



**TOWNSHIP OF EDWARDSBURGH CARDINAL
INFORMATION ITEM**

Committee: Committee of the Whole – Administration and Operations

Date: November 11, 2024

Department: Public Works

Topic: Winter Maintenance Operations Report

Background: The Winter Maintenance Level of Service Policy, By-Law 2019-65 sets a procedural framework for ensuring that the Township continuously improves on the safe and sustainable delivery of winter maintenance services. At the same time, any modifications to municipal winter maintenance activities must ensure that roadway safety is not compromised.

The Public Works Department winter season period is between November 1st and April 15th of each calendar year. During this period, staff maintain Township resources at readiness to respond to a winter event, recognizing that, should adverse conditions occur regardless of the time of year, resources will be deployed as necessary.

The Public Works Department is responsible for providing the Winter Maintenance Service throughout the Township. Some of the following components form the service delivery: developing a salt management plan, establishing proper treatment rates for roadways, design of plow and sidewalk routes, ensuring availability of resources (owned or hired equipment, materials), ensuring proper up to date weather forecasts services and condition monitoring systems as necessary, provide information in a timely manner when asked and always reviewing to find best practices.

During Winter Weather Events, it is recognized that operational decisions will need to be made based on local conditions depending upon the extent and severity of a winter storm event, and as a result, there may need to be some reasonable deviations from the Level of Service Policy.

At a minimum, the Township will adhere to the Minimum Maintenance Standards for Municipal Highways as prescribed by the Ontario Ministry of Transportation under *Regulation 239/02, as amended* from time to time. All other regulatory requirements will also be met, including but not limited to those set out in the *Occupational Health and Safety Act, as amended*, and the *Highway Traffic Act, as amended*.

Our road network is comprised of local roads which carry local traffic to United Counties of Leeds and Grenville roads network. These roads fall under class 4, 5, 6 roads as

defined in the Ontario Regulation 239/02 (Minimum Maintenance Standards) Classification of Highways Table. (See attached Policy)

The purpose of Winter Operations is to reduce the hazards of snow covered and icy road conditions to motorists, to maintain public access to all community and industrial facilities, to ensure an accessible road system for the handling of emergencies by fire, ambulance and police services, to maintain safe, passable school bus routes, and to provide safe and passable sidewalks for pedestrians in areas designated for winter maintenance.

PROCEDURES – Roadways and Sidewalks

Plowing Operations

Plowing operations will begin as early as 0400hrs and continue if needed until 1800hrs. No plowing operations will be conducted between 1800hrs and 0400hrs, except for public safety concerns or in extreme conditions. Salt/Sanding operations will begin as soon as practicable, after becoming aware that road conditions have become icy and will continue until slippery conditions are relieved. Plowing operations will not exceed 13 hours a day as per the Highway Traffic Act, Reg.4/93. Plowing operations are broken down into 7 Plow Routes and 2 Sidewalk Plow Routes. The combination plow/sander units complete the assigned route on an average of 5.5 hours. All units are equipped with Automatic Vehicle Location (AVL) equipment providing the following information:

- Vehicle Identification
- Location
- Time
- Plow up/down
- Wing Up/down
- Application on /off
- Application rate

Snow Accumulation

Roadways: Winter maintenance, consisting of plowing and salting/sanding will begin within 8 hours after the accumulation of 8cm of snow.

Paved Road Surfaces: Road salt will be applied on paved roads within urban areas of Cardinal, Johnstown, and New Wexford. Sand/salt mixture material will be applied as required on rural roads and in Spencerville. This rate shall increase based on weather conditions and road temperatures.

Gravel Road Surfaces: When the gravel has not been completely frozen, snow accumulations less than 10cm will not be plowed to protect the road surface. Sand/Salt mixture will be applied to surface during Winter Operations once the threshold has been met.

Sidewalk Surfaces: Resources to clear snow from sidewalks shall be deployed within 48 hours after the snow accumulation has ended to reduce the snow depth to a maximum of 8cm. Salt material will be applied as required to improve traction.

Ice Formation

Paved Road Surfaces: Salt/sand application will begin within 8 hours as practicable after becoming aware that the roadway has become icy and will continue as practicable until conditions are safe.

Gravel Road Surfaces: Sand/salt application will begin within 8 hours as practicable after becoming aware that the roadway has become icy and will continue as practicable until conditions are safe. Ice blading (grader) can be used after the weather event has completed and when staff members become available.

Sidewalks Surfaces: Salt application operations will begin as soon as practicable to improve traction within 48 hours after becoming aware that the sidewalk has become icy and will continue as practicable until conditions are deemed safe.

Winter Maintenance Activities are operated from two patrol garages in Cardinal and Pittston. Cardinal garage houses and deploys three combination plow/spreader units, sidewalk unit, front end loader, and backhoe for operations. Pittston Garage houses and deploys 4 combination plow/spreader units, two graders, front end loader for operations. An additional sidewalk unit is stored at the United Counties of Leeds and Grenville Patrol Garage on County Rd #21 for the winter season for sidewalk winter operations in Spencerville. The Township deploys units to perform winter maintenance activities on assigned routes, Truck#20-08 – Parking Lots, Truck #5 – Route#2 (Cardinal), Truck#7 – Route#7 (Rural Route, New Wexford, Johnstown). H3 – Sidewalks in Cardinal, Truck#19-04 (Rural Route), Truck#24-05 (Rural Route, Spencerville), Truck# 20-03 (Rural Route) Truck #6 (Rural Route) H1 – Sidewalks in Spencerville.

If breakdowns occur during winter operations, combination spreader/plow routes are doubled up to complete routes in a timely manner. Sidewalk units would be dispatched to complete sidewalk routes in Cardinal or Spencerville to achieve minimum maintenance standards during this period.

Snow Removal Operations

Snow removal on roadways and parking lots will be carried out when required, by the Public Works Department. Depending on the area and number of locations to be cleared, a decision will be made to implement a specific operation to carry out the removal process. The Manager of Public Works will determine if removal is required, and if so, which type of removal process will be utilized.

Snowbanks are removed or reduced in size when they begin to restrict sightlines, travel widths, or pedestrian and vehicular traffic. Residents are responsible for snowbanks along their private driveway.

Snowbank removal operations come secondary to standard snow clearing operations (i.e., when there is a storm, and teams must plow and/or treat roads and sidewalks).



Manager of Public Works



Director of Operations