



## PURPOSE

This Policy exists to establish the level of service the Municipality plans to deliver for the winter clearing of roads and sidewalks under its responsibility for winter maintenance.

## SCOPE

Roads covered by this policy will be posted each fall in preparation for that coming winter season. The Municipality conducts an annual winter service exchange with Nova Scotia Transportation & Infrastructure Renewal, and an agreement of which roads will be maintained by whom is documented.

Sidewalks are paved or concrete pedestrian routes within the Road Right of Way, within the Municipal boundaries. Paths between roads and trails are not covered by this policy.

## DEFINITIONS

Term	Definition
Priority 1 Roads	<ul style="list-style-type: none"> <li>• A main looped road network through a subdivision with traffic likely to exceed 1500 AADT</li> <li>• Roads leading to a school or public utility plant</li> <li>• The Elmsdale Business Park.</li> </ul> <p>The intention being to create main collectors with more frequent clearing which would open up pathways to reach other areas in a staggered approach.</p>
Priority 2 Roads	<ul style="list-style-type: none"> <li>• Roads through a subdivision with traffic likely to be below 1500 AADT</li> <li>• Cul-de-sacs and gravel roads.</li> </ul>
AADT	Annual Average Daily Traffic

## POLICY

### POLICY STATEMENT

This Policy will establish service expectations for the winter clearing of roads and sidewalks, for which the Municipality has service ownership, during the winter season. It will be the foundation used to develop contract documents in the procurement and measured accountability of those agreed upon to provide these services.



## Road PERFORMANCE STANDARD

### Salting

#### General Notes

1. Performance standards must be met whether a weather event is forecasted or not.
2. Contractors must be cognizant that icing conditions may develop through a number of means due to frost depth, wet roads, falling temperatures, flash freezing, black ice conditions and blowing snow.
3. Contractors must submit a detailed Salt Management Plan (SMP), and Anti Icing strategy with their bid.
4. The Municipality of East Hants is the sole judge of whether or not the performance standard has been met.
5. The substitution of sand in salt sections must only be done when salting is no longer effective and with the approval of the Municipality of East Hants contract manager.
6. When black ice or flash freeze conditions are present, the contractor is required to have enough equipment dispatched within 1 hour to service all P1 roads within the turnaround service standard timeline.

Street Type	Start Time	Turnaround	Finish Condition	Spread Rates	Comments
Priority 1	Pre-salt as per SMP or immediately if event is un-forecasted	3 hours	Bare pavement curb to curb within 3 hours (See note 3)	85kg to 110kg per lane km Full width.	All P1 streets are to receive service within the 3hr timeline
Priority 2	Within 6 hours after street has been cleared	N/A	2m c/l bare (See note 3)	85kg to 110kg per lane km Full width.	Turns centerline bare for 4 meters

#### Notes:

1. Freezing rain conditions will require immediate and continuous response on all road classifications until conditions improve and bare pavement achieved.
2. In areas with no curbs, road shoulders will be cleared.
3. Spot salting is required for any icy conditions. Repeated applications as required until conditions are made safe.
4. Salt only is to be applied in salt areas. Any substitution with sand must be approved by the Municipality of East Hants.
5. Pre-salting is to be completed prior to a forecasted snow event.



## Sanding General Notes

Road Type	Start Time	Turnaround	Finish Condition	Lane Width	Spread Rates	Comments
Priority 1 & 2	End of snowfall	N/A	All snow and ice removed through plowing and sanding. (See Note 3)	Full travel width	500-800kg per lane km	

Notes:

1. Winter conditions may vary requiring additional sand on Priority 1 and 2 roads especially on hills, turns and intersections.
2. The Municipality of East Hants will be the sole judge as to whether additional sanding is required.
3. Spot sanding is required for any icy conditions. Repeated applications as required until conditions are made safe.

## Plowing Priority One Roads:

Road Type	Turnaround	Anti-Icing	Start Time	Time to Clear (from end of snow)	Lane Width	Finished Condition	Salt Spread Rates
P1	3 hours maximum	Yes Pre-salting	Immediately as the snow starts	24 hours	Curb to curb or shoulder to shoulder	Bare pavement full width (See Note 4)	Minimum 85kg per lane km to 110kg per lane km

*\*Roads may require repeat plowing/sanding/salting to achieve finished condition. It is the Contractor's responsibility to ensure ongoing and repeated application of salt and or sand in order to achieve the prescribed level of service and finished condition.*

Notes:

1. Cut-through is defined as the clearing of the plow curl at the street intersection to allow traffic access and 6 meter wide plowed traveled way to allow access for residents.
2. Special care must be taken when plowing gravel roads when ground conditions are soft.
3. Some conditions (i.e. blowing/drifted snow) may require an additional cut-through to maintain access.
4. All ice/snow pack is to be removed once it reaches a depth of 5 cm. Certain conditions may prevail which will require that ice/snow pack be bladed, shaved or scarified to ensure the road remains safely passable, including the elimination of ice potholes. This work is included in the contract pricing.



## Plowing (Cont'd)

### Priority Two Roads:

Road Type	Start Time	Time for Cut-Through Completion	Time to Clear (from end of snow)	Finished Condition	Salting	Sanding (as designated)	Comments
Local Residential	No later than after 10cm accumulation	6 hours and a minimum of every 8 hours following during extended periods of snow.	24 hours	Snow covered with a minimum 2m centerline bare (See Note 4)	Minimum 85kg per lane km to 110kg per lane km	Minimum 500kg per lane km	All snow must be removed by mechanical means before salting and or sanding
Cul-de-Sacs	No later than after 10cm accumulation.  Loader(s) or similar type equipment will be required (for snow movement and placement) for all major events (15+cm) or multiple/subsequent average events (5-15cm).	6 hours and a minimum of every 8 hours following during extended periods of snow.	24 hours	Snow covered  Passable  (See Note 4)	Minimum 85kg per lane km to 110kg per lane km	Minimum 500kg per lane km	Use of a Loader(s), a mini-loader(s) or a tractor(s) will be required for major events or multiple/back to back average events in order to move snow as required and to ensure ongoing access in and out for all homes within the cul-de-sac as per required cut-through times and completion.
Gravel Roads	No later than after 10cm accumulation	6 hours	24 hours	Snow covered  Passable  (See Note 4)	N/A	Minimum 500kg per lane km	See Note 2

Notes:

1. Cut-through is defined as the clearing of the plow curl at the street intersection to allow traffic access and 6 meter wide plowed traveled way to allow access for residents.
2. Special care must be taken when plowing gravel roads when ground conditions are soft.
3. Some conditions (i.e. blowing/drifted snow) may require an additional cut-through to maintain access.
4. All ice/snow pack to be removed once it reaches a depth of 10cm. Certain conditions may prevail which will require that ice/snow pack be bladed, shaved or scarified to ensure the road remains safely passable, including the elimination of ice potholes. This work is included in the contract pricing.



## Snow Removal

Road Type	Condition	Duration to Complete
Highway 2 Intersections	Visibility problems or as requested by the Municipality of East Hants	72 hours from end of snowfall
Subdivision Intersections	Visibility problems or as requested by the Municipality of East Hants	5 days from end of snowfall
Cul-de-Sacs	Lack of snow storage causing width reduction of perimeter travel lane less than 4.25m or as requested by the Municipality of East Hants  Use of a loader or similar will be required for all plowing during major events (15+ cm)	5 days from end of snowfall

The Municipality will not be responsible for removing snow that accumulates on private driveways as a result of road clearing.



## SIDEWALK PERFORMANCE STANDARD

### Plowing and De-Icing

Type	Start Time	Time to Clear & De-ice (from end of snow)	Width	Finish Condition	De-Icing Maintenance	Comments
Priority 1	After snowfall accumulation has stopped	24 hours	Full Width	Cleared surface Full width	Monitored and completed as required	
Priority 2	After snowfall accumulation has stopped	72 hours	Full Width	Cleared surface Full width	Monitored and completed as required	Sections of sidewalk not connected with main pedestrian routes along Hwy 2 and Hwy 214

Work must be completed to reduce risk of snow collapsing along sidewalk routes when snow banks on each side of the travel path are higher than 1m vertical height. No snow can be deposited into the street to achieve this, unless it will be removed within the same calendar day.

## Snow Removal

Street Type	Condition	Duration to Complete
Designated Crosswalks	Removal after each 20cm of accumulation (piles at intersections and all snowbanks for 3 meters in each direction)	72 hours from end of snowfall

The Municipality will not be responsible for removing snow that accumulates on private driveways as a result of sidewalk clearing.



## ROLES AND RESPONSIBILITIES

Title/Role	Responsibilities
Policy Editor (Director of Infrastructure & Operations, Civil Engineering Technician)	<p>The Policy Editor is a person having managerial and policy-making responsibility related to the writing, compilation and revision of content and will:</p> <ul style="list-style-type: none"> <li>• Ensure policies in their care and control are always up-to-date, reviewed annually or sooner if necessary</li> <li>• Draft new or edit existing policy content</li> <li>• Be able to interpret and explain policy content</li> <li>• Ensure policy documents are branded and any supporting documents, i.e. applications forms are also branded and content consistent with the policy</li> <li>• Ensure policy content is relevant and accurate</li> <li>• Seek and secure approval recommendation of the policy from the Policy Owner</li> <li>• Seek and secure approval of the policy from the appropriate Approver; and,</li> <li>• Provide the final approved policy document to the Assistant Municipal Clerk</li> </ul>
Policy Owner (Director of Infrastructure & Operations)	<p>The Policy Owner will:</p> <ul style="list-style-type: none"> <li>• Provide oversight to ensure policies in their care and control are always up-to-date, reviewed annually or sooner if necessary by the assigned Policy Editor</li> <li>• Be able to interpret and explain policy content</li> <li>• Provide oversight to ensure policy documents are branded and any supporting documents, i.e. application forms are also branded and content consistent with the policy</li> <li>• Provide oversight to ensure policy content is relevant and accurate</li> <li>• Review the policy and make recommendation for approval to the appropriate Approver; and,</li> <li>• Ensure that the final approved policy document has been provided to the Assistant Municipal Clerk</li> </ul>
Approver (Council)	<p>The Approver will:</p> <ul style="list-style-type: none"> <li>• Review Policy recommendations for approval consideration (approve, reject or edit); and,</li> <li>• Notify the Policy Editor, Policy Owner and Assistant Municipal Clerk of decision</li> </ul>
Assistant Municipal Clerk	<p>The Assistant Municipal Clerk will:</p> <ul style="list-style-type: none"> <li>• Facilitate an annual Policy Review; and,</li> <li>• Ensure final approved policies are maintained, stored and posted where appropriate</li> </ul>

## RELATED DOCUMENTATION

Related forms, processes, procedures and other documents that support the policy.

Document Name	Document ID	Document Type
By-Law IO-100, Snow Clearing By-Law	N/A	By-Law
2013-06-20 Snow removal municipal streets and municipal sidewalks	N/A	Process



## VERSION LOG

Version Number	Amendment Description	Amendment/Policy Editor	Amendment/Policy Owner	Approver	Approval Date
01.01	Replacing the “Snow and Ice Removal Service Standards for Roads and Sidewalks” that was approved in January 2012.	Director of Infrastructure & Operations, Civil Engineering Technician	Director of Infrastructure & Operations	Council	06/28/2017
01.02	Amendment to sidewalk section adding a Priority 2 category and changing the method of describing how to deal with snow banks higher than 1m	Director of Infrastructure & Operations	Director of Infrastructure & Operations	Council	07/26/2017