# **Corporate Policy**

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Section:	Engineering, Operations, and Public Works	11
Sub-Section:	Streets and Roads	5400
Title:	Winter Road Maintenance	2022-01

# **Related Policies**

Number	Title

# **Approvals**

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Winter Road Maintenance

# **Policy**

The City of Port Moody wishes to provide for the safe passage of vehicles and pedestrians within the City by ensuring that winter road maintenance is carried out effectively on roads and pedestrian areas. This policy balances public safety, resource availability, and operating budgets to provide an equitable level of service across the City. This policy applies to roads and pedestrian areas but does not include areas subject to park maintenance or at City facilities.

The City has established a winter road maintenance classification system that assigns priorities to roads and pedestrian areas which are the responsibility of the City to maintain. These priorities for winter road maintenance are:

#### Roads

## Priority 1

Major arterial routes that form transportation connections that facilitate movement across the City, those that connect with regional transportation corridors, and routes which provide access to schools are included in this classification. Priority 1 routes must be maintained to a passable condition to allow for emergency vehicles, buses, and vehicle traffic to move across the City efficiently.

# Priority 2

This classification includes collector and local connector routes that connect to multiple Priority 3 routes and are typically greater than 200 metres in length. Access routes to critical City water and sewer infrastructure are also included in this classification. Some routes may be included in this classification on the basis of operational considerations.

#### Priority 3

Other neighbourhood local roads and fire lanes are considered to be Priority 3.

#### Contracted Routes

Winter road maintenance on Barnet Highway and St. Johns Street is completed by a contractor. The contractor strives to keep this route passable at all times, but the timing and frequency of service for this route may differ from other roads maintained by the City.

# Pedestrian Areas

#### Priority 1

This classification includes pedestrian areas within 800 metres of the Inlet Centre and Moody Centre Evergreen Line stations. Some pedestrian areas may be included in the classification on the basis of operational considerations. These areas must be maintained to allow access to active transportation networks.

# Priority 2

This classification includes pedestrian areas greater than 800 metres from Evergreen Line stations.

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Priority Pedestrian Routes – Sidewalk and Boulevard Maintenance Bylaw, No.2426 Areas adjacent to critical transportation infrastructure which are fronted by private properties are subject to enhanced maintenance requirements. These routes must be cleared by adjacent property owners by 10am each morning. Fines may be imposed on properties who fail to meet this standard, and City staff may conduct plowing or salting of these pedestrian areas at the cost of the property owner should they fail to comply.

# **Definitions**

Anti-Icing	An activity involving the direct application of liquid or solid materials to bare or plowed pavement carried out in advance of conditions conducive to snowfall or the formation of ice to prevent the bonding of snow or ice to the road surface.
Normal Business Hours	Normal business hours for Operations are 7:00am until 3:30pm, Monday to Friday. Any activities outside of these times and on statutory holidays are considered to be non-standard business hours.
Brine	Saltwater solution with approximately 23.7% salt content applied to pavement surfaces to prohibit formation of ice.
Bare Surface Condition	Pavement surfaces free of snow, slush, or ice.
Compacted Surface Condition	Snow, slush, or ice accumulated on roads and pedestrian areas that is compressed to a solid mass.
Departmental Operations Centre (DOC)	Central communication, command, and control point for a department, division, or business unit. Staff in this node track field operations, process and relay information, and establish internal and external lines of communication in support of achieving objectives set by leadership of the department, division, or business unit.
Local Road Network (LRN)	All local roads and pedestrian areas not part of the Major Road Network. These roads are a mix of Priority 1, 2, and 3 routes for maintenance.
Major Road Network (MRN)	Roads considered to be part of the regional transportation system. The City receives funding for maintenance of these regional serving roads, including:  • Barnet Highway;  • St. Johns Street east of Barnet Highway;  • Clarke Road;  • Clarke Street east of Barnet Highway;  • Moody Street from St. Johns Street to Clarke Street;  • Murray Street east of Moody Street;  • Guildford Way;  • loco Road east of 1st Avenue; and  • First Avenue north of loco Road and Bedwell Bay Road.  These roads fall into the Priority 1 category.
Road Snow	Snow or slush that accumulates on asphalt or concrete surfaces on roads or pedestrian areas.
Passable Condition	Roads are passable for vehicles with proper winter tires that are driven according to conditions (not necessarily the speed limit and in consideration of slippery roads). Pedestrian areas are passable on foot or by other means using appropriate

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	footwear and equipment. This does not mean bare surface condition and some snow or ice may be present on the surface of the road or pedestrian area.
Pedestrian Areas	Sidewalks, crosswalks, medians, letdowns, multi-use paths, bus stops and pedestrian overpasses. Off-street cycling infrastructure is also included in this category. Unpaved surfaces are not considered pedestrian areas for the purposes of winter road maintenance.
Plow	Front-mounted or underbody plow mounted on trucks or other equipment for snow response.
Salt	Coarse salt or other chemicals applied to asphalt and concrete surfaces to melt existing ice or compacted surface condition, and prevent the formation of new ice.
Winter Road Maintenance	Application of anti-icing materials, and removal of ice, slush, and snow from roads and pedestrian areas.
Roads Priorities	The road priority classification system provides a defined framework for maintenance of City roads. In the case of winter road maintenance, these priorities apply to anti-icing as well as snow plowing.
Driving Lane Width	The width of one lane according to the design of the corresponding road. The typical width of a lane is 3.0m.
Snow Plowing	The removal of snow from roads or pedestrian areas, typically by plowing or shovelling. This does not refer to the removal and disposal of snow at off-site locations.
Windrow	Rows or piles of snow resulting from the passage of a snow plow that is conducting winter road maintenance.

# **Procedures**

#### Roads

- The General Manager of Engineering and Operations or their designate(s) will direct winter road maintenance activities, including plowing and anti-icing, when road snow accumulations exceed 5cm.
- The General Manager of Engineering and Operations or their designate(s) will monitor
  the weather forecast and schedule resources in order to provide ongoing anti-icing and
  plowing on roads in accordance with the levels of service established in this policy.
  Monitoring activities may include patrols and the use of weather stations and remote
  sensing technology.
- Snow Plowing is conducted according to the priority classification of each road. The City may, at its sole discretion, adjust these priorities based on operational needs, emergencies, weather conditions, solid waste collection, or other factors deemed appropriate by the General Manager of Engineering and Operations or their designates(s).
- 4. Snow Plowing shall be done in a manner to achieve at least one driving lane width in each direction on all Priority 1 and Priority 2 roads, and at least one driving lane width for travel in both directions on Priority 3 roads. In some cases, parked vehicles or other

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- obstructions can limit winter road maintenance activities resulting in areas where only one driving lane width or less can be achieved.
- Staff will initially plow Priority 1 Roads with a goal to maintain Priority 1 roads to a passable condition. These routes are maintained at all times, including outside of normal business hours.
- 6. Priority 2 roads will be plowed to a passable condition once Priority 1 Roads can be maintained to a passable condition. If weather conditions and operational resources allow, Priority 2 roads will be plowed concurrently with Priority 1 roads. These routes are to be maintained at all times when feasible, including outside of normal business hours.
- 7. Priority 3 roads will be plowed to a passable condition once Priority 1 and 2 roads can be maintained to a passable condition. Priority 3 roads may be plowed in advance of some Priority 1 and 2 roads in order to facilitate access for operational needs, emergencies, weather conditions, solid waste pickup or other factors as deemed appropriate by the General Manager of Engineering and Operations or their designate(s). These routes are not serviced outside of normal business hours, unless necessitated by the factors noted above.
- 8. Additional plowing and anti-icing may be required after roads are initially plowed to a passable condition. These additional activities, such as plowing windrows, may take place outside of normal business hours on Priority 1 and 2 roads. Additional plowing and anti-icing on Priority 3 routes will not be undertaken outside of normal business hours unless deemed appropriate by the General Manager of Engineering and Operations or their designates(s).
- 9. In the event that available resources are not adequate to meet demand, unsafe or impassable roads may be temporarily closed by the General Manager of Engineering and Operations or their designate(s) until the City has the resources available to conduct winter road maintenance on these roads. Signs indicating that roads are closed will be posted at locations deemed appropriate by the General Manager of Engineering and Operations or their designate(s).
- 10. Road priorities apply to both snow plowing and anti-icing. Anti-icing may occur in conjunction with other winter road maintenance activities or may be done independently.
- 11. Anti-icing will be initiated by the General Manager of Engineering and Operations or their designate(s) when the temperature and ambient conditions are conducive to the formation of ice on roads.
- 12. In accordance with the Street, Traffic, and Public Places Bylaw No. 1528, the City may establish no-parking zones on select roads during winter conditions in order to allow for safe, effective snow plowing and anti-icing operations.

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## Pedestrian Areas

- 1. The General Manager of Engineering and Operations or their designates will direct winter road maintenance activities, including plowing and anti-icing, when pedestrian area snow accumulations exceed 5cm.
- The General Manager of Engineering and Operations or their designate(s) will monitor
  the weather forecast and schedule resources in order to provide ongoing anti-icing and
  plowing on pedestrian areas in accordance with the levels of service established in this
  policy. Monitoring activities may include patrols and the use of weather stations and
  remote sensing technology.
- Snow plowing and anti-icing on pedestrian areas is the responsibility of the resident or business of which the pedestrian area fronts according to the Sidewalk and Boulevard Maintenance Bylaw No. 2426.
- 4. Snow plowing and anti-icing on pedestrian areas will be conducted concurrently with snow plowing and anti-icing on roads. In some cases, snow plowing and anti-icing on pedestrian areas may be deferred until roads are completed for reasons of operational efficiency and effectiveness.
- 5. The City will prioritize snow plowing and anti-icing on roads over snow plowing and antiicing on pedestrian areas if suitable resources are not available to address both priorities.
- 6. Snow plowing shall be done in a manner to achieve at least a 1.5m wide path for pedestrian travel to a passable condition. At bus stops, an area measuring 1.5m by 1.5m will be cleared to a passable condition.
- Priority 1 routes will be cleared to at least a passable condition. These routes are to be maintained at all times when feasible, including during times outside of normal business hours.
- 8. Priority 2 areas will be plowed to a passable condition. These areas are to be completed following the cessation of snowfall, during normal business hours. These areas may be completed outside of normal business hours as deemed appropriate by the General Manager of Engineering and Operations or their designate.
- The General Manager of Engineering and Operations or their designates will monitor the
  weather forecast and schedule resources in order to provide ongoing snow plowing and
  anti-icing for pedestrian areas in accordance with the levels of service established in this
  policy.
- 10. Anti-icing will be initiated by the General Manager of Engineering and Operations or their designate(s) when the temperature and ambient conditions are conducive to the formation of ice on pedestrian areas.

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11. In the event that available resources are not adequate to meet demand, unsafe or impassable pedestrian areas may be temporarily closed by the General Manager of Engineering and Operations or their designate(s) until the City has the resources available to conduct winter road maintenance on pedestrian areas.

## **Administration**

- 1. The General Manager of Engineering and Operations or their designates will prepare and maintain written or electronic documentation including:
  - 1. Complaints made by the public and the City's response to each complaint;
  - 2. Records identifying the time, location, equipment, and staff member for snow plowing, anti-icing, and other winter road maintenance activities;
  - 3. Weather forecasts.
- 2. During storm events, additional staff resources may be assigned to the Operations Customer Service function to allow for greater customer service and administrative capacity, including during times outside of normal business hours. This may include establishment of a Departmental Operations Centre.

# Monitoring/Authority

The General Manager of Engineering and Operations or their designate(s) are responsible for monitoring winter road maintenance activities, supplies, customer service, administration, staff and equipment resources, and communications.

The General Manager of Engineering and Operations or their designate(s) will maintain an inventory of roads and pedestrian areas, to be used for winter road maintenance operations and public communications, that shall be updated on an ongoing basis in accordance with this policy.