirements of Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways.

POLICY STATEMENT:

The Municipality of St.-Charles promotes safety on all roads assumed and designated by the Municipality of St.-Charles. This Policy was developed in order to provide efficient and cost-effective winter maintenance to ensure insofar as reasonably practicable, the safety of the users of the Municipal Road Network by adhering to Ontario Regulation 239/02 and requirements under the *Highway Traffic Act*.

SCOPE:

This Policy shall apply to all roads assumed and designated by the Municipality of St.-Charles as roads receiving winter maintenance. Notwithstanding the foregoing, neither the Municipality of St.-Charles, nor its officials or employees shall make any promise, assurance or guarantee that the service provided by the Municipality of St.-Charles will be in excess of the Minimum Maintenance Standards.

TITLE:

This Policy shall be called "Policy SER-005 – Winter Maintenance Policy".

DEFINITIONS:

As soon as practicable – shall mean without undue delay, having regard to prevailing circumstances.

Class – shall mean the class of highway as determined in the Classification of Highways Table of the Minimum Maintenance Standards.

Day – shall mean a 24-hour period.

Highway – shall include a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles and includes the area between the lateral property lined thereof.

Ice – shall mean all kinds of ice however formed.

Maintenance Class – shall mean a Class 1, 2, 3, 4, 5, 6, road designated as such by posted speed and traffic volume in accordance with Classification of Highways Table of the Minimum Maintenance Standards.

Minimum Maintenance Standards (“MMS”) – shall mean Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways, as amended from time to time.

Municipality – shall mean the Corporation of the Municipality of St.-Charles.

Operations – shall mean those activities the Public Works Department performs to improve a condition or sustain a roadway standard. Operations are normally defined by guidelines (not Policy), with discretion of the Operations Manager to choose various methods to achieve results cost-effectively.

Operations Manager, Patrol Lead or Designate – shall refer to a person, in the employ of, contracted by or appointed by the Municipality, who is accountable for the deployment of operations that impact on the condition of roadway services.

Patrol Person – shall mean a person who is either a dedicated winter patroller or a person whose duties include winter patrolling.

Roadway – shall mean the part of the highway that is improved, designed or ordinarily used for vehicular traffic, but does not include the shoulder, and, where a highway includes two (2) or more separate roadways, the term “roadway” refers to any one (1) roadway separately and not to all of the roadway collectively.

Sidewalk – shall mean the part of the highway specifically set aside or commonly understood to be for pedestrian use, typically consisting of a paved surface but does not include crosswalks, medians, boulevards, shoulders or any part of the sidewalk where cleared snow has been deposited.

Significant Weather Event – shall mean an approaching or occurring weather hazard with the potential to pose a significant danger to users of the highway within the Municipality.

Snow Accumulation – shall mean the natural accumulation of any of the following that, alone or together covers more than half a lane width of roadway: 1) new fallen snow; 2) windblown snow; 3) slush.

Weather Hazard – shall mean the weather hazards determined by Environment Canada as meeting the criteria for the issuance of an alert under its Public Weather Alerting Program. O. Reg. 239/02, s. 1 (1); O. Reg. 23/10, s. 1 (1); O. Reg. 47/13, s. 1; O. Reg. 366/18, s. 1 (1, 2).

Winter Event – shall mean a weather condition affecting roads such as snowfall, windblown snow, sleet, freezing rain, frost, or ice, to which a Winter Event Response is required.

Winter Event Response – shall mean a series of winter control activities performed in response to a Winter Event.

Winter Patrol – shall mean the field observation of weather and road conditions.

Winter Season – shall mean that season when the Municipality normally performs winter highway maintenance as identified in this Policy.

POLICY COMMUNICATION

This Policy will be communicated by posting on the Municipality’s website.

POLICY

1.0 WINTER ROADWAY MAINTENANCE

1.1 Road Network Maintained

The Municipality has the following roads which are within its boundaries:

- 1.1 kms of high-class bituminous road.
- 17.9 kms of low-class bituminous road.
- 74 kms of loose top gravel road.
- 7.6 kms of earth top road.

1.2 The System Maintained

The major activities related to winter maintenance are:

- Snow plowing.
- Sand / Salt application.
- Snow removal.
- Sidewalk plowing and de-icing.
- Drift control.

1.2 COMMISSIONING AND DECOMMISSIONING WINTER OPERATIONS

1.2.1 An analysis of winter operational records for the period of October 1st to April 30th inclusive indicates that on average the first occasion for which a winter event response is required will occur on or about November 1st. The need for an ongoing response will on average continue to approximately April 1st.

*****Therefore, the winter season for the Municipality will be from the 1st Monday of November each year through to and including the 1st Friday of April of the next year following.**

1.2.2 Acknowledging that winter conditions can occur before and after these periods, the Municipality will gear the conversion of its resources from normal maintenance to winter maintenance mode to meet the following state of readiness guidelines.

<u>Beginning of Winter</u>	50% Operational	October 15 th
	100% Operational	November 1 st
<u>End of Winter</u>	100% Operational	April 1 st
	50% Operational	April 15 th

1.2.3 The winter control resources of the Municipality consist of sufficient resources to meet the level of service set out in this Policy for the classifications of winter-maintained roads identified in Appendix C to this Policy.

1.3 PATROLLING

1.3.1 The standard for the frequency of patrolling of highways to check for conditions described in the MMS and is set out in Table 1 to this Section.

1.3.2 If it is determined by the Municipality that the weather monitoring referred to in Section 1.4 and the MMS indicates that there is a substantial probability of snow accumulation on roadways, ice formation on roadways or icy roadways, the standard for patrolling highways is, in addition to that set out in subsection 1.3.1, to patrol highways that the Municipality selects as representative of its highways, at intervals deemed necessary by the Municipality, to check for such conditions.

1.3.3 Patrolling a highway consists of observing the highway, either by driving on or by electronically monitoring the highway and may be performed by persons responsible for patrolling highways or by persons responsible for or performing highway maintenance activities.

1.3.4 If it is determined by the Municipality that the weather monitoring referred to in Section 1.4 indicates that there is a substantial probability of snow accumulation on sidewalks, ice formation on sidewalks or icy sidewalks, the standard for patrolling sidewalks is to patrol sidewalks that the Municipality selects as representative of its sidewalks at intervals deemed necessary by the Municipality.

TABLE 1: PATROLLING FREQUENCY

Class of Highway	Patrolling Frequency
1	3 times every 7 days
2	2 times every 7 days
3	once every 7 days
4	once every 14 days
5	once every 30 days

O. Reg. 239/02, s. 3, Table; O. Reg. 23/10, s. 3 (2)

Note: These Regulations do not apply to Class 6 Highways. The Municipality will patrol Class 6 Highways as deemed required.

1.4 WEATHER MONITORING

1.4.1 From October 1st to April 30th, the standard is to monitor the weather, both current and forecast to occur in the next twenty-four (24) hours, once every shift or three times per calendar day, whichever is more frequent, at intervals determined by the Municipality.

1.4.2 From May 1st to October 1st, the standard is to monitor the weather, both current and forecast to occur in the next twenty-four (24) hours, once per calendar day.

1.5 SNOW ACCUMULATION

The standard for addressing snow accumulation on a roadway is:

1.5.1 After becoming aware of the fact that the snow accumulation on a roadway is equal or greater than the depth set out in Table 2 to this Section, to deploy resources as soon as practicable to address the snow accumulation; and,

1.5.2 After the snow accumulation has ended, to address the snow accumulation, so as to reduce the snow to a depth less than or equal to the depth set out in the Table within the time set out in Table 2.

- a) To provide a minimum lane width of the lesser of three (3) meters for each lane or the actual lane width; or,
- b) On a Class 4 or Class 5 highway with two (2) lanes, to provide a total width of at least five (5) meters.

1.5.3 If the depth of snow accumulation on a roadway is more than or equal to the depth set of in Table 2 to this Section, the roadway is deemed to be in a state of repair with respect to snow accumulation.

1.5.4 For the purpose of this Section, the depth of snow accumulation on a roadway may be determined in accordance with the Subsection (d) by a municipal employee, agent or contractor, whose duties or responsibilities include one (1) or more of the following:

- a) Patrolling highways;
- b) Performing highway maintenance activities;
- c) Supervising staff who perform activities described in paragraph a) or b);
- d) The depth of snow accumulation on a roadway and lane width may be determined by:
 - i. Performing an actual measurement;
 - ii. Monitoring the weather; or,
 - iii. Performing a visual estimate;

- e) For the purpose of this Section, addressing snow accumulation on a roadway includes, but is limited to:
 - i. Plowing the roadway;
 - ii. Application of sand / salt mixture to the roadway;
 - iii. Applying abrasive materials to the roadway;
 - iv. Applying other chemical or organic agents to the roadway; or,
 - v. Any combination of the methods described in clauses (i), (ii), (iii) and (iv);
- f) This Section does not apply to that portion of the roadway designated for parking.

1.5.5 The standard for addressing snow accumulation on a sidewalk after the snow accumulation has ended is:

- a) To reduce the snow to a depth less than or equal to eight (8) centimeters within forty-eight (48) hours; and,
- b) To provide a minimum sidewalk width of one (1) meter.

TABLE 2: SNOW ACCUMULATION

Class of Highway	Depth	Time
1	2.5 cm	4 hours
2	5 cm	6 hours
3	8 cm	12 hours
4	8 cm	16 hours
5	10 cm	24 hours

O. Reg. 239/02, s. 3, Table; O. Reg. 23/10, s. 3 (2)

Note: These Regulations do not apply to Class 6 highways. The Municipality will deploy resources as soon as practicable to address the snow accumulation on Class 6 Highways.

1.6 ICE FORMATION ON ROADWAYS AND ICY ROADWAYS

1.6.1 The standard for the prevention of ice formation on roadways is doing the following in the twenty-four (24) hour period preceding an alleged formation of ice on a roadway:

- a) Monitor the weather in accordance with section 1.4;
- b) Patrol in accordance with section 1.3;
- c) If the Municipality determines, as a result of its activities under a) or b), that there is a substantial probability of ice forming on a roadway, treat the roadway, if

practicable, to prevent ice formation within the time set out in Table 3 to this Section, starting from the time that the Municipality determined is the appropriate time to deploy resources for that purpose.

1.6.2 Subject to Section 1.6, the standard set out in subsection 1.6.1 and, despite such compliance, ice forms on a roadway, the roadway is deemed to be in a state of repair until the applicable time set out in Table 3 to this Section expires after the Municipality becomes aware of the fact that the roadway is icy.

1.6.3 Subject to Section 1.6.1. the standard for treating icy roadways is to treat the icy roadway within the time set out in Table 3 to this Section, and an icy roadway is deemed to be in a state of repair until the applicable time is set out in Table 3 to this Section expires after the Municipality becomes aware of the fact that a roadway is icy.

1.6.4 For the purpose of this Section, treating a roadway means applying material to the roadway, including but not limited to, salt, sand or any combination of salt and sand.

TABLE 3: ICE FORMATION ON ROADWAYS AND ICY ROADWAYS

Class of Highway	Time
1	6 hours
2	8 hours
3	16 hours
4	24 hours
5	24 hours

O. Reg. 366/18, s. 8

Note: This Regulation does not apply to Class 6 Highways. The Municipality will deploy resources as soon as practicable to address ice formation on roadways and icy roadways on Class 6 Highways.

2.0 WINTER MAINTENANCE PROCEDURES

2.1 WEATHER MONITORING

In accordance with Section 1.4, both current and forecast weather will be monitored from October 1st to April 30th, three (3) times per calendar day via the Weather Network website by the Operations Manager or their designate. A screen shot of the website is captured, printed, signed and the date and time that the weather was monitored recorded on the printed sheet. The weather report is sent by electronic transmission to

the Patrol Lead three (3) times per calendar day as soon as practicable after reviewing the current and forecast weather on the Weather Network website.

2.2.1 The Municipality may declare a significant weather event in accordance with the MMS at any time in its sole discretion it elects to do so. This includes roadways and sidewalks.

2.2.2 The Municipality declaring the beginning of a significant weather event or declaring the end of a significant weather event under the MMS shall do so in one (1) or more of the following ways:

- a) By posting a notice on the Municipality's website;
- b) By making an announcement on a social media platform, such as the Municipality's Facebook page;
- c) By any other notification method required in a By-Law of the Municipality or to be determined by Council.

2.2.3 If the Municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on roadways until the declaration of the end of the significant weather event is:

- a) Declare the end of the significant weather event when the Municipality determines it is appropriate to do so; and,
- b) Address snow accumulation on roadways and sidewalks.

2.2.4 Following the end of the weather hazard in respect of which a significant weather event was declared by the Municipality, the Municipality shall:

- a) Declare the end of the significant weather event when the Municipality determines it is appropriate to do so; and,
- b) Address snow accumulation on roadways and sidewalks.

2.3 PATROLLING

2.3.1 During the winter season (Section 1.20), all roads will be patrolled in accordance with Section 1.3. If it is determined by the Municipality that the weather monitoring referred to in Section 1.4 of this Policy indicates that there is a substantial probability of snow accumulation on roadways, ice formation on roadways or icy roadways, the standard is to patrol the route of representative roads included in Appendix A.

2.3.2 Shaded areas, steep hills, sharp curves and stop conditions may become icy during certain weather conditions. The route of representative roads may include some or all the areas mentioned above.

2.3.3 When deteriorating weather and road conditions are observed by the patrol person, the patrol person shall notify the Operations Manager and / or the Patrol Lead. The Operations Manager and or the Patrol Lead, with input from the patrol person, shall determine the winter event response required. The Operations Manager or Patrol Lead contacted will call out staff for a winter event response.

2.3.4 When municipal equipment is deployed for a winter event response all operators shall be treated as patrol persons and all the winter maintenance records that are created by these patrol persons will be treated as patrol records for the purpose of this Policy.

2.4 SNOW ACCUMULATION

2.4.1 The Municipality has one (1) patrol yard and a sand storage dome that has a total capacity of approximately 2800 cubic yards of winter sand.

2.4.2 The road network for the Municipality has been divided into two (2) routes. The road network is comprised of class 5 and 6 roadways, each route may contain one (1) or more classes of road.

2.4.3 Snow accumulation will be addressed by providing services that meet the requirements of Section 1.5 for all roads within each route. During times when there is a severe winter condition e.g. heavy snowfall, strong winds, or when equipment breakdown occurs, lower priority road classes may be delayed due to maintaining the higher class of road at the required service levels for both snow accumulation and ice control. Routes may be altered to service roads that are more affected by the weather.

2.4.4 The snow accumulation provision and response time applies to the Municipality of St.-Charles Municipal office and parking lots for vehicles having municipal business.

2.4.5 In the event of a call from Emergency Services (i.e. police, fire, ambulance) to address a snow accumulation the Municipality will have resources available 24/7 to respond. The response to address snow accumulation will occur as soon as practicable after receiving the call from Emergency Services.

2.5 ICE FORMATION ON ROADWAYS AND ICY ROADWAYS

2.5.1 A winter event response will be initiated by the patrol person, patrol lead or Operations Manager or designate. Ice formation on roadways and icy roadways will be treated by providing service that meets the requirements of Section 1.6 for all roads within each route as shown in Appendix B.

2.5.2 In the event of a call from Emergency Services (i.e. police, fire, ambulance) to treat icy roadways the Municipality will have the resources available 24/7 to respond.

The response to treat icy roadways will occur as soon as practicable after receiving the call from Emergency Services.

2.6 WINGING BACK SNOW

During the winter season it may be necessary to wing back snowbanks on rural road sections in order to move snow from the edge of the roadway to the roadside ditch, reduce the height of the banks to control drifting snow or to improve driver visibility at intersections. Winging back snowbanks will occur during normal day shift hours when feasible.

2.7 SNOWBANK REMOVAL

During the winter season snowbanks within the village area of the Municipality of St.-Charles and other built-up areas may require removal. Snowbanks within the sight triangles at intersections to improve driver visibility at intersections, the height of which cannot be reduced by winging back, will be removed. Snowbank removal may occur during normal day shift hours when feasible.

2.8 SNOW FENCE

The Municipality does not install and shall not provide snow fencing.

2.9 VEHICLE PARKING IN WINTER

The Municipality requests the public's co-operation not to park vehicles along a roadway or in snow-plow turnarounds, as it may interfere with a winter event response.

2.10 RECORD KEEPING

All winter maintenance on roadways shall be recorded electronically and / or paper based. The Operations Manager and Lead Hand will complete their record of the day's events at the end of each shift. The patrol person and equipment operators will record their observations of weather and road conditions at the time of patrol of the representative roads or winter event response respectively. All records shall be kept as per the Municipality's Record Retention By-Law. Paper based records of routes cleared, quantities of sand / salt utilized, operators name and time of shift start and end shall be submitted to the Public Works Supervisor or Designate at the end of each shift.

3.0 STAFF TRAINING - TARGETED LEVEL

The Municipality requires mandatory annual winter operations training for all operations department staff including contract staff, if any. Training will consist of but not be limited to:

- Review of MMS Sections 3, 4 and 5.
- Shift schedules.
- Call out procedures.
- Review of plow routes and any route changes for the upcoming winter season.
- De-icing materials - loading instructions, application rates, returning unused material.
- Plowing techniques, speed of plowing, rounding corners, lifting plows over level crossing, winging back and high winging.
- Equipment pre-trip inspection.
- Equipment calibration confirmation.
- Record keeping.
- Health and Safety.
- Emergency procedures and contact numbers.
- Level of Service - policies, practices, and procedures.
- Identification of road salt vulnerable areas and the procedures to follow in those areas.
- Yard and equipment maintenance.

Staff will be required to sign off that training has been received.

4.0 POLICY REVIEW

The Municipality will review this Policy annually.

Dated at St.-Charles, Ontario, this XXth day of November, 2024.

X

Paul Branconnier
Mayor

X

Tammy Godden
Clerk

APPENDIX A - ROUTE OF REPRESENTATIVE ROADS

Weather Event	Roads Patrolled
Snowfall	Turcot Road › Monte Brazeau Road › Beuparlant Road › Casimir Road › Musky Bay Road › Victoria Road › Lake Road › Highway 535
Blowing Wind	Turcot Road › Monte Brazeau Road › Beuparlant Road › Casimir Road › Musky Bay Road › Highway 535
Ice Event	Turcot Road › Monte Brazeau Road › Beuparlant Road › Casimir Road › Musky Bay Road › Victoria Road › Lake Road › Highway 535

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APPENDIX B - ROUTE OF REPRESENTATIVE SIDEWALKS

Road Name	From	To
Highway 535	50 Highway 535	King St East
King St East	Highway 535	Casimir Road

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APPENDIX C - WINTER ROAD CLASSIFICATION

Classification for the purpose of the Winter Maintenance Policy applies to Class 5, and 6, year-round maintained roads under the jurisdiction of the Municipality. Classification has been established through the Annual Average Daily Traffic (AADT) count completed in the 2009 K. Smart Associates Limited Road Management Plan, and by the Minimum Maintenance Standards for Municipal Highways Ontario Regulation 239/02, which sets the minimum standard for levels of service and patrolling requirements on each classification of road within a municipality as per the tables below:

CLASSIFICATION OF HIGHWAYS

Average Daily Traffic (number of motor vehicles)	91 - 100 km/h speed limit	81 - 90 km/h speed limit	71 - 80 km/h speed limit	61 - 70 km/h speed limit	51 - 60 km/h speed limit	41 - 50 km/h speed limit	1 - 40 km/h speed limit
53,000 or more	1	1	1	1	1	1	1
23,000 - 52,999	1	1	1	2	2	2	2
15,000 - 22,999	1	1	2	2	2	3	3
12,000 - 14,999	1	1	2	2	2	3	3
10,000 - 11,999	1	1	2	2	3	3	3
8,000 - 9,999	1	1	2	3	3	3	3
6,000 - 7,999	1	2	2	3	3	4	4
5,000 - 5,999	1	2	2	3	3	4	4
4,000 - 4,999	1	2	3	3	3	4	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	5	5
1,000 - 1,999	1	3	3	3	4	5	5
500 - 999	1	3	4	4	4	5	5
200 - 499	1	3	4	4	5	5	6
50 - 199	1	3	4	5	5	6	6
0 - 49	1	3	6	6	6	6	6

O. Reg. 366/18

MUNICIPAL ROAD CLASSIFICATIONS

Road Name	Classification
Beauparlant Road	5
Beauparlant Road (46.362205, -80.566604)	6
Bedard Road	6
Carpenter Road	6
Casimir Road	5
Chamberlin Road	6
Champagne Road	6
Chevrefils Lane	6
Clearview Lane	6
Cloutier Road	6
Coursol Road	6
Crawford Road	6
Décosse Road	6
Dumart Street (referred to as Wilson in By-Law 98-011)	6
Gervais Road	6
Hector Crescent	6
Hickman Road	6
Island Road East	6
Island Road West	6
John Street	6
King Street East	5
Labre Road	6
Lake Road	5
Lapensée Lane	6
Lapalme Road	6
Laporte Road	6
Marsim Court	6
Meyer Road	6
Monté Brazeau	6
Musky Island Road	6
Musky Bay Road	5
Napran Road	6
Nepawassi Lake Road	6
Northern Central	5
Northland Road	6
Northshore Road	6
Northshore Road (North)	6

Notre Dame Street	5
Osprey Court	6
Paquette Road	6
Pothier Road	5
Rainville Road	6
Richer Road	6
Shank Road	6
Snodden Road	6
Ste. Anne Street	5
St-George Road (#40)	6
St-Joseph Street	5
Sunrise Lane	6
Therrien Road	6
Turcot Road	6
Victoria Road	5

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