



# PUBLICATIONS

0209

## MINIMUM HIGHWAY MAINTENANCE STANDARDS

September 2002

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### **Publications under the Regulations Act Publications en vertu de la Loi sur les règlements 2002—08—24**

#### **ONTARIO REGULATION 239/02**

made under the

#### **MUNICIPAL ACT**

Made: July 23, 2002  
Filed: August 8, 2002

#### **MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS**

##### INTERPRETATION AND APPLICATION

##### **Definitions**

1. (1) In this Regulation,  
“cm” means centimetres;  
“day” means a 24-hour period;  
“motor vehicle” has the same meaning as in subsection 1 (1) of the *Highway Traffic Act*, except that it does not include a motor assisted bicycle;  
“non-paved surface” means a surface that is not a paved surface;  
“paved surface” means a surface with a wearing layer or layers of asphalt, concrete or asphalt emulsion;

“roadway” has the same meaning as in subsection 1 (1) of the *Highway Traffic Act*;

“shoulder” means the portion of a highway that provides lateral support to the roadway and that may accommodate stopped motor vehicles and emergency use;

“surface” means the top of a roadway or shoulder.

(2) For the purposes of this Regulation, every highway or part of a highway under the jurisdiction of a municipality in Ontario is classified in the Table to this section as a Class 1, Class 2, Class 3, Class 4, Class 5 or Class 6 highway, based on the speed limit applicable to it and the average annual daily traffic on it.

(3) For the purposes of subsection (2) and the Table to this section, the average annual daily traffic on a highway or part of a highway under municipal jurisdiction shall be determined,

- (a) by counting and averaging the daily two-way traffic on the highway or part of the highway for the previous calendar year; or
- (b) by estimating the average daily two-way traffic on the highway or part of the highway in accordance with accepted traffic engineering methods.

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TABLE  
CLASSIFICATION OF HIGHWAYS

Average Annual Daily Traffic (number of motor vehicles)	Posted or Statutory Speed Limit (kilometers per hour)						
	100	90	80	70	60	50	40
15,000 or more	1	1	1	2	2	2	2
12,000 – 14,999	1	1	1	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	3	3
5,000 – 5,999	1	2	2	3	3	3	3
4,000 – 4,999	1	2	3	3	3	3	4
3,000 – 3,999	1	2	3	3	3	4	4
2,000 – 2,999	1	2	3	3	4	4	4
1,000 – 1,999	1	3	3	3	4	4	5
500 – 999	1	3	4	4	4	4	5
200 – 499	1	3	4	4	5	5	5
50 – 199	1	3	4	5	5	5	5
0 - 49	1	3	6	6	6	6	6

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### Application

2. (1) This Regulation sets out the minimum standards of repair for highways under municipal jurisdiction for the purpose of subsection 284 (1.4) of the Act.
- (2) The minimum standards of repair set out in this Regulation are applicable only in respect of motor vehicles using the highways.
- (3) This Regulation does not apply to Class 6 highways.

### MINIMUM STANDARDS

#### Routine patrolling

3. (1) The minimum standard for the frequency of routine patrolling of highways is set out in the Table to this section.
- (2) Routine patrolling shall be carried out by driving on or by electronically monitoring the highway to check for conditions described in this Regulation.
- (3) Routine patrolling is not required between sunset and sunrise.

TABLE  
ROUTINE PATROLLING FREQUENCY

Class of Highway	Patrolling Frequency
1	3 times every 7 days
2	2 times every 7 days
3	once every 7 days
4	once every 14 days
5	once every 30 days

#### Snow accumulation

4. (1) The minimum standard for clearing snow accumulation is,
  - (a) while the snow continues to accumulate, to deploy resources to clear the snow as soon as practicable after becoming aware of the fact that the snow accumulation on a roadway is greater than the depth set out in the Table to this section; and
  - (b) after the snow accumulation has ended and after becoming aware that the snow accumulation is greater than the depth set out in the Table to this section, to clear the snow accumulation in accordance with subsections (2) and (3) or subsections (2) and (4), as the case may be, within the time set out in the Table.

- (2) The snow accumulation must be cleared to a depth less than or equal to the depth set out in the Table.
- (3) The snow accumulation must be cleared from the roadway to within a distance of 0.6 metres inside the outer edges of the roadway.
- (4) Despite subsection (3), for a Class 4 highway with two lanes or a Class 5 highway with two lanes, the snow accumulation on the roadway must be cleared to a width of at least 5 metres.
- (5) This section,
  - (a) does not apply to that portion of the roadway designated for parking; and
  - (b) only applies to a municipality during the season when the municipality performs winter highway maintenance.
- (6) In this section, "snow accumulation" means the natural accumulation of new fallen snow or wind-blown snow that covers more than half a lane width of a roadway.

TABLE  
SNOW ACCUMULATION

Class of Highway	Depth	Time
1	2.5 cm	4 hours
2	5 cm	6 hours
3	8 cm	12 hours
4	8 cm	16 hours
5	10 cm	24 hours

#### Icy roadways

5. (1) The minimum standard for treating icy roadways is,
  - (a) to deploy resources to treat an icy roadway as soon as practicable after becoming aware that the roadway is icy; and
  - (b) to treat the icy roadway within the time set out in the Table to this section after becoming aware that the roadway is icy.
- (2) This section only applies to a municipality during the season when the municipality performs winter highway maintenance.

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TABLE  
ICY ROADWAYS

Class of Highway	Time
1	3 hours
2	4 hours
3	8 hours
4	12 hours
5	16 hours

### Potholes

6. (1) If a pothole exceeds both the surface area and depth set out in Table 1, 2 or 3 to this section, as the case may be, the minimum standard is to repair the pothole within the time set out in Table 1, 2 or 3, as appropriate, after becoming aware of the fact.

(2) 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 1, 2 or 3, as appropriate.

TABLE 1  
POTHOLE ON PAVED SURFACE OF ROADWAY

Class of Highway	Surface Area	Depth	Time
1	600 cm <sup>2</sup>	8 cm	4 days
2	800 cm <sup>2</sup>	8 cm	4 days
3	1000 cm <sup>2</sup>	8 cm	7 days
4	1000 cm <sup>2</sup>	8 cm	14 days
5	1000 cm <sup>2</sup>	8 cm	30 days

TABLE 2  
POTHOLE ON NON-PAVED SURFACE OF ROADWAY

Class of Highway	Surface Area	Depth	Time
3	1500 cm <sup>2</sup>	8 cm	7 days
4	1500 cm <sup>2</sup>	10 cm	14 days
5	1500 cm <sup>2</sup>	12 cm	30 days

TABLE 3  
POTHOLE ON PAVED OR NON-PAVED SURFACE  
OF SHOULDER

Class of Highway	Surface Area	Depth	Time
1	1500 cm <sup>2</sup>	8 cm	7 days
2	1500 cm <sup>2</sup>	8 cm	7 days
3	1500 cm <sup>2</sup>	8 cm	14 days
4	1500 cm <sup>2</sup>	10 cm	30 days
5	1500 cm <sup>2</sup>	12 cm	60 days

### Shoulder drop-offs

7. (1) If a shoulder drop-off is deeper, for a continuous distance of 20 metres or more, than the depth set out in the Table to this section, the minimum standard is to repair the shoulder drop-off within the time set out in the Table after becoming aware of the fact.

(2) A shoulder drop-off shall be deemed to be repaired if its depth is less than or equal to that set out in the Table.

(3) In this section, "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 nonpaved surface of the shoulder.

TABLE  
SHOULDER DROP-OFFS

Class of Highway	Depth	Time
1	8 cm	4 days
2	8 cm	4 days
3	8 cm	7 days
4	8 cm	14 days
5	8 cm	30 days

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### Cracks

- 8.** (1) If a crack on the paved surface of a roadway is greater, for a continuous distance of three metres or more, than both the width and depth set out in the Table to this section, the minimum standard is to repair the crack within the time set out in the Table after becoming aware of the fact.
- (2) 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  
CRACKS

Class of Highway	Width	Depth	Time
1	5 cm	5 cm	30 days
2	5 cm	5 cm	30 days
3	5 cm	5 cm	60 days
4	5 cm	5 cm	180 days
5	5 cm	5 cm	180 days

### Debris

- 9.** (1) If there is debris on a roadway, the minimum standard is to deploy resources, as soon as practicable after becoming aware of the fact, to remove the debris.
- (2) In this section, “debris” means any material or object on a roadway,
- (a) that is not an integral part of the roadway or has not been intentionally placed on the roadway by a municipality, and
- (b) that is reasonably likely to cause damage to a motor vehicle or to injure a person in a motor vehicle.

### Luminaires

- 10.** (1) For conventional illumination, if three or more consecutive luminaires on a highway are not functioning, the minimum standard is to repair the luminaires within the time set out in the Table to this section after becoming aware of the fact.
- (2) For conventional illumination and high mast illumination, if 30 per cent or more of the luminaires on any kilometre of highway are not functioning, the minimum standard is to repair the luminaries within the

time set out in the Table to this section after becoming aware of the fact.

(3) Despite subsection (2), for high mast illumination, if all of the luminaires on consecutive poles are not functioning, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires.

(4) Despite subsections (1), (2) and (3), for conventional illumination and high mast illumination, if more than 50 per cent of the luminaires on any kilometre of a Class 1 highway with a speed limit of 90 kilometres per hour or more are not functioning, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires.

(5) Luminaires shall be deemed to be repaired,

(a) for the purpose of subsection (1), if the number of nonfunctioning consecutive luminaires does not exceed two;

(b) for the purpose of subsection (2), if more than 70 per cent of luminaires on any kilometre of highway are functioning;

(c) for the purpose of subsection (3), if one or more of the luminaries on consecutive poles are functioning;

(d) for the purpose of subsection (4), if more than 50 per cent of luminaires on any kilometre of highway are functioning.

(6) Subsections (1), (2) and (3) only apply to,

- (a) Class 1 and Class 2 highways; and
- (b) Class 3, Class 4 and Class 5 highways with a posted speed of 80 kilometres per hour or more.

(7) In this section,

“conventional illumination” means lighting, other than high mast illumination, where there are one or more luminaires per pole;

“high mast illumination” means lighting where there are three or more luminaires per pole and the height of the pole exceeds 20 metres;

“luminaire” means a complete lighting unit consisting of,

- (a) a lamp, and
- (b) parts designed to distribute the light, to position or protect the lamp and to connect the lamp to the power supply.

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TABLE  
LUMINAIRES

Class of Highway	Time
1	7 days
2	7 days
3	14 days
4	14 days
5	14 days

### Signs

11. (1) If any sign of a type listed in subsection (2) is illegible, improperly oriented or missing, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair or replace the sign.

(2) This section applies to the following types of signs:

1. Checkerboard.
2. Curve sign with advisory speed tab.
3. Do not enter.
4. One Way.
5. School Zone Speed Limit.
6. Stop.
7. Stop Ahead.
8. Stop Ahead, New.
9. Traffic Signal Ahead, New.
10. Two-Way Traffic Ahead.
11. Wrong Way.
12. Yield.
13. Yield Ahead.
14. Yield Ahead, New.

### Regulatory or warning signs

12. (1) If a regulatory or warning sign other than a sign listed in subsection 11 (2) is illegible, improperly oriented or missing, the minimum standard is to repair or replace the sign within the time set out in the Table to this section after becoming aware of the fact.

(2) In this section, "regulatory sign" has the same meaning as in the *Manual of Uniform Traffic Control Devices* published in 1985 by the Ministry of Transportation;

"warning sign" has the same meaning as in the *Manual of Uniform Traffic Control Devices* published in 1985 by the Ministry of Transportation.

TABLE  
REGULATORY AND WARNING SIGNS

Class of Highway	Time
1	7 days
2	14 days
3	21 days
4	30 days
5	30 days

### Traffic control signal systems

13. (1) If a traffic control signal system is defective in any way described in subsection (2), the minimum standard is to deploy resources as soon as practicable after becoming aware of the defect to repair the defect or replace the defective component of the traffic control signal system.

(2) This section applies if a traffic control signal system is defective in any of the following ways:

1. One or more displays show conflicting signal indications.
2. The angle of a traffic control signal or pedestrian control indication has been changed in such a way that the traffic or pedestrian facing it does not have clear visibility of the information conveyed or that it conveys confusing information to traffic or pedestrians facing other directions.
3. A phase required to allow a pedestrian or vehicle to safely travel through an intersection fails to occur.
4. There are phase or cycle timing errors interfering with the ability of a pedestrian or vehicle to safely travel through an intersection.
5. There is a power failure in the traffic control signal system.
6. The traffic control signal system cabinet has been displaced from its proper position.
7. There is a failure of any of the traffic control signal support structures.
8. A signal lamp or a pedestrian control indication is not functioning.

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9. Signals are flashing when flashing mode is not a part of the normal signal operation.

(3) Despite subsection (1) and paragraph 8 of subsection (2), if the posted speed of all approaches to the intersection or location of the non-functioning signal lamp or pedestrian control indication is less than 80 kilometres per hour and the signal that is not functioning is a green or a pedestrian “walk” signal, the minimum standard is to repair or replace the defective component by the end of the next business day.

(4) In this section and section 14, “cycle” means a complete sequence of traffic control indications at a location;

“display” means the illuminated and non-illuminated signals facing the traffic;

“indication” has the same meaning as in the *Highway Traffic Act*;

“phase” means a part of a cycle from the time where one or more traffic directions receive a green indication to the time where one or more different traffic directions receive a green indication;

“power failure” means a reduction in power or a loss in power preventing the traffic control signal system from operating as intended;

“traffic control signal” has the same meaning as in the *Highway Traffic Act*;

“traffic control signal system” has the same meaning as in the *Highway Traffic Act*;

### Traffic control signal system sub-systems

14. (1) The minimum standard is to inspect, test and maintain the following traffic control signal system sub-systems every 12 months:

1. The display sub-system, consisting of traffic signal and pedestrian crossing heads, physical support structures and support cables.

2. The traffic control sub-system, including the traffic control signal cabinet and internal devices such as timer, detection devices and associated hardware, but excluding conflict monitors.

3. The external detection sub-system, consisting of detection sensors for all vehicles, including emergency and railway vehicles and pedestrian push- buttons.

(2) The minimum standard is to inspect, test and maintain conflict monitors every five to seven months and at least twice a year.

(3) In this section,

“conflict monitor” means a device that continually checks for conflicting signal indications and responds to a conflict by emitting a signal.

### Bridge deck spalls

15. (1) If a bridge deck spall exceeds both the surface area and depth set out in the Table to this section, the minimum standard is to repair the bridge deck spall within the time set out in the Table after becoming aware of the fact.

(2) A bridge deck spall shall be deemed to be repaired if its surface area or depth is less than or equal to that set out in the Table.

(3) In this section,

“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.

TABLE  
BRIDGE DECK SPALLS

Class of Highway	Surface Area	Depth	Time
1	600 cm <sup>2</sup>	8 cm	4 days
2	800 cm <sup>2</sup>	8 cm	4 days
3	1,000 cm <sup>2</sup>	8 cm	7 days
4	1,000 cm <sup>2</sup>	8 cm	7 days
5	1,000 cm <sup>2</sup>	8 cm	7 days

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### Surface discontinuities

16. (1) If a surface discontinuity, other than a surface discontinuity on a bridge deck, exceeds the height set out in the Table to this section, the minimum standard is to repair the surface discontinuity within the time set out in the Table after becoming aware of the fact.

(2) If a surface discontinuity on a bridge deck exceeds 5 cm, the minimum standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the surface discontinuity on the bridge deck.

(3) In this section, "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 a bridge.

TABLE  
SURFACE DISCONTINUITIES

Class of Highway	Height	Time
1	5 cm	2 days
2	5 cm	2 days
3	5 cm	7 days
4	5 cm	21 days
5	5 cm	21 days

### REVIEW OF REGULATION

#### Review

17. (1) The Minister of Transportation shall conduct a review of this Regulation every five years.

(2) The first review shall be started before the end of 2007.

### COMMENCEMENT

#### Commencement

18. This Regulation comes into force on November 1, 2002.

NORMAN W. STERLING  
*Minister of Transportation*

Dated on July 23, 2002.  
34/02



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