



Policy No:

148.20

Policy Title:

Snow and Ice Maintenance

Department:

IPS – Transportation services

Council Approval:

November 24th, 2020 (Current)

Reviewed:

November 24 2015 (Last)

Revised:

November 24th, 2020

Supersedes:

Policy/Bylaw: 119/15

RES. 329/20

Date: November 24th, 2020

1. Policy Statement

1.1 The Town of Blackfalds is committed to undertaking sustainability measures and practices to ensure a healthy environment for current and future generations. Council will integrate environmental stewardship strategies into Town operations, organizational culture, development conditions, and policies and procedures where applicable. To conserve, protect and enhance the environment in balance with the social and economic needs of this service delivery.

2. Reason for Policy

- 2.1 This Policy will assist the Town in following environmental mandates relating to winter maintenance for the protection, conservation, and enhancement of the environment through this policy.
- 2.2 Further, this Policy along with associated Bylaws, will provide the Town, the development industry, and all other stakeholders with clear direction for winter maintenance undertaken by the Town.
- 2.3 Further, the Town has committed annual budgetary funds to grow our community's environmental sustainability through the actions outlined under the Town's Environmental Stewardship Strategy (ESS), with a key focus area on the Town's Infrastructure as it relates to winter maintenance.
- 2.4 Further, this Policy will guide Town forces towards conservation of resources while providing a priority-based strategy to conserve, protect, and enhance the environment in balance with social and economic needs of this service.
- 2.5 Lastly this Policy will be supported through a focused communication plan and educational programing relating to the surface winter maintenance procedures below.



3. Related Information

- 3.1 Schedule "A" 2020 Snow Priority Map
- 3.2 Traffic Bylaw 1147/12 (as amended by 1162/13)
- 3.3 Solid Waste Management Bylaw 1167/13
- 3.4 Utilities Bylaw 1250.20
- 3.5 Community Standards Bylaw 1220/18
- 3.6 Communication Policy Draft

4. Definitions

4.1	Alberta Road Builders Rates	Equipment rental rates as established by the Alberta Roadbuilders & Heavy Construction Association from time to time.
4.2	As Required	A statement which means that the level of service is not set at a predetermined number of activity occurrences per season of year.
4.3	Chief Administrative Officer	Chief Administrator Officer (CAO) as appointed by the Town of Blackfalds Council.
4.4	Director	The Director of Infrastructure and Property Services for the Town of Blackfalds.
4.5	Difficult Driving	Difficulty of driving will be determined by the Director or his designate.
4.6	Drifting	Depositing of windblown snow on roadways, service lanes, sidewalks or pathways which makes the passage of vehicles and/or pedestrian traffic difficult or impossible.
4.7	Emergency Plowing	Snow removal equipment shall be mobilized to open a single pathway in the centre of all roadways (to be done on a priority basis).
4.8	Facility Parking Lots	Parking lots adjacent to the facilities they service as shown on the map.
4.9	Level of Service (LOS)	Generally based on the completion of priority routes 1, 2, 3



	and 7 within a period of one week upon snowfall/inclement weather ceasing. Priority 4, 5 and 6 routes would be done only after 1-3 routes are completed or under an emergency plow. Usually at a minimum of once per winter season.
4.10 Surface	Either a roadway, a parking lot, concrete sidewalk, or asphalt trail surface identified to be the responsibility of the Town to maintain under this policy.
4.11 Town Sidewalk	A concrete or asphalt surface which is not adjacent to a home or business and is the responsibility of the Town of maintain under this policy.
4.12 Trail	A Town owned asphalt path or trail which is the responsibility of the Town to maintain under this policy.
4.13 Priority Levels	Hierarchy of the Town's surface network for the purposes of prioritizing snow and ice control maintenance activities.
4.14 Park Parking lot	Parking lots adjacent to park areas they service as shown on the map.
4.15 Roadway	The physical driving surface of the town's transportation corridors from edge of gravel/asphalt/concrete to the edge of gravel/ asphalt/concrete. Excluding trails, sidewalks, and concrete aprons.
4.16 Rutting	The formation of troughs and ridges in excess of 10cm depth in compacted snow or ice on the roadways.
4.17 Sanding	The application of a sand/chips/salt/calcium or other mixture to a roadway surface to improve traction, reduce skidding or reduce ice formation.
4.18 Snow Plowing	The grading of accumulated snow from roadway surfaces to the middle or sides of a roadway.
4.19 Snow Removal	The loading/blowing and hauling of snow on the roadway surfaces to a temporary snow disposal site.
4.20 Town Facilities	Town owned facilities including Abbey Centre, Community Centre, Civic Centre (Library), Blackfalds Eagle Builders Centre(Arena), RCMP/Protective Services Building, Wadey Centre, and Operations Centre.



4.21 Winter Maintenance

Snow removal, plowing, sanding, windrowing, shoveling or other methods of ice control to maintain multimodal traffic surfaces under this policy.

5. Responsibilities

- 5.1 Municipal Council to:
 - 5.1.1 Approve by resolution this Policy and any amendments.
 - 5.1.2 Consider and approve the allocation of resources for successful implementation of this Policy in the annual budget process.
- 5.2 Chief Administrative Officer to:
 - 5.2.1 Implement this Policy and approve Procedures.
 - 5.2.2 Ensure policy and procedure reviews occur and verify the implementation of policies and procedures.
- 5.3 Director to:
 - 5.3.1 Ensure implementation of this Policy and Procedure.
 - 5.3.2 Ensure that this Policy and Procedure is reviewed every three years.
 - 5.3.3 Make recommendations to the Chief Administrative Officer of necessary policy or procedure amendments.
- 5.4 Manager to:
 - 5.4.1 Understand, and adhere to this Policy and Procedure.
 - 5.4.2 Ensure employees are aware of this Policy and Procedure.
- 5.5 All Employees to:
 - 5.5.1 Understand and adhere to this Policy and Procedure.

6. Exclusions

6.1 Residents are referred to the Community Standards Bylaw for requirements of maintenance on private property, private sidewalks and driveways, private sidewalks and driveways on public property and public sidewalks adjoining private property.

7. Priorities

7.1 Seven (7) Priority Levels have been established based on when, where and how winter maintenance should take place across Town.



7.1.1 The Procedural document below outline timeframes, amount of snowfall and other local consideration for sustainable operational maintenance under this policy.

8. End of Policy



PROCEDURE

Policy No: 148.20	
Policy Title: Snow & Ice Maintenance	
Department: IPS – (Infrastructure)	

1. Procedural Statement

- 1.1 The Town of Blackfalds has a priority-based winter maintenance program with specific triggers to indicate when, where and how plowing, removal and sanding should take place throughout the municipality. There are many different variations of roads, sidewalks, and pathways through the Town that provide multimodal transportation.
- 1.2 The overall objective is to conduct winter maintenance activities to the service level outlined to meet the needs of our residents and visitors within budgetary limitations.
- 1.3 On an annual basis, the Infrastructure group conducts a review of winter maintenance activities done in the previous season. The purpose of this review is to identify successes, areas for efficiency and communication improvements for future discussions.
- 1.4 Snow and ice conditions can vary greatly on a monthly and seasonal basis in Central Alberta. This creates winter maintenance challenges for Town forces towards management of resources while providing a priority-based strategy to conserve, protect, and enhance the environment in balance with the service level standard expectation of the public (social and economic needs of this service).
- 1.5 LOS will be reviewed over the course of the season and maybe be adjusted from time to time by the Director to maintain vehicular and pedestrian travel throughout town.

2. Operational Considerations

- 2.1 When scheduling work under this Policy, the Director, or designate, will where practical, endeavor to meet the following objectives:
 - 2.1.1 Utilize only Town resources when the Town owns the equipment required and in sufficient quantity to allow the timelines specified to be met.
 - 2.1.2 Utilize contracted services for winter maintenance and parking lot snow clearing as needed to meet criteria.
 - 2.1.3 Schedule Town resources so as not to incur over-time unless deemed



necessary.

3. Snow Maintenance

3.1 Priority Routes and Criteria

3.1.1 For the purpose of this Policy, the following seven (7) priorities have been established as mapped under schedule A to allow better communication of LOS internally and externally.

Priority Route	Map Colour	Criteria
1 – Emergency Roadways and Facility Sidewalk Access (signage not required)	Red	 Snow maintenance operations will commence above all other priorities or in conjunction with other priorities when the either of the following criteria has been met: 10cm (4") or greater of snowfall within twenty-four (24) hours. 7.5cm (3") or greater of snow pack.
2 – Main Collectors, Adjacent School Roadways, Facilities, and Downtown Core	Orange	 Snow maintenance operations will commence when Priority 1 work has concluded / is concluding and either of the following criteria has been met: 15cm (6") or greater of snowfall within twenty-four (24) hours. 10cm (4") or greater of snow pack.
3 – Minor Collectors	Green	 Snow maintenance operations will commence when Priority 2 work has concluded / is concluding and when either of the following criteria has been met: 15cm (6") or greater of snowfall within twenty-four (24) hours. 10cm (4") or greater of snow pack.
4 – Residential Through Roads	Blue	 Snow maintenance operations will commence when Priority 3 work has concluded / is concluding and one of the following criteria has been met: Driving becomes difficult because of Rutting and/or depth of snow. 15cm (6") or greater of snow pack.
5 – Residential Cul-de-sac	Yellow	Snow maintenance operations will commence when one of the following criteria has been met:



		 Driving becomes difficult because of Rutting and/or depth of snow. 20cm (8") or greater of snow pack.
6 – Service Lanes	All service lanes in Town. Not identified on Schedule "A"	Snow maintenance operations will commence when a service lane becomes impassable, or when necessary to prevent the tipping of solid waste or recycling carts.
7 - Trails, Sidewalks and Parks Parking Lots	White	 Snow maintenance operations will commence above all other priorities or in conjunction with other priorities when the either of the following criteria has been met: 10cm (4") or greater of snowfall within twenty-four (24) hours. 5cm (2") or greater of snow pack.

3.2 Emergency/Extreme Conditions – All Roadways

- 3.2.1 For all Priority Routes 1-6, emergency/extreme conditions are defined as a condition where a minimum twenty (20cm or 8") of snow fall has occurred within twenty-four (24) hours, it continues to snow heavily with a forecast predicting more snow, plowing the full width of the road is not practical nor feasible and the requirements exceed the Town's capacity and available equipment.
 - Driving lanes will be opened by Emergency Plowing a single pass in the centre of the roadway.
 - Cleanup will commence within forty-eight (48) hours of snowfall terminating and will be prioritized as outlined as per Procedures in Section 2 and 3.
- 3.2.2 For Priority 6 (service lanes) within the Town of Blackfalds, emergency/extreme conditions include those criteria list above plus:
 - Clearing will be dependent upon equipment availability and may be postponed until a later date.
 - Solid Waste and/or Recycling cart collection may be suspended until equipment is available to clear service lanes.
 - Once equipment is available, service lanes will be cleared as per solid waste collection pick-up schedule and to make service lanes passable.
 - Access from service lanes to private property will not be cleared.



3.3 Emergency/Extreme Conditions – Pathways and Sidewalks

3.3.1 For Priority 7. No work will be started until event has passed and it is safe to proceed. Clearing will be dependent upon equipment availability and may be postponed until a later date.

3.4 General Procedures

The following general snow removal procedures apply to the following Priority Levels:

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Priority Levels 1 – Emergency Roadways and Facility Sidewalk	General Procedures First priority is to open driving lanes; the Town would plow snow to both sides of the streets; except where it is more practical to clear to the same side continually.
Access (signage not required)	In the event of several snowfalls that accumulate an excessive amount of snow, the Director would have the discretion to utilize any area in Town deemed necessary to keep roads open.
and 2 – Main Collectors, Schools,	Second priority is to clear snow continually to one side onto areas where snow can be easily accumulated such as municipal reserve strips, parks, and vacant lots, boulevards with no sidewalks or setback sidewalks.
Transit, Facilities, Downtown Core	Snow will be removed on any roads if it cannot be pushed to the side and maintain adequate and safe roadway width for vehicular and parked traffic or the created windrow causes drainage problems during freeze thaw cycles.
3 – Minor Collectors	First priority is to clear snow continually to one side onto areas where snow can be easily accumulated such as municipal reserve strips, parks, and vacant lands, boulevards without sidewalks or separate sidewalks, special
4 – Residential Through Roads	considerations must be made to avoid windrows into vegetation areas and drainage paths.
and 5 – Residential	Snow will be removed on any roads if it cannot be pushed to the side and maintain adequate and safe roadway width for vehicular and parked traffic or the created windrow causes drainage problems during freeze thaw
Cul-de-sac	cycles.



3.5 Priority Level Specific Procedures

Priority Level	Procedure
1 – Emergency Roadways and Facility Sidewalk Access (signage not required)	Emergency Access signage not required. Work would commence within twenty-four (24) hours of meeting the criteria as set out in Section 2.1 above, after the snowfall had ended, excluding Statutory Holidays.
2 – (Main Collectors, Schools, Transit, Facilities, Downtown Core)	Work would commence upon completion of Priority 1 or within forty-eight (48) hours of the snowfall occurring as set out in Section 2 above, after the snowfall had ended, excluding Statutory Holidays, unless deemed necessary.
3 – Minor Collectors	Work would commence within 5 days of meeting the criteria as set out in Section 2.1 above, after the snowfall had ended, excluding Statutory Holidays.
	In the event of several snowfalls that accumulate an excessive amount of snow, the Director, or designate, would have the discretion to utilize any areas deemed necessary to ensure safe traffic flow.
4 – Residential Through Roads	Work would commence within 15 days of meeting the criteria as set out in Section 2.1 above, after the snowfall had ended, excluding Statutory Holidays.
	In the case of Rutting or high depth of snow the procedures are as follows:
	Director, or designate, would schedule timing of work as required.
5 – Residential Cul-de-sac	Work would commence within 20 days of the snowfall, or upon completion of Priority Routes 1, 2, 3 and 4 occurring as set out in Section 2 above, after the snowfall had ended, excluding Statutory Holidays.
	In the case of Rutting or high depth of snow the procedures are as follows:
	Director, or designate, would schedule timing of work as required.



	Snow will be stockpiled into the middle of the centre of the cul-de-sac if it can no longer be pushed to the side and maintain adequate and safe roadway width for vehicular traffic.
6 - Service Lanes	Director, or designate, would schedule timing of work as required. Areas of known snow accumulation due to Drifting will be prioritized first.
	Clear service lanes as per solid waste collection pick-up schedule to accommodate the waste collection and to make service lanes passable.
	Access from service lanes to private property (i.e. driveways) or access from lane to solid waste or recycling carts will not be cleared.
	Snow will be removed if it cannot be pushed to the side and maintain adequate and safe roadway width for service vehicles.
	Driveways in service lanes will not be opened, but every effort will be made to rotate the blade to minimize windrows in front of lane driveways.
7 - Trails, Sidewalks and Parks Parking Lots	Signage not required. Work would commence within twenty-four (24) hours of meeting the criteria as set out in Section 2.1 above, after the snowfall had ended, excluding Statutory Holidays and weekends.

3.6 Signs and Public Notification

- 3.6.1 Except in emergency situations, the Town will take reasonable steps to attempt to notify the public of snow clearing/removal operations by placing "No Parking" signs along the affected roads and at entrances to neighborhoods where feasible.
- 3.6.2 Where possible, the Town will notify residents and businesses in advance via the Communications Policy advising locations of current parking bans and order of



roadways being done under each priority throughout the Town. The Town encourages its residents to subscribe to the Town's social media accounts and to regularly check for snow maintenance updates on its website to monitor these communications.

3.6.3 Where possible, the Director or his designate will clear roads in the order of Priority Level.

3.7 Ticketing and Towing

- 3.7.1 Any vehicles parked on the roadways or laneways and not conforming to the "No Parking" signage will be towed at the owner's expense or plowed in, but only if towing services are unavailable.
- 3.7.2 Enforcement Services personal may, when reasonable, make effort to contact the vehicle owner prior to towing.
- 3.7.3 If in the opinion of the Director or his designate, there are too many parked vehicles on a roadway and there is no ability to tow these vehicles, the roadway will be skipped and placed at the end of that priority's road list.

3.8 Driveways and Windrows

- 3.8.1 The Town of Blackfalds will not clear snow from in front of driveways or service lanes. It is the owner's responsibility to keep their driveway clear.
- 3.8.2 The Town of Blackfalds will endeavor to blow or haul the centre windrows within 48 hours of placement under normal removal conditions. The Town will endeavor to open the windrows at roadway intersections only prior to demobilizing from site. All vehicles no parking rules will be in effect until the windrow is removed.

3.9 Waste and Recycling

3.9.1 The Town will attempt to conduct winter maintenance activities in such a way as to prevent and/or minimize impacts to the residential solid waste collection schedule. Damages to waste and/or recycling carts caused by snow removal equipment will be the responsibility of the property owner if carts are left out on the roadways or laneways. Carts are to be removed from public roadways as per the Solid Waste Management Bylaw, as amended from time to time.



3.10 Contractors

3.10.1 On an annual basis, the Town will collect and maintain a list of interested and available contractors to support winter maintenance activities. Pricing for services will be based on recommended Alberta Road Builders Rates as amended from time to time. The Town will maintain a resource list of all vendors available for winter maintenance.

3.11 Transit Stops

3.11.1 The Town of Blackfalds utilizes an 'on-demand' public transit system with multiple stops throughout the Town. Many of these stops are located on sidewalks in front of private property with no designated Town owned transit stop infrastructure in place. The Town will not clear snow at designated Town owned transit stops.

3.12 Community Mailboxes

3.12.1 Canada Post is responsible for the clearing of snow and ice control in front of community mailboxes.

4. Other Winter Maintenance (Ice and Sanding)

4.1 Roadways

- 4.1.1 Roadway sanding is an ongoing program throughout the winter and is at the discretion of the Director. Sanding priorities are based on use and volumes of traffic on roadways. Sanding of intersections and icy sections will be done as required, and out of order of Priority Level focusing on known problem areas. This will be done as required after frost, freezing rain or snow.
- 4.1.2 The Town uses a mixture of sand pickled with a small amount of salt to provide traction control. Adjustments to sand and salt mixtures and/or application of liquid brines may be used if necessary.

4.2 Sidewalk and Trail Sanding

4.2.1 Sidewalk and trail sanding is a shared responsibility between Town facilities, local schools, businesses, and property owners. The Town of Blackfalds provides free



- pickled sand for ice control to anyone for use on the sidewalks and front of their property.
- 4.2.2 Property owners are responsible to ensure sidewalks on their property which are adjacent to the roadway are cleared within 48 hours of snowfall. Schools are required to clear sidewalks adjacent to school owned property.

5. Discretionary Power

- 4.1 The Director, or designate, has the discretion to:
 - 4.1.1 Vary any of the Procedures contained in this Policy as the situation dictates.
 - 4.1.2 Apply snow removal, ice control, or cleaning equipment to any area of the Town, if in the Directors' opinion, a safety hazard has been created.
 - 4.1.3 Yearly contracted services budget dollars will be adhered to whenever possible and any emergency overages will be reported to Council. It is of note, that the "snow removal reserve" is a revolving reserve, with any operational overages, or savings being placed back into that reserve each budget cycle.
- 6. End of Procedure

7. Approval

Chief Administrative Officer

November 25, 2020

Date