

THE CORPORATION OF THE TOWNSHIP OF SOUTH ALGONQUIN

BY-LAW NO. 2023-762

BEING A BY-LAW TO ADOPT MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS

WHEREAS Section 44(1) of the Municipal Act, R.S.O. 2001, states that municipalities shall keep all highways and bridges in a reasonable state to repair.

AND WHEREAS if a municipality defaults in complying with Section 44(1), then such municipality shall be liable under the *Negligence Act* for all damages any person sustains because of the default.

AND WHEREAS Section 44(4) provides that the Minister of Transportation may by regulation establish minimum standards of repair for highways and roads; classes of highways and roads; bridges; and classes of bridges.

AND WHEREAS the Township of South Algonquin desires to adopt and implement such minimum maintenance standards being Ontario Regulation 239/02 attached as policy PW23-01 hereto and forming part of this by-law.

AND WHEREAS all roads within the Township of South Algonquin are classified as per the regulation and attached as Appendix "A" hereto and forming part of this by-law.

NOW THEREFORE, the Council of the Corporation of the Township of South Algonquin enacts as follows:

1. THAT the standards herein, and amended from time to time, be hereby adopted and come into effect on the final date of passing of this by-law.
2. THAT in the South Algonquin, that Class 5 standards apply to all Class 6 roads under the jurisdiction of the Township.
3. THAT all operational activities of the municipal road department be directed to provide the desired roadway services as herein described where care is taken first to assure that the minimum standards are maintained, and second that such services are efficiently and effectively rendered.
4. THAT neither this corporation nor its officials make any promise or assurance that roadway services will be in excess of the minimum standard herein defined.
5. THAT these standards, and definitions of terminology, be made available to the ratepayers and users of this public municipal road system when requested. And that where exception is taken to standards stated herein, or interpretation of the same, such concern may be reviewed at a meeting of the Public Works Committee for that purpose, for consideration.
6. THAT where situations arise or applications be made which fall outside of the scope of these standards, the Works Superintendent shall respond as he/she may deem to be appropriate, with respect to budgetary constraint and reasonable practice.

7. AND THAT budgets and Council priorities shall be set on the basis of provision of roadway services to minimum standards.
8. That bylaw 16-512 is hereby repealed.

READ A FIRST AND SECOND TIME THIS 5th DAY OF JULY, 2023.

Ethel LaValley, Mayor

Bryan Martin, CAO/Clerk-Treasurer

READ A THIRD TIME AND PASSED THIS 5th DAY OF JULY, 2023.

Ethel LaValley, Mayor

Bryan Martin, CAO/Clerk-Treasurer

Township of South Algonquin Corporate Policy			
DEPARTMENT: Corporate Services			POLICY #: PW23-01
POLICY: Level of Service for Road Maintenance			
DATE: June /23	REV. DATE:	COVERAGE : Public Works Department	PAGE #: 1 of 16

PURPOSE: 4

POLICY STATEMENT: 4

SCOPE: 4

TITLE: 4

1.0- Routine and Winter Patrolling 5

 1.1 Introduction..... 5

 TABLE: CLASSIFICATION OF HIGHWAYS 5

 1.2 Definitions 5

 1.3 Operations Description..... 6

 Table 1A: Routine Patrolling Frequency..... 6

2.0- Plowing and Sanding 7

 2.1 Introduction..... 7

 2.2 Definitions..... 7

 2.3 Operations Description 7

 2.3.1 Snow Plowing..... 7

 Table 2A: Snow Accumulation 7

 Table 2B: Icy Roadways 8

 2.2.1 Sidewalk Maintenance 8

3.0 Road Surface Conditions..... 8

 3.1 Introduction..... 8

 3.2 Definitions 8

 3.3 Operations Description..... 9

 3.3.1 Potholes..... 9

 Table 3A: Potholes on Paved Surface of Roadway 9

 Table 3B: Potholes on Non-Paved Surface of Roadway 9

 Table 3C: Potholes on Paved or Non-Paved Surface of Shoulder 9

3.3.2 Shoulder Drop-off	10
Table 3D: Shoulder Drop-offs	10
3.3.3 Cracks	10
Table 3E: Cracks	10
3.3.4 Debris	10
3.4.5 Road Discontinuities	11
Table 3F: Surface Discontinuities	11
3.4.6 Line Painting	11
3.4.7 Dust Control	11
4.0- Street Lights (Luminaires)	12
4.1 Introduction	12
4.2 Definitions	12
4.3 Operations Description	12
Table 4F: Luminaires	12
5.0- Signs and Traffic Signal Systems	12
5.1 Introduction	12
5.2 Definitions	13
5.3 Operations Description	13
Table 5A: Regulatory and Warning Signs	13
6.0- Bridges	14
6.1 Introduction	14
6.2 Definitions	14
6.3 Operations Description	14
Table 6A: Bridge Deck Spalls	14
7.0- Drainage systems	15
7.1 Introduction	15
7.2 Operations Description	15
8.0- Trees and Brush	15
8.1 Introduction	15
9.0 Sidewalk surface discontinuities	16
9.1 Encroachments, area adjacent to sidewalk	16
9.2 Snow accumulation on sidewalks	16
9.3 Ice formation on sidewalks and icy sidewalks	16
9.4 Icy sidewalks, significant weather event	17

9.5 Winter sidewalk patrol	17
Schedule “A” MMS Classification of Roads.....	18

PURPOSE:

It is the objective of the Township of South Algonquin to provide sufficient resources to meet the level of service set out in this policy for a low volume predominantly rural road system. The goal will be to provide a level of service that meets the requirements of Ontario Regulation 239/02 Minimum Maintenance Standards (MMS) for Municipal Highways as amended from time to time.

POLICY STATEMENT:

The Township of South Algonquin promotes safety on all roads assumed and designated by the Township of South Algonquin. This policy was developed to help mitigate road related service, along with supporting the requirements of Ontario Regulation 239/02, as amended by 366/18 and other associated legislation and regulations.

SCOPE:

This policy shall apply to all roads assumed and designated by the Township of South Algonquin as roads receiving maintenance. Notwithstanding the foregoing, neither the Township of South Algonquin nor its officials or employees shall make any promise, assurance or guarantee that the services provided by the Township of South Algonquin will be more than the MMS.

TITLE:

This Policy shall be called the 'Level of Service for Road Maintenance Policy'.

1.0- Routine and Winter Patrolling

1.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for routine patrolling that meets the Minimum Maintenance Standards O. Reg. 366/18 Section 3, under the Municipal Act 2001. Road classifications are in accordance with O. Reg. 366/18. Please refer to the table below for a description of the Classification of Highways.

TABLE: CLASSIFICATION OF HIGHWAYS

Average Annual Daily Traffic Traffic Posted or Statutory Speed Limit

Column 1 Average Daily Traffic (number of motor vehicles)	Column 2 91 - 100 km/h speed limit	Column 3 81 - 90 km/h speed limit	Column 4 71 - 80 km/h speed limit	Column 5 61 - 70 km/h speed limit	Column 6 51 - 60 km/h speed limit	Column 7 41 - 50 km/h speed limit	Column 8 1 - 40 km/h speed limit
(# of motor vehicles)	(Kilometers per hour)						
53,000 or more	1	1	1	1	1	1	1
23,000 - 52,999	1	1	1	2	2	2	2
15,000 - 22,999	1	1	2	2	2	3	3
12,000 - 14,999	1	1	2	2	2	3	3
10,000 - 11,999	1	1	2	2	3	3	3
8,000 - 9,999	1	1	2	3	3	3	3
6,000 - 7,999	1	2	2	3	3	4	4
5,000 - 5,999	1	2	2	3	3	4	4
4,000 - 4,999	1	2	3	3	3	4	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	5	5
1,000 - 1,999	1	3	3	3	4	5	5
500 - 999	1	3	4	4	4	5	5
200 - 499	1	3	4	4	5	5	6
50 - 199	1	3	4	5	5	6	6
0 - 49	1	3	6	6	6	6	6

There are currently no Class 1, Class 2 or Class 3 highways within the Township of South Algonquin.

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

1.2 Definitions

- “day” means a 24-hour period.
- **As soon as practicable** - shall mean without undue delay, having regard to prevailing circumstances.
- **Bicycle Lane** - shall mean:
 - a portion of a roadway that has been designated by pavement markings or signage for the preferential or exclusive use of cyclists, or
 - a portion of a roadway that has been designated for the exclusive use of cyclists by signage and a physical or marked buffer.
- **Class** - shall mean the class of highway as determined in the Classification of Highways Table of the MMS.
- **GPS/AVL**- shall mean global positioning system, automated vehicle locating.
- **Highway** - shall include a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the public for the passage of vehicles and includes the

area between the lateral property lines thereof.

- **Ice** - shall mean all kinds of ice however formed.
- **Maintenance Class** - shall mean a Class 1, 2, 3, 4, 5 or 6 road designated as such by posted speed and traffic volume in accordance with Classification of Highways Table of the MMS.
- **MMS** - shall mean Ontario Regulation 239/02, Minimum Maintenance Standards for Municipal Highways as amended from time to time.
- **Operations** - shall mean those activities the Public Works Department performs to improve a condition or sustain a roadway standard. Public Works are normally defined by guidelines (not policy), with discretion of the Public Works Superintendent to choose various methods to achieve results cost-effectively.
- **Public Works Superintendent**- shall refer to a person, in the employ of, contracted by or appointed by the Township, who is accountable for the deployment of operations that impact on the condition or roadway services.
- **Patrol person** - shall mean a person who is either a dedicated winter patroller or a person whose duties include winter patrolling.
- **Roadway** - shall mean the part of the highway that is improved, designed, or ordinarily used for vehicular traffic, but does not include the shoulder, and, where a highway includes two or more separate roadways, the term "roadway" refers to any one roadway separately and not to all the roadways collectively.
- **Sidewalk** - shall mean the part of the highway specifically set aside or commonly understood to be for pedestrian use, typically consisting of a paved surface but does not include crosswalks, medians, boulevards, shoulders, or any part of the sidewalk where cleared snow has been deposited.
- **Significant Weather Event** - shall mean an approaching or occurring weather hazard with the potential to pose a significant danger to users of the highways within a Township.
- **Snow Accumulation** - shall mean the natural accumulation of any of the following that, alone or together, covers more than half a lane width of roadway: 1) new fallen snow 2) windblown snow 3) slush.
- **Weather Hazard** - shall mean the weather hazards determined by Environment Canada as meeting the criteria for the issuance of an alert under its Public Weather Alerting Program.
- **Winter Event** - shall mean a weather condition affecting roads such as snowfall, wind- blown snow, sleet, freezing rain, frost, or ice, to which a winter event response is required.
- **Winter Event Response** - shall mean a series of winter control activities performed in response to a winter event.
- **Winter Patrol** - shall mean the field observation of weather and road conditions.
- **Winter Season** - shall mean that season when the Township normally performs winter highway maintenance as identified in this policy.

1.3 Operations Description

The Township of South Algonquin will routinely patrol highways at a frequency set out in Table 1A below.

Table 1A: Routine Patrolling Frequency

Class of Highway	Patrolling Frequency
3	Once every 7 days
4	Once every 14 days
5	Once every 30 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

- a) Routine Patrolling will be carried out by driving on the highway or by electronically monitoring the highway to check for conditions described in O. Reg. 239/02 as amended by 366/18 and this level of service policy.

- b) Routine Patrolling is not required between sunset and sunrise.
- c) Winter patrol operations will replace routine patrols during the season when the Township performs winter highway maintenance.
- d) Winter patrol routes will not operate when conditions have been identified throughout the Township that will require commencement of snowplowing or sanding operations. The patroller will then be reassigned to snowplowing roads. The winter patrol and winter maintenance activity are an interchangeable function.

2.0- Plowing and Sanding

2.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for Road Conditions that meets the Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18, under The Municipal Act 2001. Road classifications are in accordance with O. Reg. 239/02 as amended by 366/18. There are currently no Class 1, Class 2 or Class 3 highways within the jurisdiction of the Township of South Algonquin. The Township of South Algonquin recognizes that severe weather conditions may occur that could prevent the attainment of the Level of Service specified in this policy. The Roads Department must work within the available resources and in such a manner to protect the safety of employees and the public.

2.2 Definitions

- “Season when the Township performs winter highway maintenance” means that period from October 1 to April 30 of the following year in accordance with O. Reg. 239/02 as amended by 366/18. The Township of South Algonquin may extend the season to May 10 when weather conditions create a demand for additional winter maintenance.
- “highway” means a common and public highway maintained by the Township of South Algonquin and includes any bridge, trestle, viaduct or other structure forming part of the highway.
- “roadway” means the part of the highway that is improved, designed or ordinarily used for vehicular traffic, but does not include the shoulder.
- “Snow accumulation” means the natural accumulation of new fallen snow or windblown snow that covers more than half a lane width of a roadway.
- From May 1 to September 30, the standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once per calendar day. O. Reg. 47/13, s. 3; O. Reg. 239/02 as amended by 366/18.

2.3 Operations Description

2.3.1 Snow Plowing

Table 2A: Snow Accumulation shown below contains the minimum maintenance standards specified in O. Reg. 239/02 as amended by 366/18 under the Municipal Act.

Table 2A: Snow Accumulation

<u>SNOW</u>		
Class of Highway	Depth	Time for Removal
3	8 cm	12 hours
4	8 cm	16 hours
5	10 cm	24 hours

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

Table 2B: Icy Roadways

<u>ICY ROADWAYS</u>	
Class of Highway	Time for Treatment
3	8 hours
4	12 hours
5	16 hours

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

The Township treats icy roadways in accordance with Table 2B for vehicular traffic. Maintenance for pedestrian purposes is not performed on roadways. These requirements only apply to a Township during the season when the Township performs winter highway maintenance.

2.2.1 Sidewalk Maintenance

- 2.3.2.1 The sidewalks will be cleared within 24 hours of when the snow accumulations reach a depth of 7.5 centimeters (3 inches).
- 2.2.1.2 Surfaces will be maintained in a snow packed condition during a storm.
- 2.2.1.3 Sidewalks will only be sanded when icy conditions create a hazard to pedestrians.
- 2.2.1.4 Sidewalks will generally be cleared and sanded in priority order. Priority will be given to school zones and then to commercial areas.

3.0 Road Surface Conditions

3.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for Road Surface Conditions that meets the Minimum Maintenance Standards O. Reg. 239/02 Section 6, 7, 8, 9 and 16(1) as amended by 366/18, under The Municipal Act 2001. Road classifications are in accordance with O. Reg. 239/02 as amended by 366/18. There are currently no Class 1, Class 2 or Class 3 roads within the jurisdiction of the Township of South Algonquin.

3.2 Definitions

- “day” means a 24-hour period.
- “debris” means any material or object on a roadway, that is not an integral part of the roadway or has not been intentionally placed on the roadway by a Township, and that is reasonably likely to cause damage to a motor vehicle or to injure a person in a motor vehicle.
- “highway” means a common and public highway maintained by the Township of South Algonquin and includes any bridge, trestle, viaduct or other structure forming part of the highway.
- “roadway” means the part of the highway that is improved, designed or ordinarily used for vehicular traffic, but does not include the shoulder.
- “shoulder drop-off” means the vertical differential, where the paved surface of the roadway is higher than the surface of the shoulder, between the paved surface of the roadway and the paved or non paved surface of the shoulder.
- “surface discontinuity” means a vertical discontinuity creating a step formation at joints or cracks in the paved surface of the roadway, including bridge deck joints, expansion joints and approach slabs to bridge.

3.3 Operations Description

3.3.1 Potholes

- a) Most pothole formations occur during the freeze/thaw cycles in spring and fall. Regular maintenance including patching and grading, is performed immediately following these cycles to prevent the formation of potholes.
- b) Potholes that are identified during routine patrols will be scheduled for repair as soon as practicable to prevent further degradation of the road surface structure and within the minimum maintenance standards detailed in sections c) and d) below.
- c) If a pothole exceeds both the surface area and depth set out in Table 3A, 3B, and 3C the Township of South Algonquin will repair the pothole within the time set out in Table 3A, 3B, or 3C as appropriate, after becoming aware of the condition.
- d) A pothole shall be deemed to be repaired if its surface area or depth is less than or equal to that set out in Table 3A, 3B, or 3C as appropriate.

Table 3A: Potholes on Paved Surface of Roadway

Class of Highway	Surface Area	Depth	Time for Completion of Repair
3	1000cm ²	8cm	7 days
4	1000cm ²	8cm	14 days
5	1000cm ²	8cm	30 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

Table 3B: Potholes on Non-Paved Surface of Roadway

Class of Highway	Surface Area	Depth	Time for Completion of Repair
3	1500cm ²	8cm	7 days
4	1500cm ²	10cm	14 days
5	1500cm ²	12cm	30 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

Table 3C: Potholes on Paved or Non-Paved Surface of Shoulder

Class of Highway	Surface Area	Depth	Time for Completion of Repair
3	1500cm ²	8cm	14 days
4	1500cm ²	10cm	30 days
5	1500cm ²	12cm	60 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

3.3.2 Shoulder Drop-off

- a) Regular shoulder grading is performed during spring and fall, when time and resources permit, to prevent the formation of shoulder drop-off.
- b) Problem areas are identified through routine patrolling and historical data. Shoulder grading is performed in these areas at an increased frequency appropriate to the requirements of each area.
- c) A shoulder drop-off condition that is identified during routine patrols will be scheduled for grading as soon as practicable to prevent further degradation of the road surface structure and within the minimum maintenance standards detailed in sections d) and e) below.
- d) If a shoulder drop-off is deeper, for a continuous distance of 20 meters or more, than the depth set out in the table 3D, the Township of South Algonquin will repair the shoulder drop-off within the time set out in the Table after becoming aware of the condition.
- e) A shoulder drop-off shall be deemed to be repaired if its depth is less than or equal to that set out in Table 3D.

Table 3D: Shoulder Drop-offs

Class of Highway	Depth	Time for Completion of Repair
3	8cm	7 days
4	8cm	14 days
5	8cm	30 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

3.3.3 Cracks

- a) Most cracks occur during the freeze/thaw cycles in spring and fall. Regular maintenance including patching is performed immediately following these cycles to prevent the formation of cracks.
- b) Cracks that are identified during routine patrols will be scheduled for repair as soon as practicable to prevent further degradation of the road surface structure and within the minimum maintenance standards detailed in sections c) and d) below.
- c) If a crack on the paved surface of a roadway is greater, for a continuous distance of three meters or more, than both the width and depth set out in Table 3E the Township of South Algonquin will repair the crack within the time set out in the Table after becoming aware of the condition.
- d) A crack shall be deemed to be repaired if its width or depth is less than or equal to that set out in the Table.

Table 3E: Cracks

Class of Highway	Width	Depth	Time for Completion of Repair
3	5cm	5cm	60 days
4	5cm	5cm	180 days
5	5cm	5cm	180 days

3.3.4 Debris

- a) If there is debris on a roadway, the Township of South Algonquin will remove the debris as soon as practicable after becoming aware of the condition. Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.
- b) “Debris” means any material (except snow, slush or ice) or object on roadway.

- That is not integral part of the roadway or has not been intentionally placed on the roadway by a Township, and
- That is reasonably likely to cause damage to a motor vehicle or to injure a person in a motor vehicle. O. Reg. 239/02, s. 9(2); O. Reg. 47/18, s.9 as amended by 366/18.

3.4.5 Road Discontinuities

- Most road discontinuities occur during the freeze/thaw cycles in spring and fall. Most road discontinuities are temporary conditions, caused by frost heave. Road discontinuities found during the freeze/thaw cycle will be identified with a warning sign and monitored for potential repairs.
- Regular maintenance including patching and grading, is performed immediately following these cycles to repair and permanent surface discontinuities.
- Surface discontinuities that are identified during routine patrols will be scheduled for repair as soon as practicable to prevent further degradation of the road surface structure and within the minimum maintenance standards detailed in sections c) below.
- If a surface discontinuity, (other than a surface discontinuity on a bridge deck) exceeds the height set out in Table 3F, the Township of South Algonquin will repair the surface discontinuity within the time set out in the Table after becoming aware of the condition.

Table 3F: Surface Discontinuities

Class of Highway	Height	Time for Completion of Repair
3	5cm	7 days
4	5cm	21 days
5	5cm	21 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

3.4.6 Line Painting

- The line painting maintenance is completed in summer to replace existing lines worn away during the winter months.
- Line painting is completed on roads, sharp curves and steep that the Township deems necessary.

3.4.7 Dust Control

- Dust control is a regular treatment program applied annually to gravel and dirt roads.
- Due to the high cost of dust suppressants, the treatment is not repeated during the year so the application must be timed to provide optimum coverage for the season. The dust suppressants are generally applied in early summer.

4.0- Street Lights (Luminaires)

4.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for streetlights that meets the Minimum Maintenance Standards O. Reg. 239/02 Section 10 as amended by 366/18 under the Municipal Act 2001. Road classifications are in accordance with O. Reg. 239/02 as amended by 366/18. There are currently no Class 1, Class 2 or Class 3 roads within the jurisdiction of the Township of South Algonquin. The standard for the frequency of inspecting all luminaires to check to see that they are functioning is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 366/18, s.12

4.2 Definitions

- “day” means a 24-hour period.
- “highway” means a common and public highway maintained by the Township of South Algonquin and includes any bridge, trestle, viaduct or other structure forming part of the highway.
- “streetlight” means the complete lighting unit consisting of a lamp and the parts designed to distribute the light, to position or protect the lamp and to connect the lamp to the power supply. (Regulation 239/02 as amended by 366/18 uses the term Luminaires.)

4.3 Operations Description

- Streetlights will be scheduled for repair when the Township becomes aware that it is not functioning.
- Streetlights located in a high traffic area may be immediately scheduled for repair at the discretion of the Public Work Superintendent.
- In addition, the level of service specified in sections a) and b), streetlights will be repaired to the Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

Table 4F: Luminaires

Class of Highway	Time for Completion of Repair
3	7 days
4	21 days
5	21 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

5.0- Signs and Traffic Signal Systems

5.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for Signs that meets the Minimum Maintenance Standards O. Reg. 239/02 Sections 11 and 12 as amended by 366/18 under the Municipal Act 2001. Road classifications are in accordance with O. Reg. 239/02 as amended by 366/18. There are currently no Class 1, Class 2 or Class 3 roads within the jurisdiction of the Township of South Algonquin. The Standard for the frequency of inspecting regulatory signs or warning signs to check to see that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 8; O. Reg. 47/13, s. 12(1); O. Reg. 239/02, s. 13 as amended by 366/18.

5.2 Definitions

- “day” means a 24-hour period.
- “highway” means a common and public highway maintained by the Township of South Algonquin and includes any bridge, trestle, viaduct or other structure forming part of the highway.
- “Regulatory sign” means a traffic sign advising drivers of action they should or must do (or not do), under a given set of circumstances.
- “Warning sign” means a sign which indicates conditions on or adjacent to a highway or street that is actually or potentially hazardous to traffic operations.

5.3 Operations Description

a) If any of the sign types listed below is illegible, improperly oriented or missing, the sign will be repaired or replaced as soon as practicable after becoming aware of the condition.

- Checkerboard
- Curve sign with advisory speed tab
- Do not enter.
- 1 Load Restricted Bridge
- One Way
- School Zone Speed Limit
- Stop, Stop Ahead, Stop Ahead New
- Traffic Signal Ahead, New
- Two Way Traffic Ahead
- Wrong Way
- Yield, Yield Ahead, Yield Ahead New
- Dead End Road
- No Exit
- Maintained Portion of Road Ends

b) Any sign that is found by the routine patrol to be illegible, improperly oriented or missing will be scheduled for repair or replacement as soon as practicable and within the minimum maintenance standards detailed in section c) below.

c) Any illegible, improperly oriented or missing regulatory/warning signs not found on the list above will be repaired or replaced within the time period set out in Table 5A.

Table 5A: Regulatory and Warning Signs

Class of Highway	Time for Completion of Repair
3	21 days
4	30 days
5	30 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

6.0- Bridges

6.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for Bridges that meets the Minimum Maintenance Standards O. Reg. 239/02 Sections 15 and 16 as amended by 366/18 under the Municipal Act 2001. Road classifications are in accordance with O. Reg. 239/02 as amended by 366/18. There are currently no Class 1, Class 2 or Class 3 roads within the jurisdiction of the Township of South Algonquin.

6.2 Definitions

- “Bridge deck spall” means a cavity left by one or more fragments detaching from the paved surface of the roadway or shoulder of a bridge.
- “day” means a 24-hour period.
- “highway” means a common and public highway maintained by the Township of South Algonquin and includes any bridge, trestle, viaduct or other structure forming part of the highway.
- “Surface discontinuity” means a vertical discontinuity creating a step formation at joints or cracks in the paved surface of the roadway, including bridge deck joints, expansion joints and approach slabs to bridge.

6.3 Operations Description

- Most bridge deck spalls occur during the freeze/thaw cycles in spring and fall. Regular maintenance including patching is performed immediately following these cycles to prevent the formation of spalls.
- Bridge deck spalls that are identified during routine patrols will be scheduled for repair as soon as practicable to prevent further degradation of the bridge surface structure and within the minimum maintenance standards detailed in sections c) below.
- If a bridge deck spall exceeds both the surface area and depth set out in Table 6A below, the spall will be repaired, within the time specified in Table A after becoming aware of the condition.

Table 6A: Bridge Deck Spalls

Class of Highway	Surface Area	Depth	Time for Completion of Repair
3	1,000 cm ²	8 cm	7 days
4	1,000 cm ²	8 cm	7 days
5	1,000 cm ²	8 cm	7 days

Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18.

- The bridge deck spall will be considered repaired if its surface area or depth is less than or equal to that set out in Table 6A.
- If the surface discontinuity on a bridge deck exceeds 5 cm, the condition will be repaired as soon as practicable after becoming aware of the condition.

7.0- Drainage systems

7.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for Drainage Systems that protects the road infrastructure from damage due to water saturation and prevents flooding of the roadway and adjacent properties. Drainage systems are not included in the Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18 under the Municipal Act 2001.

7.2 Operations Description

- a) Collapsed or excessively corroded culverts will be replaced.
- b) Culverts that have shifted in position and are no longer set to the proper grade due to frost heave or wear will be reset or replaced depending on the condition of the culvert.
- c) Culvert thawing will be performed seasonally, in accordance with the demand caused by weather conditions.
- d) Regular spring run-off maintenance will include the removal of snow from high volume ditching, and the clearing of each end of the culvert. The maintenance program is completed in order of priority, when time and weather conditions permit. A sudden onset of the spring melt may prevent the maintenance program from proceeding.
- e) Curb and gutter sections that have settled or heaved will be scheduled for repair.
- f) In specific areas of historical concern, catch basins are to be cleaned when required.
- g) Ditches in areas where problems are repetitive will be inspected annually and cleared as required.
- h) Catch basin tops and inlets will be cleaned when required.
- i) Ditches will be scheduled for clearing when problems are identified.
- j) Catch basin and ditch inlet frames and grates within a highway shall be inspected for road surface continuity. Adjustments of the frames and grates will be made as required in Table 3F Surface Discontinuities.

8.0- Trees and Brush

8.1 Introduction

The Township of South Algonquin Roads Department will provide a level of service for Trees and Brush that protects the health and safety of the public and maintains the natural surroundings.

Trees and brush are not included in the Minimum Maintenance Standards O. Reg. 239/02 as amended by 366/18 under the Municipal Act 2001. The Township follows the Municipal Act Section 62 (1) and 62 (2) which states:

62 (1) Entry on land, tree trimming- A Township may, at any reasonable time, enter upon land lying along any of its highways.

- a) To inspect trees and conduct tests on trees; and
- b) To remove decayed, damaged or dangerous trees or branches of trees if, in the opinion of the Township, the trees or branches pose a danger to the health or safety of any person using the highway.

62 (2) Immediate Danger- An employee or agent of the Township may remove a decayed, damaged or dangerous tree or branch of a tree immediately and without notice to the owner of the land upon which the tree is located if, in the opinion of the employee or agent, the tree or branch poses and immediate danger to the health or safety of any person using the highway.

The Township will also adhere to Section 62.1 (1) of the Municipal Act which states that a Township may apply to a judge of the Superior Court of Justice for an order requiring the owner of the land lying along the highway to remove or alter any vegetation, building or object on the land that may obstruct the vision of pedestrians or drivers of vehicles on the highway, cause the drifting or accumulation of snow or harm the highway if the Township is unable to enter into an agreement with the owner of the land to alter or remove the vegetation, building or object from the land.

9.0 Sidewalk surface discontinuities

The Standard for the frequency of inspecting sidewalks to check for surface discontinuity is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O.Reg.23/10, s.10; O.Reg.47/13, s16(1), O.Reg.239/02, s.13 as amended by 366/18.

A sidewalk that has been inspected in accordance with subsection (1) is deemed to be in a state of repair with respect to any surface discontinuity until the next inspection in accordance with that subsection, provided that the Township does not acquire actual knowledge of the presence of a surface discontinuity in excess of two centimeters. O. Reg. 47/13, s. 16 (2).

1. If a surface discontinuity on or within a sidewalk exceeds two centimeters, the standard is to treat the surface discontinuity within 14 days after acquiring actual knowledge of the fact. O. Reg. 239/02, s. 14 as amended by 366/18.
2. A surface discontinuity on or within a sidewalk is deemed to be in a state of repair if it is less than or equal to two centimeters. O. Reg. 239/02, s. 14 as amended by 366/18.
3. For the purpose of subsection (2), treating a surface discontinuity on or within a sidewalk means taking reasonable measures to protect users of the sidewalk from the discontinuity, including making permanent or temporary repairs, alerting users' attention to the discontinuity or preventing access to the area of discontinuity. O. Reg. 239/02, s.14 as amended by 366/18.

9.1 Encroachments, area adjacent to sidewalk

1. The standard for the frequency of inspecting an area adjacent to a sidewalk to check for encroachments is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 239/02, s. 15 as amended by 366/18.
2. For greater certainty, the area adjacent to a sidewalk begins at the outer edges of a sidewalk and ends at the lesser of the limit of the highway, the back edge of a curb if there is a curb and a maximum of 45cm. O. Reg. 239/02, s. 15 as amended by 366/18.
3. The area adjacent to a sidewalk is deemed to be in a state of repair in respect of any encroachment present unless the encroachment is determined by a Township to be highly unusual given its character and location or to constitute a significant hazard to pedestrians. O. Reg. 239/02, s. 15 as amended by 366/18.
4. For the purpose of subsection (4), treating an encroachment means taking reasonable measures to protect users, including making permanent or temporary repairs, alerting users' attention to the encroachment or preventing access to the area of the encroachment. O. Reg. 239/02, s. 15 as amended by 366/18.

9.2 Snow accumulation on sidewalks

- a) To reduce the snow to a depth less than or equal to 8 centimeters within 48 hours; and
- b) To provide a minimum sidewalk width of 1 meter. O. Reg. 239/02, s. 15 as amended by 366/18.

9.3 Ice formation on sidewalks and icy sidewalks

- a) If ice forms on a sidewalk even though the Township meets the standard set out, the sidewalk is deemed to be in a state of repair in respect of ice until 48 hours after the Township first becomes aware of the fact that the sidewalk is icy. O. Reg. 239/02, s.15 as amended by 366/18.
- b) The standard for treating icy sidewalks after the Township becomes aware of the fact that a sidewalk is icy is to treat the icy sidewalk within 48 hours, and an icy sidewalk is deemed to be in a state of repair for 48 hours after it has been treated. O. Reg. 239/02, s. 15 as amended by 366/18.
- c) For the purposes of this section, treating a sidewalk means applying materials including salt, sand or any combination of salt and sand to the sidewalk. O. Reg. 239/02, s. 15 as amended by 366/18.

9.4 Icy sidewalks, significant weather event

- 1) If a Township declares a significant weather event relating to ice, the standard for addressing ice formation or ice on sidewalks until the declaration of the end of the significant weather event is,
 - a) To monitor the weather in accordance with section 3.1; and
 - b) If deemed practicable by the Township, to deploy resources to treat the sidewalks to prevent ice formation or improve traction, or treat the icy sidewalks, starting from the time that the Township deems appropriate to do so. O. Reg. 239/02, s. 15 as amended by 366/18.

9.5 Winter sidewalk patrol

- 1) If it is determined by the Township that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on sidewalks in excess of 8 cm, ice formation on sidewalks or icy sidewalks, the standard for patrolling sidewalks is to patrol sidewalks that the Township selects as representative of its sidewalks at intervals deemed necessary by the Township. O. Reg. 239/02, s. 15 as amended by 366/18.
- 2) Patrolling a sidewalk consists of visually observing the sidewalk, either by driving by the sidewalk on the adjacent roadway or by driving or walking on the sidewalk or by electronically monitoring the sidewalk and may be performed by persons responsible for patrolling roadways or sidewalks or by persons responsible for or performing roadway or sidewalk maintenance activities. O. Reg. 239/02, s. 15 as amended by 366/18.

MMS Classification Schedule A

<i>Sec. #</i>	<i>Name</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>MMS Class</i>	<i>AADT</i>	<i>AADT Year</i>	<i>Speed Limit</i>
RD010	Airy Road	Highway 60	0.9km west of Highway 60	0.900	6	10	2021	50
RD020	Airy Road	0.9 km west of Highway 60	1.2 km west of Highway 60	0.300	6	10	2021	50
RD030	Galeairy Lake Road	Maple Drive (N)	Maple Drive (S)	0.440	6	318	2021	40
RD035	Galeairy Lake Road	Highway 60	Maple Drive (N)	0.250	6	318	2021	40
RD040	Maple Drive	Galeairy Lake Rd. N.	Galeairy Lake Rd. S.	0.850	5	300		50
RD050	Sunset Trail	Maple Drive	End	0.600	6	40		50
RD060	Birch Crescent	Maple Drive	End	0.150	6	20		50
RD070	Hemlock Crescent	Maple Drive	End	0.130	6	20		50
RD080	Galeairy Lake Crescent	Galeairy Lake Road	End	0.130	6	20		40
RD090	Fire Route-Dam	Galeairy Lake Road	End	0.050	6	5		50
RD100	Hay Creek Road (PA)	Highway 60	1.25 km South of Highway 60	1.250	5	638	2021	40
RD110	Hay Creek Road (UP)	1.25 km South of Ottawa Street	McCrae's Mill	0.750	5	638	2021	40
RD120	Dave Bowers Road	Hay Creek Road	0.1 km west of Hay Creek Road	0.100	6	20		50
RD130	Ottawa Street	First Avenue	Second Avenue	0.200	5	624	2021	50
RD135	Ottawa Street	Highway 60	First Avenue	0.400	5	624	2021	50
RD140	Lake Street	Third Avenue	Lakeshore Drive	0.250	6	156		50
RD145	Lake Street	Second Avenue	Third Avenue	0.300	6	156		50
RD150	Boat Launch Road	Ottawa Street	0.10 west of Ottawa Street	0.100	6	10		50
RD160	Lakeshore Avenue	Hay Creek Road	Third Street	0.600	6	30		50

<i>Sec. #</i>	<i>Name</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>MMS Class</i>	<i>AADT</i>	<i>AADT Year</i>	<i>Speed Limit</i>
RD170	First Avenue	Hay Creek Road	Ottawa Street	0.200	6	156		50
RD180	Second Avenue	Hay Creek Road	Ottawa Street	0.210	6	156		50
RD190	Third Avenue	Hay Creek Road	Lakeshore Drive	0.120	6	156		50
RD200	Mill Street	First Avenue	Second Avenue	0.200	6	156		50
RD220	Paradise Road	Highway 60	1.1 km south of Highway 60	1.100	6	195	2021	50
RD230	Paradise Road	1.1 km south of Highway 60	End	1.300	6	5	2021	50
RD240	Hilltop Crescent	Highway 60	End	0.360	6	50		50
RD250	Church Hill Street	Post Street	0.06 km South of Post Street	0.060	6	93		50
RD254	Church Hill Street	0.06 South of Post Street	300m North of Highway 60	0.380	6	93		50
RD258	Church Hill Street	300m North of Highway 60	Highway 60	0.300	6	93		50
RD260	Park Street	Highway 60	Paradise Rd.	0.245	6	93		50
RD280	Post Street	Highway 60	Medical Centre Road	0.270	5	371	2021	50
RD290	Post Street	Medical Centre Road	End	0.170	6	93		50
RD300	Medical Centre Road	Post Street	End	0.170	6	186		50
RD310	Madawaska Avenue	Post Street	Madawaska Street	0.050	6	0		50
RD320	Madawaska Street	Algonquin Street	End	1.000	6	40		50
RD330	Madawaska Street	Highway 60	Madawaska Avenue	0.100	6	25	2021	50
RD335	Madawaska Street	Madawaska Avenue	Algonquin Street	0.200	5	300		50
RD340	Algonquin Street	Madawaska Street	Algonquin Crescent	0.700	6	39	2021	50
RD340	Algonquin Street	Algonquin Crescent	End	0.210	6	39	2021	50
RD350	Algonquin Crescent	Highway 60	End	0.400	6	20		50

<i>Sec. #</i>	<i>Name</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>MMS Class</i>	<i>AADT</i>	<i>AADT Year</i>	<i>Speed Limit</i>
RD360	Nipissing Road	Algonquin Street	0.6 km East of Algonquin Street	0.600	5	300		50
RD380	Nipissing Road	0.6 km East of Algonquin Street	2.3 km East of Algonquin Street	1.670	5	300		50
RD390	Old Highway 127	Highway 60	Highway 127	5.530	6	38	2021	80
RD400	Spectacle Lake Road	Highway 60	Dickens Township Boundary	1.380	6	62	2021	50
RD410	Aylen Lake Road	Highway 60	End	8.300	5	86	2021	60
RD420	Gaffney Road	Aylen Lake Road	Moonlight Road	0.810	6	21		80
RD424	Gaffney Road	Moonlight Bay Road	Burnt Depot Road	3.870	6	21		80
RD428	Gaffney Road	Burnt Depot Road	End	0.620	6	21		80
RD435	Burnt Depot Road	200m East of Gaffney Road	End	0.300	6	5		80
RD430	Burnt Depot Road	Gaffney Road	200m East of Gaffney Road	0.200	6	5		80
RD440	Moonlight Bay Road	Gaffney Road	End	2.200	6	5		80
RD450	Whites Road	Aylen Lake Road	End	0.700	6	5		80
RD460	North Aylen Lake Road	Aylen Lake	Chapel Lane	3.320	6	43		80
RD463	North Aylen Lake Road	Chapel Lane	Ferndale Lane	2.080	6	43		80
RD466	North Aylen Lake Road	Ferndale Lane	End	2.310	6	43		80
RD470	Pringles Road	North Aylen Lake Road	End	0.670	6	10		80
RD480	Shields Road	North Aylen Lake Road	End	0.160	6	10		80
RD490	Old Farm Road	Aylen Lake North Road	End	0.310	6	5		80
RD505	Paplinskie Road	Civic #221	End	1.100	6	39	2021	80
RD500	Paplinskie Road	Highway 60	Civic #221	1.000	6	39		80
RD510	Dunnes Road	Highway 60	End	2.100	6	10		80

<i>Sec. #</i>	<i>Name</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>MMS Class</i>	<i>AADT</i>	<i>AADT Year</i>	<i>Speed Limit</i>
RD520	Dawson Street	Highway 60 West	Highway 60 East	0.800	6	101		50
RD530	Merton Street	Murchison Road	Highway 60	0.610	6	101		50
RD540	Murchison Road	Dawson Street	End	0.240	6	101		50
RD550	Holstein Street	Merton Road	End	0.500	6	50		50
RD580	Victoria Street	Highway 60	Major Lake Road	0.400	6	79	2021	50
RD590	Fire Route - Pump House	Major Lake Road	End	0.150	6	20		50
RD600	Tom and Mick Murray Park Road	Highway 523	End	0.670	6	5		80
RD610	Major Lake Road	Highway 60	Victoria Street	0.700	5	209	2021	50
RD612	Major Lake Road	Victoria Street	4.7km North of Highway 60	4.000	4	209	2021	80
RD613	Major Lake Road	4.7km North of Highway 60	6km North of Highway 60	1.300	4	209	2021	80
RD614	Major Lake Road	6km North of Highway 60	Victoria Lake Road	2.000	4	209	2021	80
RD615	Major Lake Road	Victoria Lake Road	McCaulley Lake Road	3.100	4	209	2021	80
RD630	Victoria Lake Road	Major Lake Road	Civic #700	3.440	6	5		80
RD635	Victoria Lake Road	Civic #700	End	2.510	6	5		80
RD640	McCauley Lake Road	Major Lake Road	End	3.150	6	11	2021	80
RD660	Reids Road	Highway 523	End	0.100	6	20		80
RD670	Lyell Lake Landing Road	Highway 523	End	0.400	6	30		80
RD680	McGuey Road	Highway 127	Civic# 471	2.370	6	44	2021	80
RD685	McGuey Road	Civic #471	End	1.970	6	44	2021	80
RD690	McRae-Hay Lake Road (PA)	2.4km West of Highway 127 (Civic 510)	McRae-Hay Lake Road (UP)	2.000	6	19	2021	80

<i>Sec. #</i>	<i>Name</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>MMS Class</i>	<i>AADT</i>	<i>AADT Year</i>	<i>Speed Limit</i>	
RD691	McRae-Hay Lake Road (PA)	Highway 127	2.4km West of Highway 127 (Civic 510)	2.400	6	19	2021	80	
RD700	McRae-Hay Lake Road (UP)	North Road	End	2.480	6	19		80	
RD710	Bennett Road	McRae-Hay Lake Road	End	2.360	6	5		80	
RD736	McKenzie Lake Road	South McKenzie Lake Road	Highway 127	1.560	6	45	2021	80	
RD730	McKenzie Lake Road	Highway 127	Proven Line	1.580	6	45	2021	80	
RD732	McKenzie Lake Road	Proven Line	North McKenzie Lake Road	2.460	6	45	2021	80	
RD734	McKenzie Lake Road	North McKenzie Lake Road	South McKenzie Lake Road	3.190	6	45	2021	80	
RD740	South McKenzie Lake Road	McKenzie Lake Road	End	2.600	6	5		80	
RD750	North McKenzie Lake Road	McKenzie Lake Rd.	Civic #681 (Moosemeat Archery)	3.410	6	36		80	
RD752	North McKenzie Lake Road	Civic #681 (Moosemeat Archery)	Henry Coglan Drive	2.800	6	36		80	
RD755	North McKenzie Lake Road	Henry Coglan Drive	End	2.310	6	36		80	
RD760	Henry Coglan Drive	North McKenzie Lake Road	End	1.900	6	5		80	
RD770	Proven Line	McKenzie Lake Road	Pastwa Lake Road	1.720	6	10		80	
RD780	Pastwa Lake Road	Proven Line	2.7 km East of Proven Line	2.400	6	10		80	
RD785	Pastwa Lake Road	2.7 km East of Proven Line	End	3.080	6	5		80	
RD790	Kuiack Road	Pastwa Lake Road	End	0.500	6	1		80	
RD791	Kenny Road	Paradise	End	0.200	6	25		50	
				122.085					

Winter Road Closures

Airy Ward:

<u>Road Name</u>	<u>Particulars</u>
Lakeshore Drive	From Change Room to Third Avenue
Boat Launch Road – Galeairy Lake	Entire length

Dickens Ward:

<u>Road Name</u>	<u>Particulars</u>
Burnt Depot Road	From 0.25 km to end of road
Shields Road	Entire length
Old Farm Road	Entire length

Murchison/Lyell Wards:

<u>Road Name</u>	<u>Particulars</u>
Dunnes Road	From 183 Dunnes Rd. to end
Lyell Lake Landing Road	Top of the hill to the boat launch
Tom & Mick Murray Park	Boat Launch turn to Tom & Mick Murray Park

Sabine Ward:

<u>Road Name</u>	<u>Particulars</u>
Pastwa Lake Road	From 435 Pastwa Lake Road end of road
Kuiack Road	Entire length
Hay Lake Boat Launch Road	Entire length