

□ Council □ Administrative

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. In the exchange the roads that are cleared by the Municipality will be governed by this Policy, whereas those cleared by the Province will be governed by the Province as per provincial standards.

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 <u>outside of what is discussed in the sidewalk section</u> as pre-policy.



□ Council □ Administrative

DEFINITIONS

Term	Definition
Priority 1 Roads	 A main looped road network through a subdivision with traffic likely to exceed 1500 AADT Roads leading to a school or public utility plant The Elmsdale Business Park. The intention being to create main collectors with more frequent clearing which would open up pathways to reach other areas in a staggered approach.
Priority 2 Roads	 Roads through a subdivision with traffic likely to be below 1500 AADT Cul-de-sacs and gravel roads.
AADT	Annual Average Daily Traffic
Finished Condition	The performance standard the Municipality will hold the contractor to after the storm ends.
Lane Width	The condition the road shall remain in during the storm based on the turnaround time standards
<u>Cut-Through</u>	The clearing of the plow curl at the street intersection to allow traffic access and plowed traveled way to allow access for residents
Pathways Priority 1	Pathways and Active transportation trails with safe landing zones or connections with Major sidewalks.
Pathways Priority 2	Paths and walkways that are dead-ends or have no safe landing area for pedestrians.
Major Sidewalks	Sidewalks and Active transportation trails along Highway 2 and Highway 214.

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.



□ Council □ Administrative

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.
- 7. Freezing rain conditions may require immediate and continuous response on all road classifications until conditions improve and bare pavement achieved.



□ Council □ Administrative

6.8.

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 See note 1	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 <u>See note 1</u>	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.
- 1. Spot salting is required for any icy conditions. Repeated applications as required until conditions are made safe.
- 2. Salt only is to be applied in salt areas. Any substitution with sand must be approved by the Municipality of East Hants.
- 3. Pre-salting is to be completed prior to a forecasted snow event on all P1 roads.





□ Council □ Administrative

Sanding

General Notes

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

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

General Notes

- 1. Snow Storage occurs within the Right of Way (ROW) which may result in limited width outside of the travelled portion of the road. Efforts will be made to wingback these areas once all road standards have been met.
- Requests for snow removal in and around intersections and cul de sacs will be at the discretion of the Contract Supervisor.
- 3. Timeline for end of storm shall be at the discretion of the Contract Supervisor in discussion with the Contractor. Communication may be made through social media to provide residents with updates on clearing efforts.
- 4. Soft gravel roads may result in limited plowing options. Contractor and Contract Supervisor may determine leading up to a snow event what measures should be used to minimize damage. Social Media post may be made in Late Fall/Early Spring to remind residents that plowing may differ due to soft ground.



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
					Cut-through (See Note 1)		

^{*}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/drifting 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.



oximes Council \omin Administrative

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 miniloader(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.
Turning Tees	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).	8 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	<u>Minimum</u> 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.



□ Council □ Administrative

	2 Council 2 Manimistrative						
Road Type	Start Time	Time for Cut- Through Completion	Time to Clear (from end of snow)	Finished Condition	Salting	Sanding (as designated)	Comments
Gravel Roads	No later than after 10cm accumulation	<u>8</u> € 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. Subsequent passes to be made to ensure finished condition can be met.
- 2. Special care must be taken when plowing gravel roads when ground conditions are soft.
- 3. Some conditions (i.e. blowing/drifting snow) may require an additional cut-through to maintain access.
- 4. All ice/snow pack to be no greater than 10 cm. Ice/Snow pack above 10cm to be removed. 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.



☐ Administrative

3. 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	5 days from end of snowfall
	Use of a loader or similar will be required for all plowing during major events (15+ cm)	

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



□ Council □ Administrative

4

SIDEWALK PERFORMANCE STANDARD

Plowing and De-Icing

Туре	Start Time	Time to Clear & De-ice (from end of snow)	Width	Finish Condition	De-Icing Maintenance	Comments
Priority 4 <u>Sidewalks/Active</u> <u>Transportation</u>	After snowfall accumulation has stopped	24 hours	Full Width	Cleared surface Full width	Monitored and completed as required	
Priority 2Pathways/Walkways Priority 1	After snowfall accumulation has stopped	72 - <u>36</u> hours	Full Width	Cleared surface Full width	Monitored and completed as required	This is for new pathways/walkway s within the Urban Service Corridor that meet Municipal design standards. The clearing is to be a minimum of 1.5m wide. There is 1 Pre-Policy path between Ashford Pl and Highway 2
						that is included in Priority 1Sections of sidewalk not connected with main pedestrian routes along Hwy 2 and Hwy 214



EAST H	ANTS				⊠ Council	☐ Administrative
						This is for new
						pathways/walkways
						within the Urban
						Service Corridor
						that meet
						Municipal design
						standards. The
						clearing is to be a
						minimum of 1.5m
				6 1 1		wide. This is for
	After snowfall			Cleared	Monitored and	<u>new</u>
Pathways/Walkways	accumulation	24 - <u>72</u> hours	Full Width	surface	completed as	pathways/walkways
Priority 2	has stopped			Full width	required	within the Urban
						Service Corridor
						that meet
						<u>Municipal design</u>
						standards but have
						no connection to
						another facility or
						safe landing area.
						There are 3-2 pre
						policy update
						pathways that will
		· ·				be included
						ongoing which
						include; at the top
						of Kali Lane
						towards the school
						property , at the
						end of Ashford
	_ 1					Place over to Hwy
						2, and from Sam
						Crescent over the
						to <u>the</u> School Property.



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.

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.



□ Council □ Administrative

ROLES AND RESPONSIBILITIES

Title/Role	Responsibilities
Policy Editor (Director of Infrastructure & Operations, Civil Engineering Technician)	The Policy Editor is a person having managerial and policy-making responsibility related to the writing, compilation and revision of content and will: Ensure policies in their care and control are always up-to-date, reviewed annually or sooner if necessary Draft new or edit existing policy content Be able to interpret and explain policy content Ensure policy documents are branded and any supporting documents, i.e. applications forms are also branded and content consistent with the policy Ensure policy content is relevant and accurate
	 Seek and secure approval recommendation of the policy from the Policy Owner Seek and secure approval of the policy from the appropriate Approver; and, Provide the final approved policy document to the Assistant Municipal Clerk

Title/Role	Responsibilities
Policy Owner (Director of Infrastructure & Operations)	 The Policy Owner will: 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 Be able to interpret and explain policy content 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 Provide oversight to ensure policy content is relevant and accurate Review the policy and make recommendation for approval to the appropriate Approver; and, Ensure that the final approved policy document has been provided to the Assistant Municipal Clerk
Approver (Council)	 The Approver will: Review Policy recommendations for approval consideration (approve, reject or edit); and, Notify the Policy Editor, Policy Owner and Assistant Municipal Clerk of decision
Assistant Municipal Clerk	 The Assistant Municipal Clerk will: Facilitate an annual Policy Review; and, Ensure final approved policies are maintained, stored and posted where appropriate



□ Council □ Administrative

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	
01.03	Addition of 3 pathways/walkways to sidewalk clearing protocols	Director of Parks, Recreation, and Culture	Director of Infrastructure & Operations	Council	
<u>01.04</u>	Update to the language, addition of terms and definitions, adjustment to the gravel road time for cut-through, change sidewalks to include no priority difference to clearing timelines, and break paths and walkways into Priority 1 and 2 with appropriate timelines for each	Supervisor of Road Operations	<u>Director of</u> <u>Infrastructure &</u> <u>Operations</u>		



⊠ Council □ Administrative

CERTIFICATION

I, Kim Ramsay, Municipal Clerk for the Municipality of East Hants, hereby certify that this policy was duly approved.

Kim Ramsay Municipal Clerk

