



# City of Temiskaming Shores

## Public Works Department Operations Division

### Winter Operations Plan 2023 – 2024

### Right-of Way Roadways, Sidewalks and City-owned Lands

## TABLE OF CONTENTS

<b>Item</b>	<b>Page</b>
List of Appendices	4
Purpose	6
Definitions	6
1.0 Objective	7
2.0 Policy Statement	8
3.0 Responsibilities	8
4.0 Winter Maintenance Program	9
4.1.0 The System Maintained	9
4.2.0 Level of Service	11
4.3.0 Winter Maintenance Season	20
4.4.0 Winter Preparations	20
4.4.1 Prior to Winter Season	20
4.4.2 One Month Prior to Winter Season	21
4.4.3 Two Weeks Prior to Winter Season	21
4.4.4 Start of Winter Season	22
4.5.0 Winter Patrol	22
4.6.0 Operations	22
4.6.1 Staffing and Hours of Work	22
4.6.1.1 Minimum Crew Size	24
4.6.1.2 Contracts	24
4.6.2 Winter Materials Used Annually	24
4.6.3 Application Rates	26
4.6.3.1 Winter Sand	26
4.6.3.2 Salt	26
4.6.4 Equipment – Winter Maintenance Fleet	27
4.6.5 Yard Facilities	28
4.6.6 Roadway De-Icing and Sanding	29
4.6.7 Snow Plowing	29
4.6.8 Snow Removal and Disposal	30
4.6.8.1 City By-Laws and Ordinances	31
4.6.9 Sidewalk Service Standards	31
4.6.10 Parking Lot Service Standards	31
4.6.11 Vulnerable Areas	32
4.6.12 Weather Monitoring	32
4.6.13 Communications	33

4.6.14	Call Out Procedures	33
4.6.15	Road Closure Procedures	34
4.7.0	Decommissioning Winter Operations	35
4.7.1	Two Weeks after the Winter Season Ends	35
4.7.2	One Month after the Winter Season Ends	35
4.8.0	Training	35
4.9.0	Record Keeping	36
5.0	Plan Improvement	37
6.0	Monitoring and Updating	37
7.0	Notes	38

## List of Appendices

Appendix A – Route A	South Haileybury
Appendix A – Route B	North Haileybury
Appendix A – Route C	West Haileybury
Appendix A – Route D	South New Liskeard
Appendix A – Route E	Central New Liskeard
Appendix A – Route F	North New Liskeard
Appendix A – Route G	West Dymond
Appendix A – Route H	East Dymond
Appendix A – Route I	Highway Plow Route
Appendix B – 01 NL	New Liskeard Sidewalks
Appendix B – 02 Hlby	Haileybury Sidewalks
Appendix C – 01 Dym	Dymond 4 x 4 Plow Truck
Appendix C – 02 NL	New Liskeard 4 x 4 Plow Truck
Appendix C – 03 Hlby	Haileybury 4 x 4 Plow Truck
Appendix C – 04 NL	New Liskeard Loader / Snow Dumps
Appendix C – 05 Hlby	Haileybury Loader
Appendix D – 01 NL	Snow Removal Program
Appendix D – 02 Hlby	Snow Removal Program
Appendix E – 01	Inspection Zone Map
Appendix E – 02	Daily Patrol Route
Appendix E – 03	Patrol Report Form
Appendix E – 04	Work Order Form
Appendix E – 05	Media Release – Road Closure
Appendix F – 01	Section 5.9 – Prohibition of Overnight Parking
Appendix F – 02	By-law No. 2009-159 Snow Removal & Relocation
Appendix G Notice	Overnight Parking Restriction
Appendix H	Minimum Maintenance Standards (O. Reg 239/02)
Appendix I – 01	Operator Training Record
Appendix I – 02	Patrol Person Training Record
Appendix J – 01	Roads – Call out Guide
Appendix J – 02	Sidewalk – Call out Guide

Appendix J – 03	Snow Removal – Call out Guide
Appendix K	Winter Control Notification – Flow Chart
Appendix L	Organizational Chart
Appendix M	Shift Partners
Appendix N	Winter Shift Schedule
Appendix O	Staff Contact Info
Appendix P	Emergency Telephone System

## **Purpose**

This Winter Operations Plan sets out a policy and procedural framework for ensuring that the Corporation of the City of Temiskaming Shores continuously improves on the effective delivery of winter maintenance services and the management of road salt used in winter maintenance operations, as outlined in Environment Canada's Code of Practice for the Environmental Management of Road Salts.

The plan is meant to be dynamic, to allow the municipality to evaluate and phase-in any changes, new approaches and technologies in winter maintenance activities in a fiscally sound manner. At the same time, any modifications to municipal winter maintenance activities must ensure that roadway safety is not compromised. As specified in the Code of Practice for the Environmental Management of Road Salts, the Winter Operations Plan for the Corporation of the City of Temiskaming Shores was endorsed by City Council.

## **Definitions**

**Anti-icing** means the application of liquid de-icers directly to the road surface in advance of a winter event. (The City does not apply de-icing agents to the road surface in advance of a winter event.)

**De-icing** means the application of solids, liquids, pre-treated material to the road surface after the on-set of the winter event.

**Highway** includes a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles and includes the area between the lateral property lines thereof.

**Paved Road** is a road with an asphalt surface, concrete surface, composite pavement, or portland cement.

**Pre-treat** means the application of liquids (calcium chloride, sodium chloride, etc.) to dry sand or salt prior to being loaded for storage or applied to the road surface.

**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.

**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.

**Unpaved Road** is a weather condition affecting roads such as snowfall, wind blown snow, freezing rain, frost, black ice, etc to which a winter event response is required.

**Winter Event** is a weather condition affecting roads such as snowfall, wind blown snow, freezing rain, frost, black ice, etc. to which a winter event response is required.

**Winter Event Response** is a series of winter maintenance activities performed in response to a winter event.

- **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.
- **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.

## 1.0 Objective

The objective of the **2023 - 2024 Winter Operations Plan** is to define standards to be maintained and procedures to be followed, to reduce the hazards resulting from winter snow and ice, in order to maintain the City's roadways, sidewalks and lands in a safe condition.

Winter operations standards establish levels of service for snow and ice control across the city, for various classes and priorities of roadways and sidewalks, to ensure the safe and efficient movement of vehicles, people, goods and services through our community. The standards recognize the difference in traffic conditions and associated risk management on the various classes of roadways and sidewalks. Additionally, the standards indicate that levels of service may not be met until after the end of a winter storm or snowfall event.

Winter operations procedures indicate the actions to be taken in order to maintain the above noted standards. The procedures, in conjunction with the standards, recognize that the winter maintenance measures cannot be carried out on all roadways and sidewalks at the same time, and due to the associated risk management, must follow the priorities as defined by the classification of the roadways and sidewalks.

Notwithstanding the Corporation of the City of Temiskaming Shores is committed to improving winter maintenance operations while continuing to ensure public

safety. The Corporation of the City of Temiskaming Shores will optimize the use of winter maintenance materials containing chlorides on most municipal roads while striving to minimize negative impacts to the environment. The Corporation of the City of Temiskaming Shores public works staff will strive, insofar as reasonably practicable, to provide safe winter road conditions for vehicular and pedestrian traffic as set out in the level of service policies and within the resources established by the Council of the Corporation of the City of Temiskaming Shores.

## **2.0 Policy Statement**

The Corporation of the City of Temiskaming Shores will provide efficient and cost-effective winter maintenance to ensure, insofar as reasonably practicable, the safety of users of the municipal road network in keeping with applicable provincial legislation and accepted standards while striving to minimize adverse impacts to the environment. These commitments will be met by:

- adhering to the procedures contained within the Winter Operations Plan;
- reviewing and upgrading the Winter Operations Plan on an annual basis to incorporate new technologies and new developments;
- committing to ongoing winter maintenance staff training and education; and
- monitoring on an annual basis, the present conditions of the winter maintenance program, as well as the effectiveness of the Winter Operations Plan.

## **3.0 Responsibilities**

The Manager of Transportation Services is ultimately responsible for winter maintenance operations within the City of Temiskaming Shores. The Superintendent of Transportation Services, reporting to the Manager of Transportation Services, is directly responsible, for winter maintenance operations. The Superintendent of the operations division has front line management level responsibilities, for directing the winter maintenance operations.

Winter operations are carried out by a combination of full-time road employees and, as required, contractor services, including four Heavy Equipment Operator / Crew Leaders, one Shop Clerk, twelve Equipment Operators and four Water and Sewer Operators reporting to the two Superintendents.

The Heavy Equipment Operator / Crew Leader or Patrol Person working evening shift, night shift or weekend shifts will be required to carry "*on-duty*" cell phones that will receive emergency calls re-directed from the Public Works main complex telephone system during their respective shifts. It is the responsibility of that person to contact the Superintendent or his approved alternate or Managers, to act on the emergency accordingly.



The Crew Leader or Patrol Person will be responsible to contact the Superintendent, or his approved alternate, to arrange for additional operators and equipment, as may be required, to ensure that the roads are cleared of ice and snow in accordance with this plan.

#### **4.0 Winter Maintenance Program**

##### **4.1.0 The System Maintained**

The major activities related to winter maintenance are:

- snow plowing
- salt /sand application
- salt and sand storage
- snow removal snow storage
- sidewalk plowing and de-icing

The Corporation of the City of Temiskaming Shores is responsible for winter maintenance on:

Paved Roads	210 lane km
Surface Treated Roads	35.1 lane km
Unpaved Roads	172.2 lane km
Sidewalks	40.3 km*
Paths and Trails	9 km

**\*Note: Not all municipal sidewalks are maintained during Winter Operations, See Appendix B-01 and 02.**

For the purposes of this winter operations plan, the highways under the jurisdiction of the Corporation of the City of Temiskaming Shores have been classified (Class 2, 3,4, 5 & 6) as per the following table which is based on the Classification of Highways table included in O.Reg. 239/02 (as amended by O.Reg. 366/18).

### Classification of Highways

Average Daily Traffic (number of motor vehicles)	Posted or Statutory Speed Limit (kilometres per hour)						
	91 - 100	81 - 90	71 - 80	61 - 70	51 - 60	41 - 50	1 - 40
53,000 or more	1	1	1	1	1	1	1
23,000 – 52,999	1	1	1	2	2	2	2
15,000 – 22,999	1	1	2	2	2	3	3
12,000 - 14,999	1	1	2	2	2	3	3
10,000 - 11,999	1	1	2	2	3	3	3
8,000 - 9,999	1	1	2	3	3	3	3
6,000 - 7,999	1	2	2	3	3	4	4
5,000 - 5,999	1	2	2	3	3	4	4
4,000 - 4,999	1	2	3	3	3	4	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	5	5
1,000 - 1,999	1	3	3	3	4	5	5
500 - 999	1	3	4	4	4	5	5
200 - 499	1	3	4	4	5	5	6
50 - 199	1	3	4	5	5	6	6
0 - 49	1	3	6	6	6	6	6

For the purposes of the table above to this section, the average daily traffic on a highway or part of a highway under the jurisdiction of the Corporation of the City of Temiskaming Shores shall be determined:

- a. by counting and averaging the daily two-way traffic on the highway or part of the highway; or
- b. by estimating the average daily two-way traffic on the highway or part of the highway.

The table below summarizes the road system in the Corporation of the City of Temiskaming Shores as follows:

	Paved (L Km.)		Surface Treated (L Km.)		Unpaved (L Km.)	
	Rural	Urban	Rural	Urban	Rural	Urban
Class 1	0	0	0	0	0	0
Class 2	11.9	28.67	0	0	0	0
Class 3	12.12	7.13	3.22	0	0	0
Class 4	6.87	50.71	10.45	1.91	0	0
Class 5	4.29	77.54	0	11.14	40.9	11.34
Class 6	1.01	7.67	7.7	0.6	107.71	13.14

#### **4.2.0 Level of Service**

The Corporation of the City of Temiskaming Shores provides the following level of service during the winter maintenance season, in response to a winter event as described in O. Reg 239/02 and as amended by O. Reg 366/18.

##### **Patrolling**

- (1) The standard for the frequency of patrolling of highways to check for conditions described in this Regulation is set out in the Table to this section.
- (2) If it is determined by the municipality that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on roadways, ice formation on roadways or icy roadways, the standard for patrolling highways is, in addition to that set out in subsection (1), to patrol highways that the municipality selects as representative of its highways, at intervals deemed necessary by the municipality, to check for such conditions.
- (3) Patrolling a highway consists of observing the highway, either by driving on or by electronically monitoring the highway, and may be performed by persons responsible for patrolling highways or by persons responsible for or performing highway maintenance activities.
- (4) This section does not apply in respect of the conditions described in section 10, subsections 11 (0.1) and 12 (1) and section 16.1, 16.2, 16.3 or 16.4. of the Regulation.

##### **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

##### **Weather monitoring**

- (1) 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 calendar day, whichever is more frequent, at intervals determined by the municipality.
- (2) 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.

**Snow accumulation, roadways**

- (1) The minimum standard for addressing snow accumulation on roadways is,
  - (a) after becoming aware of the fact that the snow accumulation on a roadway is greater than the depth set out in the Table below, 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 so as to reduce the snow to a depth less than or equal to the depth set out in the Table within the time set out in the Table,
    - (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.
- (2) If the depth of snow accumulation on a roadway is less than or equal to the depth set out in the Table below, the roadway is deemed to be in a state of repair with respect to snow accumulation.
- (3) For the purposes of this section, the depth of snow accumulation on a roadway and, if applicable, lane width under clause (1) (b), may be determined in accordance with subsection (4) 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.
- (4) The depth of snow accumulation on a roadway and lane width may be determined by,
  - (a) performing an actual measurement;
  - (b) monitoring the weather; or
  - (c) performing a visual estimate.

- (5) For the purposes of this section, addressing snow accumulation on a roadway includes,
  - (a) plowing the roadway;
  - (b) salting the roadway;
  - (c) applying abrasive materials to the roadway;
  - (d) applying other chemical or organic agents to the roadway;
  - (e) any combination of the methods described in clauses (a) to (d).
- (6) This section does not apply to that portion of the roadway,
  - (a) designated for parking;
  - (b) consisting of a bicycle lane or other bicycle facility; or
  - (c) used by a municipality for snow storage.

**Snow Accumulation - Roadways**

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

**Snow accumulation, significant weather event**

- (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on roadways until the declaration of the end of the significant weather event is,
  - (a) to monitor the weather in accordance with section 3.1 of the Regulation; and
  - (b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on roadways, starting from the time that the municipality deems appropriate

to do so.

- (2) If the municipality complies with subsection (1), all roadways within the municipality are deemed to be in a state of repair with respect to snow accumulation until the applicable time in the Table to section 4 expires following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 7.
- (3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,
  - (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
  - (b) address snow accumulation on roadways in accordance with section 4. O. Reg. 366/18, s. 7.

#### **Ice formation on roadways and icy roadways**

- (1) 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:
  1. Monitor the weather in accordance with section 3.1 of the Regulation.
  2. Patrol in accordance with section 3 of the Regulation.
  3. If the municipality determines, as a result of its activities under paragraph 1 or 2, that there is a substantial probability of ice forming on a roadway, treat the roadway to prevent ice formation within the time set out in the Table to this section, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose.
- (2) If the municipality meets the standard set out in subsection (1) and, despite such compliance, ice forms on a roadway, the roadway is deemed to be in a state of repair until the applicable time set out in Table 2 to this section expires after the municipality becomes aware of the fact that the roadway is icy. O. Reg. 366/18, s. 8.
- (3) Subject to section 5.1, the standard for treating icy roadways is to treat the icy roadway within the time set out in the Table to this section, and an icy roadway is deemed to be in a state of repair until the applicable time set out in the Table for treating the icy roadway expires after the

municipality becomes aware of the fact that a roadway is icy.

- (4) 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.

### Ice Formation Prevention

Class of Highway	Time
1	6 hours
2	8 hours
3	16 hours
4	24 hours
5	24 hours

### Treatment of Icy Roadways

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

### Icy roadways, significant weather event

- (1) If a municipality declares a significant weather event relating to ice, the standard for treating icy roadways until the declaration of the end of the significant weather event is,
- (a) to monitor the weather in accordance with section 3.1; and
  - (b) if deemed practicable by the municipality, to deploy resources to treat icy roadways, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 8.
- (2) If the municipality complies with subsection (1), all roadways within the municipality are deemed to be in a state of repair with respect to any ice which forms or may be present until the applicable time in Table 2 to section 5 expires after the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 8.

- (3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,
  - (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
  - (b) treat icy roadways in accordance with section 5. O. Reg. 366/18, s. 8.

**Snow accumulation on sidewalks**

- (1) Subject to section 16.4, 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. O. Reg. 366/18, s. 15.
- (2) 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. O. Reg. 366/18, s. 15.
- (3) 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. O. Reg. 366/18, s. 15.
- (4) For the purposes of this section, the depth of snow accumulation on a sidewalk may be determined in the same manner as set out in subsection 4 (4) and by the persons mentioned in subsection 4 (3) with necessary modifications. O. Reg. 366/18, s. 15.
- (5) For the purposes of this section, addressing snow accumulation on a sidewalk includes,
  - (a) plowing the sidewalk;
  - (b) salting the sidewalk;
  - (c) applying abrasive materials to the sidewalk;
  - (d) applying other chemical or organic agents to the sidewalk; or
  - (e) any combination of the methods described in clauses (a) to (d). O. Reg. 366/18, s. 15.

**Snow accumulation on sidewalks, significant weather event**



- (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on sidewalks until the declaration of the end of the significant weather event is,
  - (a) to monitor the weather in accordance with section 3.1; and
  - (b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on sidewalks starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 15.
- (2) If the municipality complies with subsection (1), all sidewalks within the municipality are deemed to be in a state of repair with respect to any snow present until 48 hours following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 15.
- (3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,
  - (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
  - (b) address snow accumulation on sidewalks in accordance with section 16.3. O. Reg. 366/18, s. 15.

**Ice formation on sidewalks and icy sidewalks**

- (1) Subject to section 16.6, the standard for the prevention of ice formation on sidewalks is to,
  - (a) monitor the weather in accordance with section 3.1 in the 24-hour period preceding an alleged formation of ice on a sidewalk; and
  - (b) 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. O. Reg. 366/18, s. 15.
- (2) If ice forms on a sidewalk even though the municipality meets the standard set out in subsection (1), 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. O. Reg. 366/18, s. 15.

- (3) 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. O. Reg. 366/18, s. 15.
- (4) For the purposes of this section, treating a sidewalk means applying materials including salt, sand or any combination of salt and sand to the sidewalk. O. Reg. 366/18, s. 15.

**Icy sidewalks, significant weather event**

- (1) If a municipality declares a significant weather event relating to ice, the standard for addressing ice formation or ice on sidewalks until the declaration of the end of the significant weather event is,
  - (a) to monitor the weather in accordance with section 3.1; and
  - (b) if deemed practicable by the municipality, to deploy resources to treat the sidewalks to prevent ice formation or improve traction, or treat the icy sidewalks, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 15.
- (2) If the municipality complies with subsection (1), all sidewalks within the municipality are deemed to be in a state of repair with respect to any ice which forms or is present until 48 hours after the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 15.
- (3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,
  - (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
  - (b) address the prevention of ice formation on sidewalks or treat icy sidewalks in accordance with section 16.5. O. Reg. 366/18, s. 15.

### **Winter sidewalk patrol**

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

### **Closure of a highway**

- (1) When a municipality closes a highway or part of a highway pursuant to its powers under the Act, the highway is deemed to be in a state of repair in respect of all conditions described in this Regulation from the time of the closure until the highway is re-opened by the municipality. O. Reg. 366/18, s. 15.
- (2) For the purposes of subsection (1), a highway or part of a highway is closed on the earlier of,
  - (a) when a municipality passes a by-law to close the highway or part of the highway; and
  - (b) when a municipality has taken such steps as it determines necessary to temporarily close the highway or part of a highway. O. Reg. 366/18, s. 15.

### **Declaration of significant weather event**

A municipality declaring the beginning of a significant weather event or declaring the end of a significant weather event under this Regulation shall do so in one or more of the following ways:

1. By posting a notice on the municipality's website.
2. By making an announcement on a social media platform, such as Facebook or Twitter.
3. By sending a press release or similar communication to internet, newspaper, radio or television media.

4. By notification through the municipality's police service.
5. By any other notification method required in a by-law of the municipality. O. Reg. 366/18, s. 15.

#### **4.3.0 Winter Maintenance Season**

The winter maintenance season within which the Corporation of the City of Temiskaming Shores will perform winter highway maintenance commences on or about November 1, 2023, and is completed on or about April 15, 2024.

#### **4.4.0 Winter Preparations**

In the months prior to the start of the winter maintenance season, as identified in 4.3.0, the Corporation of the City of Temiskaming Shores undertakes the following tasks to prepare for the upcoming winter season.

##### **4.4.1 Prior to the Winter Season**

Prior to the winter season, if required, prepare and call tenders for the supply of materials (salt, sand, liquid), replacement parts (for plows, solid and liquid application equipment), value added meteorological services (VAMS) and contract equipment (plow trucks, spreader trucks, combination units). Prior to the winter season Corporation of the City of Temiskaming Shores will;

1. Conduct a mandatory training session for staff and contract operators where all policies, procedures, schedules, reporting procedures for callout, route maps, equipment training and safety precautions will be discussed. Any issues resulting from the meeting with regard to the policies, procedures, schedules, reporting procedures for callout, route maps, equipment training and safety precautions shall be resolved either at the meeting or prior to the winter season.
2. Train winter patrollers (or staff whose duties also include patrolling) on the route of representative roads to be patrolled between winter events, their duties during a winter event, recording keeping requirements and callout procedures and the de-icing chemicals to be applied for the forecast weather conditions.
3. Inspect equipment to ensure proper working order. Schedule and complete any and all equipment repairs
4. Arrange for the delivery of materials (salt, sand and liquid solution) and begin filling storage facilities. If liquid solution is mixed on site, begin mixing and filling storage tanks.

5. Confirm that all guiderail, catch basin, hazard and fire hydrant markers, if any, are in place. Any missing markers will be replaced prior to the winter session.

#### **4.4.2 One Month Prior to the Winter Season**

One month prior to the winter season Corporation of the City of Temiskaming Shores will;

1. Prepare the winter shift schedule in accordance with the municipality's collective agreement, if any.
2. Assign equipment to staff.
3. Calibrate material application equipment.
4. Allow operators (staff and contract) time to familiarize themselves with any new equipment, material application rates, material application equipment and their route (driving the route and noting obstacles along the route).
5. Assign staff to monitor weather forecasts on a daily basis. Assign night patrol shift if forecast indicates an overnight winter event is probable. The patrol person will be authorized to initiate a winter event response if conditions warrant a response.
6. Have 25 % of the fleet ready to respond to a winter event.
7. Have sufficient staff available to operate the fleet if conditions warrant a winter event response.

#### **4.4.3 Two Weeks Prior to the Winter Season**

Two weeks prior to the winter season the Corporation of the City of Temiskaming Shores will;

1. If required, begin regularly scheduled night patrol of representative roads that are maintenance Class 2 and 3 roads, as deemed necessary.
2. Review and discuss the winter shift schedule in accordance with the municipality's collective agreement, if any.
2. Have the required complement of the fleet ready to respond to a winter event.
3. Have staff available to operate the required complement of the fleet if conditions warrant a winter event response

#### **4.4.4 Start of the Winter Season**

At the start of the winter season the Corporation of the City of Temiskaming Shores will;

1. Implement the winter shift schedule.
2. Begin patrolling representative roads in all maintenance classes.
3. Respond to winter events as per the winter operations plan.

#### **4.5.0 Winter Patrol**

During the winter maintenance season, as identified in 4.3.0, the Corporation of the City of Temiskaming Shores carries out a winter patrol on a route of representative roads twice daily, 7 days a week. Between winter events a patrol of representative roads will occur during daylight hours and a second night patrol will be also be scheduled. The purpose of the patrol is to monitor and record weather and road conditions and mobilize winter maintenance operators and equipment should a winter event be observed and a winter event response is required. On the approach of a winter event or during a winter event the route of representative roads may be modified, insofar as reasonably practicable, depending on the type and severity of winter event or the direction from which the storm approaches.

The patrol person will be familiar with local conditions in their patrol area, and prepare a condition log of road and weather conditions as well as any actions taken during the shift. The winter patrol schedule parallels the designated winter season.

#### **4.6.0 Operations**

##### **4.6.1 Staffing and Hours of Work**

Four (4) regular crews for Public Works staff will be scheduled during the “Winter Operations Season” on a rotating basis. The winter maintenance season will commence on or about November 1<sup>st</sup> and finish on or about April 15<sup>th</sup> of each year. The start and finish dates of the winter maintenance season may be adjusted by management due to weather conditions.

Shift “ <b>D</b> ” Days	6:30 am to 3:00 pm
Shift “ <b>N</b> ” Nights	10:00 pm to 6:30 am
Shift “ <b>E</b> ” Evenings	3:00 pm to 11:30 pm

Crew	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	N	N	N	N	N	OFF	OFF
2	OFF	D,EP	D, EP	D, EP	D, EP	D, EP	OFF
3	DP, EP	D,	D	D	D	D, NP	NP
4	OFF	D,	D	D	D	D,	DP,EP

The Public Works staff will share the requirements of the winter maintenance shift duties. Each day and night shift (Sunday night to Friday day shift) should, at minimum, consist of one Heavy Equipment / Crew Leader, three Operators / Laborers and one Water / Sewer Operator. Evening and weekend patrol shifts shall consist of, at minimum, one Public Works staff person.

This schedule provides for 24 hours per day – 7 days per week operational coverage during the winter maintenance season and will improve response times during and after winter storm events.

A one-half hour lunch break will be provided beginning at 12:00 pm during the day shift and a ½ hour lunch break beginning at 3:00 am during the night shift and at 7:00 p.m. during the evening shift. All non-paid break periods do not include travel time to and from the work site.

From 6:30 am Monday to 3:00 pm Friday, the Road Superintendent or his approved alternate will provide the legislated road patrol requirements with the purpose of being informed of weather and roadway conditions.

From 3:01 pm Friday to 6:29 am Monday, the weekend day, evening and night shift Patrol Person or Heavy Equipment Operator / Crew Leader will provide the legislated road patrol requirements during their respective shifts with the purpose of being informed of weather and roadway conditions. These same Patrol Persons or Crew Leaders shall carry the “on-duty” cell phone and will respond to emergency calls. It is the responsibility of these individuals to contact to Superintendent or his approved alternate to arrange for additional operators, manpower or equipment as may be required.

A worker’s normal scheduled shift may be changed by a supervisor or his alternate at any time provided the supervisor or his alternate so advises the employee by no later than 4 hours after the completion of the employees last regularly scheduled shift.

Two, fifteen minute paid “coffee breaks” will be permitted through the shift period, the first break two hours after the shift start time and the other break two hours after the scheduled lunch break period. The fifteen-minute paid break period does not include travel time to and from the work site.

**4.6.1.1 Minimum Crew Size**

A minimum number of operators are required to ensure compliance with this winter operations plan. Therefore, restrictions on time off will be governed by the limitations of the following chart.

<b>Operator classification</b>	<b>Limitation</b>
Heavy Equipment Operator	1 of 4
Equipment Operator	4 of 12
Water/Sewer Operators	2 of 4
Equipment Mechanic	1 of 2
Supervisors and Clerk	2 of 4

- But no more than two workers off per shift crew.

This limitation on time off will allow for a total of 14 workers available to deal with winter events. The supervisor will determine the need to re-schedule worker’s shifts, if workers need to be held back on overtime or called-in so that the Public Works Department can provide for the necessary operators for a full winter event response. The use of part-time workers, supervisors and mechanics is available only as provided for in the current Collective Agreement.

**4.6.1.2 Contracts**

Contractors will be hired or contracted for winter maintenance operations to assist and/or supplement;

- Snow Removal and Hauling Operations

**4.6.2 Winter Materials used Annually**

**Materials Used Annually**

<b>Year</b>	<b>Rock Salt</b>	<b>Winter Sand</b>
2005	\$81,400	\$56,200
2006	\$35,200	\$73,600
2007	\$78,500	\$87,900
2008	\$106,400	\$90,250
2009	\$74,369	\$77,618
2010	\$95,102	\$64,922
2011	\$107,206	\$95,752
2012	\$125,965	\$75,440
2013	\$177,382	\$66,586
2014	\$177,185	\$100,143



2015	\$146,758	\$73,012
2016	\$203,737	\$79,914
2017	\$178,245	\$81,785
2018	\$238,672	\$84,050
2019	\$193,915	\$143,808
2021	\$151,390	\$58,770
2022	\$244,153	\$93,533

### 4.6.3 Application Rates

#### 4.6.3.1 Winter Sand

Winter sand is applied to provide grit and traction on snow and ice and is typically used in weather conditions where the temperature is colder than -10C, on low volume roads and gravel roads where salt is not an option. The Ministry of Transportation has performed tests and has shown that the application of winter sand improves greatly the stopping distance of vehicles and improves safety of vehicular traffic.

Winter sand contains a measure of salt to prevent freezing of the material and to allow the material to smoothly flow out of the spreader units. The Ministry of Transportation standard is to produce winter sand between 3% to 5% sand/salt mix, which is the minimum amount of salt that the Ministry has determined is required to prevent freezing of the sand. The Ministry standard for the application of winter sand is 570 kg / 2-lane km.

However, in the City of Temiskaming Shores practice has been to apply a sand/salt mix based on operator experience. Intersections and hills get a higher application rate for safety reasons and low volume flat residential areas get a lower application rate. The city does not have electronic spreader controls in their sander units and therefore does not accurately know the exact rates of winter sand applied.

The City presently uses a 5% salt/sand mix ratio in its winter sand.

#### 4.6.3.2 Salt

Most road authorities do not recommend the use of crushed rock salt when the ambient temperature is below -12C, although salt may be used down to -18C if strong sunlight is providing higher surface temperatures. The eutectic temperature of salt is -21C but as this temperature is approached the melting action becomes very slow. Ten times as much snow can be melted by a kg of salt at -1C as at -12C.

The need for treatment at -12C is much less than at temperatures closer to the freezing mark as tests have shown that an automobile will stop 25 meters earlier on glare ice at -12C than the same glare ice at -1C.

The City of Temiskaming Shores policy is to apply salt for Winter Control Services at an application rate of 131 kg / 2-lane km. This rate of salt application is consistent with the lower end of the 130 to 170 kg / 2-lane km recommended by the Ministry of Transportation.

The greatest majority of salt applied to city roads is done on the secondary highways and high traffic roads, which are mostly included in Route "I". The City's vehicle does not have electronic controls and therefore salt is applied through a manual setting based on operator experience.

#### 4.6.4 Equipment – Winter Maintenance Fleet

The Public Works Department will continuously identify and assess new and innovative technologies to improve snow removal efficiency and significantly reduce the amount of road salts being applied to the roads.

New equipment purchases should investigate innovative practices and demonstrate the City's commitment to the safety of road users and the protection of the environment. Through product innovation, operators can continue making consistent decisions to achieve desired objectives.

The following table provides a list of municipal equipment used in the plowing and sanding operations for the city.

**Winter Equipment Inventory**

Unit	Year	Make	Model	Box Type	Spreader Type	Route
23	2014	International	7600	U Body	Electronic	<b>C</b> - Hlby-Country
24	2018	Freightliner	114SD	U Body	Electronic	<b>H</b> – Dymond East
25	2016	Freightliner	108SD	U Body	Electronic	Sander-South
26	2018	Freightliner	114SD	U Body	Electronic	<b>G</b> - Dymond West
27	2016	Freightliner	108SD	U Body	Electronic	Sander-North
31	2019	International	HV613	U Body	Electronic	<b>I</b> - Highway

40	2016	Trackless	MT6	Hopper	Electronic	Sidewalk South
41	2018	Trackless	MT7	Hopper	Electronic	Spare
42	2009	Trackless	MT6	Hopper	Electronic	Sidewalk North
43R	Rental			N/A	N/A	A -Hlby-South
45	2011	John Deere	772GP	N/A	N/A	F - NL-North
52 R	Rental			N/A	N/A	E - NL-Center
61 R	Rental			N/A	N/A	D – NL - South
63	2012	John Deere	772G	N/A	N/A	B – Hlby North

#### 4.6.5 Yard Facilities

##### Winter Material Storage Capacities

Site	Rock Salt (t)	Winter Sand (t)	Covered Area
New Liskeard	250	5000	No
Dymond	Nil	1000	Yes
Haileybury	450	3000/2000	Yes / No

City staff is based primarily out of the main complex yard based at 200 Lakeshore Road, New Liskeard to provide Winter Maintenance Services. The north section, formerly known as Dymond may be dispatched from the Dymond Yard located at 181 Drive-in Theatre Road. The middle section, formerly known as New Liskeard is serviced out of the New Liskeard Yard located at 200 Lakeshore Road. The southern section, formerly known as Haileybury may be dispatched out of the Haileybury Yard located at 500 Broadway Street and a materials storage yard located on View Street.

The Superintendent will endeavor to schedule the next shifts work assignments by 2:30 pm each day. Workers are responsible to travel to their assigned work start locations. If a change occurs in a worker's assigned start location and the worker is not given advance notice and reports for work at the main complex yard, transportation to the new work start location will be provided from the main complex yard.

Evening Patrols (3:00 p.m. to 11:30 p.m.) commence at the New Liskeard Yard in November and service the entire city's transportation network. City staff is called in to perform work on an as-required basis until the end

of April. The day shift is from 6:30 am to 3:00 pm and the night shift is from 11:00 pm to 7:30 am. In the event of a major storm requiring continuous equipment operations, equipment operators from the day shift may be re-scheduled. The evening shift may require additional help to ensure the safety of the transportation network.

#### **4.6.6 Roadway De-Icing and Sanding**

Roadway de-icing and/or sanding needs initiate the winter maintenance operations when the first effects of a storm are felt in order to provide traction for traffic until the depth of snow has reached the operations start trigger, at which time plowing operations typically commence.

Road Supervisors are allowed some latitude regarding frequency and timing of salt and grit applications. Application rates have been harmonized across the City. These settings were established through past practices within our urban environment.

Salt placement will be on the crown or high side of the driving surface where there is a good cross fall allowing traffic to distribute the resulting brine over the road.

There are some road authorities that are beginning to use liquid de-icing chemicals in addition to solid salt. Literature and practice show that salt performance can be improved with liquids. However, one must be cautious when introducing such techniques. To date, established city practices do not include straight liquid chemical techniques.

The City of Temiskaming Shores present guideline is to apply a solid de-icer once snow starts to accumulate or "stick" on arterial roads. Timely application of chemicals is critical to preventing snow from sticking to roads. Without the timely application of chemicals, snow could easily bond to roads and, in turn, become difficult to plow, potentially causing road hazards. As snow accumulates, it is plowed to maintain safe driving conditions.

During and upon completion of winter maintenance operations, a daily log is maintained and updated, indicating roadway winter maintenance activities carried out.

#### **4.6.7 Snow Plowing**

Plowing and de-icing/sanding continue, with respect to each class of roadway, in accordance with its classification and level of service standard. The plowing route maps included in the appendices identify the roadways to be cleared and the classification of each roadway section.

During the regular Monday to Friday, day or night shifts, winter maintenance procedures will be initiated by the Road Superintendent or his alternate based on existing and forecasted weather and road conditions. Monitoring of weather forecasts, patrol reports and other information, as may be available, may allow preparations for winter maintenance operations to be initiated prior to the beginning of an actual event.

During the evening shift, night shift, weekend shifts or on a statutory holiday, winter maintenance procedures will be initiated by the Patrol Person or Heavy Equipment Operator/Crew Leader designated. The designated Patrol Person or Heavy Equipment Operator/Crew Leader will be responsible for roadway patrol to inform him of changing road and weather conditions and he will make the appropriate call to the Superintendent or his approved alternate, to arrange for additional manpower, operators or equipment as required.

#### 4.6.8 Snow Removal and Disposal

As a result of snow plowing operations, snow accumulates at the side of roads as windrows or mounds. The City starts snow removal operations when these windrows reach volumes that create a nuisance or hazard to pedestrians and motorists and to maintain capacity for subsequent snowfalls.

The objective is to commence removal operations in **Priority 1** locations as soon as practicable after becoming aware that the snow bank accumulation is greater than **60 cm** and **120 cm** in **Priority 2** locations.

Experience over the years has shown that the City has the capability and capacity to remove and dispose of 2700 cubic meters of snow per night shift. One average snowstorm requires three-night shifts to complete all required removal work in approved designated areas.

Snow removal involves the use of in-house snow blowers, front-end loaders, motor graders and city owned dump trucks as well as contracted dump trucks.

#### List of Snow Storage Areas

Site	Location	Area	Volume
1	Shepherdson Road	New Liskeard	71,000
2	Craven Drive *	New Liskeard	34,000
3	Birch Drive Ravine	New Liskeard	3,900
4	Bay Street	New Liskeard	25,000
5	Montgomery Street North	New Liskeard	9,700
6	Montgomery Street South	New Liskeard	4,500
7	Dawson Point Road	New Liskeard	44,000

8	Haliburton Street Ravine	New Liskeard	700
9	Pine Street Ravine	New Liskeard	900
10	Sharpe St	New Liskeard	
11	Laurette Street	Dymond	10,000
12	Morissette Drive South	Haileybury	47,000
13	Lakeview Street	Haileybury	25,500
14	Groom Drive	Haileybury	6,000
15	Morissette Drive North	Haileybury	12,900

**Note:** New Liskeard has a maximum capacity of 192,700 cubic meters, Dymond has 24,600 cubic meters and Haileybury has 97,000 cubic meters. The total available storage area for the City is 323,000 cubic meters.

#### 4.6.8.1 City By-laws and Ordinances

There are two bylaws used extensively by the Public Works Department during winter maintenance operations; Traffic By-law and Snow Disposal By-law, excerpts are included in Appendix “F”.

#### 4.6.9 Sidewalk Service Standards

Sidewalks are classified in accordance with the associated pedestrian traffic and proximity to schools, seniors’ buildings, downtown business areas and high-volume roadways.

The objective is to make the sidewalk as safe as possible, to be reached as soon as possible, after a storm has ended, and normally within (24) hours. The trigger to start plowing operations is 10 cm snow accumulation.

The objective is to treat the icy sidewalk as soon as practicable after becoming aware that the sidewalk is icy, and is accordance with the standard.

There are two maps included in the Appendix “B” that specify which sidewalks have been approved for winter maintenance. Those not shown as being maintained are considered to be closed for the period covered by the Winter Operations Plan.

#### 4.6.10 Parking Lot Service Standards

Parking lots/laneways are classified in accordance with the associated vehicular traffic and proximity to downtown business areas and municipal buildings.

The objective is to make the parking lot as safe as possible, to be reached as soon as possible, after a storm has ended, and normally within (48)

hours. Staff priority will be given to plowing and sanding/salting roadways and sidewalks.

The objective is to treat the icy parking lots/laneways as soon as practicable after becoming aware that the parking lot/laneway is icy, and normally within (16) hours.

There are three maps included in the Appendix "C" that specify which parking lots/laneways have been approved for winter maintenance.

#### **4.6.11 Vulnerable Areas**

Currently the salt vulnerable areas within the City of Temiskaming Shores have been identified as:

- The Wabi River particularly at low flow (flows in the Wabi River are controlled by the South Temiskaming Dam and impacts from the discharge of salt laden run off could be more pronounced during these periods);
- Lake Temiskaming
- Moose Creek
- South Wabi Creek
- Mill Creek
- Dickson Creek
- Areas associated with groundwater recharge zones or shallow water table, with medium to high permeability soils; and
- Salt vulnerable vegetation along roadways.

Reducing salt-laden runoff to these areas will be the result of successfully implementing the 4-R's of Salt Management: right material, right amount, right time, right place.

#### **4.6.12 Weather Monitoring**

- (1) 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 calendar day, whichever is more frequent, at intervals determined by the municipality.
- (2) 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.

In order to determine an effective winter event response and allocate the appropriate resources the Corporation of the City of Temiskaming Shores supplements road patrol information with weather information from various sources which includes:

- Observations from municipal staff, communication with staff of adjacent municipalities and MTO contractors.
- Monitoring websites [www.theweathernetwork.com](http://www.theweathernetwork.com)
- Staff monitoring pavement temperatures by means of on-board infrared thermometers which are mounted on the patrol and other trucks, and;
- Local Radio Station - CJTT FM 104.5

#### **4.6.13 Communications**

All Public Works Department winter maintenance vehicles are equipped with high band radios capable of transmitting and receiving on the following frequencies: transmitting – 170.490 and receiving – 165.885 mhz. Each vehicle is assigned a unique call number and can communicate with other city Public Works vehicles, the Superintendents and the Public Works Clerk located at the Operation Division yard at 200 Lakeshore Road.

Reporting hazards and accidents to the Police, Fire or Ambulance Services can be accomplished through the Public Works Clerk.

The City provides a call service which serves as the main hub for in/outgoing calls from staff, emergency services and the general public

The Call Service:

- Can be reached by calling (705) 647-6220 during business hours
- Can be reached by calling (705) 648-5575 after business hours
- Typical call timings (during winter season) are 24 hours. (Transferred to Patrol Persons Cellular Phone after Regular Hours)
- Is in operation (during winter season) 7 days a week.
- Municipality communicates important information to the public via:
  - CJTT 104.5 FM Radio
  - City Website - [www.temiskamingshores.ca](http://www.temiskamingshores.ca)
  - Public Works Facebook Page



#### 4.6.14 Call Out Procedures

Operational decisions will be made by the Superintendent of Transportation Services or his/her designate with the aid of available forecasting, Level of Service policy, patrolling etc. However, it should be emphasized that decisions will be subjective and external input, whether in this plan or elsewhere, merely acts as an aid in determining if a call out of staff and equipment by the Supervisor or Patrol Person to respond to a winter event is warranted. It is vital therefore that the Supervisor or Patrol Person records the prevalent conditions and relevant information when he/she makes a decision.

The Patrol Person shall inform the Supervisor of changing of road and weather conditions observed in the field. When a winter event response is required the Supervisor or his/her designate will contact the Crew Leader by radio or cellular phone. The Supervisor or his/her designate will contact staff as per the shift schedule and direction given by the Supervisor or his/her designate. In the absence of the Superintendent, the Superintendent of Environmental Services, Manager of Environmental Services or the Manager of Transportation Services shall be his/her designate and initiate a call out in response to a winter event.

**Call-out Chart**

Forecast	Call-out Response			
	Class 2	Class 3	Class 4	Class 5
Storm Severity Less than 10 cm	Call-out plow operations near end of storm or when <b>5 cm</b> of snowfall has accumulated  If roads become slippery combination sander unit shall apply salt and/or sand as road temperature dictates.	Call-out plow operations near end of storm or when <b>8 cm</b> of snowfall has accumulated and maintain collector routes with plow / spreader combination unit.  No call-out of sander unless roads become slippery	Call-out plow operations near end of storm only if <b>8 cm</b> of snow fall has accumulated and maintain collector routes with plow / spreader combination unit.  No call-out of sander unless roads become slippery	Call-out plow operations near end of storm only if <b>10 cm</b> of snowfall has accumulated  No call-out of sander unless roads become slippery
More than 10 cm	Call-out plow operations when <b>5 cm</b> of snow has accumulated.  If roads become slippery combination sander unit shall apply salt and/or sand as road temperature dictates.	Call-out plow operations when <b>8 cm</b> of snow has accumulated. Re-schedule a full plow call-out shift for the next morning. No call-out of sander unless roads become slippery	Call-out plow operations when <b>8 cm</b> of snow has accumulated. Re-schedule a full plow call-out shift for the next morning. No call-out of sander unless roads become slippery	Call-out plow/spreader truck when <b>10 cm</b> of snow has accumulated. Reschedule a full plow call-out shift for the next morning. No call-out of sander unless roads become slippery
Sleet and freezing rain	Call-out combination plow/sander units if road conditions permit	Call-out sander if road conditions permit	Call-out sander if road conditions permit	Call-out sander if road conditions permit

#### **4.6.15 Road Closure Procedure**

In the event a specific road must be closed due to a severe winter storm, appropriate signs will be placed to close the road. Rb-92 Road Closed Signs on portable stands, TC-54 flexible drums and barricades will be available at the New Liskeard Main Complex.

Upon receiving a request from the Ontario Provincial Police or the Manager of Transportation Services to close a road to traffic, the Supervisor or his/her designate will organize manpower and equipment to place the signs and barricades. The Supervisor or his/her designate will contact the Works Clerk and request that a media release (Appendix E) be sent to the local news and radio stations advising of the road closure.

Roads will be deemed to be closed once the signs and barricades are placed. When it is physically impossible to place signs and barricades to close a road, the Supervisor or his/her designate will advise the Ontario Provincial Police and the Manager of Transportation Services of the situation and arrange to send the media release.

#### **4.7.0 Decommissioning Winter Operations**

After the winter season (identified in 4.3.0) expires Corporation of the City of Temiskaming Shores undertakes the following tasks to decommission winter operations.

##### **4.7.1 Two Weeks After the Winter Season Ends**

Two weeks after the winter season ends;

1. Cease regularly scheduled winter night patrols;
2. Continue monitoring weather forecasts. Assign night patrol shift if forecast indicates an overnight winter event is probable.
3. Decommission 50 % of the fleet.

##### **4.7.2 One Month After the Winter Season Ends**

One month after the winter season ends;

1. Cease all winter highway maintenance operations
2. Decommission the remainder of the equipment providing weather forecasts warrant the decommissioning.

#### **4.8.0 Training**

The Corporation of the City of Temiskaming Shores will maintain a comprehensive winter maintenance training program that demonstrates the purpose and value of new and existing procedures and ensure that personnel are competent to carry out their duties.

All Public Works Department staff directly involved in winter maintenance will be required to participate in courses to provide assurance of the competency level for all operators.

The Winter Operations Training program is comprised of the following modules:

- Equipment Circle Check
- Equipment Calibration
- Record Keeping
- Health and Safety
- Level of Service - policies, practices and procedures
- Identification of Plow Routes - including variations for year to year and issues identified along the route
- De-icing chemicals - application rates, storage and handling
- Identification of road salt vulnerable areas and the procedures to follow in those areas
- Yard and Equipment maintenance

#### **4.9.0 Record Keeping**

Full and accurate completion of the documents listed below, according to the applicable procedures, ensures that the municipality is protected from liability by providing solid documentation that procedures have been followed.

The Public Works Department will maintain an annual log that contains total quantities of sand and salt usage along with weather data reports. Shift reports shall comprise of the following:

The date will be recorded as Day/Month/Year. It will be written in a numerical format (dd/mm/yy). The time shall be documented using the 24-hour clock format, and will be notarized (print and sign name) by the person(s) completing the report.

- (a) Areas maintained;
- (b) Material used (sand and/or salt);

- (c) Quantities of material used;
- (d) Shift hours; and
- (e) Pavement and air temperature

Always retain the original copy of documents regardless of their appearance. Writing must be legible for others to read and written in ink. Stains or dirt on the documents is not an issue. If a document requires correction then a line is to be placed through the incorrect information without making it illegible and continue writing on the original document. Initial corrections or change in the colour of ink in a case where you change writing pens.

Records will be completed daily and forwarded to the Works Clerk upon completion, for retention.

## **5.0 Plan Improvement**

The current winter maintenance policies, practices and procedures form the baseline or benchmark upon which improvements can be made to improve winter operations and/or the use and management of road salt. Over the next ten years the Corporation of the City of Temiskaming Shores plans to undertake the improvements as listed in Table 1. This list will be reviewed and updated annually.

## **6.0 Monitoring and Updating**

The purpose of monitoring and updating is to provide a basis for continuous improvement of the winter operations plan and the winter maintenance policies, practices and procedures of the Corporation of the City of Temiskaming Shores.

At the end of the winter season, as identified in 4.3.0, a meeting to review winter operations will be held each year with all winter operations staff to itemize all issues that arose during the winter season and discuss how these issues may be resolved. Prior to the start of the next winter season and with sufficient lead time to implement any changes, the Corporation of the City of Temiskaming Shores shall train staff on the changes to equipment and/or winter maintenance policies, practices, and procedures.

The winter season of 2015/16 will be the benchmark year. Year over year achievement using the performance measures listed below will be measured against said benchmark year. Performance measures will be used to determine whether or not the objectives of the Winter Operations Plan and/or winter maintenance policies, practices, and procedures have been met.

Monitoring the severity of the winter season:

- % change (+/-) in the total annual cm of snow accumulation from the benchmark year

- % change (+/-) in the total number of days with measurable snowfall from the benchmark year
- % change (+/-) in the total number of days with freezing rain from the benchmark year
- % change (+/-) in the total number of continuous winter event responses from the benchmark year
- % change (+/-) in the total number of spot winter event response from the benchmark year

Monitoring the salt used:

- % change (+/-) in the total number of winter event hours from the benchmark year
- % change (+/-) in the total tonnes of salt purchased annually from the benchmark year
- % of applications where discharge rates exceeded
- % change (+/-) in the total tonnes of salt applied annually per system km per winter event

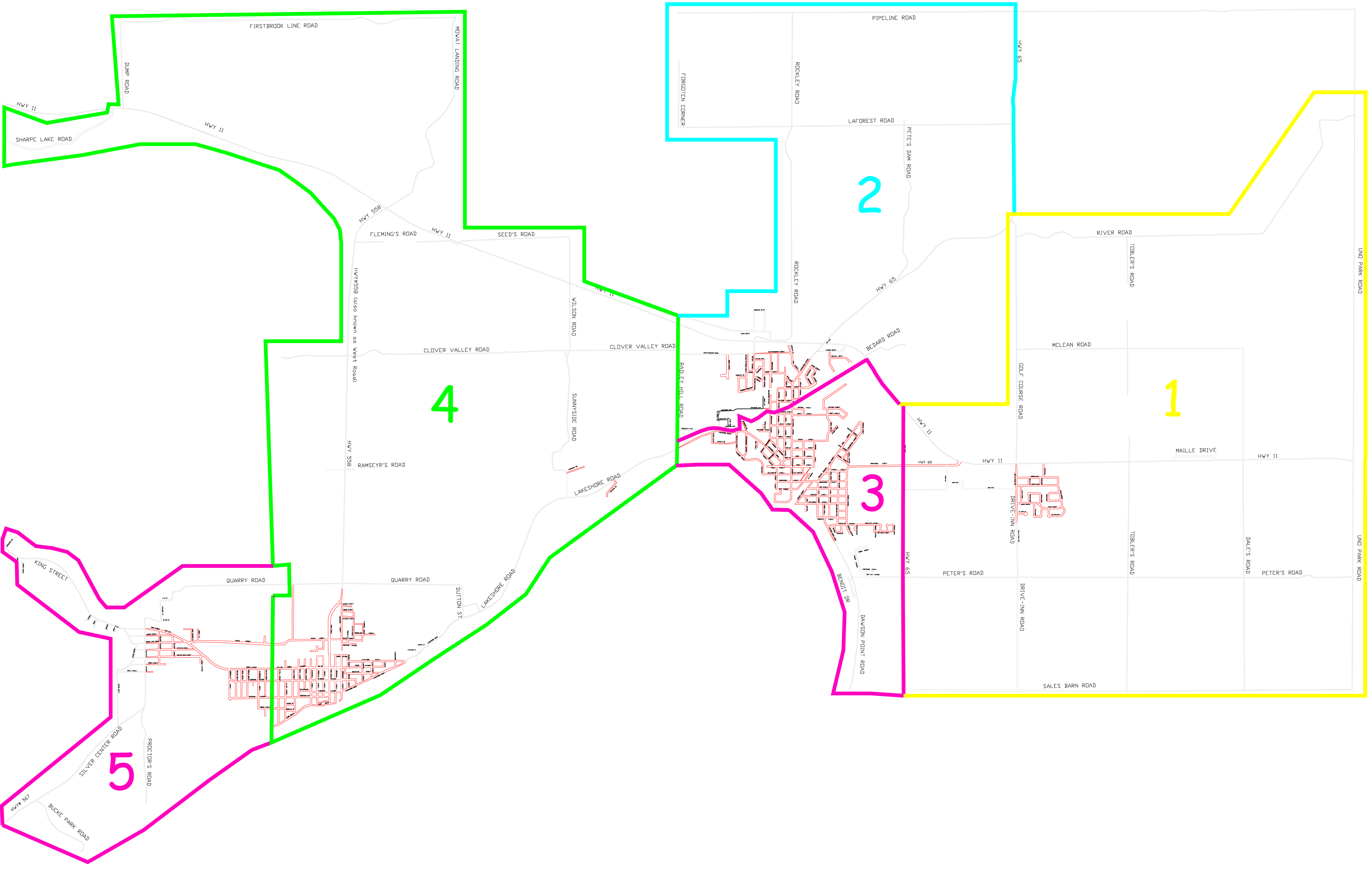
Ensuring customer satisfaction:

- % change (+/-) in the total number of winter event responses that meet or exceed the level of service policy from the benchmark year
- % change (+/-) in the total number of complaints received regarding winter operations from the benchmark year

**7.0 Notes**

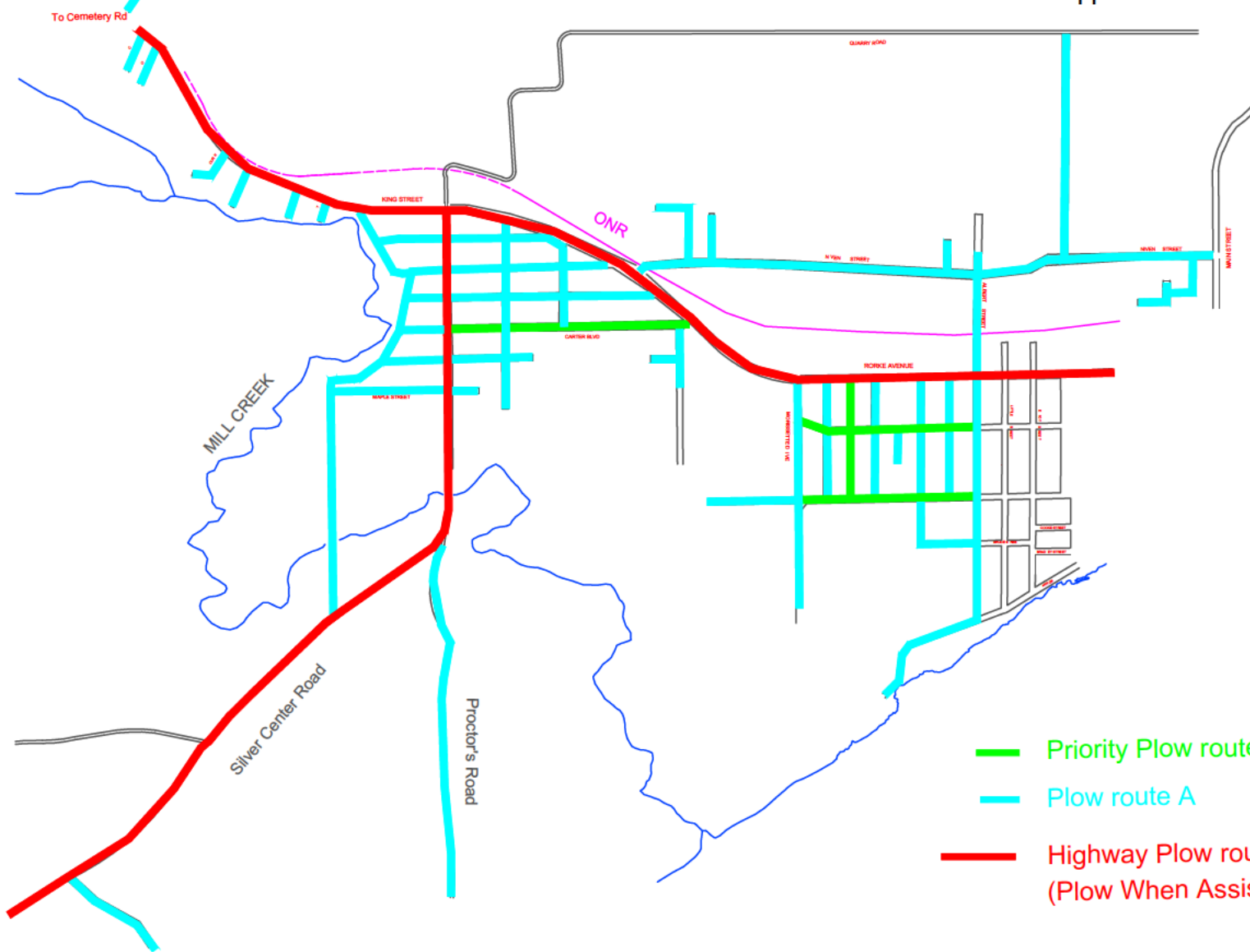
- It is acknowledged that conditions may occur which temporarily prevent achieving the levels of service as detailed in this document. In such cases, attempts will be made to keep Class 2 & 3 roads as clear as possible by utilizing all maintenance equipment at maximum efficiency.
- Winter operations will continue until the prescribed level of service is achieved where conditions permit. Should conditions not permit accomplishment of the prescribed level of service, operations shall continue as required to maintain as good a driving service as possible.
- The order of priority for winter maintenance operations during a storm is Class 2 through Class 6 roads and Priority 1 then Priority 2 sidewalks. Sidewalks will be plowed at the same time as roads if and whenever possible.




## Appendix A – Plow Routes



# Appendix A - Route A Haileybury South

City of Temiskaming Shores

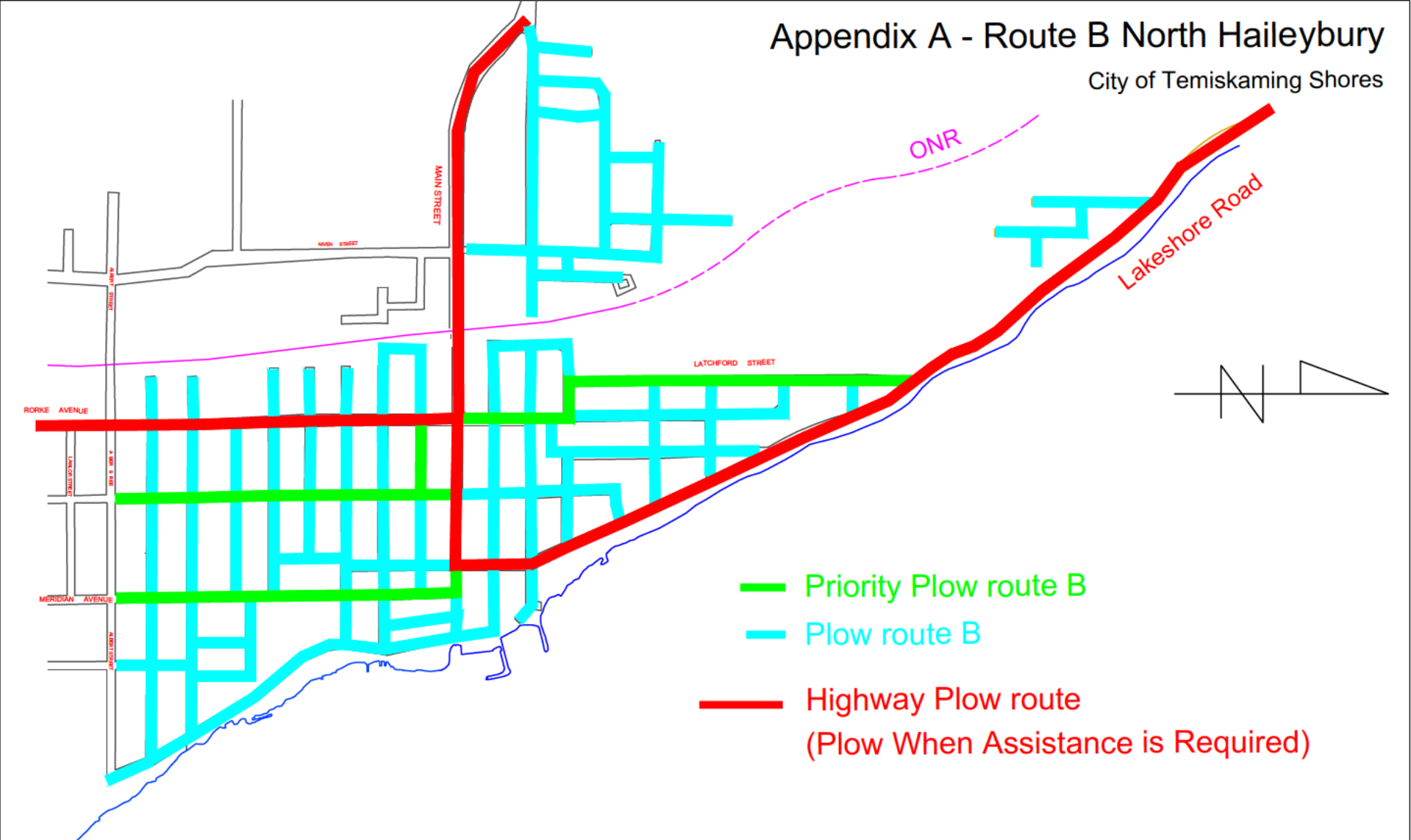


-  Priority Plow route A
-  Plow route A
-  Highway Plow route  
(Plow When Assistance is Required)



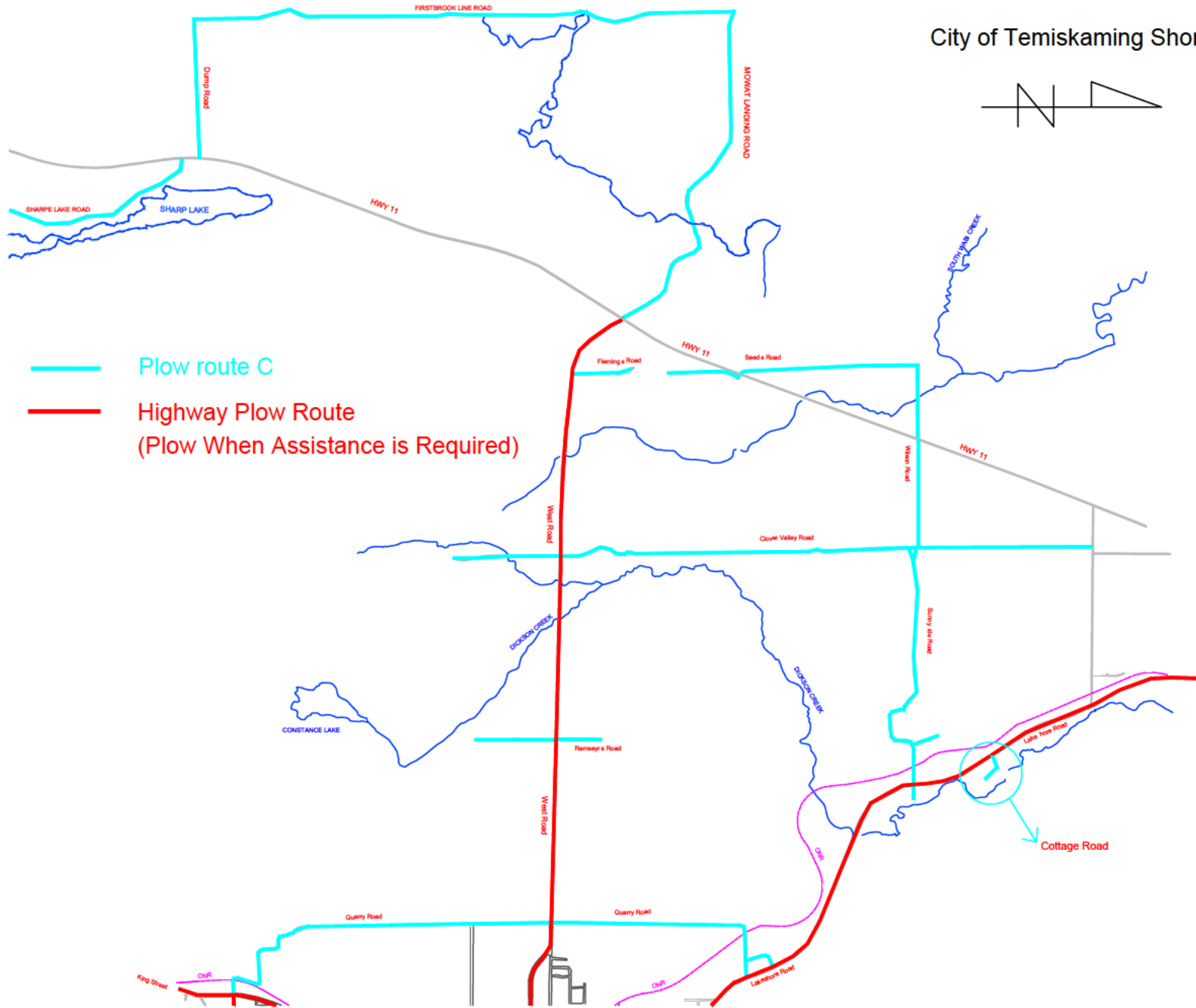
# Appendix A - Route B North Haileybury

City of Temiskaming Shores



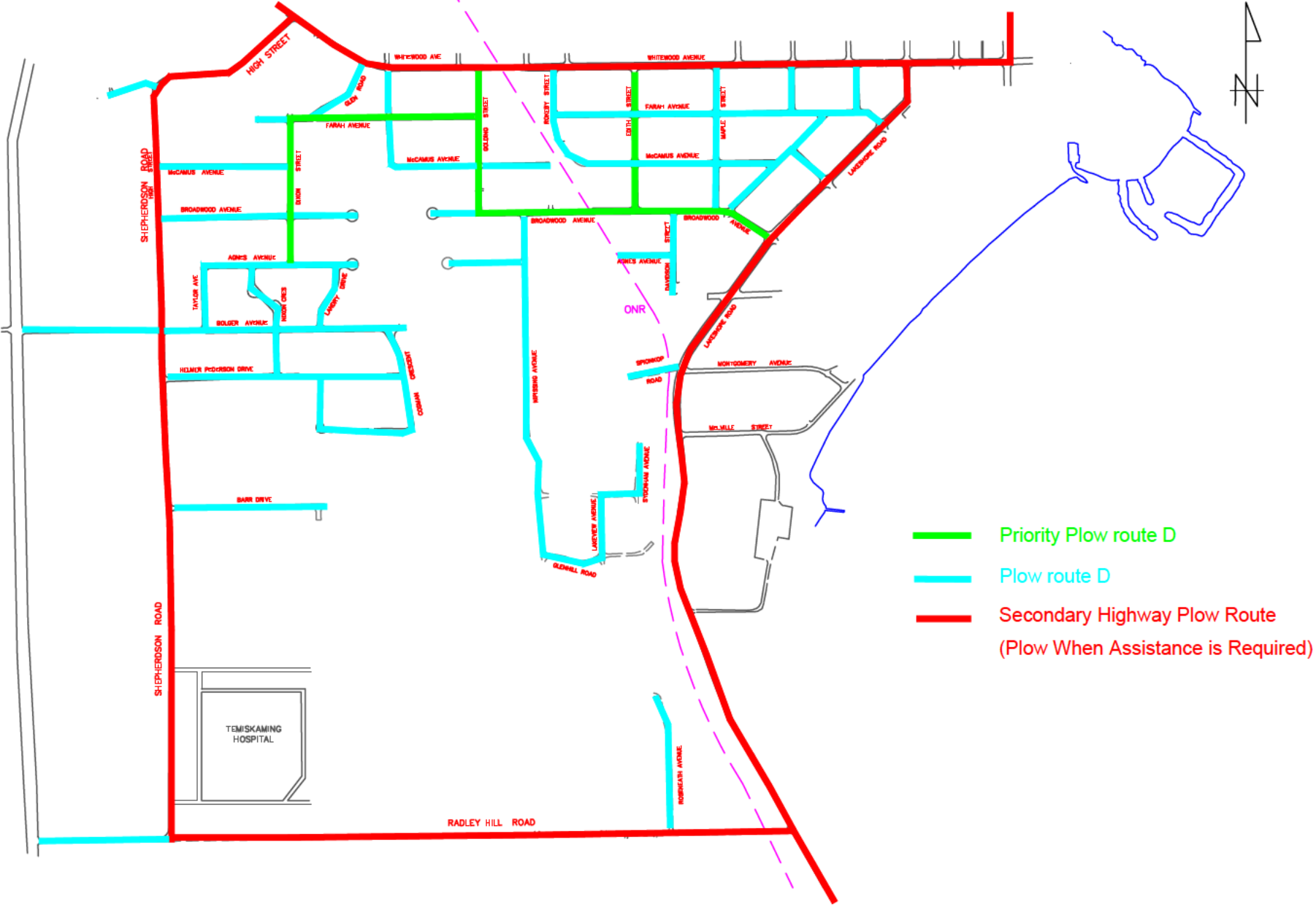
# Appendix A - Route C West Haileybury

City of Temiskaming Shores

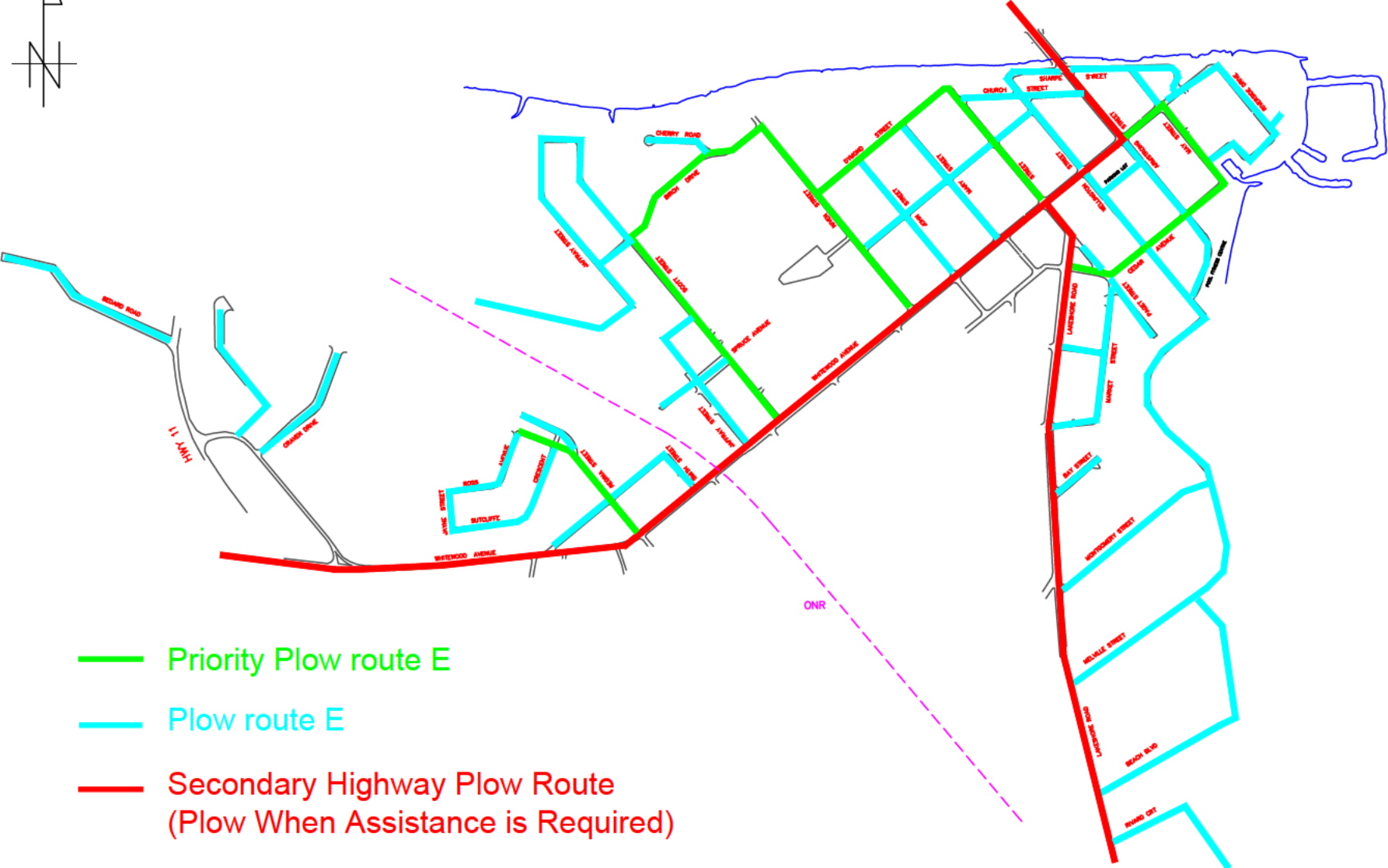


- Plow route C
- Highway Plow Route  
(Plow When Assistance is Required)

## Appendix A - Route D South New Liskeard City of Temiskaming Shores

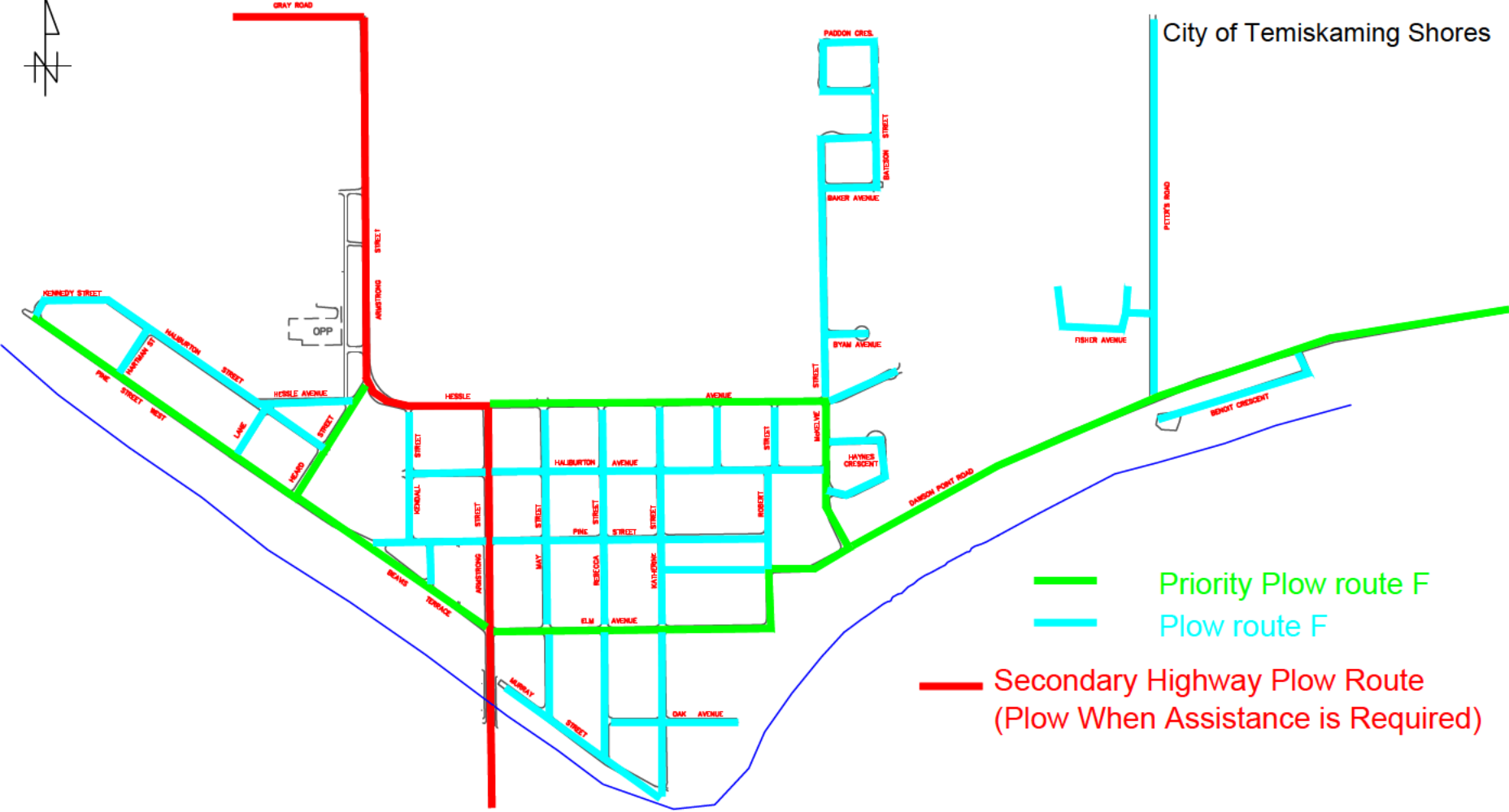
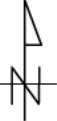


Appendix A - Route E Central New Liskeard  
City of Temiskaming Shores



# Appendix A - Route F North New Liskeard

City of Temiskaming Shores

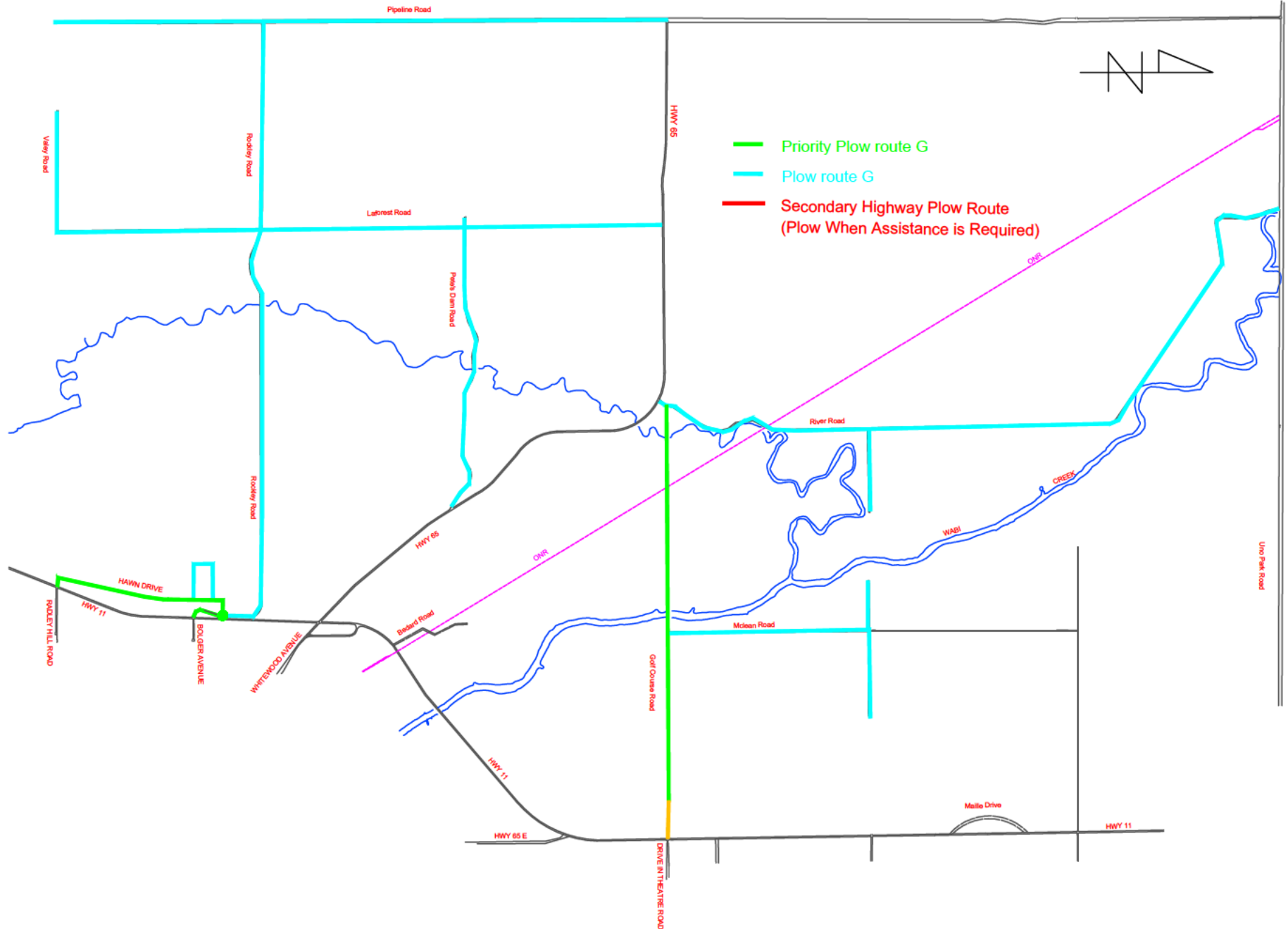


— Priority Plow route F  
— Plow route F

— Secondary Highway Plow Route  
(Plow When Assistance is Required)

# Appendix A - Route G West Dymond

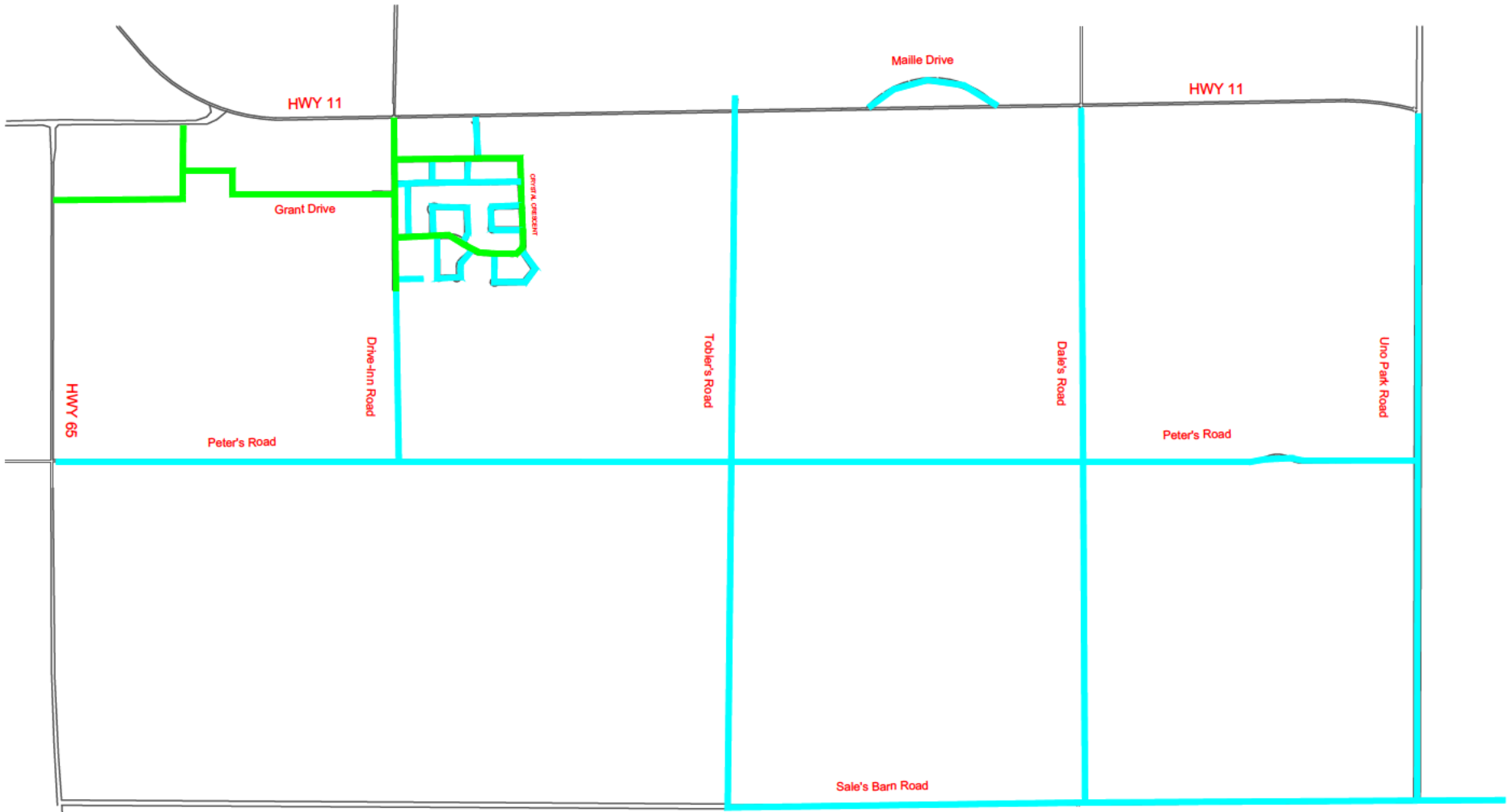
City of Temiskaming Shores



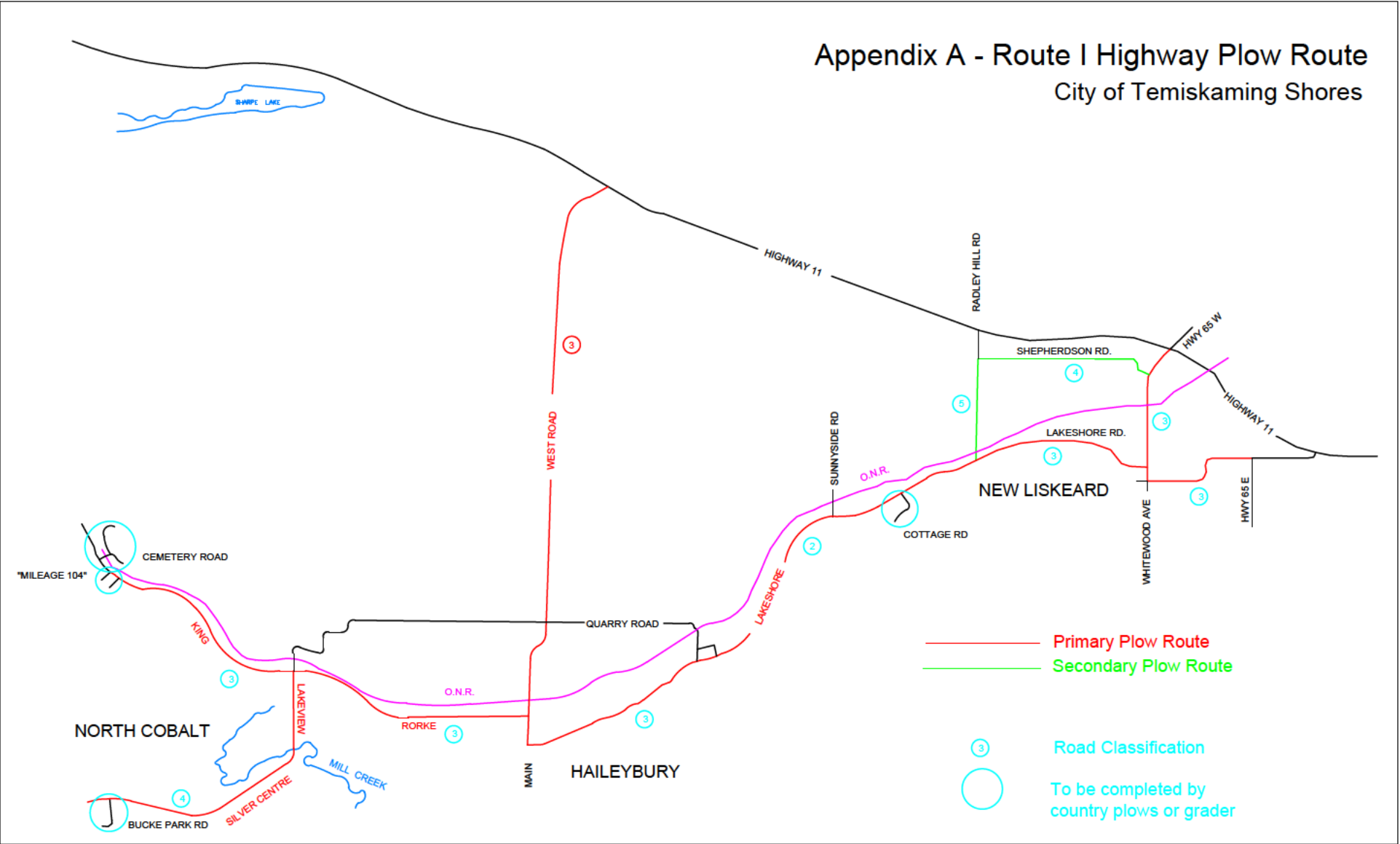
# Appendix A - Route H East Dymond

City of Temiskaming Shores

- Priority Plow route H
- Plow route H



# Appendix A - Route I Highway Plow Route City of Temiskaming Shores



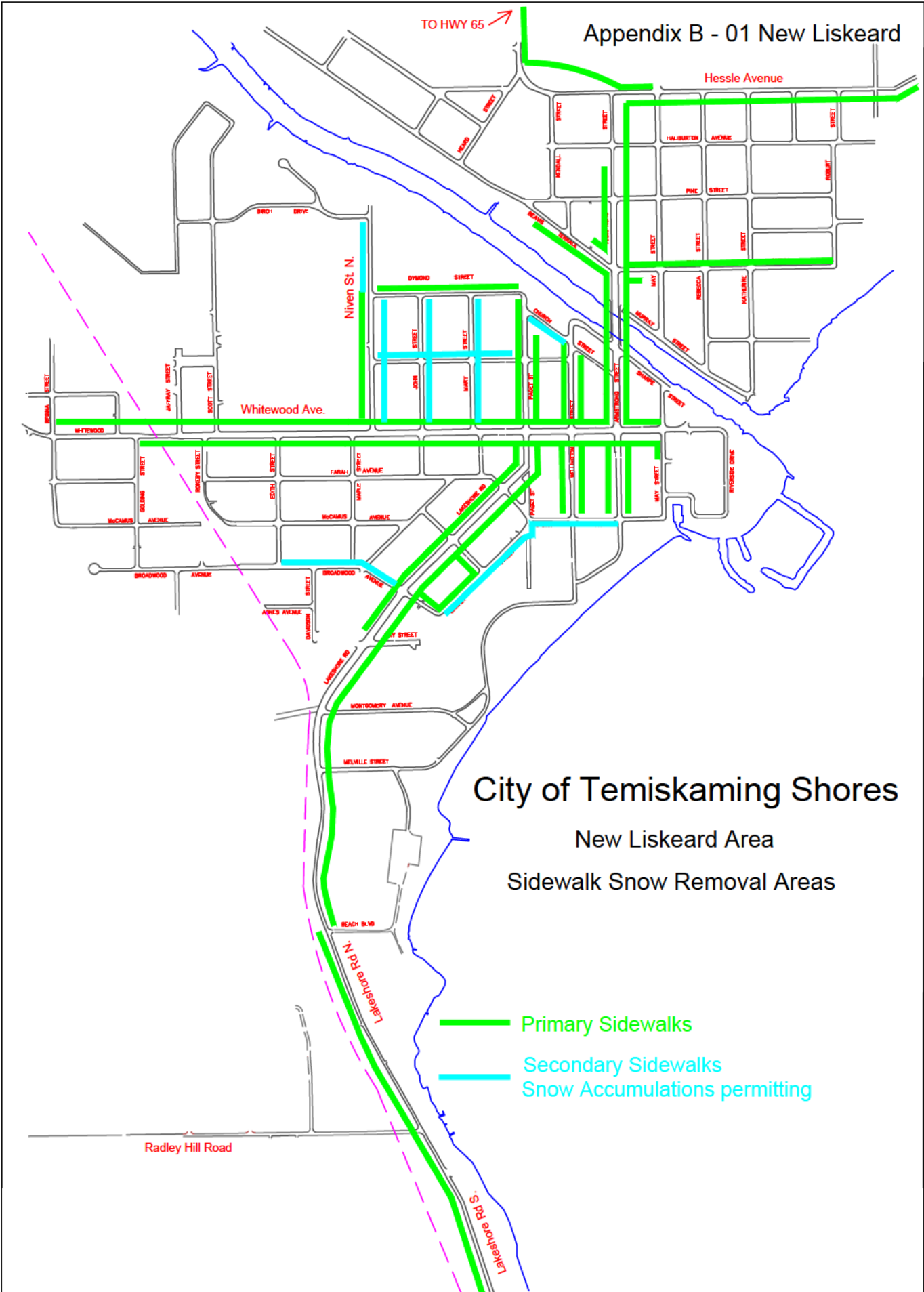
Primary Plow Route  
Secondary Plow Route

3 Road Classification  
To be completed by country plows or grader



## Appendix B – Sidewalk Routes

# Appendix B - 01 New Liskeard



TO HWY 65

Hessle Avenue

Niven St N.

Whitewood Ave.

## City of Temiskaming Shores

New Liskeard Area

Sidewalk Snow Removal Areas

- Primary Sidewalks
- Secondary Sidewalks  
Snow Accumulations permitting

Radley Hill Road

Lakeshore Rd N.

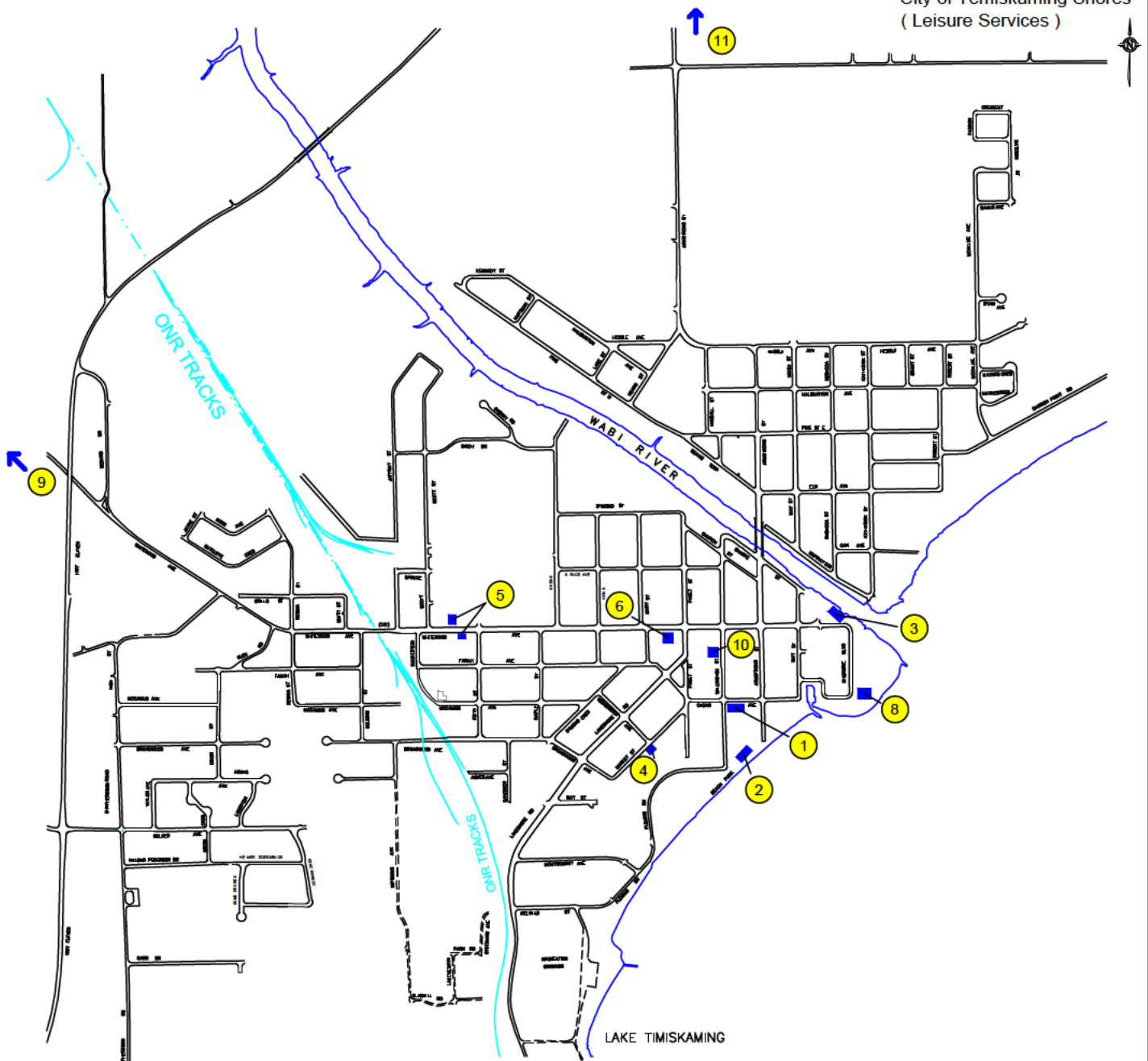
Lakeshore Rd S.

Appendix B - 02 Haileybury  
City of Temiskaming Shores  
Sidewalk Snow Removal



## Appendix C – Lots & Lanes

Appendix C - 02 New Liskeard 4 x 4 Plow Truck  
 City of Temiskaming Shores  
 ( Leisure Services )

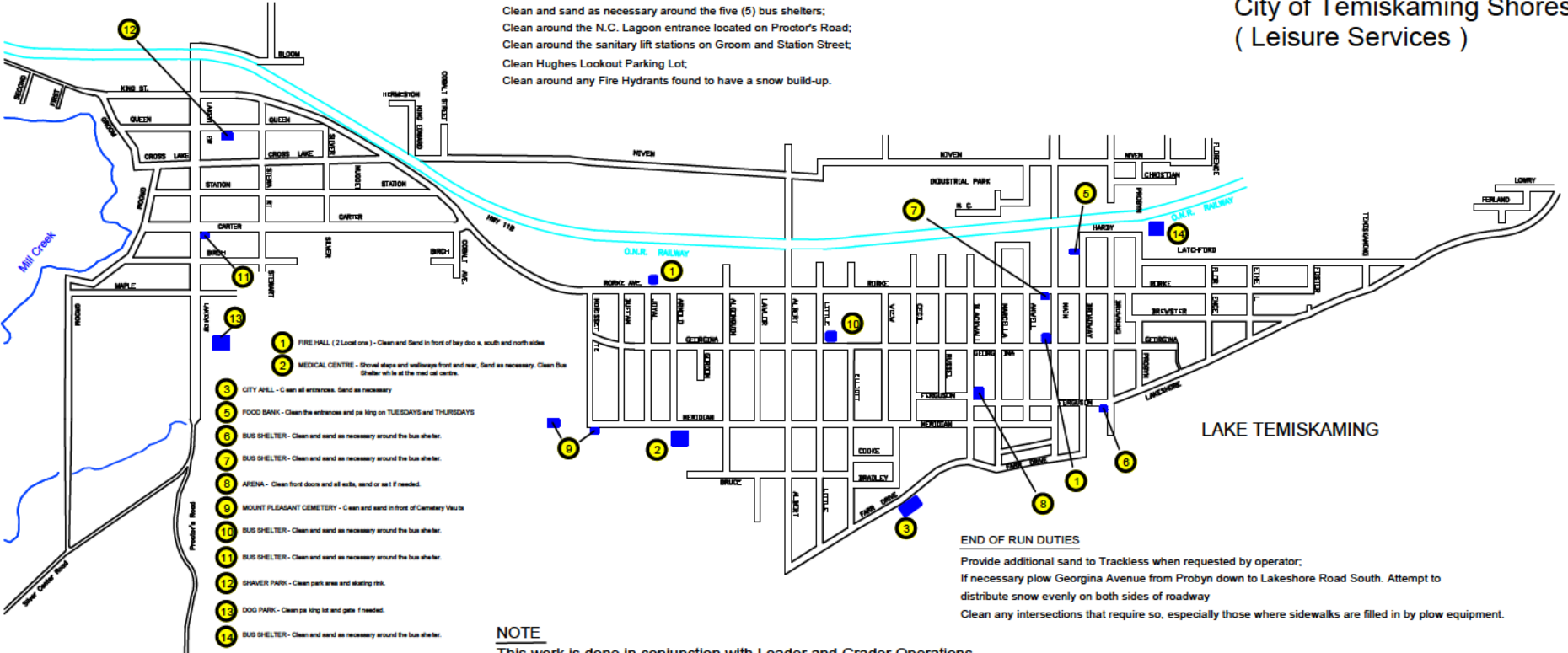


- ① ARENA - Clean front doors and all exits, sand or salt if needed.
- ② POOL FITNESS - Clean front steps and all exits from back deck over to restaurant, sand or salt front steps.
- ③ RIVERSIDE PLACE - Clean front of entire length of building, all exists and turn around. Sand or salt if needed.
- ④ BUS SHELTER - Clean and sand if necessary around bus shelter.
- ⑤ LIBRARY/BUS SHELTER - Clean all exists, sand or salt if needed and around bus shelter.
- ⑥ COMMUNITY HALL - Clean all exits and fire routes, boiler room and Cancer Care door at south end, Legion sidewalk on east side, sand or salt if needed.
- ⑧ NL MARINA - Clean front doors and parking lot. Sand and salt as needed.
- ⑨ PETE'S DAM PARK - Clean parking lot.
- ⑩ FIRE HALL - Clean all exits, overhead doors, sand or salt if needed.
- ⑪ DYMOND - Drive In Theatre Rd  
 COMMUNITY HALL / FIRE HALL - Clean all exits, overhead doors, sand or salt if needed.  
 WALMART/BUS SHELTER - Clean and sand if necessary around bus shelter.

# Appendix C - 03 Haileybury 4 x 4 Plow Truck City of Temiskaming Shores ( Leisure Services )

**AREAS THAT CAN BE DONE A DAY OR TWO FOLLOWING A STORM**

- Clean and sand as necessary around the five (5) bus shelters;
- Clean around the N.C. Lagoon entrance located on Proctor's Road;
- Clean around the sanitary lift stations on Groom and Station Street;
- Clean Hughes Lookout Parking Lot;
- Clean around any Fire Hydrants found to have a snow build-up.



- 1 FIRE HALL - (2 Local one) - Clean and Sand in front of bay doors, south and north sides
- 2 MEDICAL CENTRE - Shovel steps and walkways front and rear, Sand as necessary. Clean Bus Shelter etc in at the road cal centre.
- 3 CITY HALL - Clean all entrances. Sand as necessary
- 4 FOOD BANK - Clean the entrances and parking on TUESDAYS and THURSDAYS
- 5 BUS SHELTER - Clean and sand as necessary around the bus shelter.
- 6 BUS SHELTER - Clean and sand as necessary around the bus shelter.
- 7 BUS SHELTER - Clean and sand as necessary around the bus shelter.
- 8 ARENA - Clean front doors and all exits, sand or salt if needed.
- 9 MOUNT PLEASANT CEMETERY - Clean and sand in front of Cemetery Vaults
- 10 BUS SHELTER - Clean and sand as necessary around the bus shelter.
- 11 BUS SHELTER - Clean and sand as necessary around the bus shelter.
- 12 SHAVER PARK - Clean park area and skating rink.
- 13 DOG PARK - Clean parking lot and gate if needed.
- 14 BUS SHELTER - Clean and sand as necessary around the bus shelter.
- 15 BUS SHELTER - Clean and sand as necessary around the bus shelter.

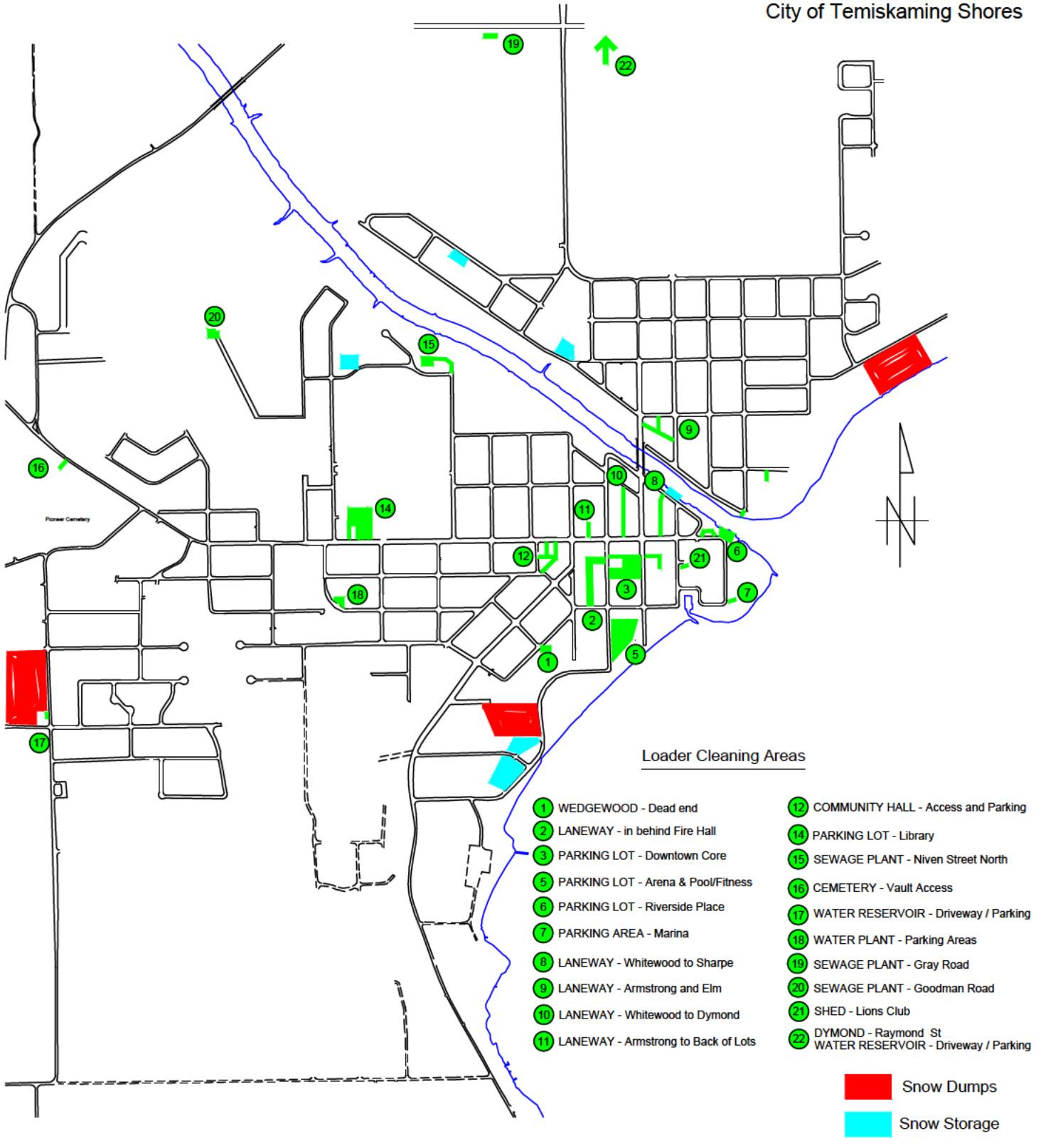
**END OF RUN DUTIES**

- Provide additional sand to Trackless when requested by operator;
- If necessary plow Georgina Avenue from Probyn down to Lakeshore Road South. Attempt to distribute snow evenly on both sides of roadway
- Clean any intersections that require so, especially those where sidewalks are filled in by plow equipment.

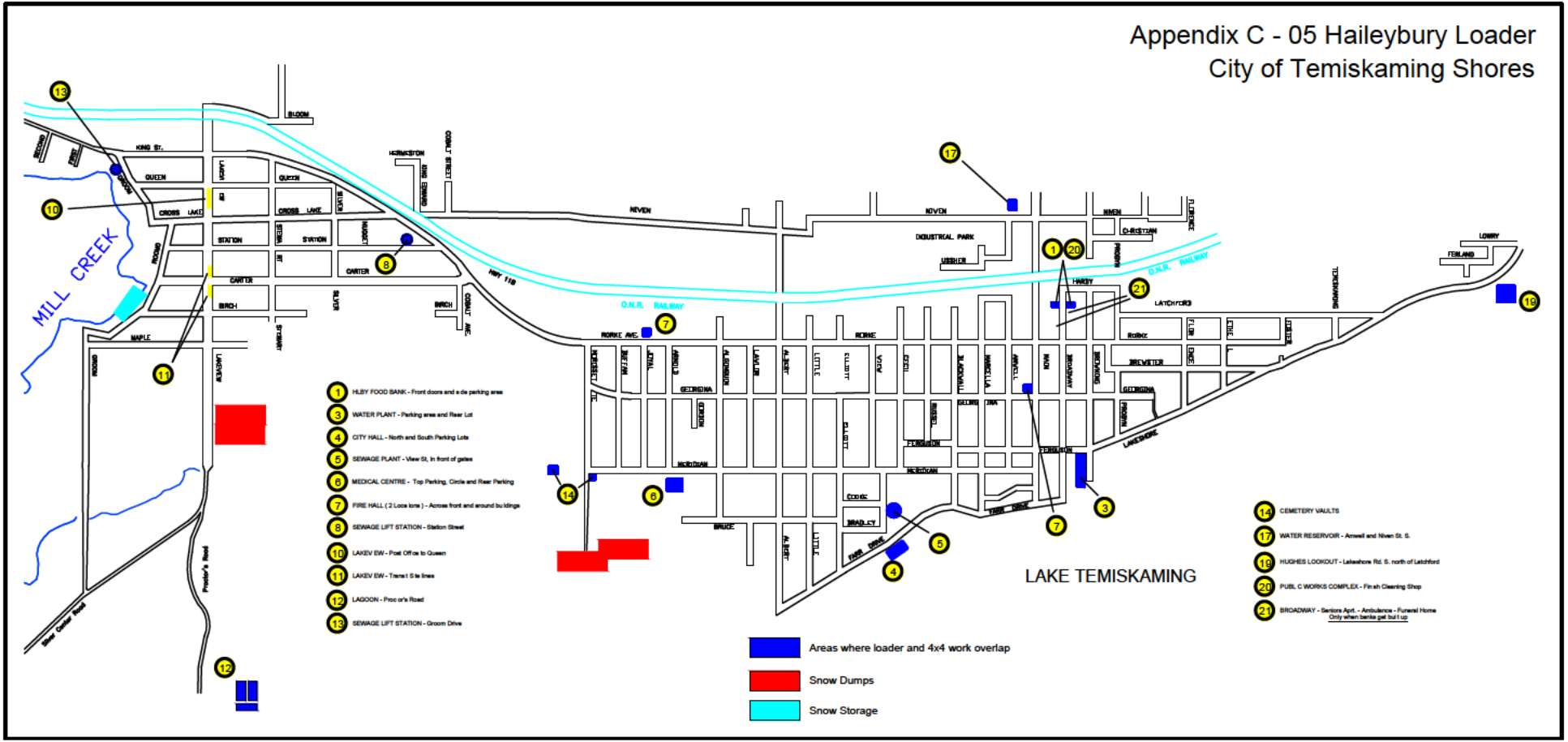
**NOTE**

This work is done in conjunction with Loader and Grader Operations.

Appendix C - 04 New Liskeard Loader / Snow Dumps  
 City of Temiskaming Shores



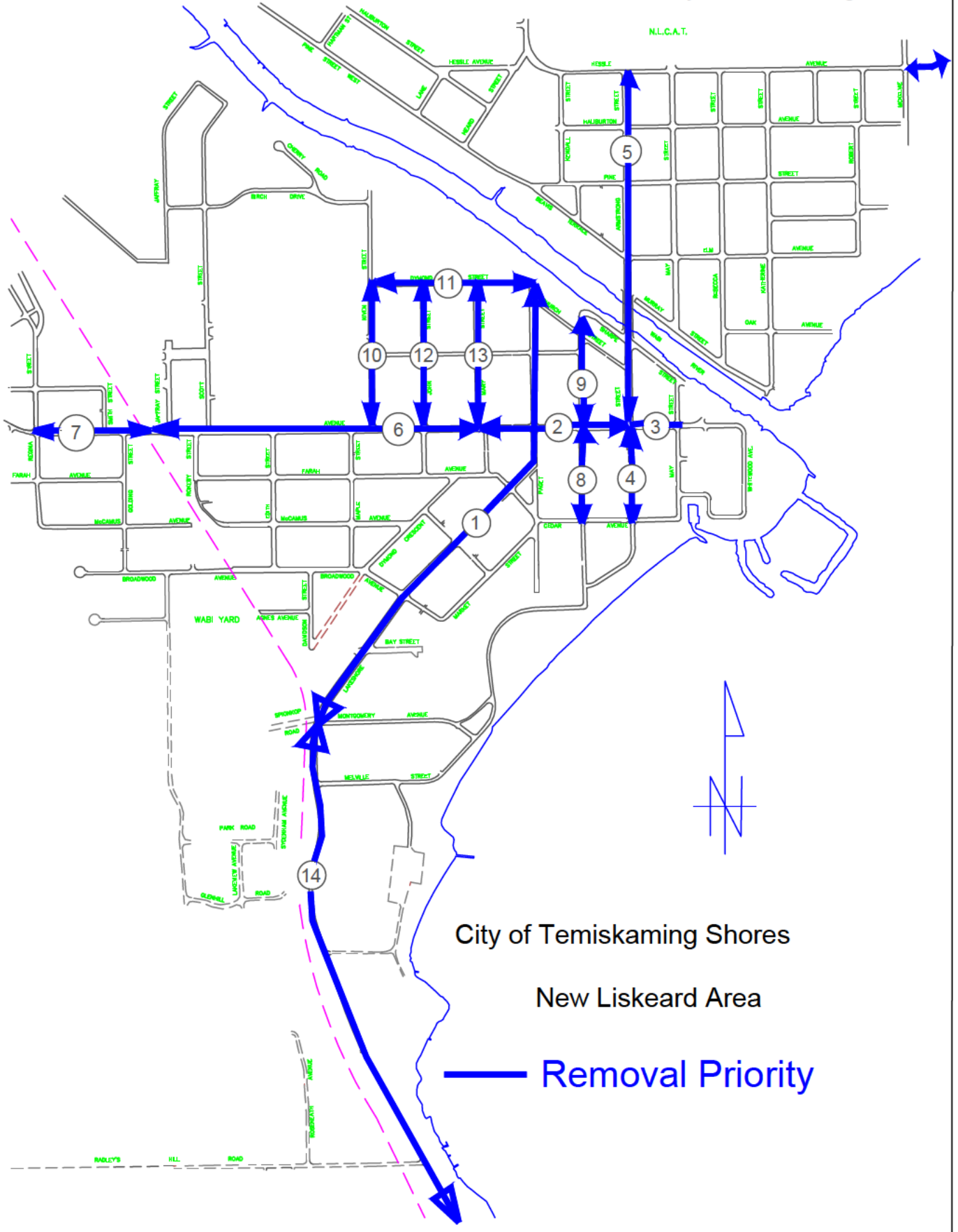
# Appendix C - 05 Haileybury Loader City of Temiskaming Shores





## Appendix D – Snow Removal

Appendix D - 01 New Liskeard Snow Removal Program  
City of Temiskaming Shores

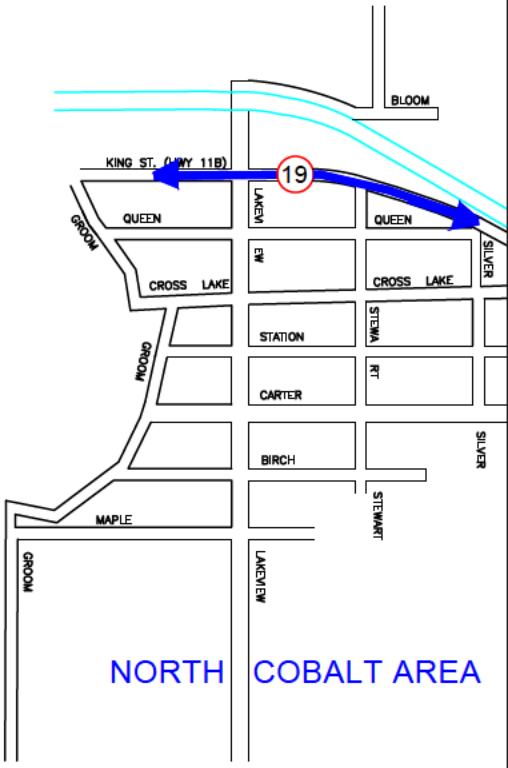


City of Temiskaming Shores  
New Liskeard Area  
— Removal Priority

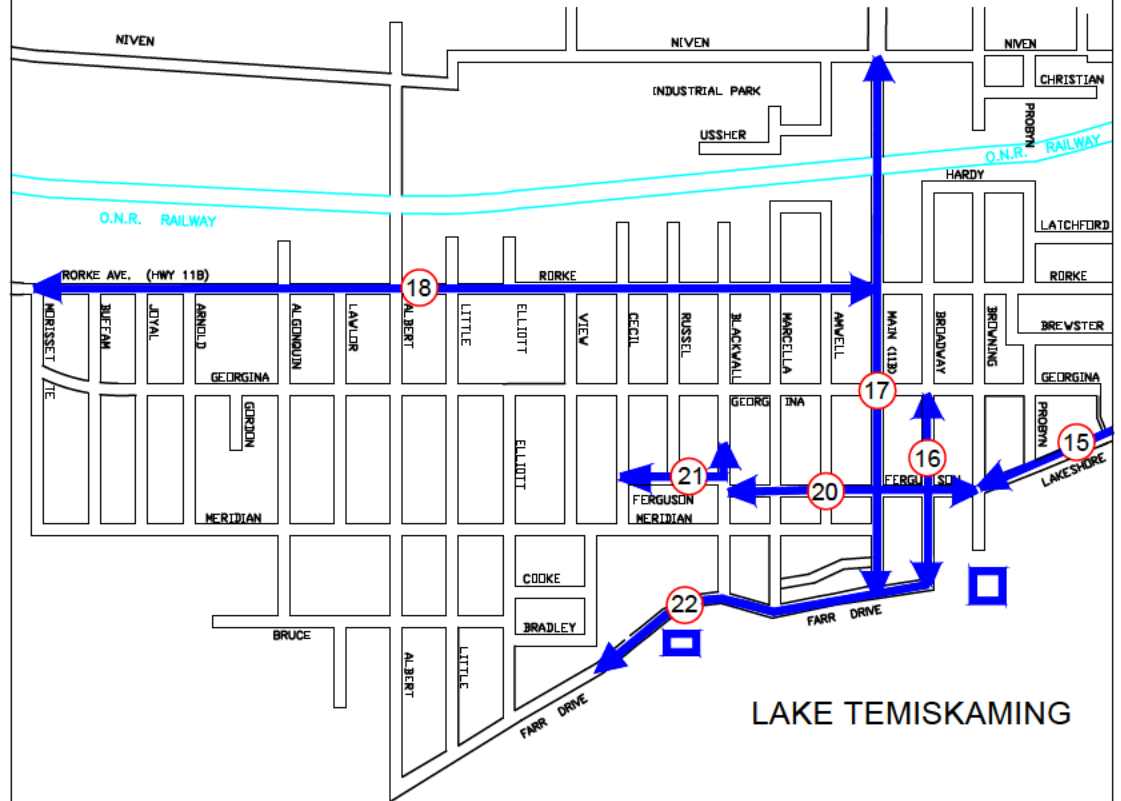
TO 1444 LAKESHORE RD S

Appendix D - 02 Haileybury Snow Removal Program  
City of Temiskaming Shores

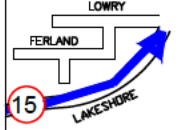
REMOVAL PRIORITY  
HAILEYBURY AREA



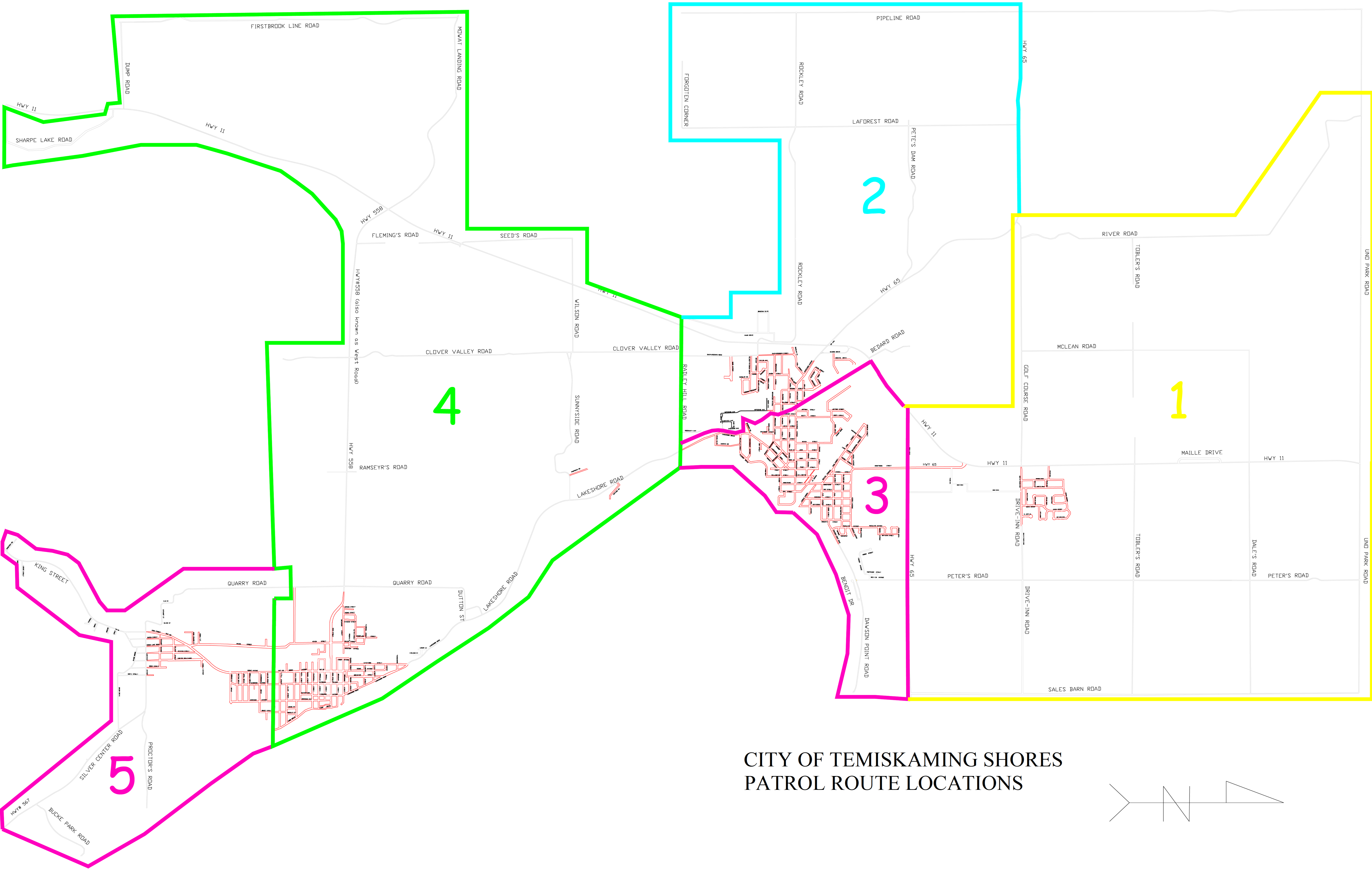
NORTH COBALT AREA



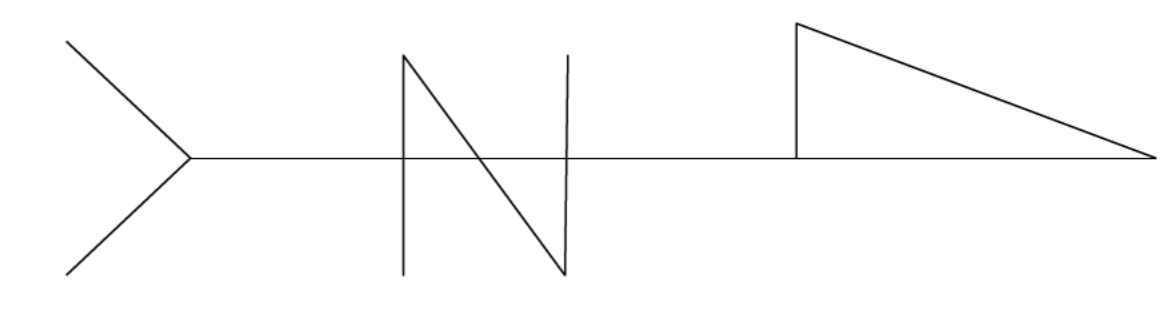
LAKE TEMISKAMING



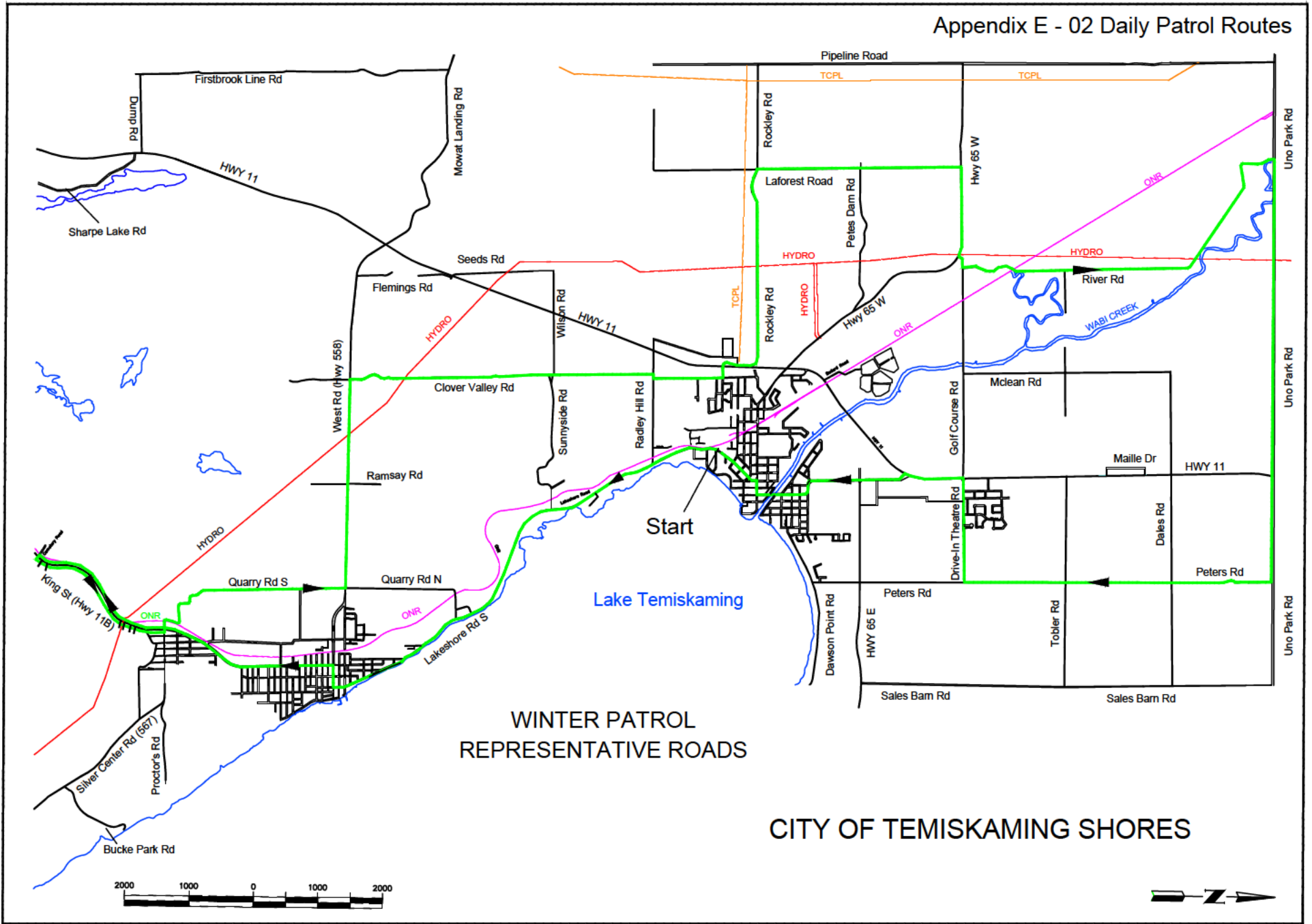
## Appendix E – Patrols



CITY OF TEMISKAMING SHORES  
PATROL ROUTE LOCATIONS



# Appendix E - 02 Daily Patrol Routes



WINTER PATROL  
REPRESENTATIVE ROADS

CITY OF TEMISKAMING SHORES





# Work Order Request

City of Temiskaming Shores  
Public Works Department  
325 Farr Drive – City Hall  
P.O. Box 2050  
Haileybury, ON P0J 1K0

Work Order No.: **WO-2023 - \_\_\_\_\_**

To: \_\_\_\_\_

From: \_\_\_\_\_

Date: \_\_\_\_\_

### Description of Work Requested

How Identified:	Date:	Time:

**Special Considerations**

Signature: \_\_\_\_\_

Deadline for completion: \_\_\_\_\_

### Description of Work Performed

Repairs Performed by:	<input type="checkbox"/> As Noted Above <input type="checkbox"/> As Described Below	
Supervisor (print):	Signature:	Completion Date:





## Media Release - Road Closed

Date: \_\_\_\_\_ Time: \_\_\_\_\_

### For Immediate Release

Due to a severe winter storm Ontario Provincial Police advise that the following roads in Corporation of the City of Temiskaming Shores are impassable due to drifting and blowing snow and have been closed to traffic.

Road Name	From	To

The Ontario Provincial Police advise that these roads will remain closed until the storm subsides and driving conditions improve.

For further Information, contact the City of Temiskaming Shores Public Works Department at 705-647-6220.

## Appendix F – By-laws



The Corporation of the City of Temiskaming Shores

**Excerpt from By-law No. 2012-101**

**Being a by-law to Regulate Traffic and Parking of  
vehicles in the City of Temiskaming Shores**

---

Section 5.9 of Schedule "A" to By-law No. 2012-101

**Prohibition - Overnight Parking – Offence**

No *person* shall *stop, stand or park* a *vehicle* on any *street* or *City* owned *parking lot* between the hours of 12:00 a.m. to 7:00 a.m. during the period of November 1<sup>st</sup> in one year to March 31<sup>st</sup> of the next year.

Certified True Copy  
City of Temiskaming Shores

A handwritten signature in black ink, appearing to read "Logan Belanger".

Logan Belanger  
Municipal Clerk

**THE CORPORATION OF THE CITY OF TEMISKAMING SHORES**

**BY-LAW NO. 2009-159**

**BEING A BY-LAW TO REGULATE THE REMOVAL AND RELOCATION OF SNOW  
WITHIN THE CITY OF TEMISKAMING SHORES**

**WHEREAS** the Council of the Corporation of the City of Temiskaming Shores deems it necessary and expedient to pass a By-law to regulate the removal and relocation of snow within the City of Temiskaming Shores;

**AND WHEREAS** under Section 8 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, the powers of a municipality shall be interpreted broadly to enable it to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues;

**AND WHEREAS** under Section 9 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

**AND WHEREAS** under Section 10 (1) of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, a single-tier municipality may provide any service or thing that the municipality considers necessary or desirable for the public;

**AND WHEREAS** Section 10(2) 6 of the Municipal Act, S.O. 2001, c. 25, as amended, authorizes Council to pass bylaws respecting the health, safety and well-being of persons;

**AND WHEREAS** Section 27 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, provides a municipality may pass by-laws with respect to highways over which it has jurisdiction;

**AND WHEREAS** Section 128 (1) of the Municipal Act, S.O. 2001, c. 25, as amended, provides that a municipality may prohibit with respect to public nuisances, including matters that, in the opinion of Council, are or could become or cause public nuisances;

**AND WHEREAS** Section 425(1) of the Municipal Act, S.O. 2001, c. 25, as amended, provides a municipality may pass by-laws providing that a person who contravenes a by-law of the municipality passed under the Act is guilty of an offence;

**AND WHEREAS** Section 429(1) of the Municipal Act, S.O. 2001, c. 25, as amended, provides a municipality may establish a system of fines for offences under a by-law of the municipality passed under the Act ;

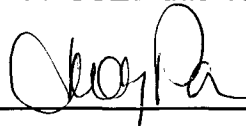
**AND WHEREAS** Section 446(1) of the Municipal Act, S.O. 2001, c. 25, as amended, provides that if a municipality has the authority under any Act or under a by-law under any Act to direct or require a person to do a matter or thing, the municipality may also provide that, in default of it being done by the person directed or required to do it, the matter or thing shall be done at the person's expense;

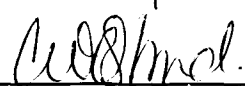
**AND WHEREAS** Section 446(3) of the Municipal Act, S.O. 2001, c. 25, as amended, provides that a municipality may recover costs of doing a matter or thing under subsection (1) from the person directed or required to do it by action or by adding the costs to the tax roll and collecting them in the same manner as taxes.

**NOW THEREFORE** the Council of the Corporation of the City of Temiskaming Shores hereby enacts as follows:

1. That Council adopts a by-law to regulate the removal and relocation of snow within the City identified as Schedule "A", attached hereto and forming part of this by-law;
2. That all by-laws respecting the removal, relocation and disposal of snow enacted by the former Town of Haileybury (more specifically By-law 94-6), the former Town of New Liskeard (more specifically By-law 1319), the former Township of Dymond (more specifically By-law 1355) and amendments thereto, are hereby repealed.
3. That the Clerk of the City of Temiskaming Shores is hereby authorized to make minor modifications or corrections of a grammatical or typographical nature to the By-law and schedule, after the passage of this By-law, where such modifications or corrections do not alter the intent of the By-law.
4. That this By-Law shall come into force and take effect on the date of its final passing.

Read a FIRST, SECOND and THIRD TIME and FINALLY PASSED this 15<sup>th</sup> day of December, 2009.

  
\_\_\_\_\_  
Mayor

  
\_\_\_\_\_  
Clerk

**CORPORATION OF THE CITY OF TEMISKAMING SHORES**

**SCHEDULE "A" TO BY-LAW NO. 2009-159**

**BEING A BY-LAW TO REGULATE REMOVAL AND RELOCATION OF SNOW IN THE  
CITY OF TEMISKAMING SHORES**

**INDEX**

**PART 1 – GENERAL PROVISIONS**

<b>SECTION</b>		<b>PAGE</b>
1.1	Short Title	1
1.2	Scope	1
1.3	Enforcement	1
1.4	Conflicts with other By-law	1

**PART 2 - DEFINITIONS**

<b>SECTION</b>		<b>PAGE</b>
2.1	By-law Enforcement Officer	1
2.2	City	1
2.3	City Property	1
2.4	Council	1
2.5	Municipality	1
2.6	Person	1
2.7	Police Officer	2
2.8	Private Property	2
2.9	Provincial Offences Act	2
2.10	Sidewalk	2
2.11	Street	2

**PART 3 – REGULATIONS**

<b>SECTION</b>		<b>PAGE</b>
3.1	Deposit of Snow	2
3.2	Re-Deposit of Snow	2

**PART 4 – PENALTIES**

<b>SECTION</b>		<b>PAGE</b>
4.1	General Penalties	3

**PART 5 – VALIDITY**

<b>SECTION</b>		<b>PAGE</b>
5.1	Validity of By-law	3

**SCHEDULES AND DISCRIPTION**

<b>APPENDIX</b>		<b>PAGE</b>
1	Set Fines For By-law 2009-159	4

**PART 1  
GENERAL PROVISIONS**

**SECTION**

**1.1 Short Title**

This By-Law shall be cited as the "Snow Removal By-law".

**1.2 Scope**

The provisions of this By-law shall apply to all property within the geographic limits of the City of Temiskaming Shores, except where otherwise provided.

**1.3 Enforcement**

This By-law shall be enforced by a *By-law Enforcement Officer* or a *Police Officer*.

**1.4 Conflicts with other by-law**

Where a provision of this By-law conflicts with a provision of another by-law in force in the City of Temiskaming Shores, the provisions that establishes the higher standard in terms of protecting the health, safety and welfare of the general public and the environmental well-being of the *municipality*, shall prevail to the extent of the conflict.

**PART 2  
DEFINITIONS**

Definitions of words, phrases and terms used in this By-law that are not included in the list of definitions in this section shall have the meanings which are commonly assigned to them in the context in which they are used in this By-law.

The words, phrases and terms defined in this section have the following meaning for the purposes of this By-law.

**SECTION**

**2.1 "By-law Enforcement Officer"** means the *person* or *persons* duly appointed by *Council* as Municipal Law Enforcement Officers for the purpose of enforcing regulatory by-laws of the *City*.

**2.2 "City"** means the Corporation of the City of Temiskaming Shores.

**2.3 "City Property"** means any land situated within the City which is owned by the City or controlled by the City by lease or otherwise.

**2.4 "Council"** means the *Municipal Council* of the *City* of Temiskaming Shores.

**2.5 "Municipality"** means the land within the geographic limit of the City of Temiskaming Shores.

**2.6 "Person"** means an individual, firm or corporation.

## SECTION

- 2.7** “**Police Officer**” means a member of the Ontario Provincial Police service.
- 2.8** “**Private Property**” means property which is privately owned and is not *City* property.
- 2.9** “**Provincial Offences Act**” means the Provincial Offences Act, R.S.O. 1990, c. P.33, as amended.
- 2.10** “**Sidewalk**” means any municipal walkway, or that portion of a *street* between *curb* lines or the lateral lines of a roadway, and the adjacent property line, primarily intended for use by *pedestrians*.
- 2.11** “**Street**” means a common and public highway, *street*, *roadway*, crescent, avenue, parkway, *driveway*, square, place, bridge, viaduct, trestle or other such place designated and intended for, or used by the general public for the passage or *parking* of *vehicles* and includes the area of land between the lateral property lines thereof.

## PART 3 REGULATIONS

### SECTION

- 3.1** **Deposit of Snow**  
No *person* shall deposit, or cause to be deposited, any snow, ice, or other debris, on any *City property* or *street* from off of his or her property or any other *private property*.
- 3.2** **Re-Deposit of Snow**
- 3.2.1** No *person* shall move snow within a *street* or allow snow to be moved from one side of the cleared portion of the *street* intended for vehicular and pedestrian traffic, to the other side of the *street*.
- 3.2.2** No *person* shall relocate snow within a *street* or allow snow to be relocated in such a manner as to encroach on the cleared portion of the *street* intended for vehicular and pedestrian traffic.
- 3.2.3** No *person* shall relocate snow within a *street* or allow snow to be relocated in such a manner as to obstruct the normal visibility or the safe movement of vehicular and pedestrian traffic on the *street*.



**PART 4  
PENALTIES**

**SECTION**

- 4.1** Any *person* who contravenes, suffers or permits any act or thing to be done in contravention of, or neglects to do or refrains from doing anything required to be done pursuant to any provisions of this By-law or any permit or order issued pursuant thereto, commits an offence and except where specifically provided in Appendix "1", shall be liable to a fine not exceeding \$5,000.00.

Where an offense is a continuing offence, each day that the offence is continued shall constitute a separate and distinct offence.

**PART 5  
VALIDITY**

**SECTION**

**5.1 Validity of By-law**

If any section, clause, or provision of this By-law, is for any reason declared by a court of competent jurisdiction to be invalid, the same shall not effect the validity of the By-law as a whole or any part thereof, other than the section, clause or provision so declared to be invalid and it is hereby declared to be the intention that all remaining sections, clauses or provisions of this By-law shall remain in full force and effect until repealed, notwithstanding that one or more provisions thereof shall have been declared to be invalid.

**THE CORPORATION OF THE CITY OF TEMISKAMING SHORES**  
**Appendix "1" OF Schedule "A"**  
**TO BY-LAW NO. 2009-159**

**SET FINES FOR BY-LAW NO. 2009-159**

<b>Item</b>	<b>COLUMN 1 Short form wording</b>	<b>COLUMN 2 Offence creating provision or Defining offence</b>	<b>COLUMN 3 Set fine</b>
1	Deposit snow on <i>City property</i> .	Section 3.1	\$100.00
2	Re-Deposit snow from one side of <i>street</i> to the other.	Section 3.2.1	\$100.00
3	Re-Deposit snow to cleared portion of <i>street</i> .	Section 3.2.2	\$100.00
4	Re-Deposit snow so as to obstruct visibility.	Section 3.2.3	\$100.00

**Note: The general penalty provision for the offences listed above is Schedule A section 4.1 of By-law No. 2009-159, a certified copy of which has been filed.**

## Appendix G – Winter Parking Notice

**NOTICE – OVERNIGHT PARKING**

**Effective November 1, 2023**

**to March 31, 2024**

By-law No. 2012-101 prohibits the parking of vehicles on municipal streets  
or City-owned parking lots between the hours of

**12:00 a.m. to 7:00 a.m.**

Thank you for your cooperation.

For further information contact the By-law Officer at (705) 672-3363.

Appendix H –  
Minimum Maintenance Standards

**Municipal Act, 2001**  
**Loi de 2001 sur les municipalités**

**ONTARIO REGULATION 239/02**  
**MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS**

**Consolidation Period:** From May 3, 2018 to the [e-Laws currency date](#).

Last amendment: 366/18.

Legislative History: 288/03, 613/06, 23/10, 47/13, 366/18.

***This Regulation is made in English only.***

**Definitions**

1. (1) In this Regulation,

“bicycle facility” means the on-road and in-boulevard cycling facilities listed in Book 18 of the Ontario Traffic Manual;

“bicycle lane” means,

- (a) a portion of a roadway that has been designated by pavement markings or signage for the preferential or exclusive use of cyclists, or
- (b) a portion of a roadway that has been designated for the exclusive use of cyclists by signage and a physical or marked buffer;

“cm” means centimetres;

“day” means a 24-hour period;

“encroachment” means anything that is placed, installed, constructed or planted within the highway that was not placed, installed, constructed or planted by the municipality;

“ice” means all kinds of ice, however formed;

“motor vehicle” has the same meaning as in subsection 1 (1) of the *Highway Traffic Act*, except that it does not include a motor assisted bicycle;

“non-paved surface” means a surface that is not a paved surface;

“Ontario Traffic Manual” means the Ontario Traffic Manual published by the Ministry of Transportation, as amended from time to time;

“paved surface” means a surface with a wearing layer or layers of asphalt, concrete or asphalt emulsion;

“pothole” means a hole in the surface of a roadway caused by any means, including wear or subsidence of the road surface or subsurface;

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

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

“sidewalk” means the part of the highway specifically set aside or commonly understood to be for pedestrian use, typically consisting of a paved surface but does not include crosswalks, medians, boulevards, shoulders or any part of the sidewalk where cleared snow has been deposited;

“significant weather event” means an approaching or occurring weather hazard with the potential to pose a significant danger to users of the highways within a municipality;

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

1. Newly-fallen snow.
2. Wind-blown snow.
3. Slush;

“substantial probability” means a significant likelihood considerably in excess of 51 per cent;

“surface” means the top of a sidewalk, roadway or shoulder;

“utility” includes any air, gas, water, electricity, cable, fiber-optic, telecommunication or traffic control system or subsystem, fire hydrants, sanitary sewers, storm sewers, property bars and survey monuments;

“utility appurtenance” includes maintenance holes and hole covers, water shut-off covers and boxes, valves, fittings, vaults, braces, pipes, pedestals, and any other structures or items that form part of or are an accessory part of any utility;

“weather” means air temperature, wind and precipitation.

“weather hazard” means the weather hazards determined by Environment Canada as meeting the criteria for the issuance of an alert under its Public Weather Alerting Program. O. Reg. 239/02, s. 1 (1); O. Reg. 23/10, s. 1 (1); O. Reg. 47/13, s. 1; O. Reg. 366/18, s. 1 (1, 2).

(2) For the purposes of this Regulation, every highway or part of a highway under the jurisdiction of a municipality in Ontario is classified in the Table to this section as a Class 1, Class 2, Class 3, Class 4, Class 5 or Class 6 highway, based on the speed limit applicable to it and the average daily traffic on it. O. Reg. 239/02, s. 1 (2); O. Reg. 366/18, s. 1 (3).

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

(a) by counting and averaging the daily two-way traffic on the highway or part of the highway; or

(b) by estimating the average daily two-way traffic on the highway or part of the highway. O. Reg. 239/02, s. 1 (3); O. Reg. 23/10, s. 1 (2); O. Reg. 366/18, s. 1 (3).

(4) For the purposes of this Regulation, unless otherwise indicated in a provision of this Regulation, a municipality is deemed to be aware of a fact if, in the absence of actual knowledge of the fact, circumstances are such that the municipality ought reasonably to be aware of the fact. O. Reg. 366/18, s. 1 (4).

TABLE  
CLASSIFICATION OF HIGHWAYS

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

O. Reg. 366/18, s. 1 (5).

**Application**

2. (1) This Regulation sets out the minimum standards of repair for highways under municipal jurisdiction for the purpose of clause 44 (3) (c) of the Act. O. Reg. 288/03, s. 1.

(2) REVOKED: O. Reg. 23/10, s. 2.

(3) This Regulation does not apply to Class 6 highways. O. Reg. 239/02, s. 2 (3).

**Purpose**

2.1 The purpose of this Regulation is to clarify the scope of the statutory defence available to a municipality under clause 44 (3) (c) of the Act by establishing maintenance standards which are non-prescriptive as to the methods or materials to be used in complying with the standards but instead describe a desired outcome. O. Reg. 366/18, s. 2.

MAINTENANCE STANDARDS

**Patrolling**

3. (1) The standard for the frequency of patrolling of highways to check for conditions described in this Regulation is set out in the Table to this section. O. Reg. 23/10, s. 3 (1); O. Reg. 366/18, s. 3 (2).

(2) If it is determined by the municipality that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on roadways, ice formation on roadways or icy roadways, the standard for patrolling highways is, in addition to that set out in subsection (1), to patrol highways that the municipality selects as representative of its highways, at intervals deemed necessary by the municipality, to check for such conditions. O. Reg. 47/13, s. 2; O. Reg. 366/18, s. 3 (2).

(3) Patrolling a highway consists of observing the highway, either by driving on or by electronically monitoring the highway, and may be performed by persons responsible for patrolling highways or by persons responsible for or performing highway maintenance activities. O. Reg. 23/10, s. 3 (1).

(4) This section does not apply in respect of the conditions described in section 10, subsections 11 (0.1) and 12 (1) and section 16.1, 16.2, 16.3 or 16.4. O. Reg. 23/10, s. 3 (1); O. Reg. 366/18, s. 3 (3).

TABLE  
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

O. Reg. 239/02, s. 3, Table; O. Reg. 23/10, s. 3 (2).

#### Weather monitoring

3.1 (1) From October 1 to April 30, the standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once every shift or three times per calendar day, whichever is more frequent, at intervals determined by the municipality. O. Reg. 47/13, s. 3; O. Reg. 366/18, s. 4.

(2) From May 1 to September 30, the standard is to monitor the weather, both current and forecast to occur in the next 24 hours, once per calendar day. O. Reg. 47/13, s. 3; O. Reg. 366/18, s. 4.

#### Snow accumulation, roadways

4. (1) Subject to section 4.1, the standard for addressing snow accumulation on roadways is,

- (a) after becoming aware of the fact that the snow accumulation on a roadway is greater than the depth set out in the Table to this section, 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 so as to reduce the snow to a depth less than or equal to the depth set out in the Table within the time set out in the Table,
  - (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. O. Reg. 47/13, s. 4; O. Reg. 366/18, s. 5 (1).

(2) If the depth of snow accumulation on a roadway is less than or equal to the depth set out in the Table to this section, the roadway is deemed to be in a state of repair with respect to snow accumulation. O. Reg. 47/13, s. 4.

(3) For the purposes of this section, the depth of snow accumulation on a roadway and, if applicable, lane width under clause (1) (b), may be determined in accordance with subsection (4) 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. O. Reg. 47/13, s. 4; O. Reg. 366/18, s. 5 (2).
- (4) The depth of snow accumulation on a roadway and lane width may be determined by,
  - (a) performing an actual measurement;
  - (b) monitoring the weather; or
  - (c) performing a visual estimate. O. Reg. 47/13, s. 4; O. Reg. 366/18, s. 5 (3).
- (5) For the purposes of this section, addressing snow accumulation on a roadway includes,
  - (a) plowing the roadway;



- (b) salting the roadway;
- (c) applying abrasive materials to the roadway;
- (d) applying other chemical or organic agents to the roadway;
- (e) any combination of the methods described in clauses (a) to (d). O. Reg. 366/18, s. 5 (4).
- (6) This section does not apply to that portion of the roadway,
  - (a) designated for parking;
  - (b) consisting of a bicycle lane or other bicycle facility; or
  - (d) used by a municipality for snow storage. O. Reg. 366/18, s. 5 (4).

TABLE  
SNOW ACCUMULATION - ROADWAYS

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

O. Reg. 47/13, s. 4; O. Reg. 366/18, s. 5 (5).

**Snow accumulation on roadways, significant weather event**

**4.1** (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on roadways until the declaration of the end of the significant weather event is,

- (a) to monitor the weather in accordance with section 3.1; and
- (b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on roadways, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 7.

(2) If the municipality complies with subsection (1), all roadways within the municipality are deemed to be in a state of repair with respect to snow accumulation until the applicable time in the Table to section 4 expires following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 7.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

- (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
- (b) address snow accumulation on roadways in accordance with section 4. O. Reg. 366/18, s. 7.

**Snow accumulation, bicycle lanes**

**4.2** (1) Subject to section 4.3, the standard for addressing snow accumulation on bicycle lanes is,

- (a) after becoming aware of the fact that the snow accumulation on a bicycle lane is greater than the depth set out in the Table to this section, 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 so as to reduce the snow to a depth less than or equal to the depth set out in the Table to this section to provide a minimum bicycle lane width of the lesser of 1 metre or the actual bicycle lane width. O. Reg. 366/18, s. 7.

(2) If the depth of snow accumulation on a bicycle lane is less than or equal to the depth set out in the Table to this section, the bicycle lane is deemed to be in a state of repair in respect of snow accumulation. O. Reg. 366/18, s. 7.

(3) For the purposes of this section, the depth of snow accumulation on a bicycle lane and, if applicable, lane width under clause (1) (b), may be determined in the same manner as set out in subsection 4 (4) and by the persons mentioned in subsection 4 (3), with necessary modifications. O. Reg. 366/18, s. 7.

(4) For the purposes of this section, addressing snow accumulation on a bicycle lane includes,

- (a) plowing the bicycle lane;
- (b) salting the bicycle lane;
- (c) applying abrasive materials to the bicycle lane;
- (d) applying other chemical or organic agents to the bicycle lane;
- (e) sweeping the bicycle lane; or

(f) any combination of the methods described in clauses (a) to (e). O. Reg. 366/18, s. 7.

TABLE  
SNOW ACCUMULATION – BICYCLE LANES

Column 1 Class of Highway or Adjacent Highway	Column 2 Depth	Column 3 Time
1	2.5 cm	8 hours
2	5 cm	12 hours
3	8 cm	24 hours
4	8 cm	24 hours
5	10 cm	24 hours

O. Reg. 366/18, s. 7.

**Snow accumulation on bicycle lanes, significant weather event**

**4.3** (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on bicycle lanes until the declaration of the end of the significant weather event is,

- (a) to monitor the weather in accordance with section 3.1; and
- (b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on bicycle lanes, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 7.

(2) If the municipality complies with subsection (1), all bicycle lanes within the municipality are deemed to be in a state of repair with respect to snow accumulation until the applicable time in the Table to section 4.2 expires following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 7.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

- (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
- (b) address snow accumulation on bicycle lanes in accordance with section 4.2. O. Reg. 366/18, s. 7.

**Ice formation on roadways and icy roadways**

**5.** (1) The 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:

- 1. Monitor the weather in accordance with section 3.1.
- 2. Patrol in accordance with section 3.
- 3. If the municipality determines, as a result of its activities under paragraph 1 or 2, that there is a substantial probability of ice forming on a roadway, treat the roadway, if practicable, to prevent ice formation within the time set out in Table 1 to this section, starting from the time that the municipality determines is the appropriate time to deploy resources for that purpose. O. Reg. 366/18, s. 8.

(2) If the municipality meets the standard set out in subsection (1) and, despite such compliance, ice forms on a roadway, the roadway is deemed to be in a state of repair until the applicable time set out in Table 2 to this section expires after the municipality becomes aware of the fact that the roadway is icy. O. Reg. 366/18, s. 8.

(3) Subject to section 5.1, the standard for treating icy roadways is to treat the icy roadway within the time set out in Table 2 to this section, and an icy roadway is deemed to be in a state of repair until the applicable time set out in Table 2 to this section expires after the municipality becomes aware of the fact that a roadway is icy. O. Reg. 366/18, s. 8.

(4) 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. O. Reg. 366/18, s. 8.

(5) For greater certainty, this section applies in respect of ice formation on bicycle lanes on a roadway, but does not apply to other types of bicycle facilities. O. Reg. 366/18, s. 8.

TABLE 1  
ICE FORMATION PREVENTION

Class of Highway	Time
1	6 hours
2	8 hours
3	16 hours
4	24 hours
5	24 hours

O. Reg. 366/18, s. 8.

TABLE 2  
TREATMENT OF ICY ROADWAYS

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

O. Reg. 366/18, s. 8.

**Icy roadways, significant weather event**

**5.1** (1) If a municipality declares a significant weather event relating to ice, the standard for treating icy roadways until the declaration of the end of the significant weather event is,

- (a) to monitor the weather in accordance with section 3.1; and
- (b) if deemed practicable by the municipality, to deploy resources to treat icy roadways, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 8.

(2) If the municipality complies with subsection (1), all roadways within the municipality are deemed to be in a state of repair with respect to any ice which forms or may be present until the applicable time in Table 2 to section 5 expires after the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 8.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

- (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
- (b) treat icy roadways in accordance with section 5. O. Reg. 366/18, s. 8.

**Potholes**

**6.** (1) If a pothole exceeds both the surface area and depth set out in Table 1, 2 or 3 to this section, as the case may be, the standard is to repair the pothole within the time set out in Table 1, 2 or 3, as appropriate, after becoming aware of the fact. O. Reg. 239/02, s. 6 (1); O. Reg. 366/18, s. 8 (1).

(1.1) For the purposes of this section, the surface area and depth of a pothole may be determined in accordance with subsections (1.2) and (1.3), as applicable, 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. O. Reg. 366/18, s. 8 (2).

(1.2) The depth and surface area of a pothole may be determined by,

- (a) performing an actual measurement; or
- (b) performing a visual estimate. O. Reg. 366/18, s. 8 (2).

(1.3) For the purposes of this section, the surface area of a pothole does not include any area that is merely depressed and not yet broken fully through the surface of the roadway. O. Reg. 366/18, s. 8 (2).

(2) A pothole is deemed to be in a state of repair if its surface area or depth is less than or equal to that set out in Table 1, 2 or 3, as appropriate. O. Reg. 239/02, s. 6 (2); O. Reg. 47/13, s. 6.

TABLE 1  
POTHOLE ON PAVED SURFACE OF ROADWAY

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

O. Reg. 239/02, s. 6, Table 1.

TABLE 2  
POTHOLES ON NON-PAVED SURFACE OF ROADWAY

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

O. Reg. 239/02, s. 6, Table 2.

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

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

O. Reg. 239/02, s. 6, Table 3.

**Shoulder drop-offs**

7. (1) If a shoulder drop-off is deeper than 8 cm, for a continuous distance of 20 metres or more, the standard is to repair the shoulder drop-off within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 366/18, s. 9 (1).

(2) A shoulder drop-off is deemed to be in a state of repair if its depth is less than 8 cm. O. Reg. 366/18, s. 9 (1).

(3) In this section,

“shoulder drop-off” means the vertical differential, where the paved surface of the roadway is higher than the surface of the shoulder, between the paved surface of the roadway and the paved or non-paved surface of the shoulder. O. Reg. 239/02, s. 7 (3).

TABLE  
SHOULDER DROP-OFFS

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

O. Reg. 366/18, s. 9 (2).

**Cracks**

8. (1) If a crack on the paved surface of a roadway is greater than 5 cm wide and 5 cm deep for a continuous distance of three metres or more, the standard is to repair the crack within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 366/18, s. 10 (1).

(2) A crack is deemed to be in a state of repair if its width or depth is less than or equal to 5 cm. O. Reg. 366/18, s. 10 (1).

TABLE  
CRACKS

Column 1 Class of Highway	Column 2 Time
1	30 days
2	30 days
3	60 days
4	180 days
5	180 days

O. Reg. 366/18, s. 10 (2).

**Debris**

9. (1) If there is debris on a roadway, the standard is to deploy resources, as soon as practicable after becoming aware of the fact, to remove the debris. O. Reg. 239/02, s. 9 (1); O. Reg. 366/18, s. 11.

(2) In this section,

“debris” means 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 a municipality, and

(b) that is reasonably likely to cause damage to a motor vehicle or to injure a person in a motor vehicle. O. Reg. 239/02, s. 9 (2); O. Reg. 47/13, s. 9.

**Luminaires**

10. (0.1) REVOKED: O. Reg. 366/18, s. 12.

(1) The standard for the frequency of inspecting all luminaires to check to see that they are functioning is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 366/18, s. 12.

(2) For conventional illumination, if three or more consecutive luminaires on the same side of a highway are not functioning, the standard is to repair the luminaires within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 366/18, s. 12.

(3) For conventional illumination and high mast illumination, if 30 per cent or more of the luminaires on any kilometre of highway are not functioning, the standard is to repair the luminaires within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 366/18, s. 12.

(4) Despite subsection (2), for high mast illumination, if all of the luminaires on consecutive poles on the same side of a highway are not functioning, the standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires. O. Reg. 366/18, s. 12.

(5) Despite subsections (1), (2) and (3), for conventional illumination and high mast illumination, if more than 50 per cent of the luminaires on any kilometre of a Class 1 highway with a speed limit of 90 kilometres per hour or more are not functioning, the standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the luminaires. O. Reg. 366/18, s. 12.

(6) Luminaires are deemed to be in a state of repair,

(a) for the purpose of subsection (2), if the number of non-functioning consecutive luminaires on the same side of a highway does not exceed two;

(b) for the purpose of subsection (3), if more than 70 per cent of luminaires on any kilometre of highway are functioning;

(c) for the purpose of subsection (4), if one or more of the luminaires on consecutive poles on the same side of a highway are functioning;

(d) for the purpose of subsection (5), if more than 50 per cent of luminaires on any kilometre of highway are functioning. O. Reg. 366/18, s. 12.

(7) In this section,

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

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

“luminaire” means a complete lighting unit consisting of,

(a) a lamp, and

(b) parts designed to distribute the light, to position or protect the lamp and to connect the lamp to the power supply. O. Reg. 239/02, s. 10 (7).

TABLE  
LUMINAIRES

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

**Signs**

**11.** (0.1) The standard for the frequency of inspecting signs of a type listed in subsection (2) to check to see that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 7 (1); O. Reg. 47/13, s. 11 (1); O. Reg. 366/18, s. 13.

(0.2) A sign that has been inspected in accordance with subsection (0.1) 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 in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the sign has ceased to meet these requirements. O. Reg. 47/13, s. 11 (2).

(1) If any sign of a type listed in subsection (2) is illegible, improperly oriented, obscured or missing, the standard is to deploy resources as soon as practicable after becoming aware of the fact to repair or replace the sign. O. Reg. 239/02, s. 11 (1); O. Reg. 23/10, s. 7 (2); O. Reg. 366/18, s. 13.

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

1. Checkerboard.
2. Curve sign with advisory speed tab.
3. Do not enter.
- 3.1 Load Restricted Bridge.
- 3.2 Low Bridge.
- 3.3 Low Bridge Ahead.
4. One Way.
5. School Zone Speed Limit.
6. Stop.
7. Stop Ahead.
8. Stop Ahead, New.
9. Traffic Signal Ahead, New.
10. Two-Way Traffic Ahead.
11. Wrong Way.
12. Yield.
13. Yield Ahead.
14. Yield Ahead, New. O. Reg. 239/02, s. 11 (2); O. Reg. 23/10, s. 7 (3).

**Regulatory or warning signs**

**12.** (1) The standard for the frequency of inspecting regulatory signs or warning signs to check to see that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 8; O. Reg. 47/13, s. 12 (1); O. Reg. 366/18, s. 13.

(1.1) A regulatory sign or warning sign that has been inspected in accordance with subsection (1) 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 in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the sign has ceased to meet these requirements. O. Reg. 47/13, s. 12 (2).

(2) 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 the Table to this section after becoming aware of the fact. O. Reg. 23/10, s. 8; O. Reg. 366/18, s. 13.

(3) In this section,

“regulatory sign” and “warning sign” have the same meanings as in the Ontario Traffic Manual, except that they do not include a sign listed in subsection 11 (2) of this Regulation. O. Reg. 23/10, s. 8.

TABLE  
REGULATORY AND WARNING SIGNS

Class of Highway	Time
1	7 days
2	14 days

3	21 days
4	30 days
5	30 days

O. Reg. 239/02, s. 12, Table.

**Traffic control signal systems**

**13.** (1) If a traffic control signal system is defective in any way described in subsection (2), the standard is to deploy resources as soon as practicable after becoming aware of the defect to repair the defect or replace the defective component of the traffic control signal system. O. Reg. 239/02, s. 13 (1); O. Reg. 366/18, s. 13.

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

1. One or more displays show conflicting signal indications.
2. The angle of a traffic control signal or pedestrian control indication has been changed in such a way that the traffic or pedestrian facing it does not have clear visibility of the information conveyed or that it conveys confusing information to traffic or pedestrians facing other directions.
3. A phase required to allow a pedestrian or vehicle to safely travel through an intersection fails to occur.
4. There are phase or cycle timing errors interfering with the ability of a pedestrian or vehicle to safely travel through an intersection.
5. There is a power failure in the traffic control signal system.
6. The traffic control signal system cabinet has been displaced from its proper position.
7. There is a failure of any of the traffic control signal support structures.
8. A signal lamp or a pedestrian control indication is not functioning.
9. Signals are flashing when flashing mode is not a part of the normal signal operation. O. Reg. 239/02, s. 13 (2).

(3) Despite subsection (1) and paragraph 8 of subsection (2), if the posted speed of all approaches to the intersection or location of the non-functioning signal lamp or pedestrian control indication is less than 80 kilometres per hour and the signal that is not functioning is a green or a pedestrian “walk” signal, the standard is to repair or replace the defective component by the end of the next business day. O. Reg. 239/02, s. 13 (3); O. Reg. 366/18, s. 13.

(4) In this section and section 14,

“cycle” means a complete sequence of traffic control indications at a location;

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

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

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

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

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

“traffic control signal system” has the same meaning as in the *Highway Traffic Act*. O. Reg. 239/02, s. 13 (4).

**Traffic control signal system sub-systems**

**14.** (1) The standard is to inspect, test and maintain the following traffic control signal system sub-systems once per calendar year, with each inspection taking place not more than 16 months from the previous inspection:

1. The display sub-system, consisting of traffic signal and pedestrian crossing heads, physical support structures and support cables.
2. The traffic control sub-system, including the traffic control signal cabinet and internal devices such as timer, detection devices and associated hardware, but excluding conflict monitors.
3. The external detection sub-system, consisting of detection sensors for all vehicles, including emergency and railway vehicles and pedestrian push- buttons. O. Reg. 239/02, s. 14 (1); O. Reg. 47/13, s. 13 (1); O. Reg. 366/18, s. 13.

(1.1) A traffic control signal system sub-system that has been inspected, tested and maintained in accordance with subsection (1) is deemed to be in a state of repair until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the traffic control signal system sub-system has ceased to be in a state of repair. O. Reg. 47/13, s. 13 (2).

(2) The standard is to inspect, test and maintain conflict monitors every five to seven months and at least twice per calendar year. O. Reg. 239/02, s. 14 (2); O. Reg. 47/13, s. 13 (3); O. Reg. 366/18, s. 13.

(2.1) A conflict monitor that has been inspected, tested and maintained in accordance with subsection (2) is deemed to be in a state of repair until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge that the conflict monitor has ceased to be in a state of repair. O. Reg. 47/13, s. 13 (4).

(3) In this section,

“conflict monitor” means a device that continually checks for conflicting signal indications and responds to a conflict by emitting a signal. O. Reg. 239/02, s. 14 (3).

**Bridge deck spalls**

**15.** (1) If a bridge deck spall exceeds both the surface area and depth set out in the Table to this section, the standard is to repair the bridge deck spall within the time set out in the Table after becoming aware of the fact. O. Reg. 239/02, s. 15 (1); O. Reg. 366/18, s. 13.

(2) A bridge deck spall is deemed to be in a state of repair if its surface area or depth is less than or equal to that set out in the Table. O. Reg. 239/02, s. 15 (2); O. Reg. 47/13, s. 14.

(3) In this section,

“bridge deck spall” means a cavity left by one or more fragments detaching from the paved surface of the roadway or shoulder of a bridge. O. Reg. 239/02, s. 15 (3).

TABLE  
BRIDGE DECK SPALLS

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

O. Reg. 239/02, s. 15, Table.

**Roadway surface discontinuities**

**16.** (1) If a surface discontinuity on a roadway, other than a surface discontinuity on a bridge deck, exceeds the height set out in the Table to this section, the standard is to repair the surface discontinuity within the time set out in the Table after becoming aware of the fact. O. Reg. 23/10, s. 9; O. Reg. 366/18, s. 13.

(1.1) 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 the Table to this section. O. Reg. 47/13, s. 15.

(2) If a surface discontinuity on a bridge deck exceeds five centimetres, the standard is to deploy resources as soon as practicable after becoming aware of the fact to repair the surface discontinuity on the bridge deck. O. Reg. 23/10, s. 9; O. Reg. 366/18, s. 13.

(2.1) 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 centimetres. O. Reg. 47/13, s. 15.

(3) In this section,

“surface discontinuity” means a vertical discontinuity creating a step formation at joints or cracks in the paved surface of the roadway, including bridge deck joints, expansion joints and approach slabs to a bridge. O. Reg. 23/10, s. 9.

TABLE  
SURFACE DISCONTINUITIES

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

O. Reg. 239/02, s. 16, Table.

**Sidewalk surface discontinuities**

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



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

(2) If a surface discontinuity on or within a sidewalk exceeds two centimetres, the standard is to treat the surface discontinuity within 14 days after acquiring actual knowledge of the fact. O. Reg. 366/18, s. 14.

(2.1) REVOKED: O. Reg. 366/18, s. 14.

(3) A surface discontinuity on or within a sidewalk is deemed to be in a state of repair if it is less than or equal to two centimetres. O. Reg. 366/18, s. 14.

(4) For the purpose of subsection (2), treating a surface discontinuity on or within a sidewalk means taking reasonable measures to protect users of the sidewalk from the discontinuity, including making permanent or temporary repairs, alerting users' attention to the discontinuity or preventing access to the area of discontinuity. O. Reg. 366/18, s. 14.

(5) In this section,

“surface discontinuity” means a vertical discontinuity creating a step formation at any joint or crack in the surface of the sidewalk or any vertical height difference between a utility appurtenance found on or within the sidewalk and the surface of the sidewalk. O. Reg. 366/18, s. 14.

#### **Encroachments, area adjacent to sidewalk**

**16.2** (1) The standard for the frequency of inspecting an area adjacent to a sidewalk to check for encroachments is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 366/18, s. 15.

(2) The area adjacent to a sidewalk that has been inspected in accordance with subsection (1) is deemed to be in a state of repair in respect of any encroachment present. O. Reg. 366/18, s. 15.

(3) For greater certainty, the area adjacent to a sidewalk begins at the outer edges of a sidewalk and ends at the lesser of the limit of the highway, the back edge of a curb if there is a curb and a maximum of 45 cm. O. Reg. 366/18, s. 15.

(4) The area adjacent to a sidewalk is deemed to be in a state of repair in respect of any encroachment present unless the encroachment is determined by a municipality to be highly unusual given its character and location or to constitute a significant hazard to pedestrians. O. Reg. 366/18, s. 15.

(5) If a municipality determines that an encroachment is highly unusual given its character and location or constitutes a significant hazard to pedestrians, the standard is to treat the encroachment within 28 days after making such a determination, and the encroachment is deemed in a state of repair for 28 days from the time of the determination by the municipality. O. Reg. 366/18, s. 15.

(6) For the purpose of subsection (4), treating an encroachment means taking reasonable measures to protect users, including making permanent or temporary repairs, alerting users' attention to the encroachment or preventing access to the area of the encroachment. O. Reg. 366/18, s. 15.

#### **Snow accumulation on sidewalks**

**16.3** (1) Subject to section 16.4, 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. O. Reg. 366/18, s. 15.

(2) 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. O. Reg. 366/18, s. 15.

(3) 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. O. Reg. 366/18, s. 15.

(4) For the purposes of this section, the depth of snow accumulation on a sidewalk may be determined in the same manner as set out in subsection 4 (4) and by the persons mentioned in subsection 4 (3) with necessary modifications. O. Reg. 366/18, s. 15.

(5) For the purposes of this section, addressing snow accumulation on a sidewalk includes,

- (a) plowing the sidewalk;
- (b) salting the sidewalk;
- (c) applying abrasive materials to the sidewalk;
- (d) applying other chemical or organic agents to the sidewalk; or
- (e) any combination of the methods described in clauses (a) to (d). O. Reg. 366/18, s. 15.

#### **Snow accumulation on sidewalks, significant weather event**

**16.4** (1) If a municipality declares a significant weather event relating to snow accumulation, the standard for addressing snow accumulation on sidewalks until the declaration of the end of the significant weather event is,

- (a) to monitor the weather in accordance with section 3.1; and
- (b) if deemed practicable by the municipality, to deploy resources to address snow accumulation on sidewalks starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 15.

(2) If the municipality complies with subsection (1), all sidewalks within the municipality are deemed to be in a state of repair with respect to any snow present until 48 hours following the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 15.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

- (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
- (b) address snow accumulation on sidewalks in accordance with section 16.3. O. Reg. 366/18, s. 15.

#### **Ice formation on sidewalks and icy sidewalks**

**16.5** (1) Subject to section 16.6, the standard for the prevention of ice formation on sidewalks is to,

- (a) monitor the weather in accordance with section 3.1 in the 24-hour period preceding an alleged formation of ice on a sidewalk; and
- (b) 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. O. Reg. 366/18, s. 15.

(2) If ice forms on a sidewalk even though the municipality meets the standard set out in subsection (1), 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. O. Reg. 366/18, s. 15.

(3) 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. O. Reg. 366/18, s. 15.

(4) For the purposes of this section, treating a sidewalk means applying materials including salt, sand or any combination of salt and sand to the sidewalk. O. Reg. 366/18, s. 15.

#### **Icy sidewalks, significant weather event**

**16.6** (1) If a municipality declares a significant weather event relating to ice, the standard for addressing ice formation or ice on sidewalks until the declaration of the end of the significant weather event is,

- (a) to monitor the weather in accordance with section 3.1; and
- (b) if deemed practicable by the municipality, to deploy resources to treat the sidewalks to prevent ice formation or improve traction, or treat the icy sidewalks, starting from the time that the municipality deems appropriate to do so. O. Reg. 366/18, s. 15.

(2) If the municipality complies with subsection (1), all sidewalks within the municipality are deemed to be in a state of repair with respect to any ice which forms or is present until 48 hours after the declaration of the end of the significant weather event by the municipality. O. Reg. 366/18, s. 15.

(3) Following the end of the weather hazard in respect of which a significant weather event was declared by a municipality under subsection (1), the municipality shall,

- (a) declare the end of the significant weather event when the municipality determines it is appropriate to do so; and
- (b) address the prevention of ice formation on sidewalks or treat icy sidewalks in accordance with section 16.5. O. Reg. 366/18, s. 15.

#### **Winter sidewalk patrol**

**16.7** (1) If it is determined by the municipality that the weather monitoring referred to in section 3.1 indicates that there is a substantial probability of snow accumulation on sidewalks in excess of 8 cm, ice formation on sidewalks or icy sidewalks, the standard for patrolling sidewalks is to patrol sidewalks that the municipality selects as representative of its sidewalks at intervals deemed necessary by the municipality. O. Reg. 366/18, s. 15.

(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 performing roadway or sidewalk maintenance activities. O. Reg. 366/18, s. 15.

**Closure of a highway**

**16.8** (1) When a municipality closes a highway or part of a highway pursuant to its powers under the Act, the highway is deemed to be in a state of repair in respect of all conditions described in this Regulation from the time of the closure until the highway is re-opened by the municipality. O. Reg. 366/18, s. 15.

(2) For the purposes of subsection (1), a highway or part of a highway is closed on the earlier of,

- (a) when a municipality passes a by-law to close the highway or part of the highway; and
- (b) when a municipality has taken such steps as it determines necessary to temporarily close the highway or part of a highway. O. Reg. 366/18, s. 15.

**Declaration of significant weather event**

**16.9.** A municipality declaring the beginning of a significant weather event or declaring the end of a significant weather event under this Regulation shall do so in one or more of the following ways:

- 1. By posting a notice on the municipality's website.
- 2. By making an announcement on a social media platform, such as Facebook or Twitter.
- 3. By sending a press release or similar communication to internet, newspaper, radio or television media.
- 4. By notification through the municipality's police service.
- 5. By any other notification method required in a by-law of the municipality. O. Reg. 366/18, s. 15.

**REVIEW OF REGULATION****Review**

**17.** (1) The Minister of Transportation shall conduct a review of this Regulation and Ontario Regulation 612/06 (Minimum Maintenance Standards for Highways in the City of Toronto) made under the *City of Toronto Act, 2006* every five years. O. Reg. 613/06, s. 2.

(2) Despite subsection (1), the first review after the completion of the review started before the end of 2007 shall be started five years after the day Ontario Regulation 23/10 is filed. O. Reg. 23/10, s. 11.

**18.** OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 239/02, s. 18.

Back to top

## Appendix I – Training Records

# Record of Training

This statement certifies that the below named individual has successfully completed the in-house Winter Operations Training program as required by the Corporation of the City of Temiskaming Shores Winter Operations Plan.

The Winter Operations Training program is comprised of the following modules:

- Equipment Circle Check
- Equipment Calibration
- Record Keeping
- Health and Safety
- Level of Service - policies, practices and procedures
- Identification of Plow Routes - including variations for year to year and issues identified along the route
- De-icing chemicals - application rates, storage and handling
- Identification of road salt vulnerable areas and the procedures to follow in those areas
- Yard and Equipment maintenance

Employee Name (Print)\_\_\_\_\_

Employee Signature\_\_\_\_\_

Date\_\_\_\_\_

Trainer Signature\_\_\_\_\_

Supervisor Signature\_\_\_\_\_



## Record of Training – Patrol Person

This certifies that \_\_\_\_\_ (employee name) has successfully completed the in-house Winter Operations - Night Patroller Training as required by the Corporation of the City of Temiskaming Shores Winter Operations Plan.

The Winter Operations - Patroller Training workshop includes the following modules:

- Weather monitoring and forecasting results including: Road Weather Information System, Value Added Meteorological Service, eutectic temperature, pavement temperature, dew point
- Winter Schedules
- Record Keeping
- Health and Safety
- Level of Service - policies, practices and procedures
- Identification of Plow Routes - including variations for year to year and issues identified along the route
- De-icing chemicals - usage, application rates, storage and handling
- Identification of road salt vulnerable areas and the procedures to follow in those areas
- Call-out procedures
- Emergency contacts
- Yard and Equipment maintenance

Employee Name (Print)\_\_\_\_\_

Employee Signature\_\_\_\_\_

Date of Training\_\_\_\_\_

Trainer Signature\_\_\_\_\_

Supervisor Signature\_\_\_\_\_

## Appendix J – Call-out Charts

## Call-out Chart “ROADS”

FORECAST	CALL-OUT RESPONSE			
STORM SEVERITY	CLASS 2	CLASS 3	CLASS 4	CLASS 5
Less than 5 cm	After storm has ended and after becoming aware that the snow accumulation is <b>greater than 5 cm</b> call-out plows and clear the snow <b>within 6 hours</b> .  No call-out of sander unless roads become slippery	No requirement for clearing of snow.  No call-out of sander unless roads become slippery	No requirement for clearing of snow.  No call-out of sander unless roads become slippery	No requirement for clearing of snow.  No call-out of sander unless roads become slippery
More than 5 cm	While storm continues, call-out plow operations as soon as practicable after becoming aware that the snow accumulation is greater than 5 cm.  After storm has ended, and after becoming aware that the snow accumulation is greater than 5 cm clear the snow within 6 hours  No call-out of sander unless roads become slippery	While storm continues, call-out plow operations as soon as practicable after becoming aware that the snow accumulation is <b>greater than 8 cm</b> .  After storm has ended, and after becoming aware that the snow accumulation is <b>greater than 8 cm</b> <b>clear the snow within 12 hours</b>  No call-out of sander unless roads become slippery.	While storm continues, call-out plow operations as soon as practicable after becoming aware that the snow accumulation is <b>greater than 8 cm</b> .  After storm has ended, and after becoming aware that the snow accumulation is <b>greater than 8 cm</b> <b>clear the snow within 16 hours</b>  No call-out of sander unless roads become slippery	While storm continues, call-out plow operations as soon as practicable after becoming aware that the snow accumulation is <b>greater than 10 cm</b> .  After storm has ended, and after becoming aware that the snow accumulation is <b>greater than 10 cm</b> <b>clear the snow within 24 hours</b>  No call-out of sander unless roads become slippery
Sleet and freezing rain	Call-out sander if road conditions permit	Call-out sander if road conditions permit	Call-out sander if road conditions permit	Call-out sander if road conditions permit

It is understood that conditions may occur which temporarily prevent achieving the level of service specified above.



## Call-out Chart “SIDEWALKS”

FORECAST	CALL-OUT RESPONSE	
Storm Severity	Priority 1 – Downtown Areas	Priority 2 – Side Streets
Up to 10 cm	<p>After storm has ended, and after becoming aware that the snow accumulation is <b>greater than 10 cm call-out plows and clear the snow within 24 hours</b></p> <p>No call-out of sander unless sidewalks become slippery</p>	<p>No requirement for snow clearing operations.</p> <p>Priority 2 sidewalks will not be serviced until the completion of Priority 1 sidewalks have met their service level and may also be delayed by other winter control roads requirements.</p> <p>No call-out of sander unless sidewalks become slippery</p>
More than 10 cm	<p>While storm continues, call-out plow operations as soon as practicable after becoming aware that the snow accumulation is <b>greater than 10 cm.</b></p> <p>After storm has ended, and after becoming aware that the snow accumulation is <b>greater than 10 cm clear the snow within 24 hours</b></p> <p>No call-out of sander unless sidewalks become slippery</p>	<p>While storm continues, call-out plow operations as soon as practicable after becoming aware that the snow accumulation is <b>greater than 15 cm.</b></p> <p>Priority 2 sidewalks will not be serviced until the completion of Priority 1 sidewalks have met their service level and may also be delayed by other winter control roads requirements.</p> <p>No call-out of sander unless sidewalks become slippery</p>
Sleet and freezing rain	Call-out sander if sidewalk conditions permit	Call-out sander if sidewalk conditions permit

It is understood that conditions may occur which temporarily prevent achieving the level of service specified above.

## Call-out Chart “SNOW REMOVAL”

FORECAST	CALL-OUT RESPONSE	
Snow Accumulation	Priority 1 - Downtown areas	Priority 2 - Side streets
Up to <b>60 cm</b> snow bank	No requirement for snow removal operations	No requirement for snow removal operations
Up to <b>120 cm</b> snow bank	<p>After storm has ended and the city's plowing and sanding requirements have been satisfied, and after becoming aware that the snow bank accumulation is greater than <b>60 cm</b>, removal operations shall begin.</p> <p>The winter control plan indicates a downtown street removal route numbered from 1 to 21 which suggests an importance level and will be used as a guide to operations.</p> <p>Due to traffic and pedestrian congestion, this work may be required to be completed during the night shift. Deviation from this will be approved by the Director or his designate.</p> <p>Snow removal in downtown areas will have priority over side streets.</p> <p>It is understood that conditions may occur which temporarily prevent achieving the level of service specified.</p>	<p>After storm has ended and the city's plowing and sanding requirements have been satisfied, and after becoming aware that the snow bank accumulation is greater than <b>120 cm</b>, removal operations shall begin.</p> <p>Intersections will receive service when it is deemed by the road supervisor to pose a hazard to vehicular traffic.</p>
Sleet and freezing rain	Call-out sander if conditions permit	Call-out sander if conditions permit

It is understood that conditions may occur which temporarily prevent achieving the level of service specified above.

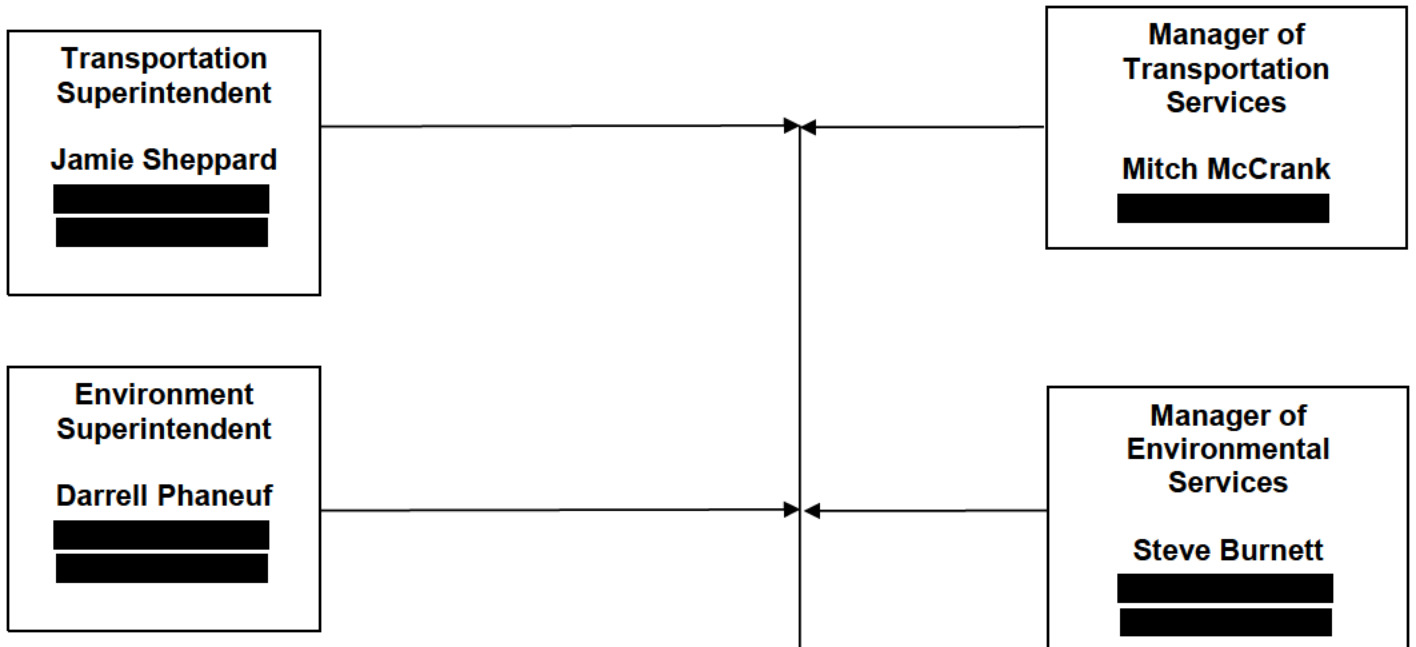
**NOTE:** One 8 hour night shift removes +/- 2,700 cubic meters of snow

## Appendix K – PW Notice Charts

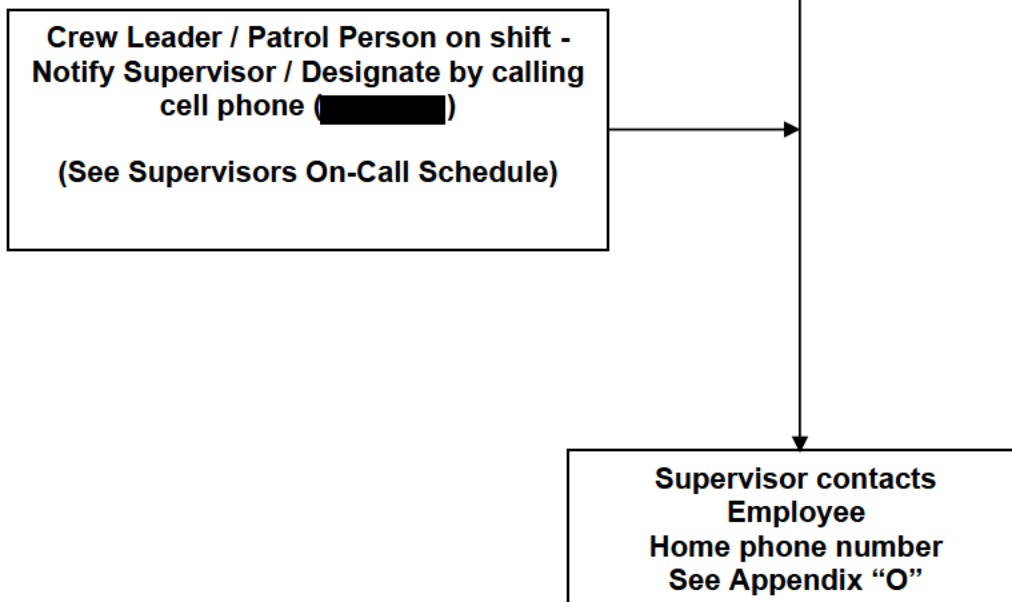
# Public Works Department Operations Division

## Winter Control Notification FLOW CHART

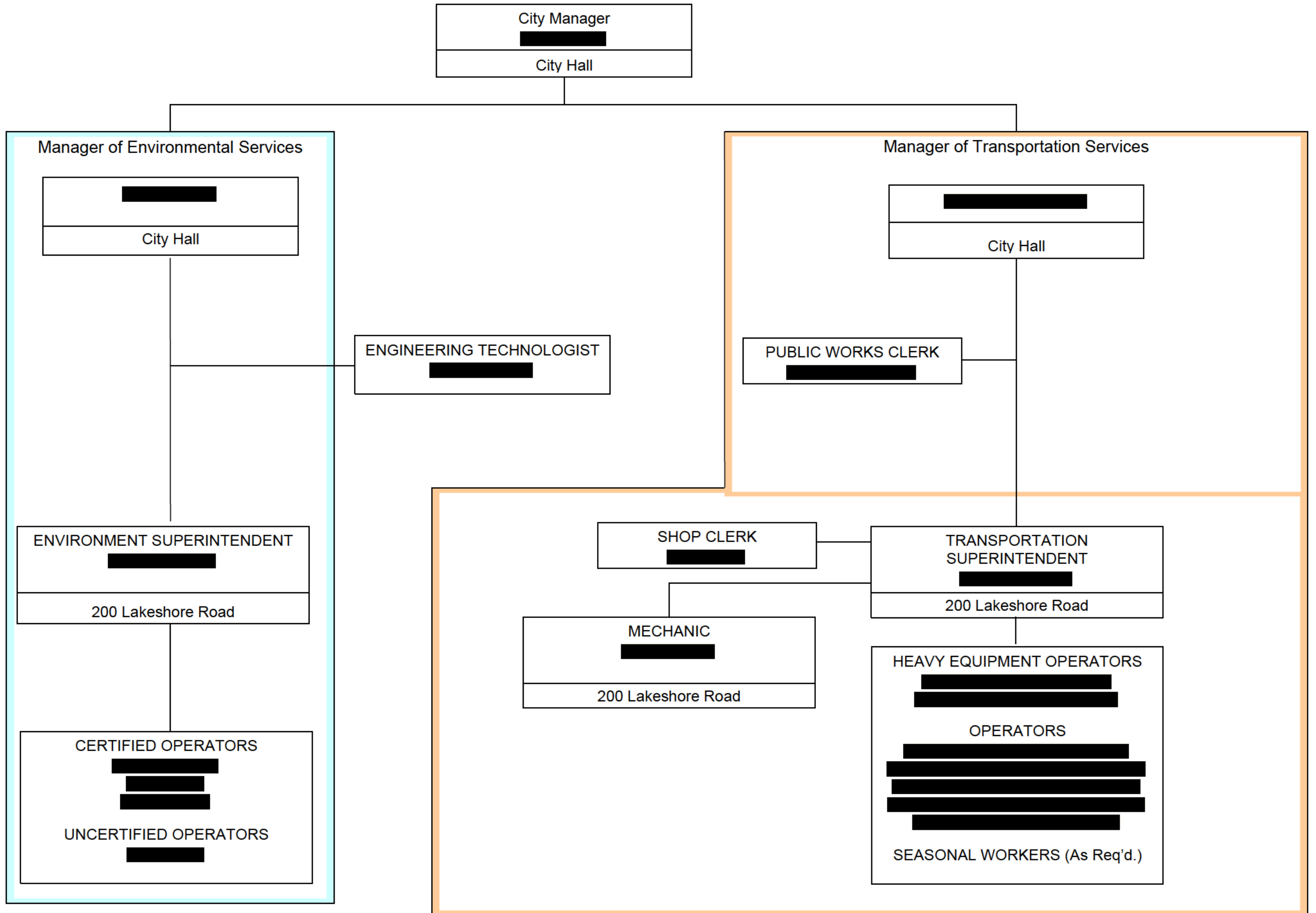
### Monday - Friday



### Afternoon Shifts, Evening Shifts, Saturday – Sunday – Statutory Holiday



## Appendix L – PW Org. Chart



## Appendix M – Shift Partners

# City of Temiskaming Shores

2023 - 24 Winter Operations Plan	
Shift Partners	
Crew One	
Crew Two	
Crew Three	
Crew Four	
Dayshift	Afternoon Patrol -



## Appendix N – Shift Schedule

**November**

		30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
22:00 - 6:30								2	2	2	2	2	2	1A	1A	3	3	3	3	3	2A	2A	4	4	4	4	4	3A	3A	1	1	1	1	1
6:30 - 15:00		1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4			1,3,4	1,3,4	1,3,4	1,3,4	1,3,4	1B	1B	1AD,2,4	1,2,4	1,2,4	1,2,4	1,2,4	2B	2B	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	3B	3B	2,3,4	2,3,4	2,3,4	2,3,4	
15:00 - 23:30								AP	AP	AP	AP	AP	AP	1C	1C	AP	AP	AP	AP	AP	2C	2C	AP	AP	AP	AP	AP	3C	3C	AP	AP	AP	AP	

**December**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
22:00 - 6:30		4A	4A	2	2	2	2	2	1D	1D	3	3	3	3	3	2D	2D	4	4	4	4	4	4	3D	3D		1	1	1	4D	4D	
6:30 - 15:00		2,3,4	4B	4B	1,3,4	1,3,4	1,3,4	1,3,4	1,3,4	1C	1C	1,2,4	1,2,4	1,2,4	1,2,4	1,2,4	2C	2C	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	3C	AP*	2, 4	2,3,4	2,3,4	3	4C	4C	
15:00 - 23:30		AP	4C	4C	AP	AP	AP	AP	AP	1E	1E	AP	AP	AP	AP	2E	2E	AP	AP	AP	AP	AP	AP	3E		AP	AP	AP	3E	4E	AP**	

**January**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
22:00 - 6:30		2	2	2	2	1B	1B	3	3	3	3	3	2B	2B	4	4	4	4	4	3B	3B	1	1	1	1	1	4B	4B	2	2	2	2
6:30 - 15:00		1,3,4	1,3,4	1,3,4	1,3,4	1E	1E	1,2,4	1,2,4	1,2,4	1,2,4	1,2,4	2E	2E	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	3E	3E	2,3,4	2,3,4	2,3,4	2,3,4	2,3,4	4E	4E	1,3,4	1,3,4	1,3,4	
15:00 - 23:30		AP	AP	AP	AP	1D	1D	AP	AP	AP	AP	AP	2D	2D	AP	AP	AP	AP	AP	3D	3D	AP	AP	AP	AP	AP	4D	4D	AP	AP	AP	

**February**

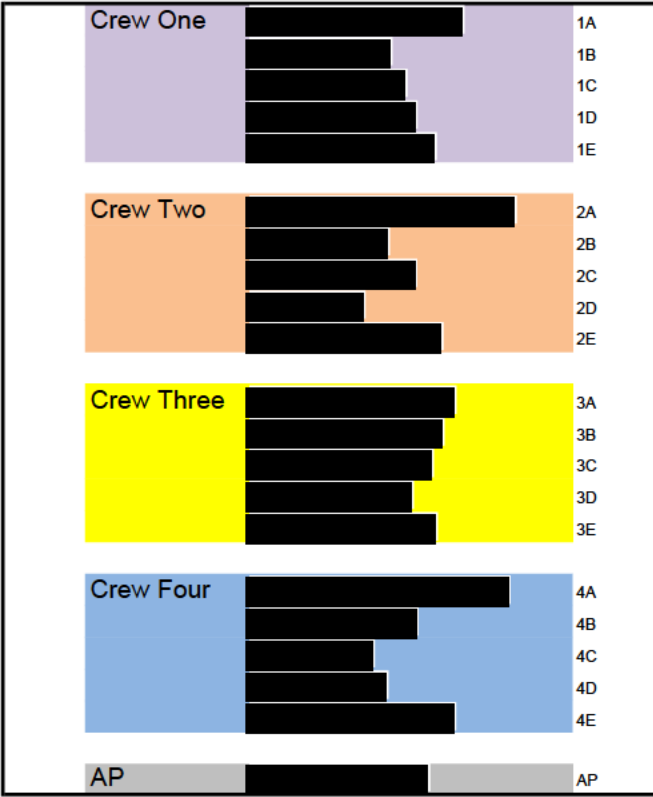
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
22:00 - 6:30		2	1C	1C	3	3	3	3	3	2C	2C	4	4	4	4	4	3C	3C		1	1	1	1	4C	4C	2	2	2	2	2
6:30 - 15:00		1,3,4	1,3,4	1A	1A	1,2,4	1,2,4	1,2,4	1,2,4	1,2,4	2A	2A	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3C	3A	3A		2,3,4	2,3,4	2,3,4	2,3,4	4A	4A	1,3,4	1,3,4	1,3,4	1,3,4
15:00 - 23:30		AP	AP	1B	1B	AP	AP	AP	AP	2B	2B	AP	AP	AP	AP	AP	3B	3B		AP	AP	AP	AP	4B	4B	AP	AP	AP	AP	AP

**March**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
22:00 - 6:30		1E	1E	3	3	3	3	3	2E	2E	4	4	4	4	4	3E	3E		1	1	1	1	1	4E	4E	2	2	2	2	1D	1D	
6:30 - 15:00		1,3,4	1D	1D	1,2,4	1,2,4	1,2,4	1,2,4	1,2,4	2D	2D	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	3D	3D		2,3,4	2,3,4	2,3,4	2,3,4	4D	4D	1,3,4	1,3,4	1,3,4	1,3,4	1C	1C	
15:00 - 23:30		AP	1A	1A	AP	AP	AP	AP	AP	2A	2A	AP	AP	AP	AP	AP	3A	3A		AP	AP	AP	AP	AP	4A	4A	AP	AP	AP	AP	1E	1E

**April**

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
22:00 - 6:30		3	3	3	3	2D	2D																								
6:30 - 15:00		1,2,4	1,2,4	1,2,4	1,2,4	2C	2C	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4																			
15:00 - 23:30		AP	AP	AP	AP	2E	2E																								



**\*Christmas**

3D works night shift Dec. 23. @ 630 am 3D gives on-call phone to AP  
 AP carries phone and patrols, as required, 24 afternoon, 25, and 26  
 AP gives phone to Crew 2/4 coming on day shift on the 27

**\*\*New Year's**

4C works day shift New years eve. @3pm he gives the phone to AP  
 AP carries phone and patrols, as required, 31 afternoon and Jan 1 day  
 AP gives phone to Crews coming in on day shift on the 2nd

**Family Day**

3B works Afternoon Sunday Feb 18th.  
 Ap carries phone and patrols as required 19  
 Gives phone to Crew 1 coming in on nights

**Easter**

AP Holds Phone March 28th after their AP shift  
 AP carries phone and patrols, as required, March 29 until 1D comes in on Nights.  
 1E holds phone after their Sunday shift until Monday nightshift comes in.

Appendix O – Staff Contact  
Information (Private & Confidential  
Information to be available through  
Clerks office)

## Appendix P – Telephone System

City of Temiskaming Shores

Telephone System - Winter Operations 2023 - 2024						
Item	Day	Time	Action		Comments	
			Roads	W/S		
1	First point of Contact is 705-647-6220 if busy or after hours will prompt to Press "3" or transfer automatically to 705-648-5575					
2	Sunday 11:01 p.m. to Friday 3:00 p.m.	6:31 am to 3:00 pm	705-647-6220	705-648-3240	When main line is busy General voice mail Leave a message or press #3 should direct to 648-5575	705-647-6220 with a message
		3:01 pm to 11:30 pm	705-648-5575		General message system Landfill hours, roads, water to On call "person" Phone voice mails Leave a message or press #3 should direct to 648-5575	message in phone
		11:01 pm to 7:30 am	705-648-5575		General message system to On Duty "Night" phone Phone voice mail Leave a message or press #3 should direct to 648-5575	message in phone
3	Friday 3:01 p.m. to Sunday 11:00 p.m.	3:01 pm to 11:30 pm	705-648-5575		General message system to On Duty "Day" phone Phone voice mail Leave a message or press #3 should direct to 648-5575	message in phone
		11:00 pm to 7:30 am	705-648-5575		General message system to On Duty "Night" phone Phone voice mail Leave a message or press #3 should direct to 648-5575	message in phone
		7:00 am to 3:30 pm	705-648-5575		General message system to On Duty "Day" phone Phone voice mail Leave a message or press #3 should direct to 648-5575	message in phone
4	Secondary Contact	24 Hours per day	[REDACTED]		Manager of Environmental Services Manager of Transportation Services Leave a message or text if no response	