Know our Plan for Snow



OWED SOLIC where you want to live

Introduction

The purpose of this information package is to provide reference material to City Council members to facilitate communication between staff, Council, and the public regarding winter control. You'll find general information regarding the Minimum Maintenance Standards (MMS), plowing priorities, the nature and use of significant weather events, as well as secondary issues like driveways, overnight parking, and garbage & recycling.

Table of Contents

INTRODUCTION	1
WINTER CONTROL ROAD CLASSIFICATIONS	1
SIDEWALKS	3
SIGNIFICANT WEATHER EVENTS	4
MONITORING WEATHER	4
STAFFING AND EQUIPMENT	5
OWEN SOUND SPECIFIC PRACTICES	6
SNOWFALL VOLUME	7
DRIVEWAYS	8
OVERNIGHT PARKING	g
GARBAGE & RECYCLING	10
MEDIA RELEASES	10
RELATED BYLAWS	11
OUESTIONS	11

Appendix A – Minimum Maintenance Standards Regulation 239/02

Appendix B – Winter Control Road Classification

Appendix C - Sidewalk Clearing Routes

Appendix D – Media Release: "Get to Know Our Plan for Snow"

Appendix E – Media Advisory: "Winter By-laws FAQ"

Winter Control Road Classifications

The City of Owen Sound has 282 lane kilometres of streets and 105 kilometres of sidewalks. Appendix B contains figures illustrating the road classifications in the City. Road classifications are defined in the MMS based on traffic counts and the nature of the roadway.

The "Get to Know Our Plan for Snow" Media Release includes more details about how road classification and the MMS help set our priorities. Road Classification in the MMS determines various criteria and timelines, including patrol frequency, required "action" level for snow depths, required response time to observed snow, and required response times for ice formation. For instance, a Class 2 road must be addressed within six hours upon observing 5 cm of snow, while a Class 5 road must be addressed within 24 hours of observing 10 cm of snow.

The City has no Class 1 Roadways. However, the City has defined an additional class for operational convenience, Class 6; "dead end" roadways designated as Class 5 in the MMS.

It is important to note that meeting the MMS in a documented way provides a very strong legal defence against an associated claim for damages.



Sidewalks

The figures in Appendix C illustrate the sidewalk snow clearing routes throughout the City with an emphasis on high priority routes. Sidewalks are plowed concurrent with the roadways, with the City's sidewalk plows.

While the City has classified its sidewalks in a similar manner to the roadways, this has a less practical impact on prioritization. One reason is that the MMS does not designate different response times based on classification: the MMS requirement is that all sidewalks must be addressed within 48 hours of observing 8 cm or more of snow or ice formation. However, sidewalks on hills and those leading to schools (for example) have a high priority.



Significant Weather Events

O Reg 239/02 (The Minimum Maintenance Standards) provides for a Municipal Declaration of a Significant Weather Event. When a significant weather event is declared, the roadways are considered to be in a state of repair. This allows the City more time to meet the timelines stipulated in the MMS.

The declaration is typically issued by Roads staff in consultation with the Manager or Director. This is generally done near the beginning or in the middle of an existing event whose severity or forecast intensity makes it unlikely that the City will meet the requirements of the MMS. The City has used and will continue to use this provision as needed, with frequency depending on the severity of the winter.

In a very general way, the declaration of a significant weather event places the timelines and criteria spelled out in the MMS "on hold", until the event is declared over. In practice, the event is usually declared over when staff find that roads are being brought back into good driving conditions and often in advance of sidewalks, which require more time. Staff also must be confident that sidewalks can be addressed within 48 hours before declaring the event over.

Monitoring Weather

The MMS stipulates that municipalities must monitor the weather and show proof of doing so.

Staff will pull weather reports from the Government of Canada's weather information website https://weather.gc.ca/city/pages/on-7 metric e.html. Staff also check the Weather Network and receive emails from Grey County three times a day with weather forecasts.

Owen Sound is impacted by lake effect snow, which at times means the weather is not always picked up by any radar from the sites mentioned above. This means staff must also observe the actual weather.

Staffing And Equipment

The City has the following Winter Control fleet:

- Four Plow Trucks
- Four Sidewalk Plows
- Two Graders
- Three Frontend Loaders
- Various One-Ton and Half-Ton Trucks (Support sidewalk plows and shovelers, etc.)
- Patrol Vehicle

The City runs a "lean" fleet with no spare vehicles. This has the advantage of decreasing fleet capital costs, but also means that breakdown time can affect operations. It also means that the City's two mechanics occasionally must work long hours to keep the fleet running.

With the assistance of the Patrol Coordinator and the Public Works Administrative Assistant, the Roads Superintendent manages three shifts of Winter Control Operations that operate 24/7.

The three shifts consist of the following:

- "Day" Shift (8:00 16:00) Nine Equipment Operators and seven seasonals (sidewalk plow operators and shovelers)
- "Afternoon" Shift (16:00 24:00) Four Equipment Operators
- "Midnight" Shift (0:00 8:00) Four Equipment Operators and one Sidewalk Plow (seasonal)

The Superintendent, Patrol Coordinator, and Lead Hands have the authority to call in more staff on any given shift on overtime depending on conditions and declare a significant weather event.

Public Works also is responsible for shovelling fifty-one locations in the City, including corners at key street intersections, crosswalks, facilities, steps, and paths. The seasonal snow shovelers do most of this work. Staff also top up numerous sand and salt boxes, and inspect parking lots to ensure the contractors responsible for clearing them perform as expected.

Owen Sound Specific Practices

Owen Sound has a unique topography, which makes it a beautiful place to live and play but it can also cause havoc when it comes to winter control operations.

To deal with the topography, several practical considerations for Winter Control must be incorporated into the City's work plan. For example:

- Hills The hills on our street network represent a particular risk to the travelling public during winter control. The steepness of the hills requires frequent plowing and applications of salt and sand to keep the roads in safe driving condition. The City's escarpment topography means we have a disproportionate number of hills. Therefore, hills are considered our highest priority on Class 2 Roads (i.e., 10th Street, 9th Street, 8th Street, 6th Street, St Mary's Hill, Moore's Hill, Harrison Park Hill, 16th St West, 28th St East etc.). Similarly, sidewalks on hills are our highest priority sidewalks.
- Plow Routes are designed as a compromise between getting roads done in order of road class, and covering lane kilometres efficiently (i.e., no wasted travel going from one priority street to another with the blades in the air) "If you're driving, you're plowing." In a practical sense, this means, for instance, that a Class 4 road may be done "ahead" of schedule if it is adjacent to a Class 2 route and linking one road of similar classification to another. This practice allows for the overall route to work efficiently. Considerations such as hospital access, schools, and transit routes also affect route planning. The same general point can be made about sidewalk routes.
- Sidewalk plows have two modes of operation "blades" and "blowers". When snowfall intensity is light to moderate, operators can keep up to the volume using blades. When intensity and depth get past a certain point, blowers are needed clear the sidewalks of snow.

After a high-volume event, it can take significant time to clear the sidewalks because the sidewalk blower will only be able to travel at 2 to 3 km/h.

From time to time, you may see a sidewalk plow parked and not moving. When this happens, it may be because of a breakdown, but more likely, it's because they are waiting for sand and salt. It's much more efficient to bring the salt and sand to the sidewalk than to drive the sidewalk plow back to the Public Works yard.

We are

Snowfall Volume

The City of Owen Sound receives more snowfall annually (330 cm) than any other municipality in Ontario, and far more than others in Southwestern Ontario.

Please refer to the attached link and table.

Average Yearly Snowfall in Ontario - Current Results

Southwestern Ontario

Days	Place	Inches	Centimetres
22	Chatham-Kent	31.2	79.2
45	<u>Guelph</u>	61.1	155.1
60	<u>London</u>	76.5	194.3
60	Owen Sound	130.1	330.4
32	Point Pelee National Park	40.8	103.8
41	Sarnia	44.1	112.0
62	Waterloo	62.9	159.7
44	Windsor	50.9	129.3

Total amount of snow in a year on average

No locations in Eastern Ontario, Northwestern Ontario, or Central Ontario have yearly averages exceeding 280 cm. In Northwestern Ontario, only Sault Ste Marie, Timmins, Wawa, and Kapuskasing receive more than 280 cm, and none receive as much as Owen Sound.

"SNOW! SNOW! SNOW!"

Driveways

Under the Highway Traffic Act, residents are not allowed to deposit snow on the roadway. When residents are clearing snow from their driveways, they cannot shovel it onto the sidewalk, road, or across the road; they must pile it on their property.

Pushing snow onto roadways is dangerous because it covers the traction control applied to the surface, which may cause motorists to lose control when driving through the snow pile.

When clearing snow from their driveways, residents should pile the snow on the right side of the driveway (looking towards the road from the driveway). This will reduce the amount of snow pushed back into their driveway when the road is plowed. Also, property owners are responsible for keeping snowbanks low at the end of their driveways. Staff understand that windrows (the pile of snow left at the bottom of a driveway after a snowplow has cleared the road) can be frustrating for residents. Unfortunately, to effectively plow the road, windrows cannot be avoided.



Overnight Parking

The City's Traffic By-law prohibits on-street parking from December 1 to March 31 between 1 a.m. and 7 a.m., or parking on the road in a manner that interferes with plowing. Plow operators need clear roadways to complete their routes safely and efficiently.

Vehicle owners found in contravention of the by-law are subject to a \$30.00 parking fine, and potentially having their vehicle towed at their expense.

Residents and visitors can purchase overnight parking passes at City Hall or the Transit Terminal for \$20.00 per month or \$5.00 per night. These passes are valid in the overnight parking areas of Municipal Lot 5 (800 block of 3rd Avenue East) and Municipal Lot 9 (700 block of 1st Avenue East). The City retains three private contractors along with City crews to maintain the parking lots during the winter control season, and maintenance crews may start as early as 1 a.m. to clear parking lots.



Garbage & Recycling

Residents are asked to place all collectible materials behind or on top of snowbanks to eliminate the potential risk of a dangerous slip or fall.

By avoiding the placement of their waste and recycling containers on roadways, boulevards and sidewalks, it will ensure that they do not:

- Block oncoming traffic
- Prevent snowplows from properly clearing the roadway and sidewalk
- Create a hazard as they may get struck by vehicles or snowplows; and
- Prevent waste materials from being knocked over or buried during snowplowing operations

Media Releases

Staff prepare several media releases that are issued for specific situations leading up to and during the winter control season.

You'll find copies of the media releases in Appendix D.



Related By-laws

By-law enforcement will be issuing an informative media release about the various obligations our citizens must adhere to under the relevant by-laws.

Copies of the by-laws are included in Appendix E.

Questions

If you have any questions about winter control or wish to pass on the concerns of a citizen, please get in touch with us:

Dennis Kefalas

Director of Public Works & Engineering (519) 376-4440 ext. 1201 dkefalas@owensound.ca

Matt Prentice

Manager of Public Works (519) 376-4274 ext. 3224 mprentice@owensound.ca

Jeff Follis

Public Works Superintendent (519) 376-4274 ext. 3225 jfollis@owensound.ca

