

Augusta Public Works Standard Operating Policy

SECTION	Operations	NUMBER	0401
SUBJECT	Winter Maintenance		
DEPARTMENT	Public Works		
AUTHORITY	Public Works Manager		

Policy

The responsibility for providing snow clearing, ice control and snow removal from the Township's infrastructure of 206 km of roadways and six parking lots for Township facilities rests entirely with the Public Works Department.

The Public Works Department is also responsible for:

- Designing a Salt Management Plan
- Establishing proper treatment rates for roadways
- Designing plow routes
- Ensuring availability of resources (owned or hired equipment, materials)
- Ensuring proper up to date weather forecast services and condition monitoring systems
- Patrolling roadway conditions
- Decision making to commence winter maintenance operations and activities as necessary
- Providing information in a timely manner when asked
- Reviewing all relevant information to find best practices

The Public Works Department will strive, as practical, to provide safe and passable winter road conditions for vehicular traffic within the Township of Augusta. The level of service requirements defined in this policy will be followed, utilizing the resources provided by the Township of Augusta and contractors.

The standards set out in this document are based on the current version of Ontario Regulation 239/02, *Minimum Maintenance Standards for Municipal Highways* and are supported by procedures outlined in this Winter Maintenance Policy.

Directive

Purpose:

The purpose of this policy is to reduce the hazards of snow covered and slippery road conditions to motorists and help support public access to all community facilities.

Definitions:

Ice - means all kinds of ice, however formed.

Date Created: 12/16/2024	Last Revision: 12/16/2024	Page 1 of 10
POL #: 0311		

Minimum Maintenance Standards (MMS) - Refers to Ontario Regulation 239/02 *Minimum Maintenance Standards for Municipal Highways*, as amended. (May 3, 2018)

Representative Roadways - means roadways within the Township of Augusta that have been identified as representative of road weather conditions.

Road Classifications - As defined by Ontario Regulation 239/02 (*Minimum Maintenance Standards*) and may be amended from time to time and further identified in the chart below. The Township's road network is comprised of local roads which carry local traffic to UCLG County roads. These roads fall under class 4, 5, and 6 roads.

Classification of Highways Table

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

Road Condition - means the condition of the roadway surface before, during and after a winter storm event.

Significant Weather Event - means an approaching or occurring weather event with the potential to pose a significant danger to users of the highways within the Township.

Substantial Probability - means a significant likelihood, more than 51 per cent.

Township - means the Township of Augusta.

Winter Event - means the weather affecting roadways such as snowfall, blowing snow, sleet, freezing rain, frost, or ice, to which a winter event response is required.

Winter Patrol - means field observation of weather and road conditions.

Winter Season - means the season (October 15 - April 15) when the Township of Augusta normally performs winter roadway maintenance.

Procedure:

Road Patrolling

- From October 15 to April 15, the standard is to monitor the weather, both current and forecasted to occur in the next 24 hours, once every shift or three times per calendar day.
- The Township selects representative roads within its network (Appendix B) and patrols these roads when winter weather is forecasted for such conditions as snow accumulation, blowing snow and ice formation.
- Patrolling a road consists of observing, by driving/monitoring as identified above, and shall be performed by persons responsible for patrolling roadways, including Roads Patrolman, Lead Hands, or individuals designated by the Public Works Manager.

Declaration of a Significant Weather Event

- The Township may declare a Significant Weather Event when an approaching or occurring winter event has the potential to pose a significant danger to users of Township roads.
- The declaration for a Significant Weather Event and end of a Significant Weather Event shall be the responsibility of the Public Works Manager or designate.
- These declarations shall be communicated by:
 - o Posting a notice on the Township website and social media
 - o Issuing a press release or similar communication to internet, newspaper, or radio media
 - o Notification to OPP, Fire, and Ambulance
- In the event that a Significant Weather Event is declared by the Township:
 - o Weather should be monitored as described above.
 - o Resources will be deployed to address snow accumulation and/or ice formation as deemed practical.
 - o The declaration will be rescinded when appropriate to do so.
 - o Snow accumulation and/or ice formation will be addressed as described below.



Augusta Public Works Standard Operating Policy



Snow Removal

- Snow removal operations are typically conducted after plowing operations are completed.
- Snow removal areas consider public safety, snow storage capacity, on street parking requirements, as well as vehicle volumes.
- Snow removal resources will be deployed once the snowplowing requirements have been met, and as availability of resources permits.
- When requested by emergency services due to access concerns, resources will be deployed as soon as practicable.

Roadways Plowing Operations

- Plowing operations will begin as early as 4:00 a.m. and continue if needed until 6:00 p.m. No plowing operations will be conducted between 6:00 p.m. and 4:00 a.m. except for public safety or in extreme conditions.
- Sand/salt operations will begin as soon as practical after becoming aware that road conditions have become slippery and will continue until conditions are relieved.
- Salt and sand mix is applied on the return pass only.
- Plowing operations will not exceed 13 hours as per the Highway Traffic Act, Reg.4/93.
- Plowing operations are broken down into 5 Plow Routes (Appendix C)
- The combination plow/sander unit completes the assigned route in an average of 6 hours.
- All plows are equipped with Automatic Vehicle Location (AVL) equipment providing the following information at any time:
 - o Vehicle Identification
 - o Location
 - o Time
 - o Plow up/down
 - o Wing up/down
 - o Application on/off
 - o Application rate

Date Created: 12/16/2024	Last Revision: 12/16/2024	Page 4 of 10
POL #: 0311		

Snow Accumulation

- Paved Roads:
 - o The defined level of service is to have the center of a paved surface bare within 16 hours after the completion of the winter snow event.
 - o Winter maintenance, consisting of plowing and salt/sanding will begin within 8 hours after the accumulation of 8 to 10 cm of snow.
 - o Sand/salt will be applied at a rate of 300 kg per 2-lane kilometer as required on rural roads. This rate should increase based on weather conditions and road temperatures. Rates can be increased to 500 kg per 2-lane kilometer.
- Unpaved Roads:
 - o The defined level of service is to have snow packed conditions achieved within 16 hours after the completion of the winter snow event.
 - o Winter maintenance, consisting of plowing will begin within 8 hours after the accumulation of 8 to 10 cm of snow.
 - o When the surface has not completely frozen, snow accumulations less than 10 cm will not be plowed to protect the road surface.
 - o Sand/salt will be applied at a rate of 300 kg per 2-lane kilometer. This rate should increase based on weather conditions and road temperatures. Rates can be increased to 500 kg per 2-lane kilometer.
 - o Snow removal operations are typically conducted after plowing operations are completed.

Ice Formation

- Paved Roads:
 - o The defined level of service is to have the center of a paved surface bare within 24 hours after the completion of a winter ice event.
 - o Sand/salt application will begin within 8 hours as practicable after becoming aware that the roadway has become icy and will continue as practicable until conditions are safe.
- Unpaved Roads:
 - o Sand/salt application will begin within 8 hours as practicable after becoming aware that the roadway has become icy and will continue as practicable until conditions are safe.
 - o Ice blading (when required) will be used after the weather event has concluded and when staff members become available.

Reporting and Record Keeping

- Winter Patrol reports will be submitted for filing and will provide the following information:
 - o Date
 - o Patroller's name
 - o Truck number
 - o Weather report(s)
 - o Sand/salt used will be calculated when practicable
- Winter Maintenance Plow Reports Pre-trip inspections will be submitted by the operators for filing, and will provide the following information:
 - o Date
 - o Operator's name
 - o Truck number
 - o Start mileage
 - o Sand/salt used will be calculated when practicable
- A review of reports and summary reports will be undertaken at the end of each winter season to provide a basis for continuous improvement of the winter operations practices and as required by the Township's Salt Management Plan.

Mailboxes

Mailbox provision, installation and maintenance are the sole responsibility of the owner. Failure to provide access to and maintenance of mailboxes could result in the suspension of service by Canada Post.

Winter Mailbox Policy

- The Township does not provide snow removal for rural mailboxes and cannot ensure access to mailboxes for mail delivery.
- In all cases, mailboxes should be properly located and constructed to avoid being damaged during snow removal operations. Decorative mailboxes which are placed in the Township's right of way are done so at the owners' own risk.
- If a rural mailbox and/or post are damaged by snow being discharged from snowplows during snow removal operations, the Township is not negligent and is not responsible for repairs.
- If the mailbox and/or post is damaged by direct contact with the Township's snow removal equipment, the Township will repair or replace the damaged items with a standard mailbox and/or post only.
- Determination of the responsibility for damage to a mailbox will be by the Public Works Manager or designate. It shall also be at the Township's sole discretion as to whether the damage can be repaired or replacement with new materials is warranted.

Date Created: 12/16/2024	Last Revision: 12/16/2024	Page 6 of 10
POL #: 0311		



Augusta Public Works Standard Operating Policy



- If determined to be the responsibility of the Township, the mailbox shall be repaired or replaced with a new metal mailbox supported by a wooden post which meets the standard as established by Canada Post. The Township reserves the right to have a mailbox relocated if it is considered to obstruct traffic or snow removal operations.

Restoration

During road winter operations, a certain amount of damage to Township and private property may occur. If sod damage is sustained, it will be restored by the Public Works department using topsoil and seed at the earliest availability of material and resources (typically May). The owner of the property is responsible for maintaining the repaired area.

Consequences of Non-Compliance:

Any workers failing to abide by written standards of this program will be subject to discipline including and up to termination of employment.

Review Cycle:

The employer will review the policy and program annually or when changes in legislation occur and adjust where necessary to ensure it remains effective.

Appendix:

Appendix A – Winter Patrol Report

Appendix B – Representative Roads Designated for Patrol

Appendix C – Winter Plow Routes

Responsibilities

It is the responsibility of all Augusta Public Works staff to adhere to this policy.

Public Works Manager, Augusta Township

Date Created: 12/16/2024	Last Revision: 12/16/2024	Page 7 of 10
POL #: 0311		



Augusta Public Works Standard Operating Policy



Appendix A – Winter Patrol Report

Weather	
Clear	Time
Partly Cloudy	Time
Overcast	Time
Rain	Time
Snow	Time
Freezing Rain	Time
Fog	Time
Visibility: Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/>	Time
Wind: Light <input type="checkbox"/> Moderate <input type="checkbox"/> Strong <input type="checkbox"/>	Direction

Date:
Patrolled By:
Hours of Work: Start Shift: _____ Finish Shift: _____
Approved by:

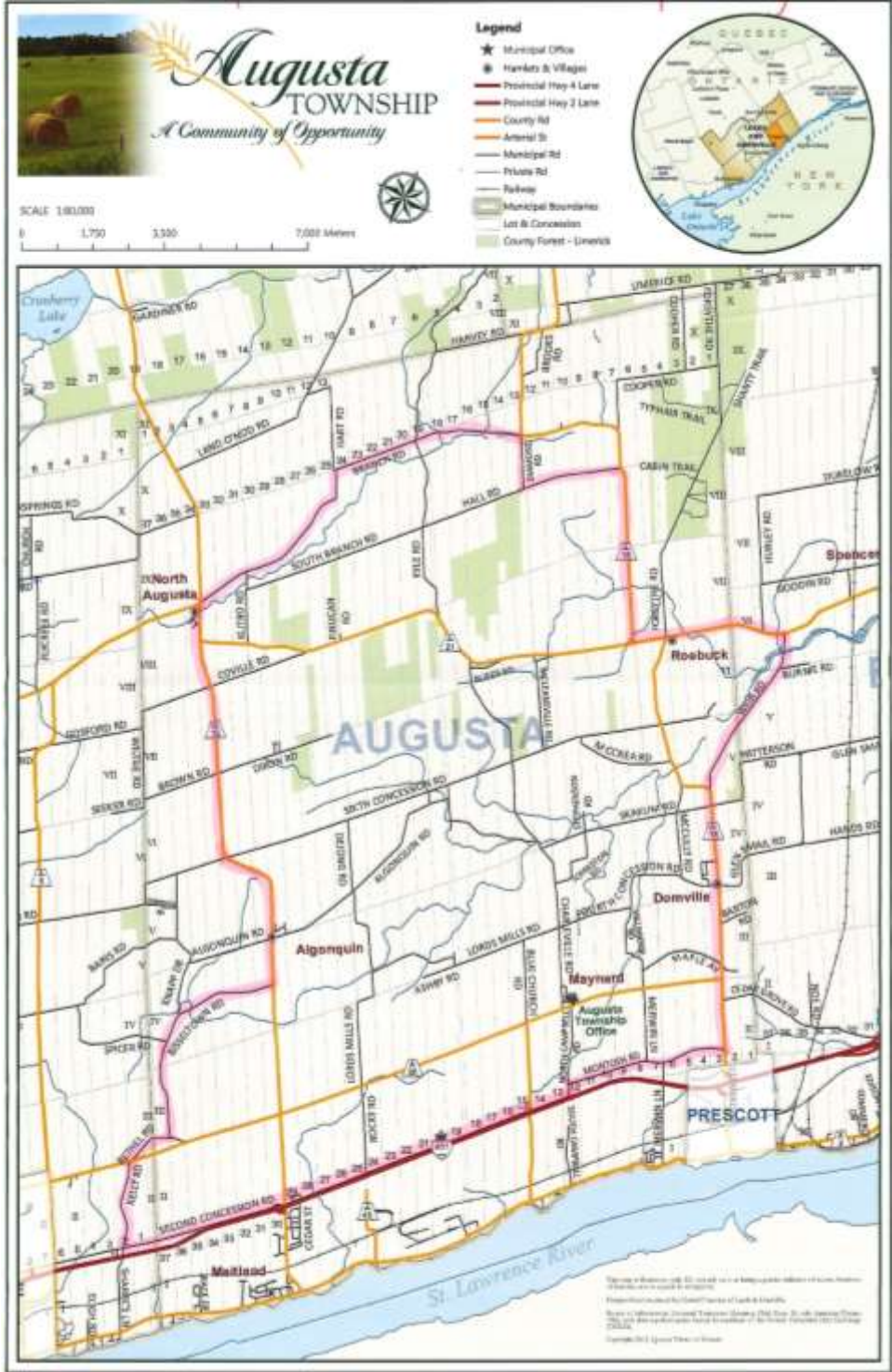
Air Temperature:
Pavement Temperature:
Snow Accumulation:

Condition Codes:	
<input checked="" type="checkbox"/> Acceptable <input checked="" type="checkbox"/> Needs Service	Time to be recorded using a 24-hour clock

Comments:					Ambient Condition					Winter Event Condition						
Highways Patrolled Record					Bare & Dry	Bare & Wet	Track Bare	Centre Bare	Snow Covered	Snow Packed	Drifting Snow	Ice Covered	Spot Ice	Black Ice	Frost	Slush
					Name	Time	From	To	Time							

Augusta Public Works Standard Operating Policy

Appendix B – Representative Roads Designated for Patrol



Appendix C – Winter Plow Routes

2024

