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STAFF REPORT: ENGINEERING & PUBLIC WORKS DEPARTMENT



REPORT TO: **Committee of the Whole**
MEETING DATE: **August 18, 2014**
REPORT NO.: **EPW.14.015**
SUBJECT: **Town Winter Minimum
Maintenance Standards – Risk
Management**

PREPARED BY: **Jim McCannell, Manager, Roads &
Drainage**

A. Recommendations

THAT Council receive Staff Report EPW.14.015, “Town Winter Minimum Maintenance Standards – Risk Management”;

AND THAT Council endorses continuing with the historical level of service for winter maintenance on roads for the reasons outlined in Report EPW.14.015.

B. Background

The Town has an obligation to maintain its road network to a safe level of service. By establishing winter minimum maintenance standards, the Town can act to mitigate liability that might be presented as a result of accidents that may have occurred because of the perceived or attributable conditions of a road. To that end, the Town has utilised the Provincial Minimum Maintenance Standards (MMS) as set under the Municipal Act, 2001 in Ontario Regulation 239/02, as amended.

At the November 19, 2012 meeting, Council approved then-new Town winter minimum maintenance standards. The introduction to these standards noted:

“The Corporation of the Town of The Blue Mountains will strive to meet the Minimum Maintenance Standards as identified in Ontario Regulation 239/02 (The “Regulation”) and the Common Law test of reasonableness.”

The Provincial MMS were designed to give Municipalities a “due diligence” defense in the event of a vehicle accident. Although the regulation is not mandatory, the Town should follow the Provincial MMS to be able to use it as a defense. If the Town cannot meet the Provincial MMS, it can still use Section 44 (1) of the Municipal Act to demonstrate that the service provided was reasonable in the circumstances for both weather and road conditions. The Town does not need to adhere to the Provincial MMS but should set a prescribed level of service for Staff to follow and maintain.

On October 8, 2013, the Infrastructure and Recreation Committee considered Staff Report EPW.13.055, “Town Winter Minimum Maintenance Standards”, which was subsequently adopted and approved by Council on October 28, 2013, as an update to the 2012 standards. (See Attachment #1)

Further to this, Council has asked Staff to provide some additional information regarding Town Winter Minimum Maintenance Standards and Risk Management. This Report provides that information.

The Province of Ontario released a revised MMS on January 27, 2013 which came into effect on January 29, 2013. The new MMS have left the level of service open to some interpretation. Under the revised MMS, the recommended level of service appears to have been increased. It was previously considered that the crews had 16 hours to clear a road once the snow depth reached 8 centimetres (cm) for a Class 4 road (a typical Town road).

It is now recommended that roads will be cleared within 16 hours **or before** snow reaches a depth of 8 cm. Depending on the time of day when a storm event occurs, Town crews will not consistently be able to meet the revised MMS with the current compliment of Staff and equipment. To meet the new MMS the Town would need to provide a second shift of drivers to operate equipment during the period of 5 pm to 5 am which would significantly increase the Towns winter control costs.

The actual winter road maintenance costs for the 2012/ 2013 winter season were \$723,786.

The anticipated costs of operating a second shift of 6 additional operators for the 6 months of the winter control period are \$451,800. This is based on full time contracted operators being on duty every evening. There are some possible savings by having on- call or stand-by Operators. These saving could be as much as \$100,000 which would reduce the cost of to \$333,500. (See Attachment #2)

In addition, there would also be increased costs associated with the Contracted Service provider. These costs could range between \$60,000 and \$90,000 annually to provide a second shift during prolonged winter events.

Currently the Town is maintaining the historical level of service that the residents have experienced in the past. Although the Town is not meeting the Provincial MMS the Town still has several options to offer as defence:

1. As was mentioned in EPW.13.055 : "If the Town cannot meet the Provincial MMS, it can still use Section 44 (1) of the *Municipal Act* to demonstrate that the service provided was reasonable in the circumstances for both weather and road conditions. (As noted later in the Report, Town insurer JLT Canada has confirmed that coverage would not be denied where the Town does not meet the current provincial MMS.)
2. A second defense is that the Town took reasonable steps to prevent the default from arising. (This is why the direct application of anti-icing liquids is used in problem areas.)

Staff did contact Frank Cowan Insurance in November 2013 to determine their opinion of using the Town's historical level of service versus the provincial MMS. The insurer did indicate that when there are an accepted set of standards available, like the Provincial MMS, the Court will expect to hear a good reason why they were not followed. Any decision that is based on a budget consideration should be a policy decision and thus the decision to provide a Town approved level of service that may be less than the Provincial MMS is based on a Council policy and not on an operating decision. The thought here is that the Courts may provide some immunity from a Council Policy decision.

During a past Council meeting, a concern was raised as to whether the Town's insurer could withdraw coverage if the Town was not intending to meet the Provincial MMS and was providing a reduced level of service as is afforded by Section 44(1) of the Municipal Act. Staff has contacted Frank Cowan Insurance to review and discuss this possibility. The answer was very clear that the Town would not be denied coverage if the level of service provided was lower than the Provincial MMS.

Since the Town changed insurers recently, Staff has also contacted JLT Canada and asked for a review of this report. JLT Canada has confirmed that coverage would not be denied where the Town does not meet the current provincial MMS. JLT Canada has agreed that the level of service should be adopted by Council and the Town should obtain legal consultation in this regard. JLT Canada also warned that by following Town established MMS, this practice could potentially increase settlements resulting in higher future insurance premiums, depending on the frequency and severity of incidents.

In response to the JLT Canada recommendation that the Town should have legal consultation regarding the decision to follow a level of service that falls below the Provincial MMS, Staff met with Mr. Doug Wyseman of Municipal Risk Services Limited. Mr. Wyseman has reviewed the Town's policies and procedures, both current and draft. In addition, Mr. Wyseman drove many of the Town roads and found the level of maintenance and service to be adequate and found no major areas of concern. See Attachment #3 –Road Risk Assessment. A copy of the Report as been forward to JLT Canada for their information.

The recommendations from the report will be included in the fall review and update of the Roads and Drainage Policies. The Winter Operations Plan will be finalized and brought before Council to be adopted.

Staff have been monitoring the winter operations to track the number events where the Town has meet theTown's historical level of service but has not achieved the Provincial MMS level of service. During the period beginning November 1, 2013 and April 15, 2014 there were 23 periods where crews were not able to achieve the Provincial MMS since more than 8 cm of snow accumulated on the roads, or the roads were not plowed within 16 hours of a recent snow fall.

Recommendation

Given the high cost of resourcing to achieve the Provincial MMS at all times, Staff is recommending continuing with the historical level of service as this has been reasonable in the past and, the residents have come to understand and expect this level of service.

C. The Blue Mountains' Strategic Plan

Goal 2: Addressing the Town's municipal infrastructure needs.

Goal 6: Providing a strong, well-managed municipal government.

D. Environmental Impacts

None

E. Financial Impact

While the Town is not compelled to adhere to the Provincial MMS, a defined level of service should be established for Staff to follow and maintain. The risk of not meeting the Provincial MMS is that the Town is reducing its level of defence for liability by due diligence and by which may result in an increase in future insurance premiums.

F. In Consultation With

Serena Wilgress, Manager of Purchasing & Risk Management

G. Attached

1. Staff Report EPW.13.055, "Town Winter Minimum Maintenance Standards"
2. Cost Breakdown for Second Shift – Fulltime and On-Call Operators.
3. Town of The Blue Mountains Road Risk Assessment, Municipal Risk Services Limited, June 9, 2014.

Respectfully submitted,

Brian Kane on behalf of

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Reg Russwurm

Reg Russwurm
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Serena Wilgress

Serena Wilgress
Manager of Purchasing
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STAFF REPORT: ENGINEERING AND PUBLIC WORKS DEPARTMENT



REPORT TO: **Infrastructure and Recreation
Committee**
MEETING DATE: **October 8th 2013**
REPORT NO.: **EPW.13.055**
SUBJECT: **Town Winter Minimum
Maintenance Standards**
PREPARED BY: **Jim McCannell, Manager of Roads
and Drainage**

A. Recommendations

THAT Council receive Staff Report EPW.13.055, "Town Winter Minimum Maintenance Standards";

AND THAT Council adopt Town Minimum Winter Maintenance Standards and Level of Service POL.COR.13.XX for implementation by Town Staff.

B. Background

The Town has an obligation to maintain its road network to a safe level of service. To that end, the Town has utilised the Province's Minimum Maintenance Standards (MMS) as set out under the *Municipal Act, 2001* in Ontario Regulation 239/02 as amended as a framework and comparator in determining the Town's maintenance standards. At the meeting of November 19, 2012, Council approved Staff Report EPW.12.093, "Winter Minimum Maintenance Standards" for roads under the Town's jurisdiction (Attachment 1).

The Province of Ontario released a revised MMS on January 27, 2013 which came into effect on January 29, 2013. The new MMS have left the level of service open to some interpretation. Under the revised MMS, the recommended level of service appears to have been increased. It was previously considered that the crews had 16 hours to clear a road once the snow depth reached 8 centimetres (cm) for a Class 4 road (a typical Town road). It is now recommended that roads will be cleared within 16 hours **or before** snow reaches a depth of 8 cm. Depending on the time of day when a storm event occurs, Town crews will not consistently be able to meet the revised MMS with the current compliment of Staff and equipment.

The Provincial MMS were designed to give Municipalities a "due diligence" defense in the event of a vehicle accident. Although the regulation is not mandatory, the Town should follow the Provincial MMS to be able to use it as a defense. If the Town cannot meet the Provincial MMS, it can still use Section 44 (1) of the Municipal Act to demonstrate that the service provided was reasonable in the circumstances for both weather and road conditions. The Town does not need to adhere to the Provincial MMS but should set a prescribed level of service for Staff to follow and maintain. The purpose of this Report is to outline and establish a policy for Winter Minimum Maintenance Standard and level of service specific for the Town.

In the past, the Town's level of service has met the expectations of the residents and allowed the Roads and Drainage Division to operate within the approved budget. Therefore, the proposed "Winter Minimum Maintenance Standards and Level of Service Policy" (Attachment 2) continues the same level of service as approved by Council on November 19, 2012. In addition, the policy has been expanded to now include winter minimum maintenance standards for sidewalks and municipal parking lots. It should be noted the proposed Town MMS do **not** meet the Provincial MMS. Non-compliance with the Provincial MMS has been used as reason for litigation involving vehicular accidents in the past. While the Town is not compelled to adhere to the Provincial MMS, a defined level of service should be established for Staff to follow and maintain. The risk of not meeting the Provincial MMS is that the Town is reducing its level of defence for liability by due diligence.

A copy of the proposed winter maintenance Policy was forwarded to our insurance provider for review and comments. The Cowan's Risk Management Department recommended: *"that the MMS be incorporated into all winter maintenance policies. The Town has named their own council approved standards the 'minimum maintenance standards' which is confusing and not recommended."* They did not provide any suggestions or comments other than to adhere to the Provincial MMS.

Should Council desire the Town to comply with the Provincial MMS, additional Staff will be required to enable equipment to operate for additional hours over the winter season. It would involve the creation of an afternoon or second shift for each route, or sufficient on-call contracted positions to field a full crew within the time limits prescribed. The Town operates 7 winter control vehicles; the patrol truck operates with 2 shifts currently. To provide a second shift would require 6 additional contract drivers for the winter control period. With the additional drivers, additional supervision is required. Winter control cost would increase due to fuel usage, winter material costs, additional repairs to equipment and a reduced life cycle of equipment. The Town would also need to negotiate a revised service contract with the contracted winter service provider.

Due to the significant budget implications of expanding the Town's winter control operations to meet the revised Provincial MMS, Staff recommend Council approve the "Winter Minimum Maintenance Standards and Level of Service Policy as a Corporate Policy for application on roads, sidewalks and parking lots under the Town's jurisdiction.

Management will monitor the timing of storm events and track events when crews are not able to meet the Provincial MMS.

As part of a comprehensive winter minimum maintenance standards consideration, Staff have also developed the following Departmental Operating Policies:

- Preparing For, Initiating and Decommissioning Winter Operations
- No Winter Maintenance Signage
- Winter Patrol Standards
- Winter Weather Monitoring

C. The Blue Mountains' Strategic Plan

Goal 2: Addressing the Town's municipal infrastructure needs.

Goal 6: Providing a strong, well-managed municipal government.

D. Environmental Impacts

Typical environmental impacts related to winter maintenance such as greenhouse gas generation and spreading of road salt and sand will continue as in the past.

E. Financial Impact

No Budget impact is expected with the implementation of the proposed Policy.

The Town may experience an increase in insurance premiums should the insurance providers attach a surcharge if they feel non-compliance with the Provincial MMS warrants. An updated new Winter Minimum Maintenance Standards and Level of Service Policy, together with the four new winter minimum maintenance operating Policies, should mitigate liability concerns.

F. In Consultation With

Ontario Good Roads Association resource documents were also reviewed and considered during the drafting of the Town Policies.

Jessica Jaremchuk - Manager of Risk Management Consulting Services at Cowan Insurance

Rob Cummings – Director of Finance & IT Services

G. Attached

1. Staff Report EPW.12.093 Winter Minimum Maintenance Standards
2. Winter Minimum Maintenance Standards and Level of Service Policy, 2013

Respectfully submitted,

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STAFF REPORT: ENGINEERING AND PUBLIC WORKS DEPARTMENT



REPORT TO: Infrastructure and Recreation
 Committee
MEETING DATE: November 13th 2012
REPORT NO.: EPW.12.093
SUBJECT: Winter Minimum Maintenance
 Standards
PREPARED BY: Jim McCannell, Manager of Roads and
 Drainage

A. Recommendations

THAT Council receive Report EPW.12.093 entitled "Winter Minimum Maintenance Standards";

AND THAT Council adopt the minimum winter maintenance standards described within Report EPW.12.093 for each class of road as defined.

B. Background

The Town has an obligation to maintain its road network to a safe level of service. To that end, the Town has utilised the Province's Minimum Maintenance Standards as set under the Municipal Act, 2001 in O.Reg 239/02 as amended.

In a recent court case, a municipality was unsuccessful in its defense of a claim using the Provincial Minimum Maintenance Standards. The province is considering regulatory changes to address this problem however no action is expected before the coming winter season. As a result of this situation, Grey County has established a winter maintenance minimum level of service for the County road system. The County's proposed winter maintenance level of service is very similar to the provincial winter minimum maintenance standards previously used and is consistent with the service historically provided in Grey County. Similarly, Town Staff has developed minimum maintenance standards for the Town and have forwarded it on to the Town's insurers to vet and review. The comments of the Town insurers have been incorporated into the service standards

Prior though to the Town's adoption of minimum maintenance standards, Town Staff want to execute an agreement with the County of Grey for winter maintenance on the Highway 26 connecting link in Thornbury from approximately Peel Street to 100m east of Grey Street. Within the Agreement, the proposed level of service must be specified. The County has asked that the Town implement a level of service for the roadway. Since the connecting link is classified as a Class 3 Road, Staff propose that the Town adopt the same minimum maintenance standard as the County has for Class 3 Roads.

Therefore Staff recommend that Council approve the objective of the minimum maintenance standard for each Class of road as set out in Attachment 1 appended to this Report.

D. Environmental Impacts

Typical environmental impacts related to winter maintenance such as greenhouse gas generation and spreading of road salt and sand will occur.

E. Financial Impact

By adopting the minimum maintenance standard for winter maintenance, the Town has mitigated liability concerns on the behalf of Town and County Staff with regards to the Connecting Link.

F. In Consultation With

Town's Insurers

G. Attached

1. Town Winter Minimum Maintenance Standards - Draft

Respectfully submitted,

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THE CORPORATION OF THE TOWN OF THE BLUE MOUNTAINS
Draft
“WINTER” MINIMUM MAINTENANCE STANDARDS

The Corporation of the Town of The Blue Mountains will strive to meet the Minimum Maintenance Standards as identified in Ontario Regulation 239/02 (The “Regulation”) and the Common Law test of reasonableness .

WINTER MAINTENANCE- Spreading and Plowing Times

Objective:

CLASS 3 (1000 to 5000 AADT) *The objective will be to make best efforts to achieve center bare or track bare pavement.*

Spreading Materials -- Class 3 roads will have materials spread within 8 hours after becoming aware that such treatment is required.

Snow Plowing - Class 3 roads will have both sides of the road plowed one time within 12 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.

CLASS 4 (250 to 1000 AADT) *The objective will be to make best efforts achieve center bare or track bare pavement.*

Spreading Materials - Class 4 roads will have materials spread within 12 hours after becoming aware that such treatment is required.

Snow Plowing - Class 4 roads will have both sides of the road plowed one time within 16 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.

CLASS 5 (50 to 1000 AADT on 50Km/ hr highways) *The objective is to make best efforts to provide a smooth snow covered surface.*

Spreading Materials - Class 5 roads will have materials spread within 16 hours after becoming aware that such treatment is required. Bituminous roads in the category should not be bared after the storm by applying salt.

Snow Plowing - Class 5 roads will have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.

CLASS 6 (under 50 AADT) *The objective will be to make best efforts to provide a smooth snow covered surface. Gravel roads in this category may be spot sanded only on hills, curves and intersections.*

Spreading Materials - Class 6 roads may have materials spread within 24 hours after becoming aware that such treatment is required.

Snow Plowing - Class 6 roads will have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.

Seasonal Roads CLASS 6 (under 50 AADT) *the Objective will be to close these roads and not perform any winter maintenance as signed.*

Spreading Materials – Not applicable- Seasonal Class 6 roads will not have materials spread .

Snow Plowing - Not applicable - Seasonal Class 6 roads will not have snow plowed or removed .

This Level of Service Policy :

- 1)
 - a. Only applies to one through lane in each direction and does not apply to auxiliary lanes such as parking, passing or turning lanes, and
 - b. Only applies to a municipality during the season when the municipality performs winter highway maintenance.

- 2) In this section, “snow accumulation” means the natural accumulation of any of the following that, alone or together, covers more than half a lane width of a roadway:
 - a. New fallen snow.
 - b. Wind-blown snow
 - c. Slush.

The following table is a guideline for The Blue Mountains Winter operations. Once it has been determined by the Roads and Drainage Division staff that conditions warrant spreading materials and /or snow clearing efforts, the following timelines will be followed.

Table “B”

Class of Highway	AADT	Spreading Time	Plowing Depth	Plowing Time
2	Over 5000	4 hours	5cm	6 hours
3	Over 1000	8 hours	8cm	12 hours
4	Under 1000	12 hours	8cm	16 hours
5	Under 1000	16 Hours	10 cm	24 hours
6	Under 50	24 Hours	10cm	24 hours
Seasonal 6	NA	NA	NA	NA

NA: Not Applicable

The objective of The Blue Mountains Roads and Drainage Division will be to provide winter maintenance given the resources available for winter control purposes and given the weather conditions. It is also recognized that conditions do occur that will preclude the defined Winter Level of Service from being achieved.

The Blue Mountains will make best efforts to monitor road conditions and weather information.

This document can be made available in other accessible formats as soon as practicable and upon request

TOWN OF THE BLUE MOUNTAINS

POLICY & PROCEDURES

Subject Title: Minimum Winter Maintenance Standards and Level of Service

Corporate Policy (Approved by Council)

Policy Ref. No.: POL.COR.13.XX

Administrative Policy (Approved by CAO)

By-law No.: N/A

Department Policy: (Approved by Mgr.)

Name of Dept.: Engineering & Public Works

Date Approved:

Staff Report: EPW.13.055

Policy Statement

This Policy is intended to ensure that appropriate winter minimum maintenance standards are developed and implemented to meet the Common Law test of reasonableness.

Purpose

This Policy is intended to provide a guideline for winter minimum maintenance standards and level of service.

Application

This Policy applies to employees of the Roads and Drainage Division of Engineering and Public Works

Definitions

MMS: means the Council approved Town Winter Minimum Maintenance Standards and Level of Service Policy

Procedures

Background

The Town has an obligation to maintain its road and sidewalk network to a safe level of service. To that end, the Town has developed a Winter Minimum Maintenance Standards and Level of Service Policy.

Winter Minimum Maintenance Standards- Roads

Spreading and Plowing Times

Objectives for Class 3, 4, 5 and 6 roads based on the following Average Annual Daily Traffic (AADT) volumes:

CLASS 3 (1000 to 5000 AADT) (80 km/hr) The objective is to make best efforts to achieve center bare or track bare pavement.

Spreading Materials - Class 3 roads will have materials spread within 8 hours after becoming aware that such treatment is required.

Snow Plowing - Class 3 roads will have both sides of the road plowed one time within 12 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.

CLASS 4 (250 to 1000 AADT) (80 km/hr) The objective is to make best efforts achieve center bare or track bare pavement.

Spreading Materials - Class 4 roads will have materials spread within 12 hours after becoming aware that such treatment is required.

Snow Plowing - Class 4 roads will have both sides of the road plowed one time within 16 hours after it has been determined that there is 8 cm of snow accumulated on the road surface.

CLASS 5 (50 to 1000 AADT on 50km/ hr highways) The objective is to make best efforts to provide a smooth snow covered surface.

Spreading Materials - Class 5 roads will have materials spread within 16 hours after becoming aware that such treatment is required. Bituminous roads in the category should not be bared after the storm by applying salt.

Snow Plowing - Class 5 roads will have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.

CLASS 6 (under 50 AADT) The objective is to make best efforts to provide a smooth snow covered surface.

Spreading Materials - Class 6 roads may have materials spread within 24 hours after becoming aware that such treatment is required. Gravel roads in this category may be spot sanded only on hills, curves and intersections.

Snow Plowing - Class 6 roads will have one lane 5m in width plowed one time within 24 hours after it has been determined that there is 10 cm of snow accumulated on the road surface.

This document can be made available in other accessible formats as soon as practicable and upon request

Seasonal Roads CLASS 6 (under 50 AADT) The objective is to close these roads and not perform any winter maintenance as signed.

Spreading Materials – N/A- Seasonal Class 6 roads will not have materials spread.

Snow Plowing - N/A- Seasonal Class 6 roads will not have snow plowed or removed.

This Level of Service Policy :

- 1) a. Only applies to one through lane in each direction and does not apply to auxiliary lanes such as parking, passing or turning lanes, and;
- b. Only applies during the season when the winter highway maintenance is performed.

In this section, “snow accumulation” means the natural accumulation of any of the following that, alone or together, covers more than half a lane width of a roadway:

- a. New fallen snow
- b. Wind-blown snow
- c. Slush

The following table is a guideline for the Town’s Winter operations. Once it has been determined by the Roads and Drainage Division Staff that conditions warrant spreading materials and /or snow clearing efforts, the following timelines will be followed.

Class of Highway	AADT	Spreading Time	Plowing Depth	Plowing Time
2	Over 5000	4 hours	5cm	6 hours
3	Over 1000	8 hours	8cm	12 hours
4	Under 1000	12 hours	8cm	16 hours
5	Under 1000	16 Hours	10 cm	24 hours
6	Under 50	24 Hours	10cm	24 hours
Seasonal 6	NA	NA	NA	NA

This document can be made available in other accessible formats as soon as practicable and upon request

The objective of the Town's Roads and Drainage Division is to provide winter maintenance given the resources available for winter control purposes and the weather conditions. It is also recognized that conditions do occur that will preclude the defined Winter Level of Service from being achieved.

The Town will make best efforts to monitor road conditions and weather information.

Winter Minimum Maintenance Standards- Sidewalks

The Town's practice is to clear priority sidewalks in Thornbury, Clarksburg and the Village Commercial Core plus secondary sidewalks in Thornbury and Clarksburg.

Winter sidewalk maintenance are as follows:

- i Priority Routes: Following a winter storm event, plow equipment will be dispatched to priority routes upon the accumulation of: five (5) centimeters of new snow. Plowing operations will remove snow down to a smooth snow packed surface. Priority sidewalks will be cleared within sixteen (16) hours of being dispatched. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.
- ii Secondary Routes: Following a winter storm event, plow equipment will be dispatched to secondary routes after the Priority routes are completed and upon the accumulation of: five (5) centimeters of new snow. Plowing operations will remove snow down to a smooth snow packed surface. Secondary sidewalks will be cleared within twenty-four (24) hours of being dispatched. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.
- iii The Contractor will undertake daily patrol to monitor sidewalk conditions. Town staff will monitor the Contractor's activities and conduct random inspections
- iv Apply sand/salt mix within sixteen hours to increase traction for pedestrians as the operator becomes aware of slippery conditions during non-snow events. (This is the same MMS as a Class 4 road.)
- v Winter maintenance will begin on November 1 in any year to April 15 in the following year.
- vi Sidewalks not included in the defined areas shall not be maintained from November 1 in any year to April 15 in the following year and shall be considered closed during this period.

Winter Minimum Maintenance Standards- Municipal Parking Lots

For the purpose of this Policy, municipal parking lots are those maintained by the Roads and Drainage Division. The Level of Service for municipal parking lots be the same as that prescribed for secondary sidewalks.

Following a winter storm event, equipment will be dispatched to parking lots upon the accumulation of: five (5) centimeters of new snow. Plowing operations will remove snow down to a smooth snow packed surface. Sand/salt mix will be added at the same time to increase traction for pedestrians on icy/slippery areas.

Level of Service Summary – Sidewalks and Municipal Parking Lots

1. The service area will remain those sidewalks currently cleaned on a priority and secondary basis;
2. Priority routes will be cleared upon the accumulation of 5 cm of snow within 16 hours, secondary routes will be cleared upon the accumulation of 5 cm of snow within 24 hours, and sand/salt mix will be applied as necessary for traction;
3. Snow removal will be undertaken as a contracted service achieving the Town's MMS criteria at the sole discretion of the Manager of Roads and Drainage or his or her designate;
4. The liability for injury claims will be the sole responsibility of the Contractor;
5. The contracted service will be bid on an annual lump sum basis .

Furthermore, Staff recommend that the same level of service be adopted for municipal parking lots maintained by the Roads and Drainage Division as that used for secondary sidewalks.

Exclusions

Town road sections and sidewalks that do not receive maintenance on a year-round basis.

References and Related Policies

1. Road Needs Study – 2009 to 2013 – Town of The Blue Mountains
2. The *Municipal Act, 2001*, S.O. 2001, c. 25, Regulation 239/02 and Regulation 23/10.

Consequences of Non-Compliance

Liability in the case of an action brought against the Town as a result of an accident caused by non-compliance with the Winter Minimum Maintenance Standards and Level of Service Policy.

Review Cycle

This Policy will be reviewed annually by the Manager of the Roads and Drainage Division and the Roads Foreman.

Jim McCannell
Manager, Roads and Drainage

Reg Russwurm
Director, Engineering and
Public Works

For more Information Contact

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Estimated Cost for Second Shift

Assuming 33 additional snow events that Staff would respond too.

Assuming 25 additional snow events that Contracted trucks would respond too.

Salary Costs (6 months Contracts)

5 additional drivers	\$30,517 x 5	\$152,586.72
1 additional lead hand	\$38,369.x 1	\$ 38,369.76
Sub-total		\$190,956.48

Option for On-call Drivers

1845 hours x 26.68 / hr	\$ 49,222.60	
On call cost for 6 drivers over 26 weeks at \$150 /week	\$ 23,400.00	
Sub total		\$72,625.00

Fuel costs

3 trucks at 33 events at 240 L per event shift		
23,760 additional of L of fuel used by the trucks (\$1.30)	\$ 30,888.00	
3 graders at 35 events at 280 L per event shift		
29,400 additional L of fuel used by the graders (\$1.16)	\$ 34,104.00	

Winter Material costs,

3 trucks at 33 events at 12 Tonnes of blended sand/salt per shift		
1188 Tonnes at \$21 / Tonne	\$ 24,948.00	

Maintenance and Repairs

Seven (7) vehicles average \$4000 each of additional repairs and maintenance cost 7 x 4000= 28,000		\$ 28,000
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Machine Time

Trucks : 3 Trucks at 33 events on 9 hour shifts equals 900 hours of Machine time at \$70.50/ hour		\$ 63,500
Graders: 3 graders at 35 events on 9 hours shifts 945 hours of machine time at \$84/ hr		\$ 79,400

The useful life for Trucks will be reduced from 10 year to 7 years

The useful life of graders is not likely to be effected.

Total cost using Contracted Operators		\$ 451,796.48
Total using On- call Operators		\$ 333,465.00

Additional Costs for Contracted Trucks.

Through discussion with the Service provider it was identified
The standby rates would increase to cover overhead and burden
of additional staff.

Estimated Standby days of 120 days x \$100 / day for 3 trucks is	\$ 36,000
Operating cost : 25 events x 3 trucks x 8 hours x \$103/ hour	\$ 60,000

The anticipated costs for providing a second shift are	\$ 96,000
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Summary of Costs.

The Cost of providing a second shift using full time Operators for winter control would be approximately
(\$451,796.48+\$96,000) \$547, 796.48 (\$550,000)

The Cost of providing a second shift using On-call Operators for winter control would be
Approximately (\$333,465.00+ 96,000) \$429,465. (\$430,000)

The 2012 2013 winter control cost were \$ 723,786.

Town of the Blue Mountains



Roads Risk Assessment

By: Doug Wyseman
Municipal Risk Services Limited
June 9, 2014

Municipal Risk Serves Limited was formed in 1998 to assist North American municipalities in dealing with a wide variety of risks. Doug Wyseman is the principal of the firm and has been involved in risk management since 1973. He has worked in the public sector as risk manager for a large Canadian municipality and in the private sector for insurers of public entities across North America.

Municipal Risk Services Limited specializes in developing risk management plans for municipalities to help them reduce costs of risk.

An Associate in Risk Management in the Insurance Institute of America, Mr. Wyseman has developed and taught risk management programs to a broad range of public entities throughout North America. He has acted as an instructor for the Ontario Good Roads School, the American Public Works Association, and the Public Risk Management Association and is a past chairman of the Canadian Urban Transit Risk Management Committee. Doug also served on a government committee to develop the Ontario Minimum Road Maintenance Standards and has served on the Board of Directors of the Canadian Parks and Recreation Association.

He has also developed risk management programs and strategies for programs such as Safe Routes to School and the Walking School Bus. Doug also provides risk assessments (pre-loss and post loss) on a wide variety of municipal concerns

A partial list of clients includes:

- Government of Canada
- Province of Ontario
- Government of the Yukon
- Alberta Association of Municipal Districts and Counties
- City of Vancouver
- City of Toronto
- City of Montreal
- City of Calgary
- Halifax Regional District
- City of Kamloops
- City of St. John's
- City of Windsor
- Brown County, Wisconsin
- City of Honolulu
- City of Tempe, AZ

Roads Risk Assessment



On June 9, 2014 we were able to visit the Town of the Blue Mountains and complete a risk assessment on Town roads as well as complete a review of department policies.

It was readily apparent that the Town offers its' users well maintained transportation routes. We greatly appreciate the assistance of Jim McCannell in providing us with current Town policies and providing guidance to assist in our examination of transportation routes.

Scope of Assessment:

The risk assessment comprised a site inspection of Town roads and a review of department policies and procedures with regarding to the level of service established in the Town Minimum Maintenance Standard. The report will also discuss liability concerns raised as a result of the Town MMS falling below the Provincial MMS.

Physical Roads and Sign Conditions

As a part of our risk assessment service we inspected many of the roads of the Town of the Blue Mountains to establish how well the roads were maintained. Since problems with visibility of road signs are a major cause of many of the largest municipal liability losses in Canada, we also checked sign visibility.

Road Conditions

Our inspection found the roads in the Town of the Blue Mountains to be very well maintained. Our efforts to physically find problem areas on Town roads found no problems.

The Town roadways cover 254 kilometers and due to the terrain are often located on hills and winding roads. Due to this fact we felt that it extremely important that all road marking, signs and site lines be clear.



Having done roads assessments for many years across North America we have come to find that many road signs are least visible in early June since new foliage often partially covers signs, decreasing visibility and dramatically increasing liability exposures. The road signs in the Town of the Blue Mountains on June 9, 2014 were the best maintained of most visible that we have ever inspected. Clearly the Town does an excellent job in physically maintaining roadways and ensuring that traffic control devices are visible and effective.

Town Minimum Maintenance Standards

Our review of Town policies shows that the level of road maintenance provided by the Town of the Blue Mountains does not always meet the standard as set out in the Ontario Minimum Roads Maintenance Standard. If council adopts a policy of road maintenance for Town roads that falls below the Provincial Minimum Maintenance Standard, the liability exposure for the Town should not increase.

Staff report # EPW.14.015 *Town Winter Minimum Maintenance Standards – Risk Management* quite correctly states that “The Town does not need to adhere to the Provincial MMS but should set a level of service for staff to follow and maintain”.

The Provincial MMS was established to give Ontario municipalities a third defence to road liability losses. In fact, it was our pleasure to sit on the original committee to assist in drafting this standard.

Prior to Nov. 1, 2002 The Municipal Act, RSO 1990, Section 44. (1) placed liability for road maintenance on the municipality that has jurisdiction over the road. This section was written as:

“Maintenance – The municipality that has jurisdiction over a highway or bridge shall keep it in a state of repair that is reasonable in the circumstances, including the character and location of the highway or bridge.”

Defences to liability were set out in Section 44. (3) as follows:

“A municipality is not liable for failing to keep a highway or bridge in a reasonable state of repair if,

- a) It did not know and could not have been expected to have known about the state of repair of the highway or bridge;*
- b) it took reasonable steps to prevent the default from arising*

In order to provide municipalities added protection from liability, Minimum Maintenance Standards (MMS) were developed. On November 1, 2002, Regulation 239/02 was enacted. The regulation was amended by Regulation 23/2010. MMS provided municipalities with a third defence against road liability claims. This defence is incorporated into the Municipal Act, RSO 1990, Section 44 (3) and is written as follows:

(c) at the time the cause of action arose, minimum standards established under subsection (4) applied to the highway or bridge and to the alleged default and those standards have been met.”

If the Town can show that it took reasonable steps to maintain its' roads and prevent problems from arising it meets the defence as set out in Section 44.3 of the Municipal Act and is not liable.

It is not reasonable to think that all municipalities are the same and therefore unreasonable to expect that they can all deliver the same level of service.

The courts recognize that municipalities have budgetary and manpower constraints which affect the level of service they provide. While you might like to inspect roads daily, that is economically not feasible. The municipality therefore has the right to determine how they can best use their resources.

The position of the courts was demonstrated at the Supreme Court of Canada in the case of *Beadle v. City of Nanaimo*, (2009) B.C.J. No 2191, 2009 BCSC 1506. In that case a plaintiff sued after tripping on a lip of a sidewalk and being injured. The municipality had an inspection and repair policy that stated that they "check for and repair sections of sidewalk cracked or separated with a greater than 25 mm difference in elevation." The municipality submitted that their sidewalk inspection and maintenance policy was dictated by the City's budgetary and manpower constraints and argued that they were not negligent or liable because "the difference in elevation at issue was below its threshold to repair". The court recognized the task of the municipality "to balance financial considerations against the need to repair the physical infrastructure of the City". The requirement was not to maintain sidewalks at a perfect level but to do the best they reasonably could, based on their resources. The case was dismissed. In the reasons for judgment the court stated:

"True policy decisions involve social, political, and economic factors. In such decisions, the authority attempts to strike a balance between efficiency and thrift, in the context of planning and predetermining the boundaries of its undertaking and of their usual performance. True policy decisions will usually be dictated by financial, economic, social and political factors or constraints" Supreme Court of Canada

Clearly the courts recognize that public entities have budgetary and manpower constraints which affect the level of service they provide. While you might like to inspect roads hourly, that is economically not feasible. You therefore have the right to determine how they can best use their resources. Since the court lets you set your policies, they expect you to meet the level of service that you've decided is reasonable for your town. They let you set your own exam....so you need to be able to pass.

Town of the Blue Mountains Policies

As a part of this assessment we reviewed the policies and procedures documents provided by the Town as well as the 40 page Draft Winter Operations Plan.

We found the policies to be very well written and set forth appropriate levels of service for the Town. We did find some areas of policy wording that we would recommend be modified.

Policy Reference Number RD.2013.03 Preparing For, Initiating and Decommissioning Winter Operations

This document is very well written and establishes necessary procedures to be followed to deal with winter operations. We note that under the procedures section of the document it suggests that the Town consider carrying out specific functions at various times leading up to, during and after to the winter season. The steps suggested in the document are excellent however we would recommend that wording be changed from “Prior to the winter season the Town will consider.” to “Prior to the Winter Season the Town will. Deleting *consider* allows the document to establish what the Town shall do rather than what it will think about doing.

Policy Reference Number RD.2013.04 Winter Patrol Standards

This is another well written document that properly establishes duties and procedures. On page 3 of the document under the title *Equipment* we recommend changing the wording to state “*Every Patroller shall be equipped with the following:*”

Policy Reference Number RD.2013.05 Winter Weather Monitoring

This is a well written document. On page 3 under the title *During the Winter Season* it states that weather forecasts should be monitored “at least once per shift or three times per day.” While we believe “a shift” means an eight hour shift, we would recommend that “shift’ be defined on page 1 of the document. We have seen municipalities challenged as to why a task to be performed once per shift was not carried out when an operator came in for an hour to assist during a hectic time.

Draft Winter Operations Plan

Our review of the Draft Winter Operations Plan found an extremely well written document that outlines a reasonable level of service for Town roads. The document is clear and concise and if adopted as policy by Town council, should protect the municipality against liability from road liability lawsuits.

Once adopted as policy by Town Council it becomes essential that the Town is able to fulfill the service requirements that our established in this document. By so doing the Town of The Blue Mountains will establish that it took reasonable steps to prevent road maintenance problems from arising and minimize their liability exposures.

Conclusion:

Our risk assessment of the Town of the Blue Mountains transportation routes shows that routes are well managed and that the Town handles their road risks far better than the average Ontario municipality. While the Town Minimum Road Maintenance Standard falls below the Provincial MMS, in our view the road maintenance provided by the Town of the Blue Mountains far surpasses a majority of Ontario municipalities that have policies stating that the meet the Provincial standard. The roads are well maintained and we found no major areas of concern.

Our recommendations that follow outline what we feel to be appropriate steps to reduce risks for the Town

Recommendations:

Recommendation: # 1

Establish Winter Operations Policy and have it adopted by Town Council.

Recommendation: # 2

Policy Reference Number RD.2013.03 making wording change to delete “consider” and state “Town will”

Recommendation: # 3

Policy Reference Number RD.2013.04 Winter Patrol Standards change wording to say “every patroller shall be equipped with the following;”

Recommendation: # 4

Policy Reference Number RD.2013.05 Winter Weather Monitoring define “shift” under definitions section of this document.