

Committee of the Whole Report

Report Number:	RD2021-004
Meeting Date:	June 1, 2021
Title:	Enhanced Downtown Winter Level of Service
Description:	Inclusion of winter sidewalk plowing to Lindsay BIA and more frequent downtown snow removal
Author and Title:	Oliver Vigelius – Manager – Roads Operations (West B)

Recommendation(s):

That Report RD2021-004, **Enhanced Downtown Winter Level of Service**, be received.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

By-Law 95-04 allocates maintenance responsibilities for sidewalks in the winter (clearing and application of melting agents/abrasives) within the Lindsay Business Improvement Association (BIA) area to local building owners.

There are two Council Policies that identify Level of Service (LOS) for winter maintenance services offered by Public Works:

- 1) C 124 EPW 010 – Roadway Level of Service Policy for Winter Maintenance
- 2) C 125 EPS 001 – Sidewalk Level of Service Policy for Winter Maintenance

These policies clearly identify service level expectations and commitments from the City including what triggers response and removals.

Currently parking lot maintenance in Lindsay is coordinated by Municipal Law Enforcement (MLE) for both plowing and snow removal. Both of these services are completed under separate corporate contracts. Snow clearing is a self start contract when snow accumulation triggers service and snow removal (loading and removing snow) requires MLE staff to call to initiate service.

At the Council Meeting of November 17, 2020, Council adopted the following resolution:

CR2020-364

Moved By Councillor Dunn

Seconded By Deputy Mayor O'Reilly

That a Pilot Project be put in place for Downtown Area's for the 2020/2021 winter season, waiving the current policy(cies) and By-Law one year;

That Downtown Lindsay receive the same level of sidewalk service as other Downtown Areas in the City;

That the level of service be adjusted so that the snowbank removal in all Downtown Areas be triggered at .5 meters instead of .9 meters;

That Staff be directed to apply a heightened level of service in back municipal parking lots during the winter months; and

That Staff report back to Council on the service level adjustments by the end of Q2, 2021.

Carried

This report addresses these instructions.

Council has also received and referred a memo from the Lindsay BIA to Staff at the March 23, 2021 Council Meeting:

CC2021-07.8.1

Correspondence Regarding Winter Parking Lot Maintenance in Downtown Lindsay

Melissa McFarland, Executive Director, Lindsay Downtown BIA
Stephen Podolsky, Vice-Chair, Lindsay Downtown BIA

CR2021-154

Moved By Deputy Mayor O'Reilly

Seconded By Councillor Elmslie

That the correspondence from Melissa McFarland, Executive Director, Lindsay Downtown BIA, and Stephen Podolsky, Vice-Chair, Lindsay Downtown BIA, **regarding Winter Parking Lot Maintenance in Downtown Lindsay**, be received and referred to Staff for inclusion in the report back to Council on Downtown Service Enhancements by the end of Q3, 2021.

Carried

This memo discusses shifting responsibility of the service to PW from MLE. It is the opinion of Staff that the primary concern here is defining, adhering to and cost of service levels as opposed to divisional oversight. MLE, PW and Purchasing Staff will review alternatives and report back to Council on this resolution at a later date in Q3.

Rationale:

Other downtown communities in the City of Kawartha Lakes receive winter sidewalk maintenance which consists of, when sidewalk winter maintenance is required, a single pass of a sidewalk plow and spreading of either salt or sand as required. Council directed that this LOS be implemented, on a trial basis, in the downtown core of Lindsay (the BIA district). Council also directed that all the downtown areas of the City of Kawartha Lakes receive an 'enhanced' level of snow removal where the trigger height for removal of the snow banks be reduced from 0.9 m to 0.5 m which includes enhanced service in the Municipal parking lots. These directions were accomplished during the winter of 2020/2021.

The winter sidewalk maintenance for the BIA district of Lindsay received a single pass of a sidewalk unit in response to winter maintenance events and the overall results of this trial appear to be positively accepted. It should be noted that the boulevards in Lindsay's BIA district are wide and adjacent property owners were still required to perform winter maintenance on the remaining boulevard area, create paths to their doorways and create access points through snowbank accumulations to the on-street angled parking where desired. Snow removal was triggered at the lower level and results of the trial period also appear positively accepted.

Greater detail will be provided in the Financial/Operation Impacts section of this report but it should be noted that two independent circumstances had a profound affect on the data collected in the Lindsay BIA district this past winter. The first being the ongoing downtown revitalization construction project which removed a large section of the downtown core from the winter maintenance responsibility of Public Works as it was included in the responsibilities of the general contractor. The second was the winter itself; this past winter was, by comparison, mild – with a lesser call for winter maintenance activities.

Other Alternatives Considered:

Sidewalk Plowing

Operationally the inclusion of a single pass of a sidewalk plow, when winter maintenance was required, did not have a significant impact on operations as a whole. It should be noted that the increase to areas covered for winter maintenance will accelerate the need for another sidewalk plow and staff to operate it will be required. This is especially noteworthy considering the increased subdivision development activity in the area. The BIA area, as described in By-Law 95-04 (Appendix A), consists of approximately 2.7km of sidewalk (being all areas where the City is not the adjacent property owner). For the purposes of scale, all three phases of the Cloverlea Subdivision in Lindsay (all of the streets connected to Broad St. between Angeline St. S. and Wallace Drive) contain approximately 2.9km of sidewalk and require one to two hours to service for winter maintenance depending on the type of winter event – longer for a *heavy* snow event.

Council could opt to maintain the added winter sidewalk maintenance permanently. This would require "By-Law 95-04 Clearing and removing snow and Ice from sidewalks downtown in Lindsay" (Appendix A) be amended to reflect the modified maintenance

responsibilities of The City of Kawartha Lakes and adjacent property owners within the Lindsay BIA district with the following resolutions:

“That the Pilot Project put in place for Lindsay’s Downtown BIA district for the 2020/2021 winter season, waiving the current policy(cies) and By-Law one year and allowing Lindsay’s Downtown BIA district to receive the same level of sidewalk winter maintenance as other downtown areas in the City be made permanent; and

That By-Law 95-04 “Clearing and removing snow and Ice from sidewalks downtown in Lindsay” be amended to reflect the maintenance responsibilities of the City of Kawartha Lakes and adjacent property owners.”

Should Council opt not to make these changes no further action is required as the pilot project has concluded.

Snow Removal

Altering the LOS for snow removal will have a more immediate impact on operations, more specifically the operating budget. A reduction of 0.4m to the trigger height for snow removal activities is a reduction of 45%. This year’s data is inconclusive as to the budget impact for the reasons previously stated, but it is reasonable to assume that an increase is to be expected under more seasonable winter conditions (and in the absence of construction activities in the subject area) and it is also reasonable to assume the increase will be in the order of 45%.

Council could opt to increase the LOS and adjust trigger height for snowbank removal at 0.5m for downtown areas within the City of Kawartha Lakes. This would require amendment of Council Policy C 124 EPW 010 Roadway Level of Service Policy Winter Maintenance (Appendix B) to reflect the changes with resolutions being:

That the trigger height detailed in “Table 4 – Snow Removal Level of Service, Urban/ Built Up Areas, Roadside” of Council Policy C 124 EPW 010 Roadway Level of Service Policy Winter Maintenance be adjusted for all instances detailed in the table to read 0.5m in place of the existing 0.9m.

Should Council opt not to make these changes no further action is required as the pilot project has concluded.

Municipal Parking Lots:

Operationally and as directed by the resolution of Council, the municipal parking lots within the Lindsay downtown core area received an increased level of service for the 2020-2021 winter season. Service levels regarding pile removal are controlled and adjusted around snow events and by encouraged communication between City staff, the Lindsay Downtown Business Improvement Association and the Community Liaison Officer. Piles, during the study period were removed when significant impact was observed to the travel pathways, lanes, parking areas and generally within 48 hours of a snow event.

Alignment to Strategic Priorities

The pilot project potentially aligns with the strategic priority of "A Vibrant and Growing Economy" as it supports local business owners in the City's downtown cores by enabling greater accessibility for visitors to the business areas. However, this must also be balanced against the strategic priority of "Good Government"; part of good government is fiscal responsibility and part of this pilot project will negatively impact future budgets.

Financial/Operation Impacts:

Sidewalk Plowing

Operational costs to include the BIA district would amount to approximately \$3,700 in staff time including \$1,000 allowance for material (Salt). The real impact of this addition is in time; when more infrastructure is added the departments ability to achieve levels of service is impacted it will accelerate the need for additional labour and equipment to maintain Council's desired LOS.

Snow Removal

In 2018, 2019, and 2020 The City of Kawartha Lakes spent an average of \$85,871 on contracted snow removal services to various downtown areas and parking lots managed by Municipal Law Enforcement. Should this snow removal LOS be extended to other locations (such as community centers and arenas) further budget impacts will be realized. It is reasonable to assume that a 45% reduction in the trigger height for snow bank removal will result to an equal increase in snow removal costs due to the increased frequency of the service being provided. 45% of \$85,871 is \$38,642 which would bring the average annual cost up to \$124,513. Potential future capital and operating pressures are discussed in the "Other Alternatives – Sidewalk Plowing" section of this report.

Consultations:

Supervisor, Roads Operations – Lindsay

Manager, Municipal Law Enforcement

Attachments:

Appendix A - By-Law 95-04 Clearing and removing snow and Ice from sidewalks downtown in Lindsay



Appendix A By-Law
95-04.pdf

Appendix B - C 124 EPW 010 Roadway Level of Service Policy Winter Maintenance



Appendix B
C124EPW010.pdf

Department Head email: brobinson@kawarthalakes.ca

Department Head: Bryan Robinson

A by-law for clearing away and removing snow and ice from sidewalks downtown in the Town of Lindsay.

WHEREAS the Municipal Act, Chapter M45, Section 210(60-63), R.S.O. 1990 authorizes Council to pass by-laws for clearing away and removing snow and ice from sidewalks of occupied, and unoccupied premises and on any highway or part of a highway or any class thereof in front of, alongside or at the rear of such buildings or vacant lands, at the expense of the owners;

AND WHEREAS the Municipal Act, Chapter M45, Section 314(1), R.S.O. 1990 authorizes Council to pass by-law for prohibiting or regulating the obstructing, encumbering, injuring or fouling of highways or bridges;

NOW THEREFORE the Council of the Corporation of the Town of Lindsay enacts as follows:

1. **DEFINITIONS:**

1.1. For the purposes of this By-law:

1.1.1. Corporate Boundaries shall mean those boundaries of the Town of Lindsay.

1.1.2. Highway shall mean a common and public highway, street, or a bridge forming part of a highway or on, over, or across which a highway passes, the portion used for vehicular traffic, sidewalks and boulevards thereof.

1.1.3. Person shall mean the owner or person who rents, leases or otherwise occupies property in the Town of Lindsay.

1.1.4. Sidewalk shall mean any sidewalk, pathway, footpath or area forming part of any highway or bridge or boulevard, or other means of public communication used by or set apart for the use of pedestrians.

1.1.5. Town shall mean the Town of Lindsay.

2. **LOCATION:**

2.1. The locations of the sidewalks discussed in this by-law shall be as follows:

2.1.1. Kent St. W. between Lindsay St. and Sussex St.

2.1.2. William St. between Peel St. and Russell St.

2.1.3. York St. between Peel St. and Russell St.

2.1.4. Cambridge St. between Peel St. and Russell St.

2.1.5. Victoria Ave. between Peel St. and Russell St.

3. **REQUIREMENTS:**

3.1. No person shall fail to remove snow and/or ice from the sidewalks, within the locations noted in section 2 of this by-law, abutting the property of any occupied or unoccupied building or vacant lot which they own, within a twenty-four (24) hour period from the cessation of a storm.

3.2. No person shall move or place any snow and/or ice onto any sidewalk, indicated in section 2 of this by-law, so as to impede pedestrian traffic thereon.

- 3.3. Snow and/or ice, which is cleared in the locations indicated in Section 2, shall be placed completely off the sidewalk, on the "roadside" of the curb, a distance no greater than one metre from the curb, in order to facilitate removal by the Town.

4. **CONTRAVENTION:**

- 4.1. In the event that any person contravenes the provisions of this by-law, the Town of Lindsay shall procure the clearing and removal of the snow and ice at the expense of the property owner.
- 4.2. The expenses incurred by the Town of Lindsay under Section 3 of this By-law shall be collected and recovered from the property owner in like manner as municipal taxes.
- 4.3. Any person who contravenes any section of this by-law is guilty of an offence and is liable to a fine as allowed under the Provincial Offences Act, R.S.O. 1990, Chapter P. 33, Section 61 or as amended.

5. **FORCE AND EFFECT:**

- 5.1. This By-law comes into force and takes effect on the final day of passing thereof.

Read a first time on:

Read a second time on:

Read a third time and

finally passed on:

Mayor

Clerk

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Council Policy No.:	C 124 EPW 010
Council Policy Name:	Roadway Level of Service Policy Winter Maintenance
Date Approved by Council:	November 29, 2005
Date revision approved by Council:	December 10, 2011, October 27, 2015
Related SOP, Management Directive, Council Policy, Forms	n/a

Policy Statement and Rationale:

It is the objective of the City of Kawartha Lakes, Public Works Department to apply its operational activities in an efficient and effective way, so as to provide safe driving conditions consistent with a low volume in a predominantly rural road system during those times of the year when winter conditions can be expected. The purpose will be to achieve the Levels of Service as defined herein, and in no case shall the Levels of Service provided be allowed to fall below the Minimum Maintenance Standards provided for in the Municipal Act SO 2001 c. 25 and the Minimum Maintenance Standards O. Reg. 239/02 as amended by O. Reg.47/13made thereunder.

Scope:

This policy shall apply to all roads assumed and maintained as public roads by the City of Kawartha Lakes. Notwithstanding the foregoing, neither the Corporation of the City of Kawartha Lakes nor its officials or employees make any promise, assurance or guarantee that the services provided by the Public Works Department will be in excess of the minimum standard, as required by regulation and detailed herein.

Inherent within the standard is the expectation that drivers will act responsibly and will operate their vehicles, at all times, reasonably with due regard for the prevailing weather and roadway conditions.

Definitions:

“AADT” Average Annual Daily Traffic is a technical measurement of traffic volume on a road, in both directions. Conversion factors, which vary depending on time of year and week, extrapolate daily traffic counts into AADT. (See seasonal.)

“Ambient Conditions” are conditions that are commonly found in a stabilized environment. Normally in ambient conditions there are no negative effects actively reducing the existing conditions. i.e. Storm, excess traffic or construction effects are not in evidence. (See storm conditions.)



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“Aspects” in the context of these standards refer to specific elements of roadway service, which are defined by these standards.

“As Soon As Practicable” shall mean without undue delay.

“Bare” conditions refer to winter road conditions where all traveled lanes are effectively clear of snow build-up or general ice conditions that might impair the safe travel on the road below the travel speed under ambient conditions.

“Centre Bare” conditions refer to winter road conditions where one wheel track of each of the traveled lanes is substantially clear of snow and ice conditions allowing the user to negotiate safer travel than if snow packed or general ice conditions prevail.

“Class” in the context of these standards refers to the criteria for classifying roadways as set out in O. Reg. 239/02 Minimum Maintenance Standards.

“Conditions” define the state in which the subject matter is found. The standard indicates the condition being measured.

“Cycle” is that time interval between Winter Maintenance conducted for a specific purpose on any identified road segment. Consideration can still be made for inspection cycle time adjustments at the discretion of the city's Supervisor or designate for mitigating circumstances, which are of an uncommon, or unpredictable, nature.

“Day” is a calendar day.

“Desirable” describes that level of service standard the roadway authority has established as an objective for road department operations.

“Effect” is the acting of an external influence on the condition of any aspect of the roadway.

“Hardtop” refers to a road surface, which is relatively hard in nature, by treatment with either a bonding agent or cement, which effectively prevents reshaping by conventional motor grader.

“Improved” condition refers to the condition being better than it was before, from the perspective of a typical user, all other effects being equal.

“Inspection” is the activity performed by a qualified person, authorized and directed by the Director of Public Works or designates, to investigate and report on the relevant conditions of the roadway. General inspection has regard for road surface and roadside standards. Winter inspection has regard for winter road surface standards.

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“Lane” is that portion of the road designated for a single file of vehicles to travel over, in one direction. For roads where two-way traffic is permitted, the lane width is half the road width unless otherwise delineated by pavement marking.

“Localized” conditions, for the purpose of these standards, that occur on short lengths of roadway specifically on bridges, intersections, curves and hills.

“Loosetop” refers to a road surface that is of a granular manufactured product, which can reasonably be shaped by a motor grader, and includes road surfaces under reconstruction.

“Maintenance Priority Classes” means the priority for roadway maintenance services as defined by Table 1 of the level of service policy; roadway maintenance classification.

“Notice” of an effect or condition is considered given when received by an appropriate employee of the road authority.

“Operations” means those activities the Public Works Department performs to improve a condition or sustain a roadway standard. Operations are normally defined by guidelines (not policy), with discretion of the supervisor to choose various methods to achieve results cost-effectively.

“Policies” decisions of a formal nature made by the road authority to enable, qualify and govern the mission of the road authority as directed by-law.

“Priority” an order of the Class of roads to be maintained during a winter event.

“Response” describes that action taken by the roadway authority when informed of an effect or condition. Monitoring an effect or condition may constitute a response. A reasonable response takes into account the relevant standards.

“Right Of Way” (R.O.W.) describes the corridor of land reserved for roadway improvements and under the jurisdiction of the roadway authority. Certain rights of way infer a right of passage to the public. However, in the context of these standards, only rights of way with assumed public roadways are considered. Rights of way solely for non-vehicular traffic are not addressed in these standards (e.g. Pedestrian, equestrian, bicycle.).

“Road” refers specifically to the traveled road surface on a roadway assumed by a roadway authority, but not including on-street parking or stopping zones.

“Roadside” refers to all features that make up the roadway within the jurisdiction of the roadway authority, except for the road surface itself.

“Roadway” in the context of these standards means any public assumed road right of way, intended for vehicular traffic. It refers not only to the traveled road surface, but to



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all services relevant to the road, within the right of way. In the context of an urban road this includes the traveled portion plus the ancillary lanes. In the case of rural roads this includes the ancillary lanes and the shoulders.

“Roadway Authority” indicates the public agency accountable for the status and condition of the roadway. This refers to the Corporation of the City of Kawartha Lakes and its designated officials or agents.

“Section” refers to a portion of roadway with a distinct classification, and homogeneous character. A roadway section is commonly used for construction costing, inventory control in Maintenance Management Systems, Road Needs Studies, Pavement Management Studies, and Priority Planning and Budgeting.

“Seasonal” refers to the limited time of the year where certain roadway service standards apply to the subject roadway. (eg. Summer roads, Winter roads). In the context of these standards seasonal roads are classified as those not receiving winter services, unless otherwise defined.

“Service” can be defined in two contexts. In the larger context any government activity is a service. A roadway network is a service, as is a library, potable water supply, etc. When used in the context of these standards, “service” refers more specifically to aspects of a roadway and their condition. Services are seen from the perspective of the user.

“Service Level Matrix” the Table(s) established within this policy that specifically defines the service level according to Class of roadway.

“Service Levels” a range of values that quantify a particular service standard, by one or more parameters, across a range of roadway classifications. Service levels typically reflect a maximum or minimum condition.

“Shoulder” that maintained surface immediately adjacent to the traveled surface of the road. The shoulder may be partially or fully hardtop, loosetop, grassed, or earth. It is not considered a part of the road for these standards.

“Snow Accumulation” means the natural accumulation of any of the following, alone or together:

1. New fallen snow.
2. Wind-blown snow
3. Slush

“Snow Packed” conditions refer to winter road conditions where the traveled surface of the road is covered with a buildup of snow and/or ice.



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“Speed” refers to the average speed at which an average automobile can safely travel on a road without the effects of traffic. This does not refer to design speed or legal speed unless specifically qualified. Posted speed is either legal or advisory.

“Standards” quantified statements, defining the nature of a product or activity. Usually such standards are minimum or desirable, and in this context refer specifically to the roadway service standards adopted as policy, by a roadway authority.

“Storm” conditions or effects are when natural or external effects are acting upon the roadway to reduce the condition as defined by one or more roadway service standards. It does not refer to weather conditions that do not impact on the infrastructure. Storm conditions could include wind, rising and/or moving water, precipitation, cold temperatures (below -15C), snowfall, freezing rain, hail, blowing snow, etc.

“Substandard” refers to a condition that is outside the defined standard. Normally a substandard condition requires a response, unless otherwise considered in the standard.

“Supervisor” refers to a person in the Public Works Department who is accountable for the deployment of operations that impact on the condition or roadway services.

“Surface” the exposed top of the traveled road and includes adjacent surfaces for turning or stopping, but not parking or shoulders.

“System” refers to a collection of roadways, typically of various classifications, owned by a single road authority.

“User” refers to any person traveling on or over the roadway, including vehicle operators, passengers and pedestrians.

“Winter” the season when cold weather effects on road conditions can be reasonably expected and as specified herein.

Policy:

Winter Response

This level of service policy covers these activities which are required to produce safe driving conditions for a driver acting responsibly, during those times of the year in which winter conditions can be anticipated.

An analysis of winter operational records for the period of 2001 to 2010 inclusive indicates that on average the first occasion for which a winter response is required will occur on or about November 15 and the commencement of continuous winter operations will typically occur beyond December 15 of each year. The need for an ongoing response will on average continue to approximately March 15 of each winter



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season and the last date for which a response is required will be about April 8 of each season. Acknowledging that winter conditions can occur before and after these periods, the City of Kawartha Lakes will prepare the conversion of its resources from summer to winter maintenance mode to meet the following state of readiness

Beginning of Winter	50% Operational	October 31
	100% Operational	November 15
	Initiate Night Patrol	November 15
End of Winter	100% Operational	March 31
	End of Night Patrol	March 31
	50% Operational	April 15

The winter control resources of the City of Kawartha Lakes consists of single axle, tandem axle combination plow/spreader trucks and graders equipped to plow (if required), with sufficient operators for the current number of plow routes, organized in a one day shift. In order to ensure that these resources are employed as efficiently and effectively as possible, the City of Kawartha Lakes adopts a policy of having the resources deployed generally when the needs are required as per the adopted Levels of Service.

An analysis of the variation of traffic over time, based on traffic engineering principles, demonstrates that 85 to 90% of the average daily traffic can be anticipated between the hours of 5 a.m. and 9 p.m. Therefore, the City of Kawartha Lakes will focus its efforts to meet this demand. Outside this period, the City employs a small number of additional operators to act during the evening and night time hours. The function of this partial second shift will be to maintain the main arterial roads in a safe and passable condition for emergency response purpose and to address localized substandard conditions that may be observed in the course of their rounds.

A full call out of winter maintenance resources between the hours of 9:00 pm and 4:00 am will not as a general rule be made except where weather and road conditions deteriorate to the state where the travelled road network has compromised the road users' safety. Otherwise, the City of Kawartha Lakes will strive to achieve the objectives of this policy through the use of the evening and night time hours as specified above.

Winter maintenance activities covered by this policy include snow fencing, continuous plowing, spot plowing, continuous sanding/salting, spot sanding/salting, ice blading, winging back banks, snow removal, the provision of winter drainage outlets, and road patrolling during normal ambient and storm conditions.

Snow Clearing Level of Service:

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The policy for snow clearing is to deploy resources as soon as practicable to clear snow accumulations after becoming aware of the fact that the snow accumulation is greater than the depth set out in Table 1 below and to ensure that the accumulation of snow is maintained at a level less than or equal to the maximum depth indicated within the time allowed for in the policy for the duration of the storm. During the storm the objective will be to maintain only the through lanes but not less than 3.0 metres in width per lane and left hand turn lanes in each direction. Ancillary lanes such as right turn lanes, intersection ramps, acceleration/deceleration lanes, shoulders and parking lanes will only be treated after all roads have been addressed.

Once the snow accumulation has ended, and within the time specified after the end of the storm, the objective shall be to return the road to at least the minimum surface condition as shown in Table 1. Class 1, 2, 3 and 4 roadways, clearing operations will clear the snow from the edge of roadway and all ancillary lanes and ramps etc. Class 5 roads with two lanes, if after the snow accumulation has ended, the snow accumulation is greater than the depth set out in Table 1, the objective will be to clear the snow accumulation to a depth less than or equal to the depth set out in Table 1 and to a width of at least the width of the 3.0 metre lane and shall be maintained and open for the public's use within the time period, after the end of the storm. Once the snow pack has been adequately established on the roads, the objective will be to remove all new fallen snow and reinstate the hard pack surface with winter abrasives within the time frames indicated. Ice blading of snow packed surfaces will be undertaken as necessary to provide additional traction as determined by the Area Manager or designate (Supervisor, Acting Supervisor or Lead Hand under the direction of the Area Manager).

The maximum allowable accumulation provision of this policy does not apply to that portion of the road designated for parking. Snow removal from parking areas will only be completed after all other areas have been cleared.

Table 1 – Snow Accumulation Level of Service:

Minimum Maintenance Standards Classification	Response to Snow Accumulation		
Road Class	CKL Road Priority	Maximum Depth	Time Cycle
1	N/A	N/A	N/A
2	1-Arterial	2.5 cm	4 hours
3	1-Arterial	2.5 cm	4 hours
4	2 - Collector	8 cm	12 hours
5	3 - Residential	8 cm	12 hours

Sanding and Salting:

The objective will be to deploy resources as soon as practicable, after becoming aware of the fact that the road surface is in a snow or ice covered condition and the safe

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operation has dropped below the threshold indicated in Table 2. The response will be to treat the road way or sections thereof with deicing chemicals and/or abrasives as appropriate to remove the ice or provide traction within the timeframes indicated in Table 2 for such response.

It is the objective of the actions taken to improve the surface conditions of the road within the time shown in Table 1, such that the safe operation on the road will meet or exceed levels as shown in the Table 2.

Table 2 – Icy Roads Response Level of Service:

CKL Road Priority	Response Time	Cycle Time
1 – Arterial	4 hours	6 hours
2 – Collector	8 hours	12 hours
3 – Residential	8 hours	12 hours

Winging Back Of Snow Banks:

At various times during a winter season it may be necessary to wing back snow banks in order to reduce the height of the banks so that driver visibility is not impaired and/or provide space to store additional snow. Typically this work will be undertaken in rural and urban residential areas.

The objective will be to deploy resources on roadways within the response time frames after becoming aware that the snow banks exceed the height specified and to reduce the height of the banks to at or below the height indicated in Table 3 within the time frames specified for each classification of roadway.

Table 3 – Snow Bank Winging Back Level of Service:

	Objective to Address Snow Banks	Snow Bank Height	
CKL Road Priority	Response Time	Maximum Height (Metres)	Cycle Time
1 – Arterial	24 hours	0.9	24 hours
2 – Collector	48 hours	0.9	48 hours
3 – Residential	48 hours	0.9	48 hours

No objective is established for the necessity to wing back banks for purposes of creating additional snow storage. Such work will be undertaken as and when it is deemed necessary to do so by the Supervisor and time is available to undertake such work between winter events and other priority work.

Snow Removal:

Removal and disposal of snow in an approved snow disposal facility is carried out in those areas where inadequate physical space exists to store the snow and/or the presence of snow banks interferes with the movement of pedestrian traffic. Snow will be removed from the central business districts of the City of Kawartha Lakes and other designated built up areas within the City.

The objective will be to deploy resources on roadways within the response time frames after becoming aware that the snow banks parallel to the roadway and away from the legal cross walk areas exceed the height specified and to reduce the height of the banks to at or below the height indicated in Table 4 within the time frames specified for each classification of roadway.

Table 4 – Snow Removal Level of Service, Urban/ Built Up Areas, Roadside:

	Objective to Address Snow Banks	Snow Bank Height	
CKL Road Priority	Response Time	Maximum Height (Metres)	Cycle Time
1 – Arterial	48 hours	0.9	12 hours
2 – Collector	48 hours	0.9	24 hours
3 – Residential	48 hours	0.9	24 hours

At all cross walks and intersections the objective will be to deploy resources within the response time frames after becoming aware that the snow banks parallel to the roadway and away from the legal cross walk areas exceed the height specified and to reduce the height of the banks to at or below the height indicated in Table 5 within the time frames specified for each classification of roadway.

Table 5 – Snow Removal Level of Service, Cross Walks:

	Objective to Address Snow Banks	Snow Bank Height	
CKL Road Priority	Response Time	Maximum Height (Metres)	Cycle Time
1 – Arterial	24 hours	0.6	12 hours
2 – Collector	48 hours	0.6	24 hours
3 – Residential	48 hours	0.6	24 hours

Winter Patrolling Level of Service –Winter Season Conditions:

Winter patrolling during the occurrence of winter events, conditions shall be in accordance with Table 7. Patrolling shall be carried out by driving or monitoring of weather service providers and other Value Added Meteorological Services (VAMS) to



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ascertain conditions and the need for a response. Patrolling of a representative sample of the road system shall be deemed to be sufficient to identify problem areas.

Table 6 – Winter Representative Patrolling – Winter Season Levels of Service:

CKL Road Priority	Cycle
1 – Arterial	1 x per day
2 – Collector	Once every 3 days
3 - Residential	Once every 7 days

Winter Patrolling – Night, Evening and Weekend Conditions:

During the season when a municipality performs winter highway maintenance, the minimum standard for patrolling highways is, in addition to that set out to that noted above, to patrol highways that the municipality selects as representative of its highways, as necessary, to check for conditions requiring winter control maintenance. The City of Kawartha Lakes shall provide a winter night patrol between the hours of 3:30 p.m. and 7:00 a.m. for the period of the year when continuous winter operations can be anticipated. The purpose of the night patrol will be to monitor weather and roadway conditions during the night time hours and to assist in addressing localized substandard conditions found in the course of its patrolling. The objective will be to maintain the roads in passable condition until the regular shift comes on duty at 7:00am or commence full or partial maintenance operations at 4:00 a.m.

Snow Fencing:

The City may erect snow fencing in rural areas where experience has identified a frequent localized build up of wind blown snow. Maintenance staff will monitor conditions over the course of the winter and identify potential sites where the erecting of snow fence has the potential to reduce the number of responses. The potential sites for installation of snow fence will be reviewed by area maintenance staff in the fall of each year and those locations having the greatest potential to reduce the number of site specific responses approved for the installation of snow fence. Snow fencing if deemed appropriate will be erected by November 15th of the year and will be removed not later than April 15th so as to not interfere with agricultural operations.

Revision History:

Proposed Date of Review:

Revision	Date	Description of changes	Requested By