



SNOW REMOVAL POLICY

City of Westmount

Public Works Department

Prepared by:

Todd Séguin Parks and Roads Superintendent

Réjean Binette Parks and Roads Superintendent

Approved by:

Robert Talarico Director of Public Works

Sandra Avakian, Assistant Director General, Infrastructure
P.Eng.

Date: April 20, 2018

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

Table of Contents

1. Preamble	3
2. Proviso.....	3
3. Public Road Conditions	3
4. List of Operations	4
5. Hierarchy of Public Roads	4
6. Rules of Operation	6
7. Snow Removal	7
A. Clearing with Road Widening	7
B. Snow Loading	7
8. Mixture Used	8
9. Specific Cases	8
Bicycle lanes.....	8
Mobility-impaired parking areas	9
School drop-offs	9
Snow removal from public laneways.....	9
Paths in parks.....	9
Public stairs	9
Fire hydrants	9
Bus shelters	9
Street closure	10
10. Snow Storage	10
11. On-street Parking Management	10
12. Residents' Role	10
13. Appendices.....	11
APPENDIX A	12
List of city equipment used for snow removal:.....	12



SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

APPENDIX B	13
-------------------------	----

Road priority zone map

APPENDIX C	15
-------------------------	----

Sidewalk priority zone map

1. Preamble

The City of Westmount has been providing high-quality snow removal service on public roads for several years. In an effort to continue providing users with excellent service and ensuring safe travel on sidewalks and roadways at the lowest possible cost, the City has developed a Snow Removal Service Policy.

This policy is for documenting the City of Westmount's winter maintenance practices and making operational decisions more systematic. As such, it will help optimize operations and improve service quality.

This policy is intended as a decision-support tool. In the interest of good management, it is possible that, in a particular situation, the practices may be different.

2. Proviso

This policy is based on the main local winter weather conditions. In abnormal or extreme weather conditions, the City reserves the right to change the planned level of service for snow removal.

The City must also comply with existing legislation and standards.

3. Public Road Conditions

Four public road conditions are used for defining the levels of service to be provided:

Public Road Conditions		Surface Characteristics
Condition #1	Clear road	Non-winter surface (dry or wet pavement) or less than 2 cm of slush, wind-

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

	(-2.5 cm)	swept snow; might be hardened or icy snow on the shoulders and parking space surfaces of the street and on sidewalks.
Condition #2	Freezing rain or presence of ice	Slippery surface; Freezing rain.
Condition #3	Passable road (2.5 to 5 cm)	Snow-covered surface and less than 5 cm of fresh snow; hard snow with non-icy surface; 2 cm or more of wet snow, thin ice.
Condition #4	Not very passable road (5 cm or more)	Heavily snow-covered surface (between 5 and 20 cm of fresh snow); hard snow with icy surface, icy surface. Freezing rain. Reduced drivability or traction of vehicles and risk of road traffic blockage.
Condition #5	Impassable road	More than 20 cm of snow. Very thick ice. Very little traction, major hindrance to the progress of road and sidewalk users.

4. List of Operations

Snow removal operations include:

- **Spreading** de-icers and abrasives
- **Clearing** snow
- **Removing** snow
- **Storing** snow

5. Hierarchy of Public Roads

In order to adequately meet the varying traffic needs, the road network is divided into three priority levels:

Hierarchy of Public Roads		Characteristics
Priority #1	Pavement and sidewalk	These are major arteries, very narrow streets, bus routes and reserved lanes, hospital entrances, large commercial streets, streets with high traffic volumes.
Priority #2	Pavement and sidewalk	These are mid-collector streets, primarily residential, with varying traffic volumes.
Priority #3	Pavement	These are local and secondary streets and lanes with low traffic volume or dead ends.

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

The following factors can be considered for priority #1:

- Curve and slope greater than 8%
- Presence of educational, hospital and health service institutions
- Traffic density and limited space
- STM routes.

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

6. Rules of Operation

	Type of Operation	Pavement or Sidewalk	Condition #1 Clear Road (- 2.5 cm)	Condition #2 Freezing Rain or Presence of Ice	Condition #3 Passable Road (2.5-5 cm)	Condition #4 Not Very Passable Road (5 cm or more)	Condition #5 Impassable Road (storm)
Priority #1 Streets	Spreading	Pavement	Discontinuous spreading on sharp curves and at intersection approaches for 30 m One single pass within 3 hrs	Preventive spreading De-icers, continuous	Discontinuous spreading on sharp curves and at intersection approaches for 50 m One pass at the start of precipitation, then every 3 hrs and after clearing	Discontinuous spreading on sharp curves and at intersection approaches for 50 m One pass at the start of precipitation, then every 3 hrs and after clearing	Discontinuous spreading on sharp curves and at intersection approaches for 50 m One pass at the start of precipitation, then every 3 hrs and after clearing
		Sidewalk	De-icers, no schedule	Preventive application De-icers and abrasives, no schedule	De-icers and abrasives, no schedule	De-icers and abrasives, no schedule	De-icers and abrasives, one complete pass within 4 hrs
	Clearing	Pavement	n/a	n/a	Continuous operation	Continuous operation (adding ploughs)	Continuous operation (adding ploughs)
		Sidewalk	n/a	n/a	Simultaneously with spreading	Continuous operation	Continuous operation
Priority #2 Streets	Spreading	Pavement	Discontinuous spreading on sharp curves and at intersection approaches for 30 m One single pass within 3 hrs	Preventive spreading De-icers, continuous	Discontinuous spreading on sharp curves and at intersection approaches for 50 m One pass at the start of precipitation and after clearing	Discontinuous spreading on sharp curves and at intersection approaches for 50 m One pass at the start of precipitation and after clearing	Discontinuous spreading on sharp curves and at intersection approaches for 50 m One pass at the start of precipitation and after clearing
		Sidewalk	De-icers, no schedule	Preventive spreading De-icers and abrasives, no schedule	De-icers and abrasives, no schedule	De-icers and abrasives, no schedule	De-icers and abrasives, one complete pass within 4 hrs
	Clearing	Pavement	n/a	n/a	Continuous operation	Continuous operation	Continuous operation
		Sidewalk	n/a	n/a	Simultaneously with spreading	Continuous operation	Continuous operation
Priority #3 Streets	Spreading	Pavement	When necessary, abrasives on sharp curves and slopes of 5% or more	Preventive spreading De-icers, schedules after main streets	When necessary, abrasives on sharp curves, slopes of 5% or more, and at intersection approaches	When necessary, abrasives on sharp curves, slopes of 5% or more, and at intersection approaches	When necessary, abrasives on sharp curves, slopes of 5% or more, and at intersection approaches
		Sidewalk	De-icers, no schedule	Preventive spreading De-icers and abrasives, no schedule	De-icers and abrasives, no schedule	De-icers and abrasives, no schedule	De-icers and abrasives, one complete pass within 4 hrs
	Clearing	Pavement	n/a	n/a	n/a	Continuous operation	Continuous operation
	Loading	Pavement	n/a	n/a	n/a	n/a	

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

7. Snow Removal

Snow removal can be done in three ways:

- **by clearing** with road widening;
- **by loading** snow into transport trucks;
- **by blowing** snow onto yards.

A. Clearing with Road Widening

Clearing is primarily done for streets without sidewalks or curbs and involves clearing the snow on the shoulders of roads as far along as possible.

Clearing is done as needed when streets become too narrow for traffic flow. There is no operation schedule for it.

B. Snow Loading

Snow loading is triggered for any of the following reasons:

- The build-up of snow or ice on the ground is reducing the width of the roads enough to hinder traffic flow;
- The build-up of snow or ice on the ground is preventing safe parking by limiting the space available;
- The build-up of snow or ice on the ground is making the ability to store snow by the curb insufficient in the event of an approaching storm;
- The build-up of snow or ice on the ground is preventing water run-off and causing it to build up on the roads;
- The curb-side snow windrow created after a storm reaches more than 15 cm.

Snow loading based on the accumulated quantity is done within the following schedules:

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

- 12 to 20 cm in 48 to 72 hours;
- 21 to 30 cm in 72 to 96 hours;
- Over 30 cm in 96 hours or more.

It is also done based on the priority level of the streets:

- For priority #1 streets, it is done within 36 hours. Hours of operation are between 3:00 a.m. and 3:00 p.m.
- For priority #2 and #3 streets, it can be done once priority #1 streets are completed, depending on production capacity of the trucks. Hours of operation are between 7:00 a.m. and 7:00 p.m.

8. Mixture Used

Depending on the temperature, the mixture used for roads is:

- -10°C and above: pure salt
- between -10°C and -15°C: pure salt and de-icer
- below -15°C: pure salt

Depending on the temperature, the mixture used for sidewalks is:

- presence of freezing rain: 25% sand, 25% salt and 50% gravel
- presence of snow: 25% sand, 25% salt and 50% gravel

9. Specific Cases

Bicycle lanes

Only the lanes on the four-season bicycle lane map are accessible. They have the same service priority level as the road on which they are located.

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

Mobility-impaired parking areas

During or immediately after the clearing operations, snow built up in permanently signed mobility-impaired parking areas and drop-offs is cleared to enable easy and safe access.

School drop-offs

These are permanently signed areas near primary and secondary schools with school transportation and/or para-transit. For safety reasons, snow built up in drop-off areas is cleared in order to facilitate parking and students' circulation.

Snow removal from public laneways

Public laneways with a street address exiting onto the lane must be cleared of snow. There is no schedule for snow removal operations for laneways.

Paths in parks

Paths are considered the same as sidewalks. However, they are priority 2 or 3 for snow removal.

Public stairs

Public stairs will be cleared for safety reasons. An abrasive and de-icer can be used as needed. There is no schedule for snow removal operations for stairs.

Fire hydrants

Hydrants must kept clear to enable access to them.

Bus shelters

Snow removal for bus shelters is done by STM.

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

Street closure

During snow removal operations, there may be a temporary street closure. It is temporary. This operation is necessary due to the narrowness of the roadway. For the safety of users and workers, we ask citizens not to drive there.

10.Snow Storage

During snow removal operations, snow is temporarily stored on the streets. The snow is picked up later and directed to authorized, accessible sites such as Butler Falls or the Lasalle dump.

11. On-street Parking Management

The signage announcing upcoming snow removal is posted on existing signs the day before the operation, at least twelve (12) hours in advance.

It is also prohibited to place snow on sidewalks or streets when it creates a hazard for vehicular and pedestrian traffic.

In addition, the City can place snow at the edge of private yards.

12. Residents' Role

Citizens have an important role in snow removal operations and can contribute to it in a number of ways, including:

- not obstructing the public road with their vehicles during snow removal from the streets;
- placing their recycling or waste bins at the edge of their yard, not on the pavement or sidewalk;

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

- not putting snow in the prohibited areas: streets, sidewalks, fire hydrants;
- parking their cars a reasonable distance from the sidewalk; the snowcat can then move more easily; and installing protection on shrubs, hedges, trees;
- installing visual markers to indicate features such as curbs, stairs, hedges;
- removing the snow from sloped roofs near sidewalks. After a snowfall or de-icing operation, clearing the snow windrow from driveways is citizens' responsibility;
- placing stakes marking out on the front of their property at least 61 cm from the inside edge of the sidewalk. Ensure they are safe. They must also be flexible and more than 91 cm long because, if they are too short and too rigid, someone slipping on the sidewalk could seriously injure themselves.

13. Appendices

List of Municipal Equipment

Road Priority Zone Map

Sidewalk Priority Zone Map

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

APPENDIX A

List of city equipment used for snow removal:

- 1) 3 snow blowers
- 2) 5 salt trucks
- 3) 2 sand trucks (convertible into salt trucks)
- 4) 7 snowcats
- 5) 3 sidewalk tractors
- 6) 7 loaders or ploughs

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

APPENDIX B

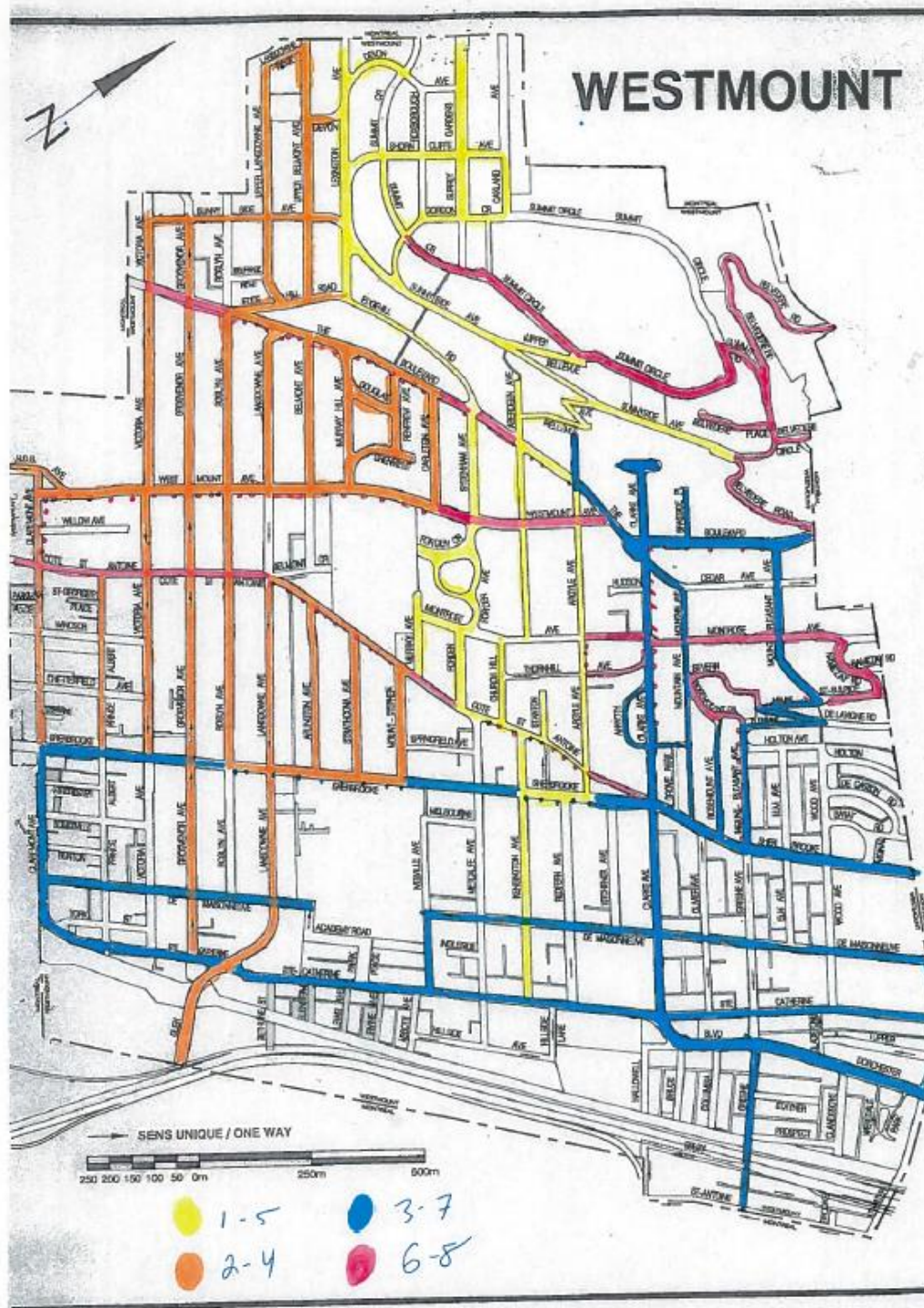
Road Priority Zone Map

SNOW REMOVAL SERVICE POLICY

April 20, 2018

Prepared by:
Public Works Department

Approved by:
Robert Talarico

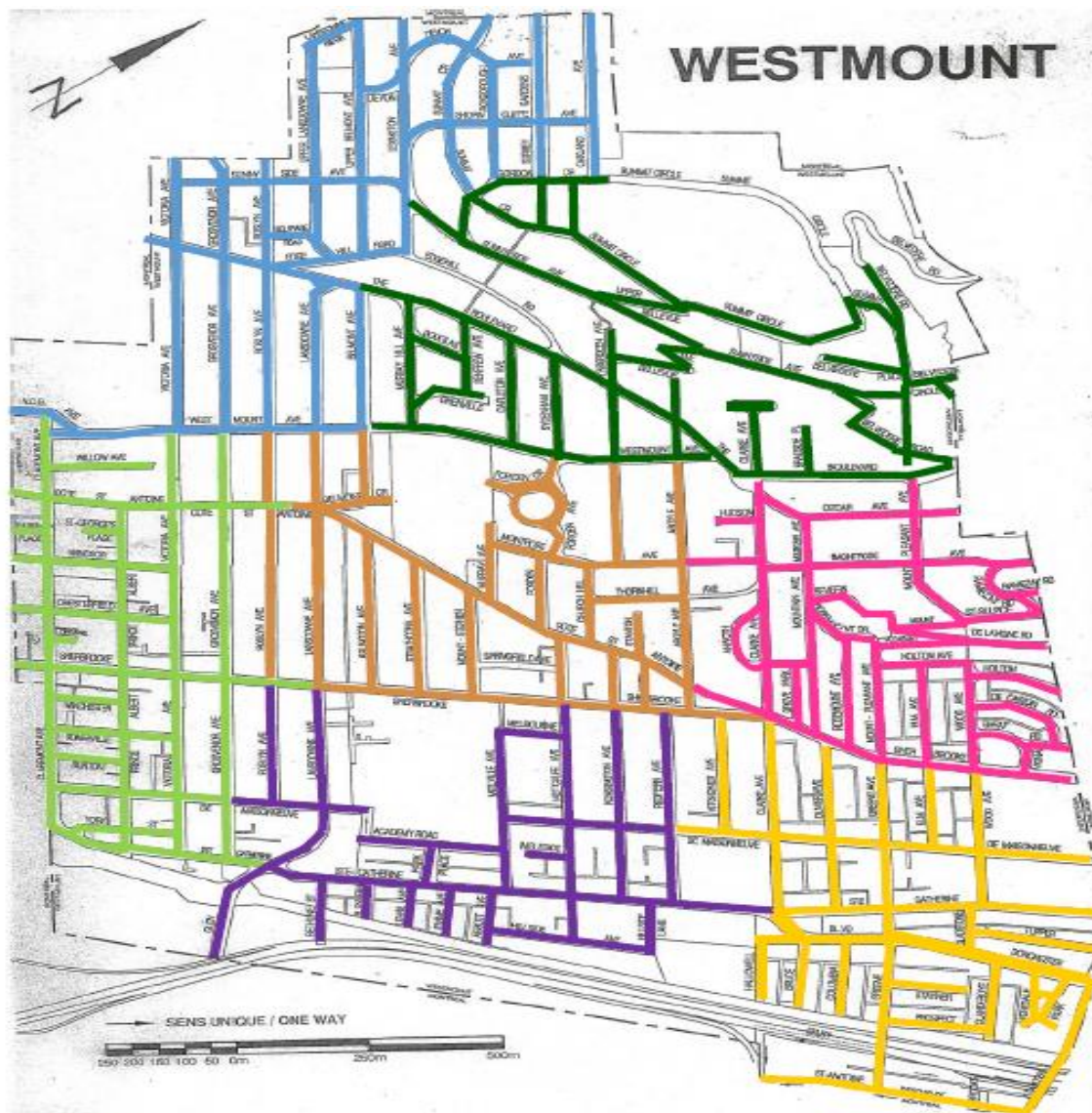


SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico

APPENDIX C

Sidewalk Priority Zone Map

SNOW REMOVAL SERVICE POLICY	April 20, 2018
Prepared by: Public Works Department	Approved by: Robert Talarico



BOMBARDIERS

- SECTION 1 —
- SECTION 2 —
- SECTION 3 —
- SECTION 4 —
- SECTION 5 —
- SECTION 6 —
- SECTION 7 —