#### The Corporation of the Township of Hornepayne

By-Law No. 2085

#### Being a By-Law to establish a Road Maintenance Policy for the Township of Hornepayne

**WHEREAS** 0. Reg. 239/02 under the *Municipal Act, 2001*, S.O. 2001, c. 25 as amended, provides for minimum maintenance standards for municipal highways; and,

**AND WHEREAS** the Council of the Corporation of the Township of Hornepayne deems it desirable and in the public interest to establish a Road Maintenance Policy for the Township of Hornepayne;

**BE IT THEREFORE ENACTED** by the Council of the Corporation of the Township of Hornepayne:

- 1. **THAT** Schedule "A" entitled "Road Maintenance Policy" attached hereto forms an integral part of this By-Law;
- 2. **THAT** the Mayor and CAO/Clerk are hereby authorized to sign this By-Law and to affix the corporate seal thereto; and,
- 3. THAT this By-Law shall come into force and take effect upon passage.

Read a first and second time this 17th day of July 2024.

Read a third time and finally passed this 17th day of July 2024.

Cheryl Fort ( Jul 19, 2024 21:02 FDT)

Presiding Officer

Clerk



TOWNSHIP OF HORNEPAYNE			
Policy/Procedure/Plan Name:	Road Maintenance Policy		
Originating/Responsible Department:	Public Works Department		
Approval Authority:	Council		
Adopted by By-Law No.	2085		
Date of Original Policy:	July 17, 2024		
Last Updated:	July 17, 2024		

# ROAD MAINTENANCE POLICY

# ROAD MAINTENANCE POLICY

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### i. INTRODUCTION

The Township of Hornepayne, Public Works Department shall in no case allow the level of service to fall below the minimum standard provided for in the Municipal Act and Regulations<sup>1</sup> made thereunder.

The Township of Hornepayne has established a policy regarding Municipal roadway service standards as follows:

- i That all operational services of the Public Works Department will meet Minimum Maintenance Standards (MMS) specified in the Ontario Regulation 239/02, as amended.
- ii That neither the Township nor its officials or employees make any promise, assurance or guarantee that roadway services will be more than the minimum standard herein provided.
- That where a situation arises or applications are made which fall outside the scope of these standards, the Public Works Manager shall respond as they deem practicable, with due regard to budgetary constraint and reasonable practice.
- iv That the Public Works Department will apply its operational activities in an efficient and effective way, with a goal of providing safe driving conditions 12 months of the year.
- v The Public Works Department will refer to the Highway Traffic Act, Municipal Act, Manual of Uniform Traffic Control Devices for Canada, and any other pertinent acts, regulations, or guidelines to undertake roadway operations and ensure that minimum standards are met.
- vi. Emphasis of operations will generally be carried out in order of priority. When necessary, at the discretion of the Public Works Manager or designate, provision of the required services may be altered outside the order of priority.
- vi Inherent within the standard is the expectation that drivers will act responsibly and will always operate their vehicles reasonably with due regard for the prevailing weather and roadway conditions.
- vii When minor amendments to the policy are required (i.e. technical errors, typing errors), staff are authorized by Council to amend the policy from time to time. Amendments that are deemed to be major in nature, will be presented to Council for approval.
- x References to legislation imply the most recent statutes, as amended. Thus, this policy need not be amended to maintain the applicability of such references.

Municipal Act, 2001, Ontario Regulation 239/02, Amended to O. Reg. 366/18, Minimum Maintenance Standards for Municipal Highways.

### ii. DEFINITIONS

"Anti-icing" means the application of liquid de-icing agents directly to the road surface in advance of a winter event.

"Average Annual Daily Traffic (AADT)" is a technical measurement of traffic volume on a road, in both directions.

**"Class"** in the context of this policy refers to the criteria for classifying roadways in accordance with Table 1, per Ontario Regulation 239/02, made under the Municipal Act for Minimum Maintenance Standards for Municipal Highways.

"cm" means centimeters.

"Conventional illumination" means lighting, other than high mast illumination, where there are one or more luminaires per pole.

"Debris" is any material (except snow, slush, or ice) 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 the Municipality
- (b) that is reasonably likely to cause damage to a motor vehicle or injury to a person in a motor vehicle.

"High mast illumination" means lighting where there are three or more luminaires per pole and the height of the pole exceeds 20 meters.

"HMA" means Hot Mix Asphalt.

"Ice" means all kinds of ice, however formed.

"Infrared Thermometers" are used to detect pavement temperatures, which can be significantly different from air temperatures.

"Living Snow Fences" are hedges, trees and other vegetation carefully placed to keep drifts and snow off roads.

"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.

"Major Storm" is constituted by:

- (a) a snowfall of 10 cm (4 inches) or more; or
- (b) any storm where the conditions are such that the Public Works Manager or designate concludes it to be a major storm.

"Minor Storm" is constituted by a snowfall of less than 10 cm (4 inches).

- **"Motor Vehicle"** includes an automobile, motorcycle, and any other vehicle propelled or driven otherwise than by muscular power, but does not include a motor assisted bicycle, a streetcar, or other motor vehicles running only upon rails, or a motorized snow vehicle, traction engine, farm tractor, self-propelled implement of husbandry or road-building machine.
- "Non-paved Surface" means a surface that is not paved.
- "Operations" are those activities the Public Works Department performs to improve a condition or sustain a roadway standard. Operations are normally defined by guidelines (not policy), with discretion of the Public Works Manager to choose various methods to achieve results cost-effectively.
- "Paved Surface" means a surface with a wearing layer or layers of asphalt, concrete or asphalt emulsion, composite pavement.
- "Practicable" means activities or standards that are feasible and able to be accomplished, given the Township of Hornepayne's limited financial and human resources, and in consideration of Hornepayne's winter climate conditions.
- "Pre-treat" means the application of liquids (calcium chloride, sodium chloride, etc.) to the sand pile or salt pile as the sand or salt is loaded into the storage facility.
- "**Pre-wetting**" means the application of liquids (calcium chloride, sodium chloride, etc.) at the spinner of the truck just prior to application to the road surface.
- "Roadway" means 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 of the roadways collectively.
- "RWIS" Road Weather Information System automated weather reporting stations installed along the roadway with sensors embedded in and below the road to assist weather forecasters in predicting icing conditions before they occur.
- **"Sanding"** is the application of treated or dry sand to roadways, either manually or by mechanical spreaders to improve traction.
- **"Shoulder**" means the portion of a highway that provides lateral support to the roadway and that may accommodate stopped motor vehicles and emergency use.
- "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 (See Table B-7).
- "Sidewalk Clearing" is the plowing of sidewalks in the sidewalk clearing program with plows or other appropriate equipment.

- "Significant Weather Event" is a weather event, where it is determined by the Public Works Manager or designate, that the Winter Control Standards of this Road Maintenance Policy cannot be met.
- "Snow Accumulation" means the natural accumulation of new fallen snow, wind-blown snow, or slush that, alone or together, covers more than half a lane width of a roadway.
- "Snow Plowing" means crews of graders, loaders, plow trucks or similar equipment engaged in clearing accumulated snow from the roadway surfaces.
- "Snow Removal" is the plowing of snow into windrows, loading onto trucks and subsequently hauling snow to predetermined snow disposal sites.
- "Substantial probability" means a significant likelihood considerably more than 51 per cent.
- "Surface Treated Road" is road with bituminous surface treatment comprised of one or two applications of asphalt emulsion and stone chips over a gravel road.
- "Susceptible Area of Known Concern" is an area, known to the Municipality, to be of concern related to the Township's winter control operations.
- "Unpaved Roads" is a road with a gravel, stone, or other loose traveling surface.
- "Weather" means air temperature, wind, and precipitation.
- **"Windrowing"** means plowing of snow into a long continuous pile to facilitate removal or storage of snow on roadway or sidewalk surfaces.
- "Winter Event" is a weather condition affecting roads such as snowfall, wind-blown snow, sleet, freezing rain, frost, black ice, etc., to which a winter event response is required.
- "Winter Event Response" is a series of winter control activities performed in response to a winter event.
  - (a) "Continuous Winter Event Response" is a response to a winter event with full deployment of manpower and equipment that plow/salt/sand the entire system.
  - (b) "Spot Winter Event Response" is a response to a winter event with only a part deployment of manpower and equipment or with full deployment to only part of the system.
- "Winter Event Response Hours" are the total number of person-hours per year (plowing, salting/sanding, winging back, etc.) to respond to winter events.

Definitions listed above are provided for reference and information purposes. There is no implied guarantee that all items described occur as part of regular activities.

### iii. CLASSIFICATION OF HIGHWAYS

For the purposes of this policy, every highway or part of a highway under the jurisdiction of the Township of Hornepayne is classified in accordance with Table 1 as 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 (AADT) on it.

With reference to Table A2-2, the AADT on the highway or part of the highway shall be determined in one of the following methods:

- (a) AADT equals the average of the daily two-way traffic on the highway.
- (b) AADT equals 333.3% of the two-way traffic from 2:00 to 6:00 pm, taken mid-week in either the month of May, June, October, or November.
- (c) AADT on rural dead-end roads equals 6 times the number of houses on the dead-end road.
- (d) AADT is the best estimate for lower volume roads, based upon local knowledge and the calculated AADT for higher volume collector roads.

TABLE 1 CLASSIFICATION OF HIGHWAYS							
AADT	-		Statutory S		•		
	91-100	81-90	71-80	61-70	51-60	41-50	1-40
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

All roads maintained by the Township of Hornepayne fall within the green shaded classifications of Table 1 above, based on data or estimates. Road classifications are summarized in Appendix 2.

# Section A



# WINTER CONTROL STANDARDS (WCS)

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### A-1.0 PURPOSE

The purpose of WCS is:

- To maintain roadways and sidewalks in a manner to minimize economic loss and inconvenience to the community.
- To reduce hazardous roadway and sidewalk conditions which may contribute to accident or injury.
- To facilitate responding to emergencies by fire, police, and ambulance services.
- To provide a guide for management and operating personnel for winter maintenance operations.
- To work in compliance with appropriate Acts and Regulations.

During the winter season, road patrolling provides staff knowledge of deteriorating weather and road conditions. Local weather reports and observations are just some of the tools used to support the appropriate call out of winter snow maintenance equipment.

#### A-2.0 CURRENT PRACTICES

#### A-2.1 ROLES AND RESPONSIBILITIES

The Township of Hornepayne Council oversees and specifically budgets for the winter control program. The Public Works Manager prepares budget documents, reports to Council, and generally manages winter control operations. The Public Works Manager also supervises service delivery.

Most of the winter control and road maintenance is undertaken by Public Works Staff, although the services of outside agencies may be contracted to assist the Township in delivery of these services.

Many Township of Hornepayne employees have some responsibility for developing, implementing, reviewing, maintaining, and documenting/recording the Winter Control Standards (WCS). It is through a cooperative effort that the Township strives to maintain safe roads and see success in its WCS.

#### A-2.2 WINTER CONTROL

The ROAD MAINTENANCE POLICY is comprised of four (4) sections:

Section A Winter Control Standards
Section B Road Maintenance Standards

Section C Hours of Service

Section D Appendices

The Township of Hornepayne currently meets or exceeds the Minimum Maintenance Standards (MMS) specified in Ontario Regulation 239/02, Municipal Act, 2001, for winter control operations.

#### A-2.3 WINTER MAINTENANCE SEASON

The winter maintenance season commences October 1 and is completed April 30. Winter Control Level of Service does not apply to lands designated for parking and only applies during the season when the Municipality performs winter roadway maintenance.

Winter snowfall conditions in Hornepayne are considered moderate. Based on information from Environment Canada, the average annual snowfall level (for the period 1971-2000) for the Hornepayne area is 246.7 cm.

#### A-2.4 WINTER CONTROL RESPONSE

The Township maintains 24/7 on-call personnel and response service. All operators have been trained on how to retrieve weather conditions from various sources including, but not limited to:

- Temperature Probe
- Local news/weather networks (television and radio)
- Environment Canada's Weather Information Network
- The Weather Network Website
- Staff field observations

#### A-2.5 ROAD CLASSIFICATIONS

As of the date of adoption of this policy, the Township of Hornepayne has approximately 41.8 km of roads that are maintained by the Township, as per Table A-1 below.

Roadways maintained by the Township are maintained under a hierarchical system in accordance with Ontario Regulation 239/02. This regulation establishes six categories of highways based on average annual daily traffic where road Class 1 has the highest volume and Class 6 has the lowest. Roadways categorized as Class 6, if maintained by the Township, are maintained in accordance with Class 5 regulations. Therefore, all roads maintained by the Township of Hornepayne are maintained in accordance with Class 5 regulations.

ESTIMATE OF R	TABLE A-1 ESTIMATE OF ROADS MAINTAINED BY THE TOWNSHIP OF HORNEPAYNE			
ROADWAYS				
Total	Length of Roadway within Municipal Boundary	36.6 km		
	Length of Roadway outside Municipal Boundary	5.2 km		
Ownership	Township of Hornepayne	35.8 km		
	Province of Ontario – Hwy 631 Connecting Link 0.8			
	Unincorporated Township of Haig	5.2 km		
Winter Maintenance	Maintained by Township 41.8 k			
Class of Roadways	Class 5 (All Municipal Roads) 41.0			
Maintained by Township	Class 5 (Hwy 631 Connecting Link)	0.8 km		
SIDEWALKS Length maintained during winter		120 m		
PATHS & TRAILS	Length maintained during winter	0 m		

#### A-2.6 WINTER MAINTENANCE OBJECTIVES

Winter maintenance objectives include:

- The foremost objective is to meet or exceed the Minimum Maintenance Standards for Municipal Highways under Ontario Regulation 239/02 as made under the Municipal Act.
- To reduce the hazards of icy conditions to motorists and pedestrians.
- To reduce the economic losses to the community caused by winter weather conditions.
- To facilitate the handling of emergencies by fire, police, and ambulance officials.
- To maintain safe passable routes within the financial limits of the municipality's budget.

Various conditions may temporarily prevent these standards from being met including available resources (funds, equipment, and manpower) and weather conditions. Due to standards not being met for those reasons noted, it is expected that traffic will reduce speeds to suit the weather conditions until the road standards are met.

# A-3.0 PROVINCE OF ONTARIO CONNECTING LINK

The Township of Hornepayne has entered a Verbal Winter Maintenance Agreement/Understanding with the Province of Ontario for the maintenance of:

<u>Highway 631 Connecting Link</u> From Second Street to Hwy 631 North (Approx. 800 m)

These roads shall be maintained as Class 5 Roads, in accordance with an understanding with the Ontario Ministry of Transportation.

### A-4.0 WEATHER MONITORING

From October 1 to April 30, the minimum standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once every shift or three times per day whichever is more frequent, at intervals determined by the municipality.

From May 1 to September 30, the minimum standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once per calendar day.

#### **ROAD PATROLLING**

If it is determined by the Township that weather monitoring indicates that there is a substantial probability of snow accumulation on roadways or icy roadways, the minimum standard is to patrol the roads that the Township selects as representative of its roads, at intervals deemed necessary by the Township to check for such conditions.

### A-5.0 SNOW ACCUMULATION

The minimum standard for addressing snow accumulation is,

- (a) after becoming aware of the fact that the snow accumulation on a roadway is greater than the depth set out in Table A-2, to deploy resources as soon as "practicable" to address the snow accumulation; and
- (b) after the snow accumulation has ended, to address the snow accumulation to reduce the snow to a depth less than or equal to the depth set out in Table A-2 within the time set out in Table A-2.
  - (i) to provide a minimum lane width of the lesser of three metres for each lane or the actual lane width, or
  - (ii) on a Class 4 or Class 5 highway with two lanes, to provide a total width of at least five metres.

If the depth of snow accumulation on a roadway is less than or equal to the depth set out in Table A-2, the roadway is deemed to be in a state of repair with respect to snow accumulation.

For the purposes of this section, and given the Township's limited financial and human resources, Council has determined it to be "practicable" to deploy resources in the early morning (approximately 5:00 am) following snow accumulation that exceeds the standards of Table A-2. This practice makes efficient use of limited resources, and recognizes operator time in a vehicle, while still ensuring that Table A-2 standards are met in a practicable manner.

For the purposes of this section, the depth of snow accumulation on a roadway may be determined by a municipal employee, agent or contractor, whose duties or responsibilities include one or more of the following:

- 1. Patrolling highways.
- 2. Performing highway maintenance activities.
- 3. Supervising staff who perform activities described in paragraph 1 or 2.

The depth of snow accumulation on a roadway may be determined by,

- (a) Performing an actual measurement.
- (b) Monitoring the weather.
- (c) Performing a visual estimate.

For the purposes of this section, addressing snow accumulation on a roadway includes, but is not limited to,

- (a) Plowing the roadway.
- (b) Applying abrasive materials to the roadway.
- (c) Any combination of the methods described in Clauses (a) and (b) above.

This section does not apply to that portion of the roadway designated for parking.

TABLE A-2 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	

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

# A-6.0 ICE FORMATION ON ROADWAYS

The minimum standard for the prevention of ice formation on roadways is doing the following in the 24-hour period preceding an alleged formation of ice on a roadway:

- (a) Monitor the weather in accordance with Section A-4.0.
- (b) Patrol in accordance with Sections A-4.0 and B-2.1.
- (c) O. Reg. 366/18, s. 8 requires a municipality, if it determines as a result of its activities under paragraph (a) or (b), that there is a substantial probability of ice forming on a roadway, to pre-treat the roadway, *if practicable*, to prevent ice formation within a 24-hour time frame, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose. However, the Township of Hornepayne's operations are governed by cold Northern Ontario weather and snow packed street surface conditions. These conditions make it ineffective and therefore not practicable to either pre-treat or treat roadways with salt and/or calcium. The Township of Hornepayne therefore primarily uses a 10% salt and 90% sand mixture to provide traction for vehicles on slippery ice and packed snow, following the formation of ice as follows:

If the municipality meets the minimum standard set out above and, despite such compliance, ice forms on a roadway, the roadway is deemed to be in a state of repair until the earlier of,

- (a) the time that the municipality becomes aware of the fact that the roadway is icy; or
- (b) the applicable time set out in Table A-3 for treating the roadway to prevent ice formation expires.

The minimum standard for treating icy roadways after the municipality becomes aware of the fact that a roadway is icy is to treat the icy roadway within the time set out in Table A-3, and an icy roadway is deemed to be in a state of repair until the applicable time set out in Table A-3 for treating the icy roadway expires.

For the purposes of this section, treating a roadway means applying material to the roadway, including but not limited to, salt, sand or any combination of salt and sand.

TABLE A-3 ICY ROADS		
Class of highway	Time	
1	3 hours	
2	4 hours	
3	8 hours	
4 12 hours		
5	16 hours	

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

The work schedule for sanding of streets and sidewalks will be implemented in order of priority, when the Public Works Manager or designate determine that conditions dictate.

# A-7.0 SIGNIFICANT WEATHER EVENTS

If by monitoring weather conditions, it is determined by the Public Works Manager or designate, that there is a substantial probability of a Weather Event, where the Winter Control Standards of this Road Maintenance Policy cannot be practicably fulfilled, then the Manager of Public Works or designate may declare a Significant Weather Event.

If the Township declares a significant weather event relating to snow accumulation or icy roadways/sidewalks, the standard for addressing snow accumulation or icy roadways/sidewalks until the declaration of the end of the significant weather event will be as follows:

- (a) to notify the public by posting the declaration of the Significant Weather Event on the Township's website, per the Notice of Declaration example in Appendix 7.
- (b) to continue to monitor the weather in accordance with Section A-4.0; and
- (c) if deemed practicable by the municipality, to deploy resources to address snow accumulation and icy roadways, starting from the time that the municipality deems appropriate to do so.

If the municipality complies with the above, all roadways within the municipality are deemed to be in a state of repair with respect to snow accumulation or icy roadways until the applicable time in the Table A-2 and Table A-3 expires following the declaration of the end of the Significant Weather Event by the municipality.

Following the end of the weather hazard in respect of which a Significant Weather Event was declared by a municipality, the municipality shall,

- (a) declare the end of the Significant Weather Event when the municipality determines it is appropriate to do so; and
- (b) to notify the public by posting that the Significant Weather Event has ended on the Township's website, per the Notice example in Appendix 7.
- (c) address snow accumulation and icy roadways in accordance with the Township's winter control standards.

#### A-8.0 SNOW PLOW ROUTES

The Township's roadways can generally be divided into three snow plow routes, as described below. A 'route' provides a general description of the route and priority; however, it does not override the Road Classification System based on the speed limit applicable to the road and the average annual daily traffic (AADT) in accordance with Ontario Regulation 239/02.

- (1) Route 1 (Grader) per Appendix 3, Table A3-1
- (2) Route 2 (Airport Loader) per Appendix 4, Table A4-1
- (3) Route 3 (Township Loader) per Appendix 5, Table A5-1

Priority will be given to each route, generally as follows, but at the discretion of the Public Works Manager or designate:

- <u>Priority Routes:</u> Highway 631 Connecting Link, collector streets, fire routes, bus/school routes and routes for emergency and medical services.
- <u>Susceptible Areas of Known Concern:</u> These areas are per Section A-10.0. Additional patrolling and resources will be applied to these areas, at the discretion of the Public Works Manager or designate.
- <u>Local Routes</u> are residential streets and industrial streets. During most storms, due to safety considerations and the need to move priority traffic, Local Routes are only plowed after the Priority Routes and Susceptible Areas of Known Concern are brought to a satisfactory level.
- <u>Internal Rural Routes within the geographic boundary of the Township</u>, but outside of the core areas of the Township of Hornepayne.
- External Rural Routes outside the geographic boundary of the Township, but historically maintained by the Township of Hornepayne.

Municipal Facilities, including municipal parking lots and cemetery.

Removal of snow from municipal streets and roads shall be undertaken only in situations where lack of adequate storage prohibits the normal winter movement of vehicular and/or pedestrian traffic and for reasons of safety such as sight restrictions at intersections. When necessary, removed snow will be piled in areas throughout the Township, as designated by the Public Works Manager or designate, in accordance with applicable regulations and requirements.

### A-9.0 SIDEWALKS

In providing a level of service for sidewalk winter maintenance, the Township refers to the Minimum Maintenance Standards O. Reg. 366/18.

#### A-9.1 WINTER SIDEWALK PATROL

- (1) If it is determined by the municipality that weather monitoring referred to in Section A-4.0 indicates that there is a substantial probability of snow accumulation on sidewalks more than 8 cm or icy sidewalks, the standard is to patrol the sidewalks at intervals deemed necessary by the municipality.
- (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.

#### A- 9.2 SNOW ACCUMULATION ON SIDEWALKS

The standard for addressing snow accumulation on a sidewalk after the snow accumulation has ended is,

- a) to reduce the snow to a depth less than or equal to 8 centimetres within 48 hours; and
- b) to provide a minimum sidewalk width of 1 metre.

If the depth of snow accumulation on a sidewalk is less than or equal to 8 centimetres, the sidewalk is deemed to be in a state of repair in respect of snow accumulation.

If the depth of snow accumulation on a sidewalk exceeds 8 centimetres while the snow continues to accumulate, the sidewalk is deemed to be in a state of repair with respect to snow accumulation, until 48 hours after the snow accumulation ends.

For the purposes of this section, addressing snow accumulation on a sidewalk includes.

- (a) plowing the sidewalk.
- (b) sanding the sidewalk.
- (c) any combination of the methods described in clauses (a) to (b).

#### A-9.3 ICE FORMATION ON SIDEWALKS

The standard for the prevention of ice formation on sidewalks is to,

- (a) Monitor the weather in accordance with Section A-4.0 in the 24-hour period preceding an alleged formation of ice on a sidewalk; and
- (b) O. Reg. 366/18, s. 15 requires a Municipality to treat the sidewalk if practicable to prevent ice formation or improve traction within 48 hours if the municipality determines that there is a substantial probability of ice forming on a sidewalk, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose. However, the Township of Hornepayne's operations is governed by cold Northern Ontario weather and snow packed street surface conditions. These conditions make it ineffective and therefore not practicable to either pre-treat or treat sidewalks with salt and/or calcium. The Township of Hornepayne therefore primarily uses a 10% salt and 90% sand mixture to provide traction for pedestrians on slippery ice and snow packed sidewalks, following the formation of ice as follows:

If the municipality meets the minimum standard set out above and, despite such compliance, ice forms on a roadway, the roadway is deemed to be in a state of repair until the earlier of,

- (a) If ice forms on a sidewalk even though the municipality meets the standard set out above, the sidewalk is deemed to be in a state of repair in respect of ice until 48 hours after the municipality first becomes aware of the fact that the sidewalk is icy.
- (b) The standard for treating icy sidewalks after the municipality 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.

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.

# A-10.0 SUSCEPTIBLE AREAS OF KNOWN CONCERN

The Township is aware of susceptible areas of known concern, as they relate to Winter Control Standards. These areas are detailed below in Table A-4.

TABLE A-4 SUSCEPTIBLE AREAS OF KNOWN CONCERN			
Street Name From Tower Road Concern			
Tower Road	Murphy Avenue	Nesomadina Avenue	Snow Drifting
Murphy Lane	McLeod Street	Tower Road	Steep (Icy) Hill
Ecomadina Avenue	McLeod Street	Tower Road	Steep (Icy) Hill
Nesomadina Avenue	McLeod Street	Tower Road	Steep (Icy) Hill
Fifth Avenue	Third Street	First Street	Snow Drifting
West End Road	Third Avenue	Green Street	Steep (Icy) Hill

To address these areas of concern, the Township undertakes the following, where deemed appropriate by the Public Works Manager or designate:

- (a) Warning signs to be installed to inform the public of susceptible areas.
- (b) Prioritize additional monitoring and patrolling of susceptible areas.
- (c) Prioritize deployment of additional resources to help improve susceptible areas.

#### A-11.0 FIRE HYDRANTS

The Ontario Fire Code, O. Reg. 213/07, Subsection 6.6.4. Hydrants states:

### Hydrants

- 6.6.4.1 Municipal and private hydrants shall be maintained in operating condition.
- 6.6.4.2 Hydrants shall be maintained free of snow and ice accumulations.
- 6.6.4.3 Hydrants shall be readily available and unobstructed for use.

Obstructed fire hydrants and sprinkler connections can cause a delay in firefighting and rescue operations.

- Public Works staff shall remove and clear snow that is obstructing access to any municipal fire hydrant as soon as practicable, subject to operational priorities.
- Clearing of hydrants does not necessarily constitute removal of snow (i.e. snow blower, removal, and disposal at the snow dump).
- Public Works staff will not undertake to clear snow on any private hydrants or sprinkler connections.
- No owner or occupant shall throw, place, bring, or deposit snow or ice on or immediately adjacent to a fire hydrant, or in any manner that obstructs access to a fire hydrant.
- Residents and building owners are urged to ensure that fire hydrants, fire department sprinkler connections, and fire escapes are clear of snow accumulations.

# A-12.0 CATCH BASINS

Snow, ice and debris from roads and sidewalks can block catch basins (water drains). When this occurs, the possibility exists that melting snow will have nowhere to drain and create flood like conditions.

The severity of potential flooding is determined by the snow volumes, how quickly the snow melts and how much rain is associated with that melt.

Maintaining open drains (covers exposed) is key to reducing potential flood conditions.

# A-13.0 CEMETERIES

The Township of Hornepayne will plow the internal road system of the Municipal Cemetery. This will be completed at the discretion of the Public Works Manager and is considered low priority.

Staff will, however, ensure vehicular access to interment locations for burials during the winter season. This does not necessarily constitute plowing the entire private road system within the cemetery.

# A-14.0 MUNICIPAL OWNED EQUIPMENT

The Public Works Manager shall be responsible for the preparation and overhauling of equipment used in winter maintenance operations.

Throughout the winter season, the servicing and repair of all equipment used in winter maintenance operations shall be given priority by the Public Works Department.

Snow ice and slush that has accumulated on the roadway can be controlled mechanically by removing it with plows mounted on trucks, motor graders, loaders, or snow blowers. Sand/Salt is applied using various spreading tools and techniques.

#### A-14.1 EQUIPMENT MAINTENANCE

Council is responsible for providing adequate funding for maintenance activities. The Public Works Manager is responsible for the preparation and overhauling of equipment used in winter maintenance operations. Throughout the winter season, the servicing and repair of all equipment used in winter maintenance operations shall be given priority by the Public Works Department.

#### A-14.2 EQUIPMENT CALIBRATION

The Township currently does not have calibration capability on any of its sand/salt spreading equipment. However, the Township does monitor when the spreaders are engaged and working, per Section A-18.0 (Fleet GPS Controls).

#### A-14.3 FLEET

The Township's current fleet (2024) is illustrated in Table A-5.

	TABLE A-5 TOWNSHIP OF HORNEPAYNE FLEET					
#	Fleet	Photo	#	Fleet	Photo	
3001	Manager's Patrol & Inspection Vehicle		3002	Plow & Salt Truck  2008 Sterling with Viking-Cives		
0004	2020 GMC ½ ton truck		0000	Sander box		
3004	Trash Compactor 1990 518 Caterpillar		3006	Public Works Patrol and Inspection Vehicle		
3011	Street Sweeper		3012	2015 Ford F150 Backhoe		
	1986 FMC			1999 410E John Deere		
3013	Road Grader  2015 770G John Deere		3016	Dump Truck 1995 Freightliner	O PO	
3018	Front end Loader 1993 544G John Deere		3019	Excavator 2018 160G John Deere		
3777	Airport Loader  1994 544G John Deere					

# A-15.0 SPEED GUIDELINES (Spreaders & Plows)

The following table provides recommended maximum speeds for winter control equipment.

TABLE A-6 RECOMMENDED MAXIMUM SPEEDS			
Spreaders	Spotting	40 km/h	
	Stripping	32 km/h	
Plows	Urban	24 km/h	
	Rural Pavement	45 km/h	
	Rural Shoulder	32 km/h	

### A-16.0 WINTER PARKING RESTRICTIONS

The Township of Hornepayne, By-Law No. 2021 (Parking By-Law) provides for Winter Parking Restrictions, as follows:

#### Interfere/Obstruct Snow Removal/Road Maintenance/ Winter Parking

No person shall park a vehicle in any location or manner which shall obstruct, hinder, or prevent, in any way, snow ploughing or snow removal operations on any street or highway or any Municipal Parking Lot during the months of November, December, January, February, March and April of each year.

#### A-17.0 STANDBY

The Public Works Manager shall undertake himself/herself or set up a winter standby shift starting no later than October 1 and ending no earlier than April 30. These dates may be changed at the discretion of the Public Works Manager.

Standby personnel shall do checks of all key areas at appropriate times to allow adequate response of crews before rush hour &/or peak traffic periods. If slippery conditions are noted, sanding and/or snow plowing will be called in.

# A-18.0 RECORD KEEPING

Basic record keeping shall be implemented by the Township specific to winter control operations for budget planning and reporting purposes. The following points should be considered for content:

- Monitoring the salt, sand mixture used:
  - Tonnes of sand purchased annually & seasonally (January-April and October-December)
  - Tonnes of salt purchased annually & seasonally (January-April and October-December)
  - o % of salt content in salt, sand mixture
  - Tonnes of salt, sand mixture spread annually and seasonally (January-April & October-December)

- Annual costs and Seasonal costs (January to April & October to December)
  - Snow plowing
  - Snow removal
  - Salting & sanding
  - Sidewalk maintenance
- Equipment
  - Maintenance costs
  - New equipment purchased
- Ensuring customer satisfaction:
  - o % of winter event responses that meet or exceed the level of service policy
  - Total number of complaints received regarding winter operations
  - % of complaints that resulted in a response
- Monitoring the severity of the winter season:
  - o Total annual cm of precipitation (snow accumulation & rain)
  - o Total number of days with measurable snowfall
  - o Total number of days with freezing rain
  - o Total number of continuous winter event responses
  - Total number of spot winter event responses
  - Total number of winter event hours
  - Winter severity (i.e. above average, average, below average)

#### Storm Response

- Air and/or pavement temperature during event
- o At end or after the storm event; temperature rising, temperature falling
- Time of day; effect of heat gain during daylight hours
- Time of day; traffic volumes assist in breaking the bond of snow/ice with the pavement
- Wind direction
- Drifting conditions; do nothing and let the wind blow the snow across the road
- Frost penetration in the road base contributing to pavement temperature
- Fleet GPS Controls
  - MY GEOTAB GPS controls and software are used by the Township of Hornepayne.
  - MY GEOTAB is a GPS fleet management system that improves control of your operations by increasing accountability and reducing liability. It collects vehicle activities and provides detailed reports on plowing, spreading and patrolling activities.
  - All winter control fleet includes an MY GEOTAB GPS device.
  - MY GEOTAB system allows the Township of Hornepayne to visualize:
    - the course taken by each vehicle;
    - the vehicle's location at a given moment;
    - hydraulic movements of the sand/salt spreader

This information will help to maintain effective operations.

# A-19.0 TRAINING

The Township of Hornepayne currently uses internal and external agencies to train our workers with respect to when to plow and sand according to weather conditions, how to plow, and in the use of new techniques and technologies.

Various courses/training seminars taken by Operations staff include, but not limited to:

- Hours of Work Information Seminar, presented by Ministry of Transportation Officers
- Snow School for Road Superintendents, Good Roads (formerly OGRA)
- Good Roads Annual Conference

The Township of Hornepayne is committed to continuing education and the staff are encouraged to participate in furthering their education and gaining knowledge through seminars and conferences.

# A-20.0 SALT MANAGEMENT PLAN (SMP)

Environment Canada is concerned that road salt is entering the environment in amounts that pose a risk to plant, animal, and fish life as well as to surface and ground water. Hence, Environment Canada is asking organizations, including municipalities, to prepare a Salt Management Plan (SMP) that will optimize salt use. This recommendation is directed primarily at:

- Organizations that use more than 500 tonnes of road salt per year
- Organizations that have identified salt vulnerable areas.

The Township of Hornepayne's current practices only use approximately 40 tonnes of road salt per year and therefore a SMP has not been adopted, at this time.

# A-21.0 PUBLIC COMMUNICATIONS

The public is informed through various methods including:

- Township of Hornepayne's web site: www.townshipofhornepayne.ca
- Procedures and Policies available through the website &/or at the Town Hall
- Mail-outs &/or flyers
- Signage

# A-22.0 PERFORMANCE MEASURES

Performance measures should be used to determine whether the objectives of the winter control standards have been met. Achievements, year over year, should be measured against each other.

To measure the success of the plan (% of the goals set out in the plan that were met), the following indicators should be reviewed:

- Monitoring the salt used
- Monitoring the sand used
- Annual costs and Seasonal costs (January to April & October to December)
- Evaluate the adequacy of the deployed equipment to meet MMS
- Ensuring customer satisfaction
- Monitoring the severity of the winter season

#### A-23.0 IMPROVEMENTS

Improvements to the Township's WCS are proposed in the following areas:

- Training is to be undertaken in such areas as record keeping and data analysis.
- Continued improvements to the Township's fleet to ensure reliability and reasonable redundancy for WCS - this should occur in the near-term Capital Forecast, as funding permit.
- Make continuous improvements to the Township's record keeping system.
- Undertake additional Traffic Counts on Priority Routes.
- Undertake posting of Speed Limit Signs on <u>Priority Routes</u>: Highway 631 Connecting Link, collector streets, fire routes, bus/school routes and routes for emergency and medical services.
- Undertake posting of Warning Signs in Susceptible Areas of Know Concern.

For these improvements to be made, Council will:

- Provide necessary resources to implement the WCS;
- Provide training opportunities to staff;
- Make information on the WCS available to the public including posting the WCS on the Township's website;
- Introduce new methods and technologies that are reasonable and cost effective; and
- Require that any agent engaged to perform winter control services adhere to the WCS.

# A-24.0 REFERENCES

Information and material used for reference purposes in the preparation of the WCS for the Township of Hornepayne include:

- Municipal Act, 2001, Ontario Regulation 239/02, Amended to O. Reg. 366/18, Minimum Maintenance Standards for Municipal Highways
- Ontario Good Roads Association website: www.ogra.org
- Municipal Road Maintenace (Best Practice) Policies
- TAC Code of Practice, July 2002
- Environment Canada website: http://www.ec.gc.ca/
- Consultations with Township of Hornepayne's Legal Council

# Section B



# ROAD MAINTENANCE STANDARDS (RMS)

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#### B-1.0 INTRODUCTION

The Township of Hornepayne, Public Works Department shall in no case allow the level of service to fall below the minimum standard provided for in the Municipal Act and Regulations<sup>2</sup> made thereunder.

#### B-2.0 ROAD SURFACE STANDARDS

#### B-2.1 ROUTINE ROAD PATROLLING

Road patrolling is carried out to inspect the roadway and adjacent right-of-way to detect defects that may adversely affect the structure of the road, adjacent property, the environment, and public safety. Observations made and documented during road patrol support the proper management and scheduling of work to ensure maintenance activities are conducted in a timely and cost-efficient manner. In general, road patrol and follow-up maintenance activities help to extend the life and investment of public and private infrastructure.

Documentation is a vital component of road patrol as it creates a permanent record of observations made relating to deficiencies in the infrastructure, incidents attended to, weather conditions and general maintenance activities performed on the roadway. These records will prove invaluable should future litigation require accurate knowledge of past events.

Routine patrolling shall be carried out by driving on or by electronically monitoring the highway to check for conditions. Refer to the following table for the minimum standard for frequency of routine patrolling.

TABLE B-1 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	

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

During routine patrolling, the inspector should look for pothole/pothole patching, shoulder drop-offs, cracks, debris, and surface discontinuities (fatigue/alligator cracking, block cracking, edge cracking, longitudinal cracking, transverse cracking, rutting, shoving, bleeding, polished aggregates, raveling, skin patching, water bleeding and pumping, corrugation, swelling, depression).

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Municipal Act, 2001, Ontario Regulation 239/02, Amended to O. Reg. 288/03, Minimum Maintenance Standards for Municipal Highways.

TABLE B-2 POTHOLE, SHOULDER DROP-OFFS, DEBRIS & SURFACE DISCONTINUITIES				
DISTRESS	DESCRIPTION	PROBLEM / CAUSE		
Bleeding	A film of asphalt binder on the pavement surface. Usually creates a shiny, glass like reflecting surface that can become quite sticky.	Causes loss of skid resistance when wet.		
Fatigue (Alligator) Cracking	A series of interconnected cracks caused by fatigue failure of the surface (or sub-base) under repeated traffic loading.	Cracks allow moisture infiltration, roughness, and may further deteriorate to a pothole.  An indicator of structural failure.		
Block Cracking	Interconnected cracks that divide the pavement up into rectangular pieces.	Allows moisture infiltration, roughness.  Typically caused by the inability of asphalt binder to expand and contract with temperature cycles because of asphalt binder aging or poor choice of binder in the mix design.		

DISTRESS	DESCRIPTION	PROBLEM / CAUSE
Corrugation and Shoving	A form of movement typified by ripples (corrugation) or an abrupt wave (shoving) across the pavement surface. The distortion is perpendicular to the traffic direction and usually occurs at points where traffic starts and stops (corrugation) or areas where HMA (Hot Mix Asphalt) abuts a rigid object (shoving).	Roughness.  Usually caused by traffic action combined with an unstable HMA layer or excessive moisture in the sub-grade.
Depression	A localized pavement surface area with slightly lower elevation than the surrounding pavement and are very noticeable after a rain.	Roughness.  When filled with water can cause hydroplaning.  Frost heave or sub-grade settlement resulting from inadequate compaction during construction.
Joint Reflection Cracking	Cracks in a flexible overlay of a rigid pavement and occur directly over underlying rigid pavement joints.	Allows moisture infiltration, roughness.  Indicates the possible onset of alligator cracking and structural failure.  Generally, not load initiated, however loading can hasten deterioration.
Longitudinal Cracking	Cracks parallel to the pavement's centerline or laydown direction.	Allows moisture infiltration, roughness.  Caused by poor joint construction, location (located in the least dense areas of a pavement), or from a reflective crack from an underlying layer or HMA fatigue.

DISTRESS	DESCRIPTION	PROBLEM / CAUSE
Patching	An area of pavement that has been replaced with a new material to repair the existing pavement.	A patch is considered a defect no matter how well it performs.  Roughness.  Caused by previous localized pavement deterioration that has been removed and patched or utility cuts.
Polished Aggregate	Areas of HMA pavement where the portion of aggregate extending above the asphalt binder is either very small or there are no rough or angular aggregate particles.	Decreased skid resistance.  Caused by repeated traffic applications.
Potholes	Small, bowl-shaped depressions in the surface that penetrate all the way through the HMA layer down to the base course.	Moisture infiltration and roughness.  Serious vehicular damage can result from driving across potholes at higher speeds.
Raveling	Progressive disintegration of an HMA layer from the surface downward because of dislodgement of aggregate particles.	Leaves loose debris on the pavement.  Roughness.  Water collects in the raveled locations resulting in vehicle hydroplaning, and loss of skid resistance.
Rutting	Surface depression in the wheel path.  Pavement uplift (shearing) may occur along the sides of the rut.	Can cause vehicle hydroplaning when filled with water.  Tends to pull a vehicle towards the rut path as it is steered across the rut.  Caused by consolidation or lateral movement of materials due to traffic loading (insufficient compaction of HMA layers – continue to densify under traffic loads, subgrade rutting – inadequate pavement structure, and improper mix design or manufacture).

DISTRESS	DESCRIPTION	PROBLEM / CAUSE
Slippage Cracking	A crescent or half-moon shaped crack generally having two ends pointed into the direction of traffic.	Allows moisture infiltration and roughness.  Caused by braking or turning wheels causing the pavement surface to slide and deform.
Stripping	The loss of bond between aggregates and asphalt binder.	Decreases structural support and leads to rutting, raveling, shoving/corrugations, or cracking.  Bottom-up stripping is very difficult to recognize because it manifests itself on the pavement surface as other forms of distress.
Transverse (Thermal) Cracking	Cracks perpendicular to the pavement's centerline or laydown direction.	Allows moisture infiltration and roughness.  May be caused by shrinkage of the HMA surface due to low temperatures or asphalt binder hardening or reflective cracks caused by cracks beneath the surface HMA layer.
Water Bleeding and Pumping	Water bleeding occurs when water seeps out of joints or cracks or through an excessively porous HMA layer. Pumping occurs when water and fine material is ejected from underlying layers through cracks in the HMA layer under moving loads.	Decreased skid resistance.  An indication of high pavement porosity (water bleeding) and decreased structural support (pumping).  Causes include porous pavement because of inadequate compaction during construction or poor mix design, high water table, or poor drainage.

DISTRESS	DESCRIPTION	PROBLEM / CAUSE
Skin Patching	Light or skin patches are patches generally 1" or less in thickness. Skin patches generally use a fine sand aggregate as opposed to coarse aggregate because the edges of the patch are "feathered" out to zero thickness.	Sometimes skin patches are used to fill depressions, in which case the patch could be as thick as three or four inches. A skin patch differs from removal and replacement because existing asphalt is not removed during skin patching. This type of repair should only be used when there is no base failure, to achieve drainage or for a low budget short term "Quick Fix".  Usually skin patches are used to improve the appearance of pavement or stop water penetration.
Shoulder Drop-off	The difference in height from the edge of asphalt to the gravel shoulder.	The probability of severe consequences from a pavement/shoulder drop-off traversal are a function of drop-off height and shape and vehicle speed and reentry angle.
Debris	Garbage and/or debris on or adjacent to the roadway.	The AAA Foundation for Traffic Safety released a study on vehicle-related road debris. The study revealed that it caused 25,000 accidents - and nearly 100 deaths - each year.

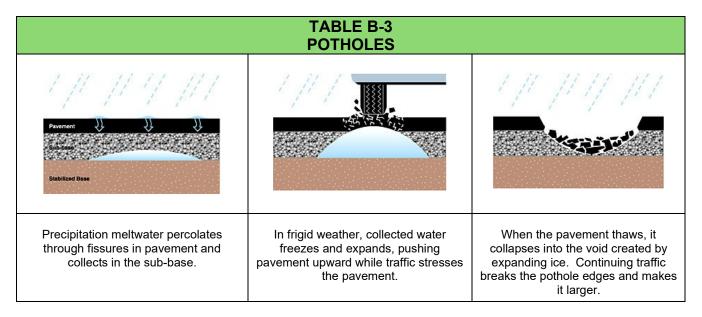
#### B-2.2 POTHOLES

Potholes can be a source of driver discomfort and can cause excessive wear and tear on vehicles. In extreme cases potholes can be a contributing factor to loss of vehicular control.

Potholes occur in two ways. Both have to do with melt water during the spring thaw and with cracks in the road surface:

(a) Water seeps through cracks in the road surface and softens the sub-base under the pavement to the point where the sub-base can no longer support the pavement and the traffic loads placed on it.

The main cause of potholes in our climate has to do with the same thaw water seeping into the cracks in the pavement and/or into the sub-base and then freezing when temperatures drop. These freeze/thaw cycles occur repeatedly during the spring season. The freezing causes the sub-base to expand which can cause sufficient pressure to cause localized pavement failure (a pothole), similarly water in the cracks or in between concrete and bituminous (asphalt) overlays can freeze causing pieces of pavement to "pop" out.



Roads with high traffic volumes have more potholes than others due to the sheer amount of use. Bridges and ramps, which receive heavy doses of snow removal chemicals all winter, are more prone to potholes, too.

There are generally three methods of repairing potholes:

**Cold-Mix Patch** - Utilizes an asphalt product designed to remain workable during cold weather. Largely considered a temporary repair as it is normally placed during wet weather, without a tack coat, consequently a good bond between pavement and patch is not made and water can quickly find its way under the patch which may be forced out by subsequent freeze thaw action or by traffic or both.

**Pressurized-Emulsion Patch -** Utilizes machinery, primarily the one-man Road Patcher machine, which sprays a combination of hot emulsified asphalt oil and crushed limestone chips (8 mm) into the pothole. The high pressure at which the patch material is sprayed forces it tightly into the pothole and to some extent displaces water in the pothole. This patch is considered semi-permanent in nature with an expected life of 6 - 18 months.

**Hot-Mix Patch** - Utilizes hot asphalt just like the product used to pave asphalt roads. This type of patch is applied in dry weather. Debris in the pothole is swept-out or blown out and a tack coat of sticky emulsified asphalt oil is applied to the pothole. The hot asphalt mixture is placed into the pothole and then properly compacted with a vibratory plate compactor or a small vibratory roller. This type of patch is considered permanent in nature. It is the most successful and also the most expensive patch method.

If a pothole exceeds both the surface area and depth set out in the following tables, as the case may be, the minimum standard is to repair the pothole within the time set out in the appropriate table, after becoming aware of the fact:

- Table B-4 Paved Surface of Roadway
- Table B-5 Non-paved Surface of Roadway
- Table B-6 Paved or Non-paved Surface of Shoulder

TABLE B-4 POTHOLES ON PAVED SURFACE OF ROADWAY				
Class of highway	Surface Area	Depth	Time	
1	600 cm2	8 cm	4 days	
2	800 cm2	8 cm	4 days	
3	1000 cm2	8 cm	7 days	
4	1000 cm2	8 cm	14 days	
5	1000 cm2	8 cm	30 days	

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

TABLE B-5 POTHOLES ON NON-PAVED SURFACE OF ROADWAY			
Class of highway	Surface Area	Depth	Time
3	1500 cm2	8 cm	7 days
4	1500 cm2	10 cm	14 days
5	1500 cm2	12 cm	30 days

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

TABLE B-6 POTHOLES ON PAVED OR NON-PAVED SURFACE OF SHOULDER				
Class of highway	Surface Area	Depth	Time	
1	1500 cm2	8 cm	7 days	
2	1500 cm2	8 cm	7 days	
3	1500 cm2	8 cm	14 days	
4	1500 cm2	10 cm	30 days	
5	1500 cm2	12 cm	60 days	

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

#### B-2.3 SHOULDER DROP-OFFS

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

A shoulder drop-off is deemed to be in a state of repair if its depth is less than or equal to that set out in the following table.

TABLE B-7 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		

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

#### B-2.4 CRACKS

If a crack on the paved surface of a roadway is greater, for a continuous distance of 3 metres or more, than both the width and depth set out in Table A-8 the minimum standard is to repair the crack within the time set out in Table A-8, after becoming aware of the fact.

A crack is deemed to be in a state of repair if its width or depth is less than or equal to that set out in the following table.

TABLE B-8 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		

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

#### B-2.5 DEBRIS

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.

#### B-2.6 ROADWAY SURFACE DISCONTINUITY

Roadway surface discontinuity means a vertical discontinuity creating a step formation at joints or cracks in the paved surface of a roadway, including bridge deck joints, expansion joints and approach slabs to a bridge.

If a surface discontinuity, other than a surface discontinuity on a bridge deck, exceeds the height set out in Table A-9, the minimum standard is to repair the surface discontinuity within the time set out in Table A-9 after becoming aware of the fact.

A surface discontinuity on a roadway, other than a surface discontinuity on a bridge deck, is deemed to be in a state of repair if its height is less than or equal to the height set out in Table A-9.

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.

A surface discontinuity on a bridge deck is deemed to be in a state of repair if its height is less than or equal to five centimeters.

TABLE B-9 SURFACE DISCONTINUITY			
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	

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

#### B-2.7 SIDEWALK SURFACE DISCONTINUITY

Surface discontinuity on a sidewalk means a vertical discontinuity creating a step formation at joints or cracks in the surface of a sidewalk.

The minimum 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.

A sidewalk that has been inspected is deemed to be in a state of repair with respect to any surface discontinuity until the next inspection provided that the municipality does not acquire actual knowledge of the presence of a surface discontinuity more than two centimeters.

If a surface discontinuity on a sidewalk exceeds two centimeters, the minimum standard is to treat the surface discontinuity within 14 days after acquiring actual knowledge of the fact.

A surface discontinuity on a sidewalk is deemed to be in a state of repair if it is less than or equal to two centimeters.

Treating a surface discontinuity on 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 the discontinuity.

# B-3.0 TRAFFIC SIGN, SIGNAL SERVICE AND SAFETY DEVICE STANDARDS

#### B-3.1 LUMINAIRES

Roadway lighting is installed to improve traffic safety and operations during hours of darkness. Roadway lighting may enhance visibility and help drivers to make safe choices.

Lighting for highways is generally categorized into conventional lighting systems and high mast lighting systems:



A high mast lighting system consists of steel poles ranging from 20 metres to 40 metres high. These poles support high pressure sodium luminaires. They are usually located in the centre median or within an interchange area. High mast lighting systems produce a comfortable light with minimal glare for drivers. High mast lighting is economical where many installations are required.

A conventional lighting system consists of steel poles ranging from 10 metres to 20 metres high. The poles support energy efficient, high pressure sodium luminaires, and are usually

located in the centre median or along the edge of pavement. Conventional lighting is economical where few installations are required.

The Guiding Principle to be followed for illumination is as follows:

- (0.1) The minimum 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.
- (1) For conventional illumination if 3 or more consecutive luminaires on a highway are not functioning, the minimum standard is to repair the luminaires within the time set out in Table B-11 after becoming aware of the fact.
- (2) For conventional illumination and high mast illumination, if 30% or more of the luminaires on any kilometer of highway are not functioning, the minimum standard is to repair the luminaires within the time set out in Table B-11 after becoming aware of the fact.
- (3) For high mast illumination, if all 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) For conventional illumination and high mast illumination, if more than 50% of the luminaires on any kilometer of a Class 1 highway with a speed limit of 90 kilometers 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.

Luminaires are deemed to be in a state of repair:

- (a) for the purpose of subsection (1), if the number of non-functioning consecutive luminaires does not exceed two
- (b) for the purpose of subsection (2), if more than 70% of luminaires on any kilometer of highway are functioning
- (c) for the purpose of subsection (3), if one or more of the luminaires on consecutive poles are functioning
- (d) for the purpose of subsection (4), if more than 50% of luminaires on any kilometer of highway are functioning.

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 kilometers per hour or more

TABLE B-11 LUMINAIRES			
Class of highway	Time		
1	7 days		
2	7 days		
3	14 days		
4	14 days		
5	14 days		

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

#### B-3.2 SIGNS

Signs inform the driver or pedestrian of traffic regulations, warn of road characteristics and road hazards, and provide information necessary for route selection. All traffic control devices must fulfill a need, command attention, convey a clear and simple meaning, provide adequate time for a proper response, and command respect of road users.

Prior to placement of signs, the roadway authority should refer to the Manual of Uniform Traffic Control Devices for Canada.

Table B-12 provides a brief description of the various categories of signs and type of application.

The minimum standard for the frequency of inspecting signs of a type listed in Table B-12 is 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.

A sign that has been inspected is deemed to be in a state of repair with respect to the retroreflectivity requirements of the Ontario Traffic Manual until the next inspection provided that the municipality does not acquire knowledge that the sign has ceased to meet these requirements.

If any sign listed in Table B-12 is illegible, improperly oriented, obscured 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.

	TABLE B-12 SIGN TYPE / DESCRIPTION				
Type	Type Description Application				
Regulatory Signs	Indicates a traffic regulation that applies at a specific time or place on a road.	Right-of-way control, Speed control, Turn control, Directional traffic control, Passing control, Lane designation, Parking control, Specific types of road user control, Miscellaneous regulatory signs, Temporary regulatory tab signs			
Warning Signs	Indicate in advance conditions on or adjacent to a road that will normally require caution and may require a reduction in vehicle speed. Warning signs are classified into the following groups according to their particular function	Road alignment, Intersections, Specific road features, Divided highway transitions, Traffic regulations, ahead, Intermittent or moving hazards, Temporary warning tab signs			
Guide & Information Signs  EXIT 133  PARK & RIDE	Purpose is to convey information to the driver for route selection, for locating off-road facilities, or for identifying geographical features or points of interest.	Destination guide signs, Route marker signs, Guide sign supplementary tab signs, Off-road services signs, Miscellaneous information signs, Temporary Information tab signs			
Freeway Guide Signs  EXIT  Grider St  1/2 MILE	Used to convey information to the driver for route selection, for locating off-road facilities, or for identifying geographical features or points of interest.	Destination signing, Interchange signing, non-interchange signing, Miscellaneous freeway guide signs			
Pedestrian Signs	Provide safe crossing control and protection for pedestrians. Include installation of signs, signals and pavement markings for these purposes.	Crosswalk lighting, Crosswalk pavement markings, pedestrian crosswalks, School crosswalks, Special crosswalks, Traffic control signals at pedestrian crossings, School and playground areas, Other pedestrian signs			

#### **REGULATORY AND WARNING SIGNS**

The minimum standard for the frequency of inspecting regulatory signs or warning signs, per Table B-12, is 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.

A regulatory sign or warning sign that has been inspected is deemed to be in a state of repair with respect to the retro-reflectivity requirements of the Ontario Traffic Manual until the next inspection provided that the municipality does not acquire knowledge that the sign has ceased to meet these requirements.

If a regulatory sign or warning sign is illegible, improperly oriented, obscured or missing, the standard is to repair or replace the sign within the time set out in Table B-13 to this section after becoming aware of the fact.

TABLE B-13 REGULATORY AND WARNING SIGNS			
Class of highway	Time		
1	7 days		
2	14 days		
3	21 days		
4	30 days		
5	30 days		

All of the Township of Hornepayne's Streets & Roads are Class 5, as highlighted in Green in the Table above.

# Section C



# HOURS OF SERVICE

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#### C-1.0 INTRODUCTION

Regulation 555/06, "Hours of Service" of the Highway Traffic Act came into effect January 1, 2007. The intent of this regulation is to ensure that commercial drivers, including drivers of municipal vehicles, enjoy adequate rest periods.

Municipalities expressed concern over the restrictions as it impedes the municipality's ability to deal with significant or impending situations. Exemptions to regulation 555/06 were made to address municipal concerns and allow longer working hours than specified in the Hours of Service Regulation. The exemptions are outlined in section 3.0 – Exemptions.

Inherent within the policy is the expectation that Township staff will act responsibly and will operate their vehicles, at all times, reasonably with due regard for the prevailing weather and roadway conditions, as well as have regard for the Highway Traffic Act, its regulations, and guidelines.

When minor amendments to this policy are required (i.e. technical errors, typing errors, word changes), staff are authorized by Council to amend the policy from time to time. Amendments that are deemed to be major in nature, will be taken to Council for approval.

References to legislation imply the most recent statutes, as amended. Thus, this policy need not be amended to maintain the applicability of such references.

All municipal employees shall have regard to "Hours of Service" as legislated.

#### C-2.0 HOURS OF SERVICE REQUIREMENTS

The following outlines Hours of Service requirements. For full details, refer to Ontario Regulation 555/06, as amended.

#### C-2.1 Duty Status

There are four categories of duty status time:

- 1. Off-duty time, other than time spent in a sleeper berth
- 2. Off-duty time spent in a sleeper berth
- 3. On-duty time spent driving
- 4. On-duty time, other than time spent driving

#### C-2.2 Daily Requirement

- A driver must have 10 hours off-duty in a day
- A driver cannot drive more than 13 hours in a day
- A driver cannot drive after 14 hours on-duty in a day

SOME exceptions apply, refer to Ontario Regulation 555/06

#### C-2.3 Mandatory Off-duty Time

- After a driver has accumulated 13 hours of driving time from the end of the most recent period of eight or more consecutive hours of off-duty time, the driver shall not drive again unless he or she takes at least eight consecutive hours of off-duty time.
- After a driver has accumulated 14 hours of on-duty time from the end of the most recent period of eight or more consecutive hours of off-duty time, the driver shall not drive again unless he or she takes at least eight consecutive hours of off-duty time.
- After 16 hours have elapsed from the end of the most recent period of eight or more consecutive hours of off-duty time, the driver shall not drive again unless he or she takes at least eight consecutive hours of off-duty time.

#### C-2.4 Cycle Requirement & Cycle Reset / Switching

#### Cycle Requirement

- An operator shall designate a cycle for the driver to follow
- There are two cycles available, a 7 day cycle or a 14 day cycle
- In a period of 7 consecutive days a driver cannot drive after having been on-duty for 70 hours
- In a period of 14 consecutive days a driver cannot drive after having been on duty for 120 hours. Drivers following this cycle shall not drive after accumulating 70 hours on-duty without having taken 24 consecutive hours of off-duty time

 On any day, all drivers must have a period of at least 24 consecutive hours offduty in the preceding 14 days

#### Cycle Reset / Switching

- A driver may only switch the cycle they are on if they start a new cycle
- To start a new cycle, a driver on the 7 day cycle must take 36 consecutive hours off-duty
- To start a new cycle a driver on the 14 day cycle must take 72 consecutive hours off-duty

#### C-2.5 Record Keeping Requirement

#### Daily Log Contents

A daily log may be handwritten, computer generated or made by means of a recording device. A daily log must contain the following information:

- The driver's name
- The date
- The name of driver's co-drivers if any
- The start time of the day being recorded if the day does not start at midnight
- The cycle that the driver is following
- The odometer reading, at the start of the day
- The number plate of each commercial motor vehicle to be driven and each trailer
- The name of the operator
- The address of the driver's home terminal and of the principal place of business of the operator
- Graph grid as illustration in Form 1 of the regulation (not required for Recording Device)
- The start and end times for each duty status during the day
- The location where the driver's duty status changes
- The total time spent in each duty status during the day
- The odometer reading at the end of the day
- The total distance driven by the driver

#### Daily Log Exemption

A driver is not required to keep a daily log if the driver:

- Drives the commercial motor vehicle solely within a radius of 160 kilometers of the location at which the driver start the day, and
- Returns at the end of the day to the same location from which he/she started, and
- Only works for one operator that day

If a driver is not required to keep a daily log the operator shall keep a record for the day showing:

 The date, driver's name, and the location where the driver starts and ends the day

- The cycle that the driver is following
- The hour at which each duty status starts and ends, and the total number of hours spent in each duty status

#### C-2.6 What is a Commercial Motor Vehicle (CMV)?

For the purpose of this regulation a CMV does not include:

- a commercial motor vehicle, other than a bus, having a gross weight or registered gross weight of not more than 4,500 kilograms
- an ambulance, fire apparatus, a hearse, or a casket wagon
- a mobile crane
- a motor home or a vehicle commonly known as a tow truck
- a commercial motor vehicle leased for no longer than thirty days by an individual
- a commercial motor vehicle operated under a dealer or service permit that is not transporting passengers or goods
- a commercial motor vehicle operated under the authority of an In-Transit permit
- a bus that is used for personal purposes without compensation

#### C-2.7 The Hours of Service Regulation Does Not apply to:

- 2 or 3 axle CMV transporting primary farm, forest, sea, or lake products
- · a vehicle being used by a police officer
- a cardiac arrest vehicle
- a vehicle engaged in providing relief in an emergency
- a bus operated by a municipality as part of a public transit service
- a pick-up truck being used for personal purposes that has a manufacturer's gross vehicle weight rating of 6,000 kilograms or less

For detailed and accurate references, including amendments, refer to the Highway Traffic Act and Ontario Regulation 555/06 – Hours of Service.

Drivers and operators must make themselves aware of changes in regulations for International Driving and/or Interprovincial Driving.

#### C-3.0 EXEMPTIONS

In response to concerns regarding municipal operations, Regulation 405/07 amends the "Hours of Service" Regulation 555/06. Amendments include exemptions to the Hours of Service regulation to address municipal concerns regarding situations that require working longer hours than specified in the Hours of Service regulation. Events such as winter storms,

windstorms, flooding, power outages and water main breaks may be potential situations where the regulation could be used.

Exemption from hours of service provisions in the following situations:

- 1. "A vehicle engaged in providing relief in an emergency, being a situation or impending situation that constitutes a danger of major proportions to life, property or the environment, whether caused by forces of nature, an accident, an intentional act or otherwise." or
- 2. "A vehicle operated by or on behalf of a municipality, road authority or public utility while responding to a situation or impending situation that constitutes an imminent danger, though not one of major proportions, to life, property or the environment, whether caused by forces of nature, an accident, an intentional act or otherwise."

This amendment provides flexibility for each municipality (in a manner the municipality deems appropriate) to determine whether a situation constitutes "an imminent danger ... to life, property or the environment". However, once the danger has passed, compliance with the regulation must be resumed and the driver must rest for a required period before operating a commercial vehicle.

# C-4.0 PROTOCOL WHEN OPERATING UNDER THE EXEMPTIONS

The Township of Hornepayne requires staff to adhere to the following protocol when operating under the exemptions.

#### C- 4.1 Who determines a Significant/Impending situation:

The Municipality determines when a situation or impending situation exists.

#### C-4.2 Designated Authority

The Public Works Manager or designate shall determine that a situation or impending situation exists that is causing or could cause an imminent danger to life, property or the environment.

Consideration for a 'Declaration of a Local State of Emergency' must be declared by either the Mayor or his/her designate. Declaration of a Local State of Emergency may be deemed necessary for events such as 100 year storms, spills evacuation, water contamination, etc.

#### C-4.3 Definition of a Significant/Impending situation:

The Public Works Manager or designate will determine that a situation or impending situation exists that is causing or could cause an imminent danger to life, property or the environment. Imminent danger may include, but is not limited to:

- Winter storms
- Flooding
- Watermain breaks
- Wind storms
- Power outages
- State of emergency

#### C-4.4 Documentation:

Documentation shall be made and retained, outlining the circumstances that were occurring or about to occur that led to the decision that the exemption would apply. Documentation shall include start and stop times, and a running log of events during the exemption.

#### C-4.5 Return to Compliance:

As soon as possible after the situation has been resolved, the municipality will resume compliance with the Hours of Service Regulation. All drivers will be expected to comply with the regulation by obtaining the required rest time, before resuming driving.

# C-5.0 INSPECTION AND MAINTENANCE REQUIREMENTS

The minimum daily truck inspection and maintenance requirements listed herein must be followed. It is the Public Works Manager's responsibility to ensure the following steps are followed:

- A daily pre-travel circle check report must be completed and logged for any truck or tractor and any towed trailer(s) regardless of the distance to be traveled, before leaving.
- 2) A post-travel report is required upon return.
- 3) When a report is prepared, the report is to be filled out and signed at the completion of the inspection, carried in or on the vehicle and produced to an enforcement officer upon request.
- 4) A report is valid for 24 hours. Any number of drivers may operate the vehicle with an inspection and report completed by another driver if the inspection and report are not more than 24 hours old.
- 5) A person other than the driver may conduct the inspection and complete the report.

#### C-6.0 RECORD RETENTION

#### C-6.1 Log Retention

#### Driver

- 1) Have the previous 14 days' worth of logs (or time records if you were exempt from requiring a daily log during any of those days).
- 2) Have your current log complete up to the last duty status change.
- 3) Keep any supporting documents (i.e. receipts).

#### Operator

- 1) Operator should receive the original of a daily log and supporting documents within 20 days.
- 2) Daily log and supporting documents must be at the principal place of business with 30 days of receiving them and keep them for at least 6 months. If

documents are in an electronic format, they must be accessible from the primary place of business.

#### C-6.2 Daily Inspection Records and Maintenance Documents:

- 1) A report listing no defect(s), is kept for three months.
- 2) A report that lists defects, repairs or indications that repairs were not required becomes a "record" of defects and repairs and is kept for two years along with other vehicle maintenance documents.
- 3) Records and reports are kept at the operator's principal place of business.

#### C-6.3 Daily Maintenance Records:

- Maintenance records are kept at the operator's principal place of business for two years, <u>or</u>
- 2) Maintenance records are kept for 6 months after the vehicle ceases to be the operator's responsibility.

#### C-7.0 EMPLOYMENT STANDARDS ACT

The Employment Standards Act, 2000 (ESA) is a law that sets minimum standards for fair workplace practices in Ontario. It does not cover employees in federal jurisdiction and people in a few other special categories. There are exceptions and special rules for some employees.

The ESA outlines rights and responsibilities at work including hours of work, rest periods, overtime pay, minimum wage, payday, vacation time and pay, public holidays, leaves of absence, termination notice and pay, etc.

# Section D



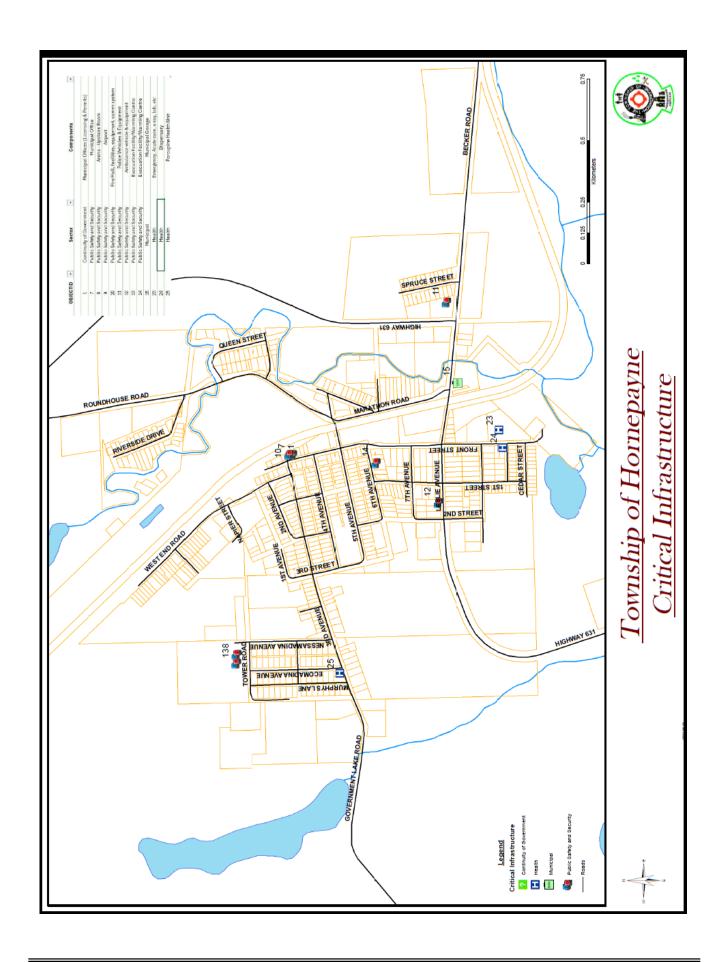
**APPENDICES** 

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# MAP CRITICAL INFRASTRUCTURE





### HIGHWAY CLASSIFICATIONS

Table A2-1 HIGHWAY CLASSIFICATIONS				
Street Name	CL Length	Speed Limit	AADT	Class
	(m)	(km/hr)	Estimates	
Airport Road	3000	80 (3)	< 50 (1)(5)	6
Becker Road (from Front St)	500	40 (2)	< 1000 (5)	5
Becker Road (from Hwy 631)	6400	40 (2)	< 500 <sub>(5)</sub>	5
Cedar Avenue	157	50 (3)	< 200 (5)	5
Cree Lake Road (4)	3400	40 (2)	< 500 <sub>(5)</sub>	5
Cree Lake Cottage Road (4)	1800	80 (3)	< 50 (1)	6
Ecomadina Avenue	390	50 (3)	< 200 (5)	5
Fifth Avenue	564	50 (3)	< 200 (1)	5
Firman Avenue	120	50 (3)	< 200 (5)	5
First Avenue	113	50 (3)	< 200 (5)	5
First Street	1044	50 (3)	< 200 (1)	5
Fourth Avenue	476	50 (3)	< 200 (1)	5
Front Street	1158	40 (2)	< 500 (5)	5
Government Lake Road	8300	80 (2)	< 50 (1)	6
Green Street	142	50 (3)	< 200 (5)	5
Herbert Avenue	396	50 (3)	< 200 (5)	5
High Street	173	50 (3)	< 200 (5)	5
Honka Drive	126	50 (3)	< 200 (5)	5
King Street	242	50 (3)	< 200 (5)	5
Laird Road	95	50 (3)	< 200 (5)	5
Lane A	350	50 (3)	< 200 (5)	5
Lane B	190	50 (3)	< 200 (5)	5
Lane C	270	50 (3)	< 200 (5)	5
Lane D	220	50 (3)	< 200 (5)	5
Leslie Avenue (Hwy 631)	300	40 (2)	<1000 (1)	5
Marathon Road	504	50 (3)	< 200 (5)	5
McLeod Street	173	50 (3)	< 200 (5)	5
Murphy Avenue	163	50 (3)	< 200 (5)	5
Murphy Lane	408	50 (3)	< 200 (5)	5
Napier Street	124	50 (3)	< 200 (5)	5
Nesomadina Avenue Old Land & Forest Road	401 2500	50 (3)	< 500 (1)(5)	5 6
Olu Latiu & Folest Roau	2500	80 (3)	< 50 (1)	U

Street Name	CL Length	Speed Limit AADT		Class
	(m)	(km/hr)	Estimates	
Pine Street	213	50 (3)	< 200 (5)	5
Queen Street	346	50 (3)	< 200 (5)	5
Riverside Drive	426	50 (3)	< 200 (5)	5
Roundhouse Road	1581	40 (2)	< 500 <sub>(5)</sub>	5
Second Avenue	263	50 (3)	< 200 (5)	5
Second Street	520	50 (3)	< 200 (5)	5
Seventh Avenue	306	50 (3)	< 200 (5)	5
Sixth Avenue	380	50 (3)	< 200 (5)	5
Spruce Street	256	50 (3)	< 200 (5)	5
Spurline Lake Road	700	80 (3)	< 50 <sub>(1)</sub>	6
Third Avenue	1092	40 (2)	< 2000 (1)	5
Third Street	327	50 (3)	< 200 (1)	5
Tower Road	235	50 (3)	< 200 (5)	5
West End Road	805	50 (3)	< 200 (5)	5
Willow Avenue	158	50 (3)	< 200 (5)	5
Total (m)	41807			

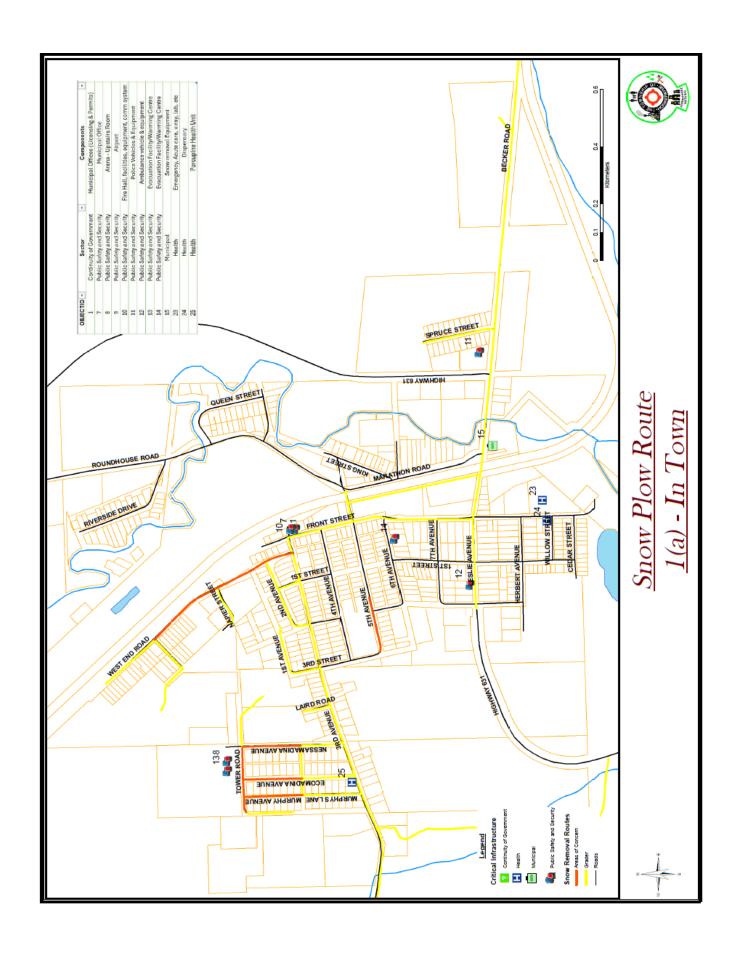
#### Notes:

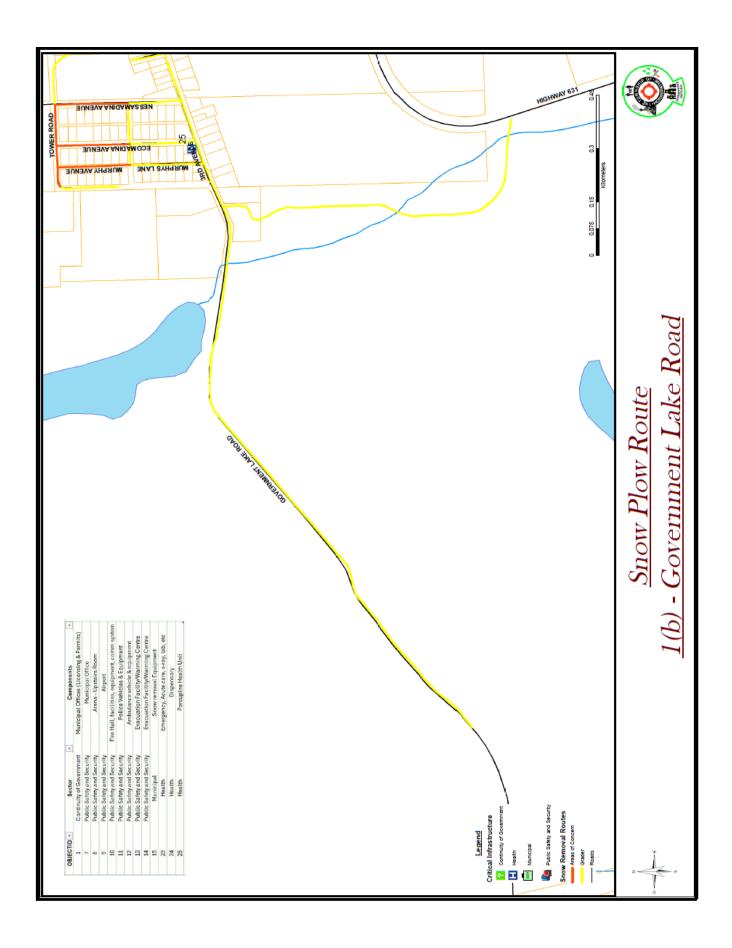
- 1. AADT Estimates, per Table A2-2
- 2. Roads have posted speed limits
- 3. Roads have un-posted speed limits
- 4. Roads are in the Unincorporated Twp of Haig
- 5. AADT Best Estimates, given actual readings and local knowledge

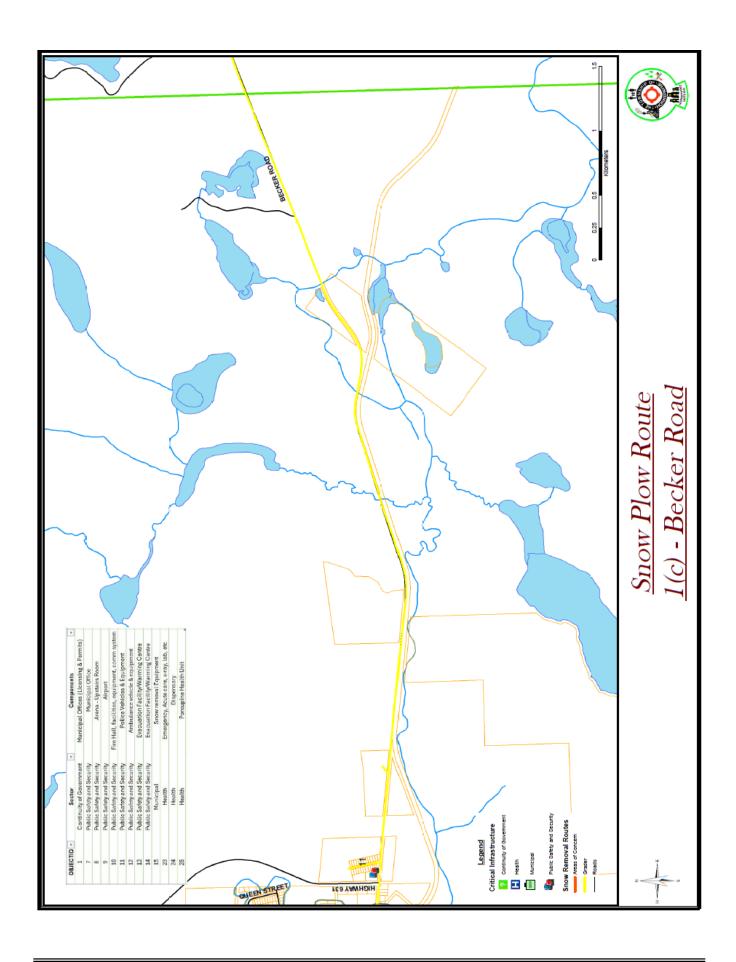
Table A2-2  AADT Estimates				
Street Name	Traffic Count	Res. Count	Factor	AADT
Liveable Cities	Traffic Counts -	7 days, Feb 2	5 to Mar 3, 2024	
3 <sup>rd</sup> Avenue	12509		Divide by 7	1787
Leslie Avenue	6672		Divide by 7	953
Internal Traffic Cou	ints – May 7, 8, 9	& 14, 2024 fro	om 2:00 to 6:00	pm
Government Lake Road	13		Divide by 0.3	43
Old Land & Forest Road	14		Divide by 0.3	47
3 <sup>rd</sup> Street	50		Divide by 0.3	167
4 <sup>th</sup> Avenue	50		Divide by 0.3	167
1st Street	32		Divide by 0.3	107
5 <sup>th</sup> Avenue	40		Divide by 0.3	133
3 <sup>rd</sup> Avenue	195		Divide by 0.3	650
Nesomadina Avenue	52		Divide by 0.3	173
Dead End Road – Residential Counts				
Airport Road		0	Multiply by 6	0
Spurline Lake Road		0	Multiply by 6	0
Cree Lake Cottage Road		8	Multiply by 6	48

SNOW PLOW ROUTE 1 (GRADER)









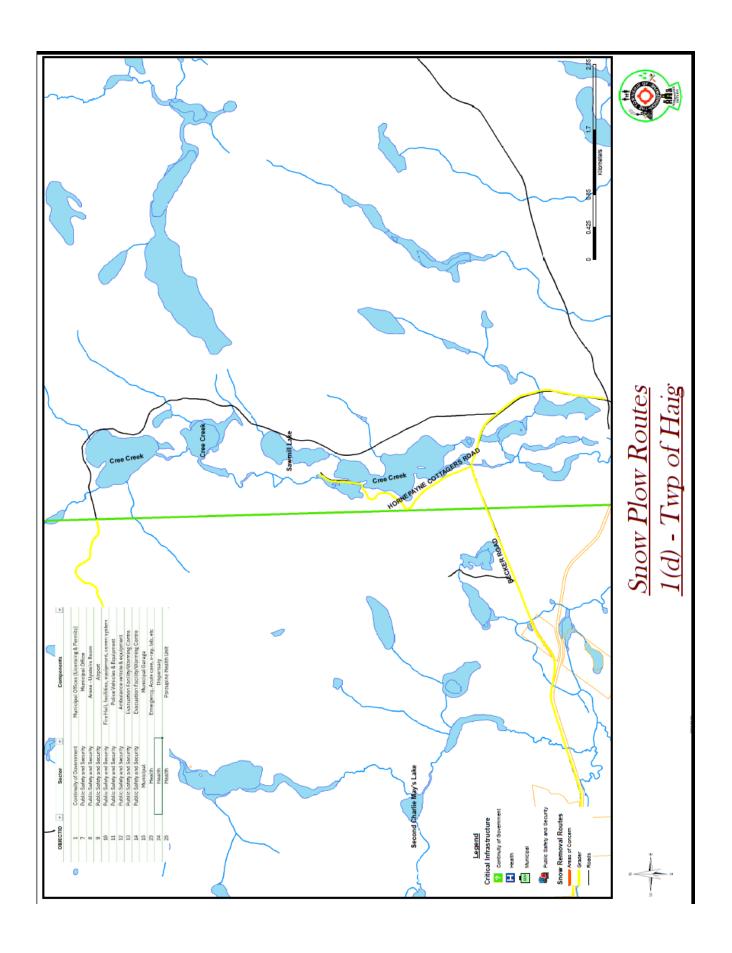


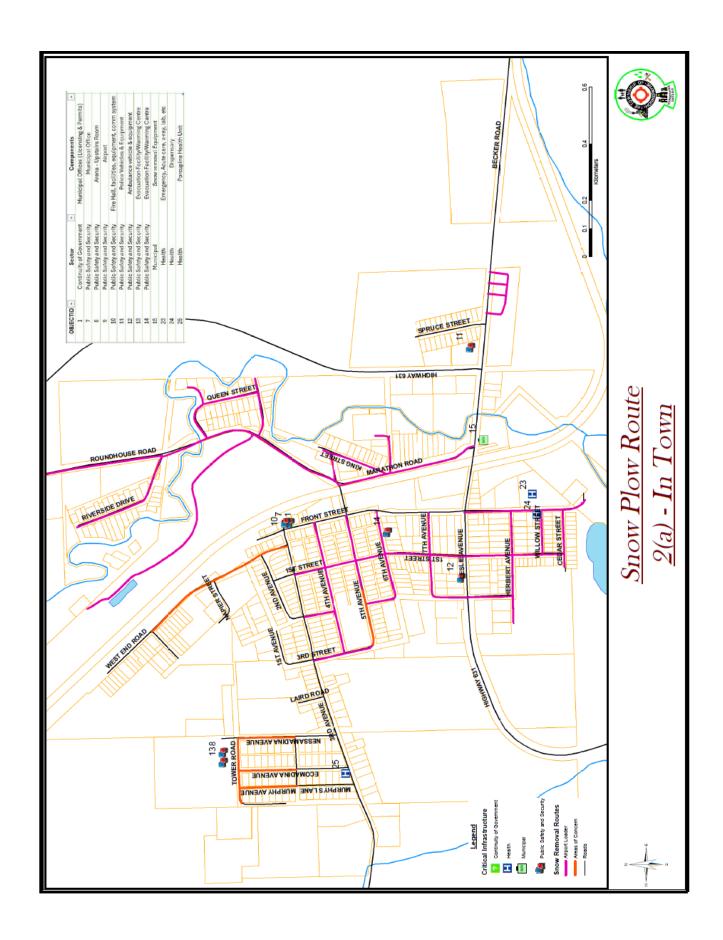
Table A3-1					
Snow Plow Route 1 (Grader)					
Street Name	From	То	Length (m)	Other	
Spruce Street	Becker Road	Dead End	256		
Leslie Avenue (Hwy 631)	Second Street	Front Street	300	Connecting Link, Ambulance	
Front Street	Leslie Avenue (Hwy 631)	Third Avenue	707	Fire Hall, Municipal Offices	
Fifth Avenue	Front Street	Marathon Road	157		
Third Avenue	Government Lake Road	Front Street	1092	Health Unit	
Murphy Lane	Third Avenue	Tower Road	408		
Ecomadina Avenue	Third Avenue	Tower Road	390		
Nesomadina Avenue	Third Avenue	Tower Road	401	Elementary School	
Tower Road	Murphy Lane	Dead End	235	Arena, Public Safety	
Murphys Avenue	Murphy Lane	Dead End	163		
McLeod Street	Nesomadina Avenue	Murphys Lane	173		
Laird Road	Third Avenue	Dead End	95		
Third Street	Third Avenue	First Avenue	109		
First Avenue	Third Street	Dead End	113		
Second Street	Third Avenue	Second Avenue	48		
Second Avenue	Second Street	West End Road	263		
First Street	Third Avenue	Second Avenue	106		
West End Road	Third Avenue	Dead End	805		
Napier Street	West End Road	Dead End	124		
Green Street	West End Road	High Street	142		
High Street	Green Street	Dead End	173		
Government Lake Road	Third Street	Dead End	8300		
Old Land & Forest Road	Third Street	Hwy 631	2500		
Becker Road	Front Street	Haig Twp	6900	Police, Landfill	
Cree Lake Road	Haig Twp	Lumber Mill	3400	Haig Twp	
Cree Lake Cottage Road	Becker Road	Cree Lake	1800	Haig Twp	
Total (m)			29160		
Hallmark Fire Lane (1)	Fifth Avenue	Hwy 631	450	Fire Lane	

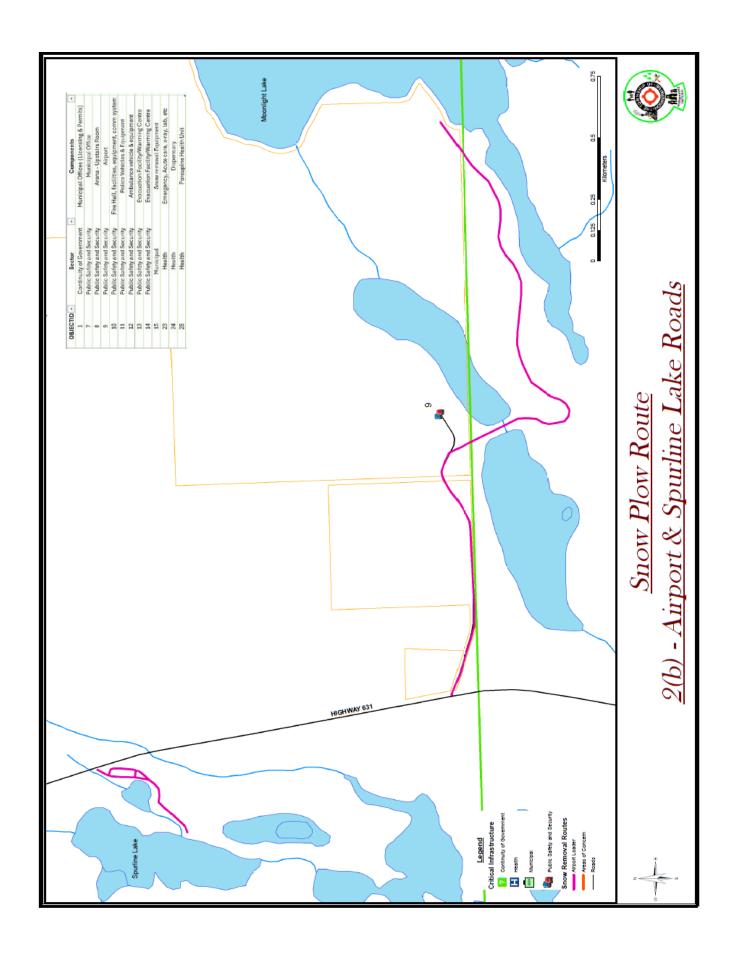
Note:

(1) Not a Public Road

## SNOW PLOW ROUTE 2 (AIRPORT LOADER)







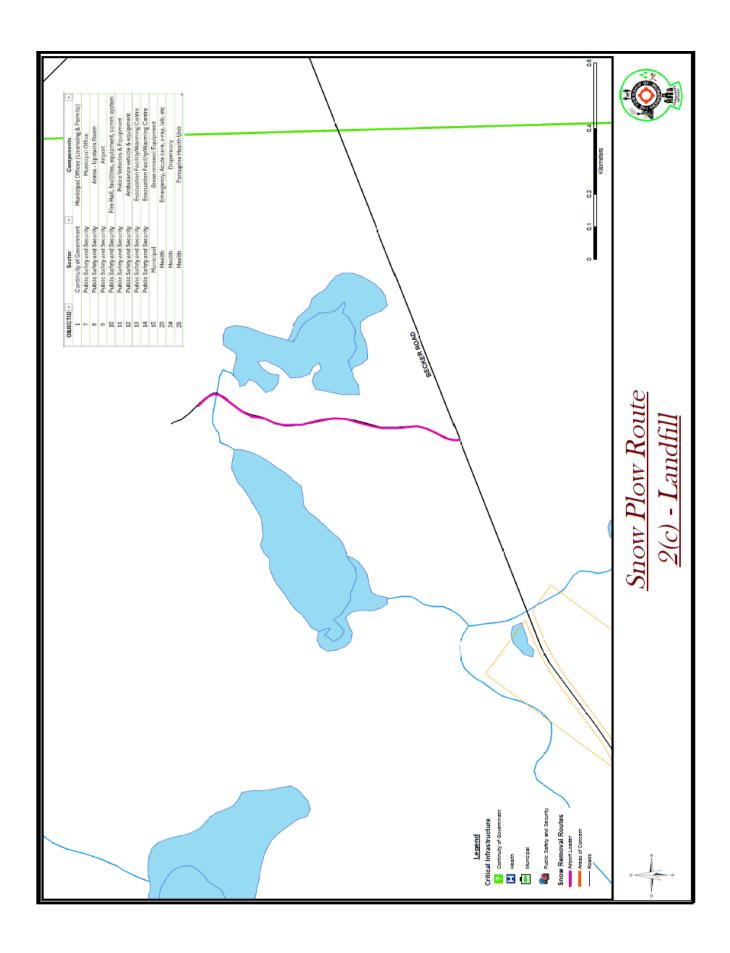


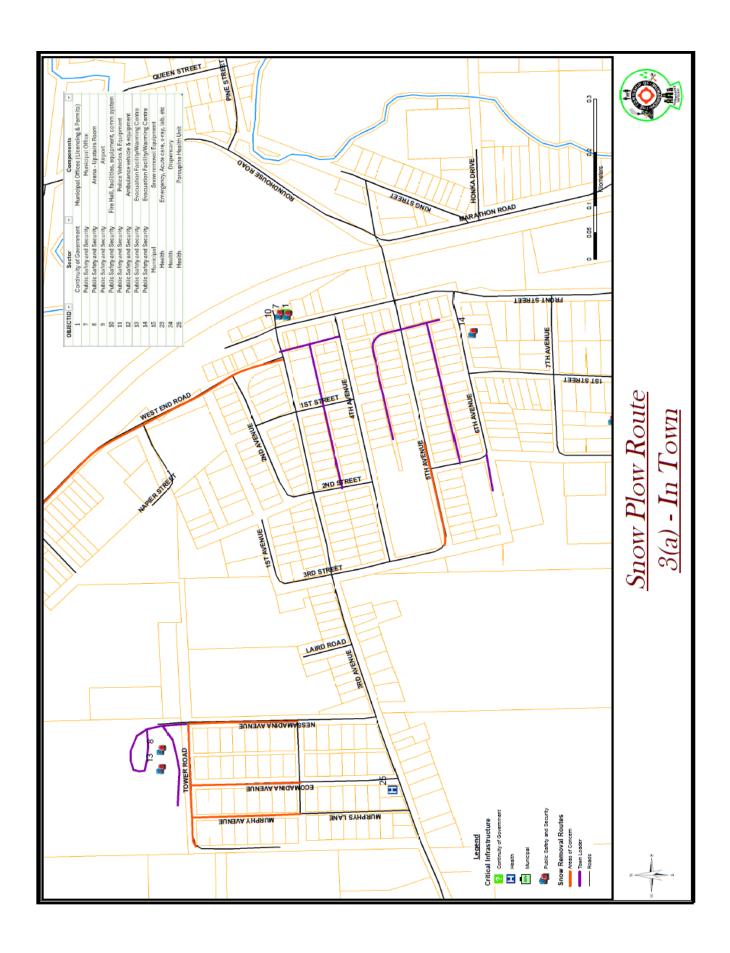
		Table A4-1		
	Snow Plow	Route 2 (Airpo	rt Loader)	
Street Name	From	То	Length (m)	Other
Front Street	Leslie Avenue (Hwy 631)	Dead End	451	Hospital
Cedar Avenue	Front Street	Dead End	157	
First Street	Third Avenue	Cedar Avenue	938	
Willow Avenue	Front Street	First Street	158	
Herbert Avenue	Front Street	Dead End	396	
Second Street	Herbert Avenue	Seventh Avenue	272	
Seventh Avenue	Second Street	Front Street	306	
Sixth Avenue	Second Street	Front Street	320	
Second Street	Sixth Avenue	Fifth Avenue	100	
Fifth Avenue	Front Street	Third Street	310	
Third Street	Third Avenue	Fifth Avenue	218	
Fourth Avenue	Front Street	Third Street	476	High School
Second Street	Fourth Avenue	Third Avenue	100	
Marathon Road	Becker Road	Roundhouse Road	504	
Roundhouse Road	Marathon Road	Hwy 631	1581	
Honka Drive	Marathon Road	Dead End	126	
King Street	Marathon Road	Dead End	242	
Fifth Avenue	Marathon Road	King Street	97	
Pine Street	Roundhouse Road	Dead End	213	
Queen Street	Roundhouse Road	Pine Street	346	
Riverside Drive	Roundhouse Road	Dead End	426	
Airport Road	Hwy 631	Dead End	3000	
Spurline Lake Road	Hwy 631	Dead End	700	
Total (m)			11437	
Cemetery (1)	Becker Road	Becker Road		
Landfill Road (1)	Becker Road	Landfill Site	1000	

Note:

(1) Not a Public Road

# SNOW PLOW ROUTE 3 (TOWNSHIP LOADER)





	Snow Ple	Table A5-1 ow Route 3 (Tow		r)
Street Name	From	То	Length (m)	Other
Firman Avenue	Third Avenue	Fourth Avenue	120	
Lane A	Second Street	Firman Avenue	350	
Lane D	Fourth Avenue	Sixth Avenue	220	
Lane B	Lane D	Dead End	190	
Lane C	Lane D	Second Street	270	
Sixth Avenue	Second Street	Dead End	60	
Total (m)	•		1210	
Arena (1)				Public Safety

Note:

(1) Not a Public Road

### MINIMUM STANDARDS ROAD MAINTENANCE CHART



#### Table A6-1 Minimum Standards – Road Maintenance Chart **CLASS 5 Roads** Routine Patrolling Frequency once every 30 days 1000 cm<sup>2</sup> Surface: Roadways Potholes on Paved Surface Depth: 8 cm of Roadway Time: 30 days Surface: 1500 cm<sup>2</sup> Potholes on Non-paved Surface Depth: 12 cm of Roadway Time: 30 days 1500 cm<sup>2</sup> Surface: Potholes on Paved or Non-paved Depth: 12 cm Surface of Shoulder Time: 60 days Shoulder Drop-offs (for a Depth: 8 cm continuous distance of 20 meters Time: 30 days or more) Width: 5 cm Cracks (for a continuous distance Depth: 5 cm of 3 meters or more) Time: 180 days Luminaires Time: 14 days If 3 or more consecutive luminaires on a highway are not Conventional Illumination functioning Conventional and High Mast If 30% or more of the luminaires on any kilometer of highway are Illumination not functioning If any of the following signs is illegible, improperly oriented or missing, or does not meet retro-reflectivity requirements, the minimum standard is to deploy resources as soon as practicable after becoming aware: Signs Stop sign Stop ahead Yield Yield ahead All Other Reg. or Warning Signs 30 days Days: Surface: 1000 cm<sup>2</sup> Bridge Deck Spalls Depth: 8 cm Time: 7 days Surface Discontinuities Other than 5 cm Height: a Bridge Deck Time: 21 days If discontinuity exceeds 5 cm on a bridge deck, the minimum **Bridge Decks** standard is to deploy resources as soon as practicable after becoming aware. Depth: 10 cm **Snow Accumulation** Time: 24 hours Icy Roadways Time: 16 hours

# NOTICES DECLARATION OF SIGNIFICANT WEATHER EVENT

### Significant Weather Event... Warning

Environment Canada has issued a storm alert warning. Township staff will be monitoring the forecast and approaching weather conditions for the possibility to declare a Significant Weather Event.

### Significant Weather Event... Warning Cancelled

The Significant Weather Event Warning potentially impacting Township of Hornepayne roads has been cancelled. Please continue to use caution as conditions may vary from area to area.

### Significant Weather Event... Declared

The Township of Hornepayne has declared a Significant Weather Event in the area with respect to existing or potential hazardous storm conditions continuing until further notice.

- All roads and sidewalks maintained by the Township are considered to be in a "state of repair" until further notice.
- Drivers and pedestrians should use an appropriate level of caution when travelling during this event and avoid unnecessary travel.
- Crews continue to work diligently to ensure public safety, but it may take longer than normal to maintain the roadways and sidewalks. Your cooperation is appreciated.
- Garbage collection services may also be affected during this SWE; it may take longer than usual to complete collection due to the storm. Residents are advised to be patient while crews continue to collect.

### Significant Weather Event... Ended

The Significant Weather Event impacting Township of Hornepayne roads has ended. Please continue to use caution as conditions may vary from area to area, while crews continue to maintain the roads and sidewalks.

# HOURS OF SERVICE RECORDING FORMS

Driver's Daily Log

DRIVER'S EMPLOYEE NUMBER  NUMÉRO D'EMPLOYE CONDUCTEUR  MOIS  JOUR  ANNÉE  Township of Hornepayne  GB Front St., Hornepayne, ON POM 1ZO  PRINCIPAL CARRIER / TRANSPORTEUR ROUTIER  GB Front St., Hornepayne, ON POM 1ZO  PRINCIPAL OFFICE ADDRESS / ADRESSE DE L'ÉTABLISSEMENT PRINCIPAL  18 Becker Rd., Hornepayne, ON POM 1ZO  HOME TERMINAL ADDRESS / TERMINUS D'ATTACHE  DUTY STATUS  ACTIVITÉ 0 1 2 3 4 5 6 7 8 9 10  1. Off Duty  Période de repos  2. Sleeper  T. Off Duty  Période de cepos  3. Sleeper  T.	NUMBER OF DAYS OFF INCLUDING TODAY / JOURS DE CONGÉ INCLUANT AUJOURD'HUJ Terminal / Utiliser l'heu  11 12 13 14	20 21 22	PERSONAL USE USAGE PERSONAL USE USAGE PERSONNEL ODO START / DÉBUT ODO END / FIN  TOTAL HOURS  24 TOTAL DES HEURES
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		DECLARE / DÉCLARER:	/ 01
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14 JOURS Total hours off duty PRÉCÉDENTS Heures totales de repos		ADVERSE DRIVING CONDITIONS / DES CONDITIONS DE CONDUITE DÉFAVORABLES PAID OFF-DUTY TIME / LA RÉMUNÉRATION DU TEMPS DE REPOS	NDUITE DÉFAVORABLES ON DU TEMPS DE REPOS
DRIVER'S SIGNATURE CERTIFIED TRUE AND CORRECT DRIVER'S N  ATTESTÉE VÉRIDIQUE ET EXACTE	DRIVER'S NAME – PRINTED / NOM DU CONDUCTEUR	CTEUR CO-DRIVER'S NAME – PRINTED / AUTRE CONDUCTEUR	/ AUTRE CONDUCTEUR