

City of Saskatoon – Roadways Emergency Response Plan

Plan for Responding to Extreme or Unusual Snow Events



8/17/2021

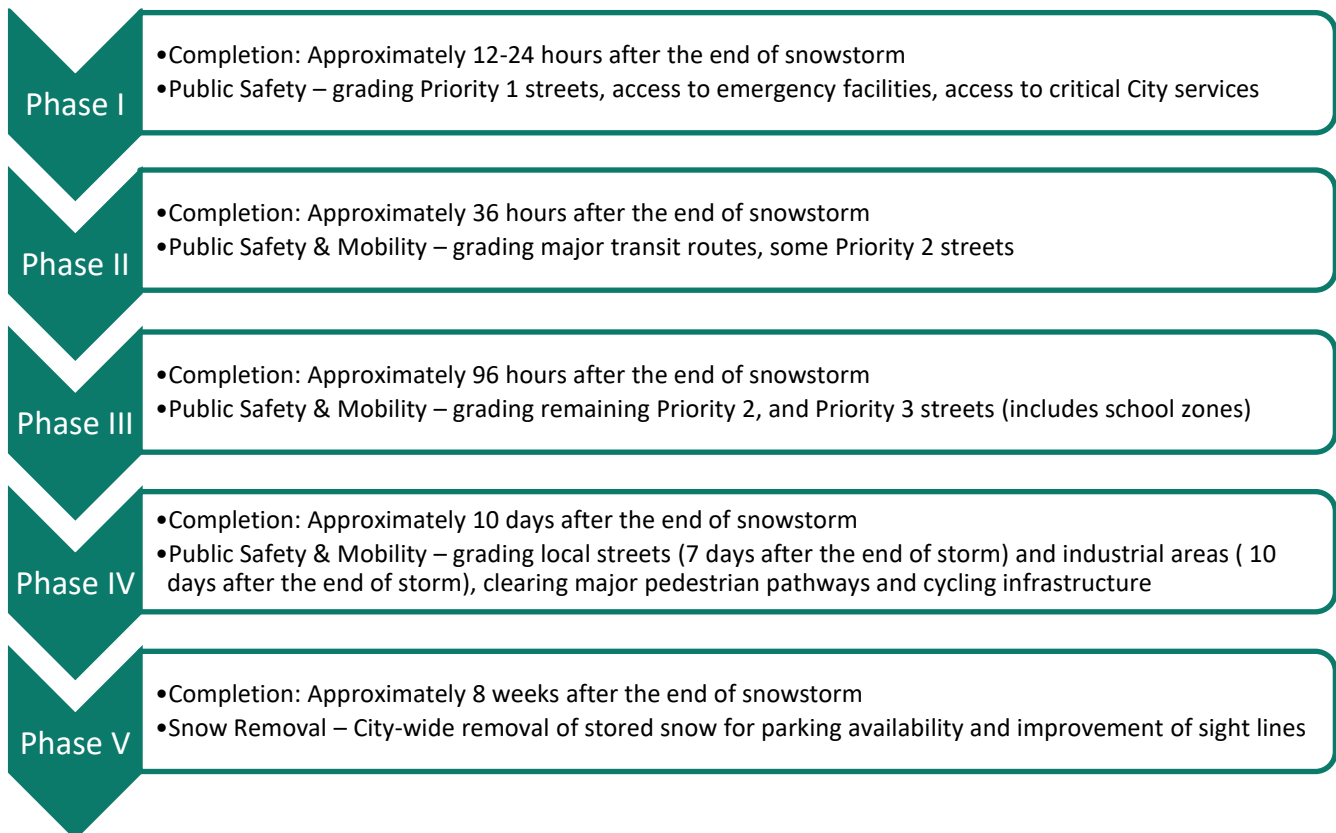
*Prepared by: Roadways, Fleet and Support Department
Transportation and Construction Division*

Executive Summary

In November of 2020, Saskatoon experienced an extreme snowstorm that brought the city to a standstill due to a combination of freezing rain, significant snow accumulation, drifting, and high winds. The snowstorm resulted in impassable streets and safety concerns for citizens. The response to the snowstorm included a city-wide snow grading and removal that included residential streets. Due to the level of coordination that was required by the City of Saskatoon (City) to restore mobility and public safety, City Council requested that a formal plan be developed for responding to extreme or unusual snow events that have the potential to shut down the city and create safety concerns for the public.

This Roadways Emergency Response Plan (ERP) will allow the City's Roadways, Fleet and Support Department (RFS) and Emergency Management Organization (EMO) to activate an immediate and planned response to extreme snow events in the future. It will provide guidance to the RFS team and allow for immediate execution of the response based on a phased approach. The document will reduce the need to plan a response at the time of the event.

A summary of the planned operational strategy and phases of the Roadways ERP is provided below:



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The criteria for the activation of the Roadways ERP are:

- major snowfall with snow accumulation greater than 25 cm and/or combination of snow, freezing rain, and wind; and,
- reduced mobility to the point that light vehicles cannot travel on city streets; mobility across the city is severely impacted and the regular winter maintenance level of service applicable to typical winter snow events can not be met.

The above criteria are considered guidelines. With the anticipated climate changes and variability in winter weather, a combination of snow, freezing rain, ice accumulation, severe temperatures, decreased visibility, and high winds could also result in activation of the plan based on the impact to mobility and safety in the city.

If Saskatoon experiences another extreme snow event in the future, the City will observe conditions and utilize all available information to decide if the Roadways ERP needs to be activated.

The City Manager will have authority to activate the plan with input from the City's Executive Leadership Team, General Manager of the Transportation and Construction Division, Director of the RFS Department, and Director of the EMO.

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1. Introduction

The operational strategy and phased approach provided in the Roadways Emergency Response Plan (ERP) are based on the following principles:

- The extreme snow event emergency will be managed by the EMO's Emergency Operation Center (EOC) following the Incident Command System (ICS).
- The Roadways ERP will be executed by the RFS Department with support from other City Departments, as required. The response team will include internal City crews and contracted resources.
- The execution of the phased approach will be preceded by a set of planning and preparedness activities immediately after the City receives Environment Canada's (EC) weather forecast indicating a high probability of an extreme snow event.
- The planning and preparedness activities will include news conferences, use of social media, news outlets and other communication channels to provide the public with advanced notifications of the potential impact of the extreme snow event on mobility and safety in the city. Other planning and preparedness activities will include mobilization and placing on standby the required internal and external resources, equipment, vehicles, materials, and signage.
- All critical infrastructure stakeholders are expected to develop their own Emergency Response Plans to reduce reliance on the RFS Department's activities in the first 72 hours of the extreme snow event. All stakeholders will be able to consider the Roadways ERP in the development of their own plans. This principle reflects best practices for emergency planning and a whole community approach to emergency management. As illustrated in *Figure 1*, it is the shared responsibility of the whole community to build disaster resiliency through understanding and supporting the needs of the community.



Figure 1 - The City of Saskatoon’s Whole Community Approach to Emergency Management

As part of the development of the Roadways ERP, two engagement sessions coordinated by the RFS and EMO were held to provide external stakeholders with the opportunities to provide input and feedback on the proposed phased approach. The following groups were represented at the meetings: Greater Saskatoon Catholic Schools, Saskatchewan Health Authority (Emergency Management Services), University of Saskatchewan, SaskPower, Environment Canada, Greater Saskatoon Chamber of Commerce, North Saskatoon Business Association, and Riversdale, Downtown, and Broadway Business Improvement Districts. There were no objections noted to the proposed strategic approach to restoring public safety and mobility following the activation of the plan. As discussions with external stakeholders continue in the future, operational elements of this plan may be refined to ensure that the needs of the whole community are considered and integrated into the plan.

More detailed operational planning experience and lessons learned from the November 2020 snowstorm have been documented to retain institutional knowledge and are available for future reference in the City’s corporate quality management system.

2. Definition of an Extreme or Unusual Snow Event

The criteria for the activation of the Roadways ERP are:

- major snowfall with snow accumulation greater than 25 cm and/or combination of snow, freezing rain, and wind; and,
- reduced mobility to the point that light vehicles cannot travel on city streets; mobility across the city is severely impacted and the regular winter maintenance level of service applicable to typical winter snow events can not be met.

The above criteria are considered guidelines. With the anticipated climate changes and variability in winter weather, a combination of snow, freezing rain, ice accumulation, severe temperatures, decreased visibility, and high winds could also result in activation of the plan based on the impact to mobility and safety in the city.

When Saskatoon experiences another extreme snow event, the City Administration will observe conditions and utilize all available information to decide if the Roadways ERP needs to be activated.

The City Manager will have authority to activate the plan with input from the City's Executive Leadership Team, General Manager of the Transportation and Construction Division, Director of the RFS Department, and Director of the EMO.

Dependent on the funding available at the time of the next extreme or unusual snow event, strategic decisions on which phases of the plan to execute may need to be made based on the level of the storm's impact to transportation infrastructure, the time of year, previous snow accumulation, and current and forecasted weather conditions.

Based on 30 years of historical Environment Canada data for Saskatoon, it is estimated that a severe winter storm like the November 2020 storm will occur once every ten years¹.

Environment Canada and other prairie climate models predict that Saskatoon will experience increased temperatures, increased winter precipitation, and increased frequency of extreme weather events in the coming decades².

These climate changes are likely to increase the frequency and severity of extreme or unusual snow events in Saskatoon.

¹https://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?searchType=stnName&txtStationName=saskatoon&searchMethod=contains&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=3328&dispBack=0

²<https://www.saskatoon.ca/community-culture-heritage/environment/climate-adaptation-strategy>

3. RFS and EMO Operations Centers and Communication

Following activation of the Roadways ERP, the EMO will form an Emergency Operations Center (EOC). The EOC will be responsible for the management of the extreme snow event emergency and coordination of a community-wide response.

The EMO uses the Incident Command System (ICS). The ICS is a standardized emergency management system designed to enable effective, efficient incident management by integrating a wide variety of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. This allows the EMO to provide a standardized and repeatable process through which all responding organizations, both inside and outside the City of Saskatoon, can quickly and effectively exchange information, accurately determine the top priorities, and plan an efficient and coordinated response.

Using the ICS protocol, the EOC will issue an EOC alert. The alert level will depend on the severity of the emergency snow event. The EOC will distribute the alert to all internal and external organizations integrated into the system. The alert will initiate a multi-organizational response based on the coordination of individual activities and priorities, and sharing of critical information.

The EOC alert will trigger the activation of an RFS Tactical Operations Center (TOC). It is anticipated that all participating internal and external organizations impacted by the emergency snow event will form their own TOCs. The structure of the RFS TOC will consist of the following personnel:

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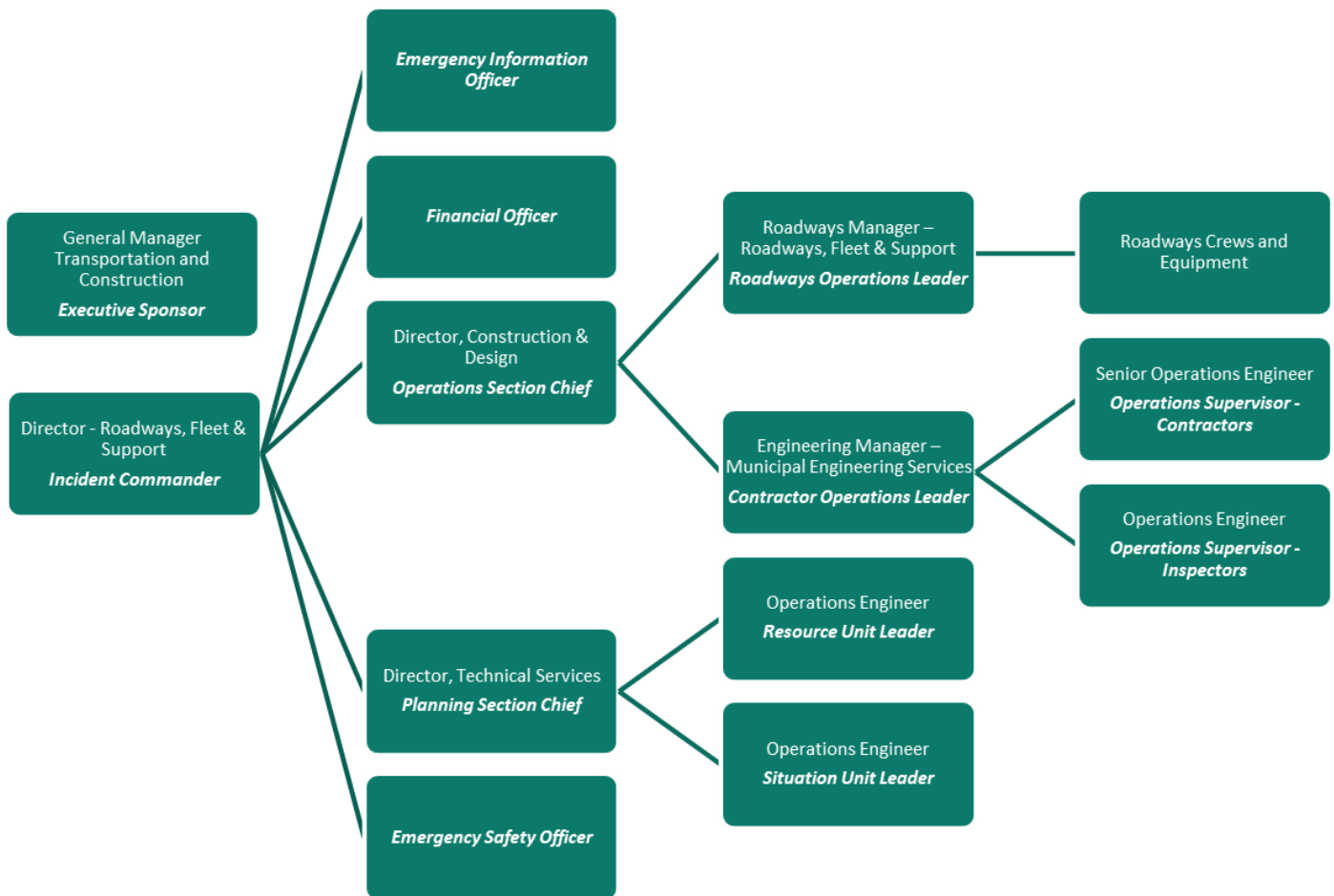


Figure 2 - Roadways, Fleet, and Support TOC Structure

As per the EOC protocol requiring that all impacted organizations provide regular and timely situational updates, the RFS TOC Incident Commander will be responsible for all communication with the EOC and if required, other stakeholders.

The EMO’s plan for managing emergencies includes the assignment of an Emergency Information Officer responsible for coordinating information and updates to the Mayor and Council, all media inquiries, and communication with all critical infrastructure partners and other internal and external stakeholders.

Under the assumption of advanced notice from Environment Canada about a pending severe winter event, the RFS Incident Commander and EMO Emergency Information Officer will coordinate early communication efforts to inform the public and suggest reduced citizen movements and proper preparation for the storm.

As part of a whole community response to emergency management all Saskatoon residents should have a 72 -hour plan for emergency events. Public Safety Canada advises Canadians that “If an emergency happens in your community, it may take emergency workers some time

to reach you. You should be prepared to take care of yourself and your family for a minimum of 72 hours.”³

This critical communication to the residents and businesses of Saskatoon will be accomplished through widespread channels such as news conferences, social media, news outlets etc. This approach should mitigate the effects of the timing of the storm as the public will be informed of the approaching severe winter event and provided with advanced notice to prepare accordingly.

As part of the Roadways ERP, specific communication times will be set for updates on operational progress throughout the ERP phases. Mid-shift and shift-end reporting protocols will be established for field inspectors, City crews, and contractors to ensure information provided to the Mayor and Council, general public, and internal and external stakeholders is current and timely.

By the 2021/22 winter season most City and contractor equipment will include Global Positioning System (GPS) technology which will allow for more accurate progress tracking and easier access to information.

³ <https://www.getprepared.gc.ca/cnt/rsrscs/pblctns/yprprdnssgd/index-en.aspx>

4. Work Activities and Prioritization

Following the activation of the Roadways ERP, the following sequence of priorities will be followed:

- the immediate focus will be on the top priority high-speed and high traffic streets to provide safe driving conditions, bridges, routes providing access to emergency facilities, and routes to City facilities providing critical services to citizens; the goal is to start restoring safety, and basic connectivity and mobility through the city while focusing on the highest priority streets;
- the next objective will be restoring mobility through the rest of the city; and
- once public safety and mobility have been restored, the focus of the operations will shift to the removal of snow from all city streets for parking availability and improvement of sight lines.

The following graphic provides a summary of the proposed phasing for the Roadways ERP:

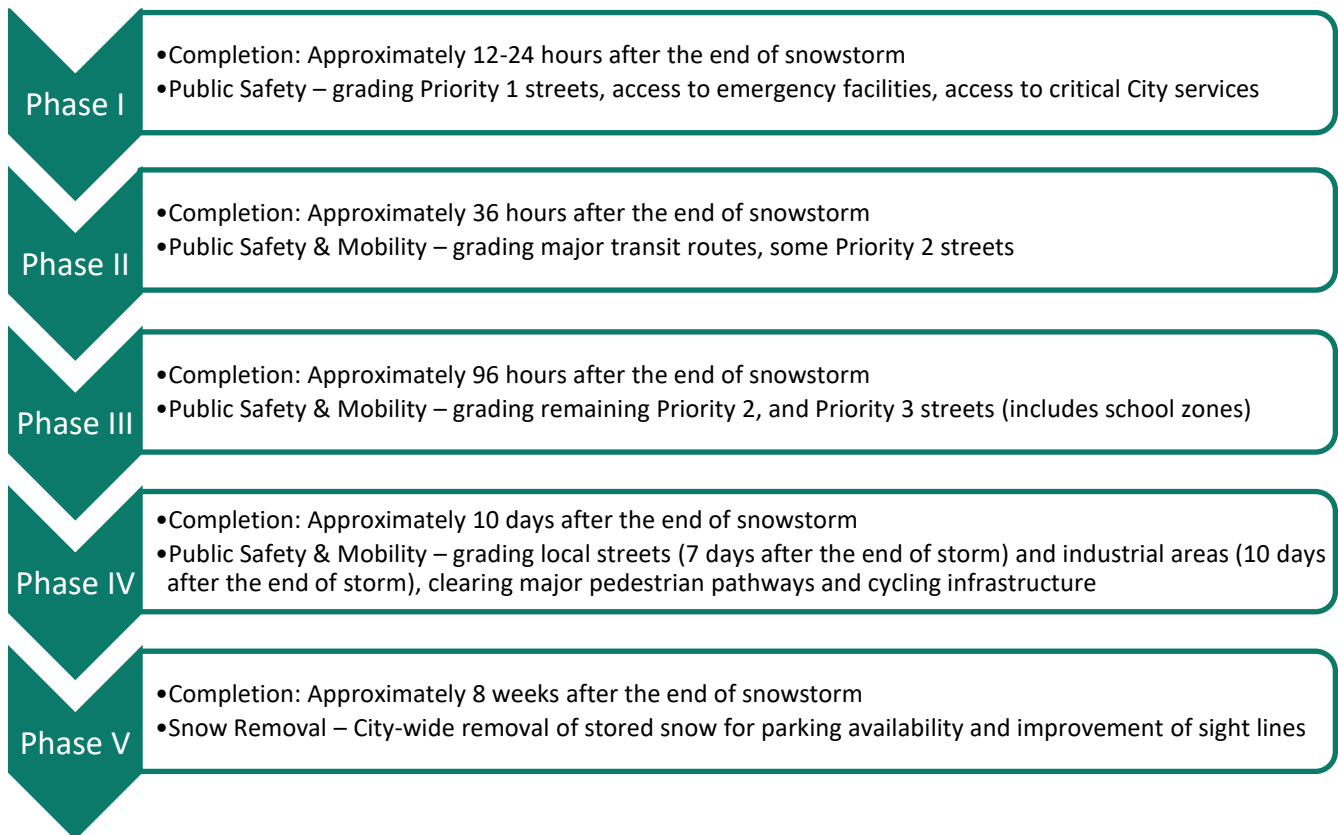


Figure 3 - Summary of Roadways ERP Phasing

Details of this sequence of work and phased approach are provided below.

Phase I – Focus on Public Safety

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This phase will begin after 3-5 cm of snow has accumulated and will continue until complete. Targeted completion timeline: approximately 12-24 hours after the snowstorm has ended.

Work to be completed:

- Snow grading on high-speed roadways (ex. Circle Drive, Hwy 7/11/12/16 within city limits, etc.), bridges, arterial roads with high speed and high traffic volumes (ex. College Drive, Idylwyld Drive, Attridge Drive, etc.), and access routes to emergency facilities (Fire/Police/Ambulance/Hospitals).
- Snow grading on all Priority 1 streets in the road network (Figure 3).
- Snow grading on routes that provide access to the City's critical infrastructure for continuation of basic services (power, water, wastewater etc.).

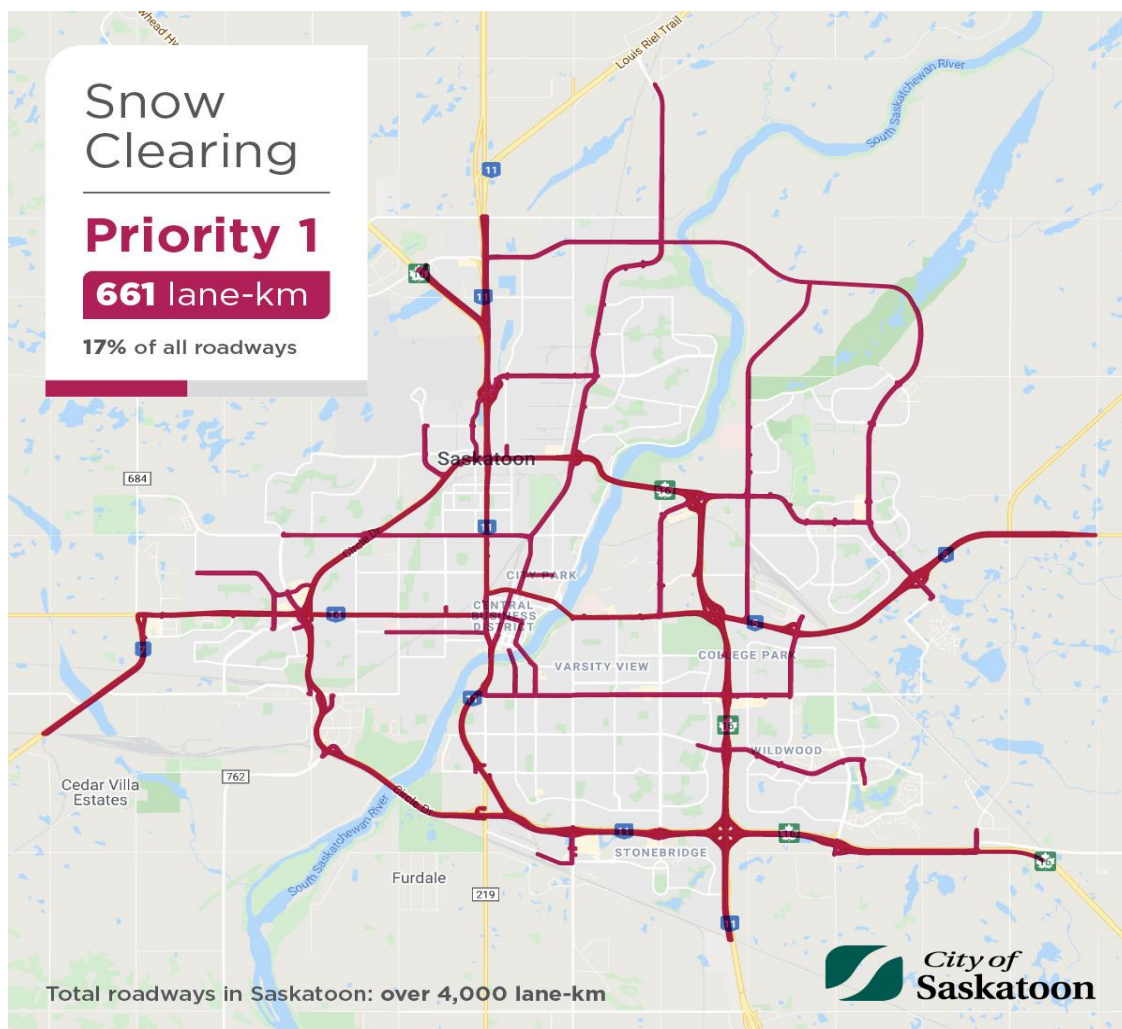


Figure 4 - City of Saskatoon Priority 1 Street Map

Phase II – Public Safety and Mobility on Major Transit Routes and Corridors

This phase will begin after Phase I is complete, or at such time that additional resources are available.

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Targeted completion timeline: approximately 36 hours after the snowstorm has ended.

Work to be completed:

- Re-establishment of major Saskatoon Transit routes.
- Snow grading on remaining arterial roads.
- Phase II includes a portion of the Priority 2 streets in the road network (Figure 4) that have the greatest impact to restoring public safety and mobility, or that may be required to open a major transit route.
- More detailed mapping and planning will be done annually by the RFS Department in advance of the winter season based on the transportation network growth and other changes that may impact sequencing of the Priority 2 street network.

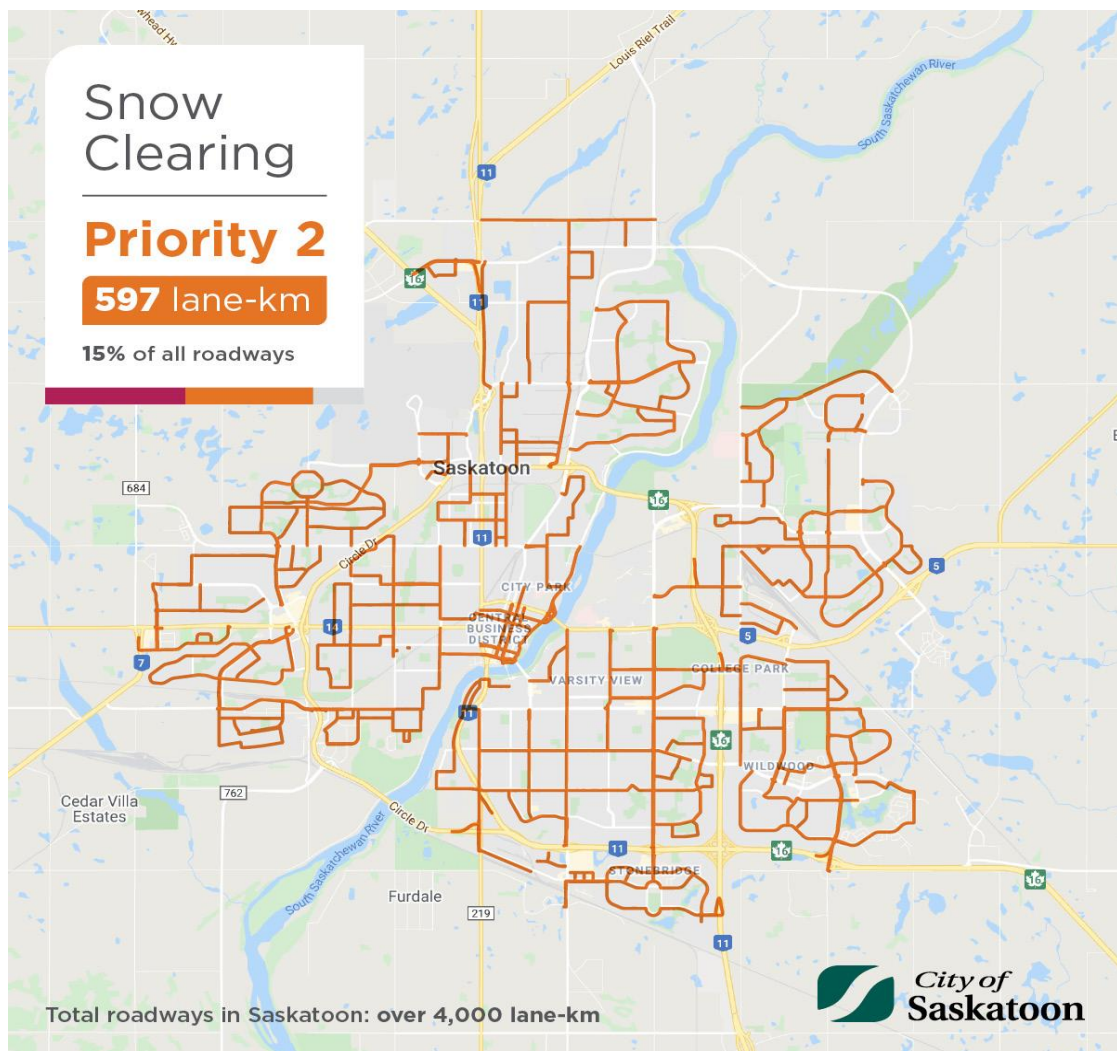


Figure 5 - City of Saskatoon Priority 2 Street Map

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Phase III – Public safety and Mobility on Remaining Priority Streets

This phase will begin once Phase I and II are complete, or at such time that additional resources are available.

Targeted completion timeline: approximately 96 hours after the snowstorm has ended.

Work to be completed:

- Re-establishment of remaining Saskatoon Transit routes.
- Remaining Priority 2 streets in the road network that were not included in Phase II.
- All Priority 3 streets in the road network (Figure 5).

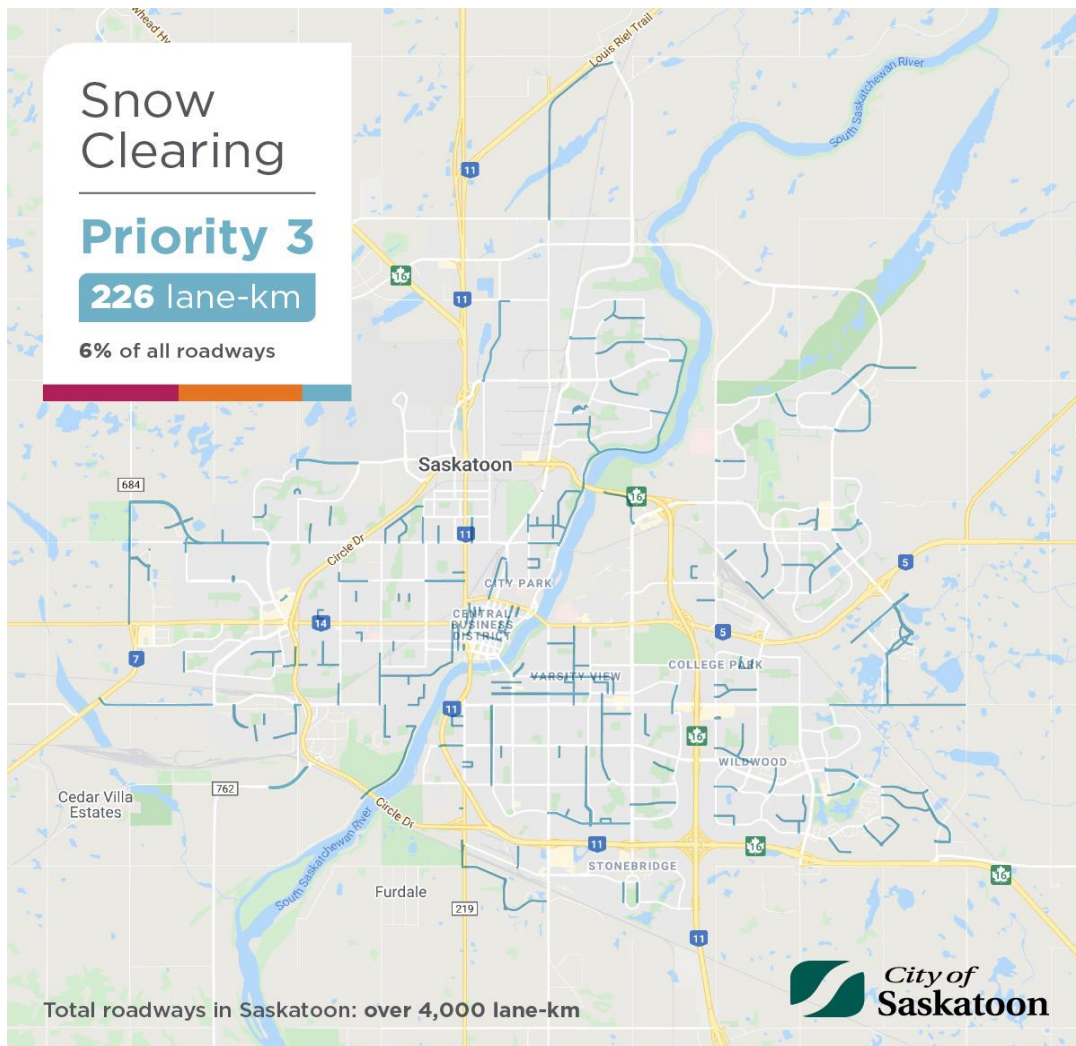


Figure 6 - City of Saskatoon Priority 3 Street Map

Phase IV – Public Safety and Mobility on Local Streets in Residential Neighbourhoods and Industrial Areas

This phase will begin once Phase I, II, and III are complete, or at such time that additional resources are available.

Targeted completion timeline: approximately 7 to 10 days after the snowstorm has ended.

Work to be completed:

- Snow grading on local streets in residential areas.
- Snow grading in industrial areas.
- Snow grading of cycling infrastructure and major pathways for pedestrians and cyclists.
- Removal of snow piles in front of bus stops
- Removal of snow piles over 30 cm in front of driveways, property, or alley entrances that may have been blocked during grading

The method for local street snow grading would involve splitting the city into designated 'pie' piece segments. This method allows crews to start at both the centre of the 'pie' piece and the outer edge of the 'pie' piece (e.g. one snow removal crew starts at the center and two crews start at the outer edge), and work towards each other through the areas until all local streets from that segment are graded. Boundaries of these segments may vary but will follow neighbourhood boundaries when possible.

This method reduces equipment and crew mobilization time, addresses the outlying areas of the city most susceptible to hazards such as drifting snow, while also providing fair and equitable service to the core neighbourhoods. This method also allows crews to continuously work their way through a segment of the city and saves significant crew time required for remobilizing and moving to different parts of the city.

During snow grading for restoration of public safety and mobility (Phases I through IV), snow may be stored in parking lanes, medians, and boulevards. This snow will not be removed until Phase V.

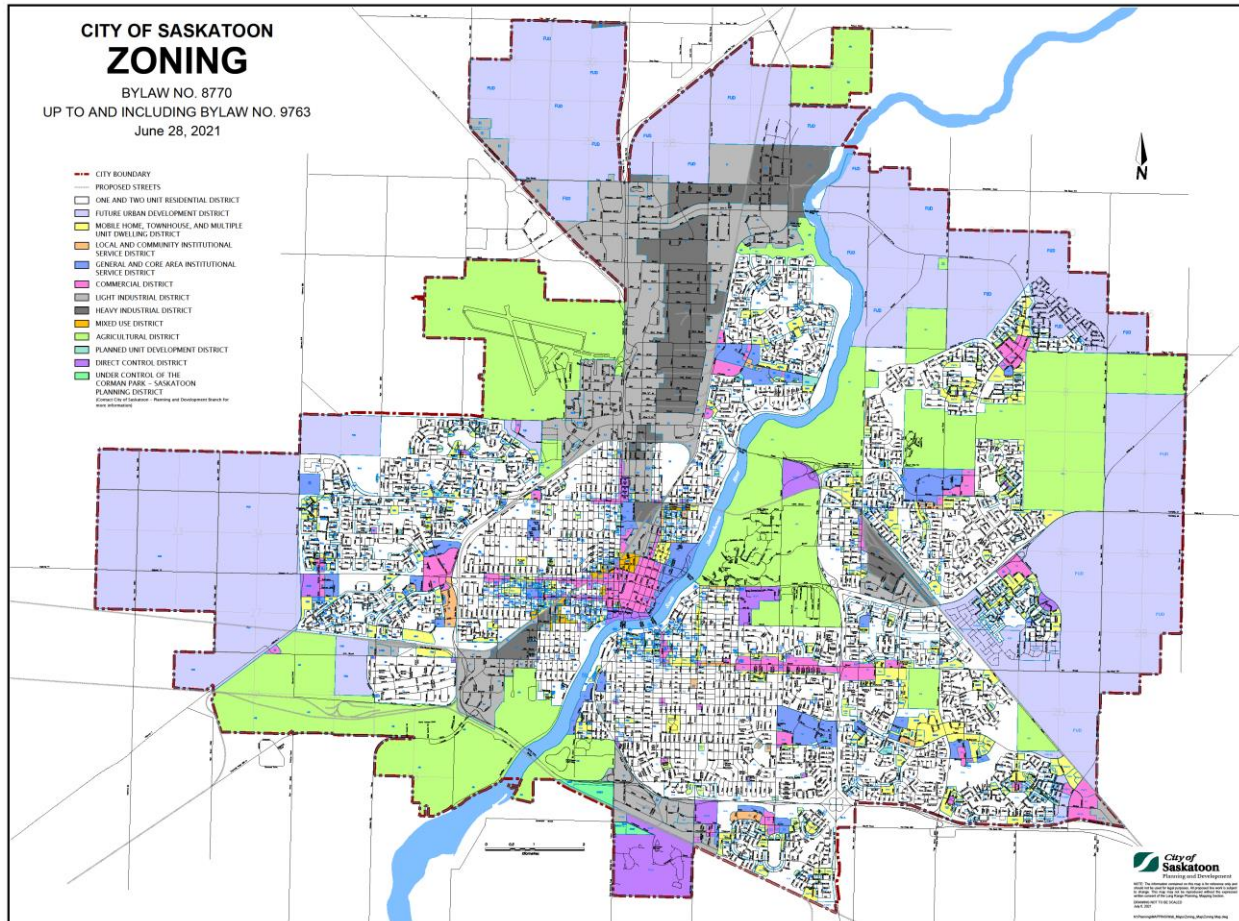


Figure 7 - City of Saskatoon Area Map

Phase V – Removal of Stored Snow

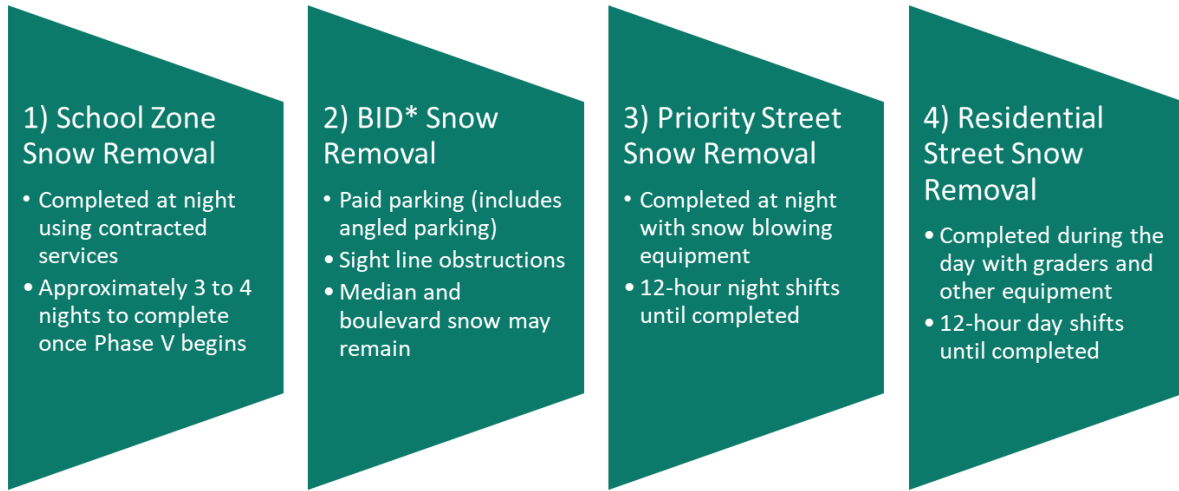
This phase will begin once Phases I through IV are complete, or at such time that additional resources are available.

Targeted completion timeline: approximately 8 weeks after the snowstorm has ended. The removal schedule will be dictated by weather variables including temperature severity, snowfall amount, etc.

Work to be completed:

- Removal of stored snow for parking availability as well as improvement of sight lines and mobility at intersections and crosswalks. This will include all priority streets and local streets in residential neighbourhoods.
- Snow may be left on medians, boulevards, and flankage streets.
- An increased radius may be cleared around regular winter season school zones to facilitate safe transportation to and from school (drop off and pick up of students). The additional clearing requirements will be confirmed with the schools and/or School Boards.

- The sequencing of snow removal in Phase V will be as follows:



*Business Improvement Districts

Figure 8 - Phase V - Sequencing of Snow Removal

After the completion of Phase IV and restoration of public safety and mobility across the city, the emergency nature of the work will be completed, and the remaining Phase V of the Roadways ERP will continue for approximately eight weeks until its completion. The EMO EOC lead may choose to downgrade the alert level at this time.

5. Emergency Level of Service for Priority and Residential Snow Grading and Removal

While undertaking Phases I through IV to address public safety and mobility concerns across the city, the regular level of service provided by the RFS Department in a typical winter season will not apply. The following emergency level of service will apply:

- Priority 1 Streets
 - Will be graded as close as possible to pavement as these are high-speed roads and high hazard locations.
 - All lanes will be graded to provide mobility, reduce the likelihood of a collision and to prevent loss of driving lanes due to drifting snow.
 - Snow is stored in medians, boulevards and parking lanes until removal takes place in Phase V.
- Bridges
 - Will be graded as close as possible to pavement for safety reasons.
 - All lanes will be graded to prevent the loss of driving lanes due to drifting snow.
 - If required, snow will be removed to prevent the possibility of ramping hazards.
 - Major pedestrian and cycling pathways may be impacted until Phase IV.
- All remaining streets (includes Priority 2 and 3 streets, streets in residential neighbourhoods and industrial areas)
 - Will be graded to allow light vehicle traffic. All lanes will be graded to provide mobility, reduce the likelihood of a collision and to prevent loss of driving lanes due to drifting snow.
 - Snow is stored in medians, boulevards and parking lanes until removal takes place in Phase V.
 - Parking availability including home frontages will be reduced until Phase V is complete.
 - Some narrowing of driving lanes may occur due to stored snow in parking lanes.
 - Transit stops may be temporarily impacted until Phase IV.
 - Any ridges under 30 cm that impact access to driveways will remain until Phase V. Owners with mobility challenges may contact the City of Saskatoon Customer Care Centre if earlier removal is needed.
- Pedestrian and Active Transportation Infrastructure

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- Mobility on pedestrian and cycling pathways may be impacted until Phase IV.
- Sidewalk mobility may be reduced until Phase V due to stored snow spilling onto sidewalks.

The standard of work for the removal of snow from priority streets will be as per the approved level of service applicable to a typical winter season where bare pavement is mostly achieved and all snow is removed from the median, street or boulevard to provide storage room for future snowfalls.

Snow removal on local roadways will be focused on loading out snow piles and windrows to establish typical winter condition driveability of the street and improve parking availability in front of homes and properties, as well as sight lines at intersections. The quality of completed work will be the same as what is achieved with snow removal in school zones, where most of the snow is removed. Bare pavement conditions are not part of this standard.

To reduce the overall cost of snow removal, snow piles on local roadways that are not impacting drivability or on-street parking in front of houses, such as snow located on boulevards and medians, along vacant lots or parks, and along the flankage (i.e. sides) of lots may remain in place for the duration of the winter. Any snow piles or ridges purposefully left in place will be trimmed to avoid encroachment into driving lanes, crosswalks, or sidewalks. Snow piles left in place will also be trimmed back 5 m from corners and alley entrances.

6. Snow Removal Sequencing for Priority Streets and Snow Removal for Local Streets in Residential Neighbourhoods

Snow from the City of Saskatoon road network will be removed as per the sequence illustrated in Figure 8.

6.1. Priority Street Snow Removal

Removal of snow from priority streets is included in the approved Snow and Ice Management level of service provided by the RFS Department every winter. The sequence of snow removal on priority streets will be in accordance with the typical operations which may be adjusted based on the actual snow accumulation and street conditions around the city.

The following factors will be considered when prioritizing priority streets for snow removal:

- Traffic volume - the probability of safety incidents is higher on streets with more traffic;
- Width of street - snow piles can narrow traffic lanes and increase the probability of safety incidents; and
- Availability of on-site snow storage:
 - Streets with narrow medians will be the first priority as they do not have room for additional snow accumulation. If excess snow spills into the driving lanes, lane width is reduced and melting of the snow can create icy conditions;
 - Streets where snow is stored on parking lanes will be the next priority;
 - The lowest priority for removal will be streets where snow can be stored on boulevards.

Within the priority street sequencing, operational decisions will be made to increase efficiency and make the best use of the resources available.

A schedule will be posted on the City's website for all priority streets where residents will be impacted by parking restrictions. The schedule will have two-week groupings so residents can anticipate when snow removal will take place. On-street parking restriction signage will indicate the specific nights that priority street snow removal will occur. Any changes to the schedule due to additional snowfalls or other variables will be posted on the City's website.

Snow removal on priority streets will be completed primarily by City resources and equipment, with assistance from contractors that can supply snow blowers. The work will be undertaken during the night as less traffic is on the streets resulting in safer operations and higher production rates.

6.2. Local Street Snow Removal

Snow removal on local streets will proceed in parallel with the removal of snow from priority streets and will be resourced by contractors. The work will be undertaken during the day as

fewer cars are typically utilizing on-street parking and to prevent nighttime noise disruption to residents.

A slightly different approach than that used in the November 2020 snowstorm for scheduling neighbourhoods for local street snow removal will be considered. While the random selection of neighbourhoods throughout the city resulted in fair and equitable distribution of snow removal work, balanced by Ward, crews spent significant time mobilizing.

A new approach for scheduling local street snow removal would involve splitting the city into designated 'pie' piece segments. This method allows crews to start at both the centre of the 'pie' piece and the outer edge of the 'pie' piece (e.g. one snow removal crew starts at the center and two crews start at the outer edge), and work towards each other through the areas until all snow from that segment is removed. Boundaries of these segments may vary but will follow neighbourhood boundaries when possible.

This method reduces equipment and crew mobilization time, addresses the outlying areas of the city most susceptible to hazards such as drifting snow, while also providing fair and equitable service to the core neighbourhoods. The method also allows crews to continuously work their way through a segment of the city and saves significant crew time required for remobilizing and moving to different parts of the city.

Once the RFS response team is able to more accurately assess the rate of progress following the first week of snow removal, a schedule will be posted on the City's website for all neighbourhoods indicating the week residents may anticipate snow removal crews in their neighbourhood.

This schedule will be regularly reviewed and updated to reflect any potential changes due to additional snowfalls or other variables that may impose an acceleration or delay to the planned start week for snow removal in each neighbourhood. Residents will be reminded to check the schedule frequently as the sequencing approaches their neighbourhood.

Contractor crews involved in the snow removal work will be provided with a set of documented instructions and photographs illustrating City's snow removal requirements. City inspectors overseeing contractor crews and conducting quality control will use checklist templates for field inspections, and to record contractor production rates and work progress.

The guidelines, neighbourhood maps, and checklists developed in 2020 have been saved for future reference and will be updated as required. One field inspector will be assigned to monitor the field activities of no more than two contractor crews. As these crews will be in the same segment of the city, this will provide sufficient oversight to verify equipment hours and quality of work.

7. Equipment and Staffing Requirements

City resources including management, supervisory staff, city crews and contracted resources normally used to respond to winter storms will be available and will be supplemented with additional contractors, temporary staff and staff re-assignments. Additional contractors and staff are required to deliver the increased services and meet the timeline objectives laid out in this plan. Staffing and equipment requirements will be assessed during the planning and preparedness activities prior to the start of the emergency to ensure that all required personnel and equipment are secured and on standby. The actual number of additional resources required will be determined at the time of the emergency event but are estimated as follows.

Normal levels of city crews and contractor resources include: 32 graders, 10 high-speed snowplows, 20 sanders, 8 loaders, 3 snow blowers, 25 tandem and tri-axial trucks, and numerous smaller pieces of equipment used for clearing sidewalks, the Active Transportation network such as multi-use paths, cycle tracks and protected bike lanes, angled parking and school zones.

This plan will include additional winter maintenance support contracts with a list of contractors and their equipment that can be deployed on short notice when required. The contractors that assist with snow grading will be required to provide approximately 10 additional graders. To ensure timely completion of snow removal on priority streets, options will be explored to secure additional snow blowers.

Due to the Roadways ERP response not taking place every year, contracted resources will be secured to execute the snow removal on local streets in residential neighbourhoods. The number of contracted crews that may be required to complete snow removal on local streets is expected to be 15 to 25 with each crew consisting of 8 to 10 pieces of equipment such as skid steers, loaders, graders, snow hauling trucks and a pilot vehicle for traffic accommodation.

Temporary staff will be hired to place parking restriction signage required during the snow removal phase.

Existing City resources from other groups will be temporarily assigned to the emergency response team within the RFS Department to ensure sufficient management and supervisory capacity, and to minimize the amount of contracted work.

This will include staff from the Technical Services, Municipal Engineering Services, Construction and Design, Communications, Finance, and other City groups, as required. These resources will be required to provide planning and communication support, operational direction and support, contractor oversight and quality control, and financial oversight.

8. Procurement of Contractor Services

The strategy for the procurement of contractor services to ensure timely and cost-effective access to the required resources will be based on the following principles:

- All existing publicly tendered contracts that are in place at the time of the emergency snow event will continue to be utilized to provide additional capacity. This includes area grading contracts, school zone contracts, sidewalk clearing contracts, trucking assistance contract, bike lane contract, and contracts for clearing snow from downtown angle parking, bus terminal, and River Landing.
- At the beginning of every winter, a winter maintenance support contract will be secured through a competitive public procurement process to ensure access to additional resources on short notice, if required. The intent is to have in place a contingency list of contractors and their equipment and rates, which could be used if additional capacity is required on short notice. This contract is in place for the winter of 2021/22.
- Use competitive public procurement process for all work that exceeds internal capacity, including snow removal on local streets in residential neighborhoods.
- Use non-competitive (sole sourcing) procurement only if there are no other more cost-effective options to execute the phased response within the completion timelines.
- Work with local contractors to understand the equipment availability prior to each winter season.

9. Parking Restrictions

During snow grading of streets, posted temporary parking restrictions and the snow routes will not be used. Vehicles will be allowed to remain on streets, but residents will be encouraged to park their vehicles off the streets into parking lots, garages and driveways whenever possible in situations where the City has received advanced warning of a severe winter storm.

The snow routes will not be used because residents would have to move their vehicles from priority streets to local streets that are impassable and will be graded in a later phase.

Parking restrictions were used in the November 2020 snow response during the snow removal phase and this approach will be used again. The temporary parking restrictions allowed room for equipment to work and prevented snow piles from being left in unintended locations.

Signage will be posted in the neighbourhood a minimum of 24 hours in advance of the planned work to allow for planning and certainty for residents. Parking restrictions will be in place for generally one day but up to three days to allow for peak productivity of snow removal crews and earlier completion of the work. Allowing parking restrictions to be in place for more than one day prevents situations where the contractor has completed the planned work and has remaining capacity to work that day, but does not have locations to go to because parking restrictions are not posted. Parking restrictions for local streets are only applicable from 7 am to 7 pm so residents can park on streets overnight. Residents are permitted to return to parking prior to any signage being removed once the snow removal has been completed.

A schedule showing the anticipated week that snow removal will be taking place for each neighbourhood will be available on the City's website and updates will be made based on actual progress.

10. Snow Management Facilities

During the response to the November 2020 severe snowstorm, there were challenges at the three snow management facilities due to the large truck traffic volumes and large volume of snow being hauled in.

In the event on an extreme snowstorm in the future, an additional temporary snow management facility will be opened as soon as possible once the emergency response plan is activated. The temporary snow facility will be helpful to break up the large truck volumes (e.g. 500 trucks per hour) so trucks will be able to unload faster, and the trucks will not be as congested which will reduce the likelihood of a safety incident.

Additional capacity for pushing and distributing dumped snow will be added to the snow management facilities immediately to prevent the situation where the snow dump pushing can not keep up with the snow volume coming in. This occurred in the November 2020 snowstorm and resulted in a short duration closure while the equipment worked on catching up.

In November 2020, due to the constant truck traffic for an extended period of time, concerns were expressed from the public on the issue of tailgate banging at the COC snow management facility. Additional signage has been added to the COC site in an attempt to discourage this behaviour, however, there is currently no bylaw or law that addresses tailgate banging, so it would currently not be possible to ticket offenders. In addition, with heavy snow moving equipment and approximately 500 trucks an hour dumping snow at the COC site at peak times, any form of safe enforcement would be a challenge amid a severe winter storm cleanup operation. To address public concerns, more signs will be erected to remind snow dump users not to bang their tailgate.

The snow management facilities are open to the City of Saskatoon crews and contractors working on City's behalf, as well as members of the public and surrounding municipalities. As such, not all users of the sites are subject to the terms within a City contract, such as using appropriate load sticking prevention to reduce the potential for tailgate banging.

During an activation of the ERP, increased contact with the trucking community members who have signed up for the notifications through the City of Saskatoon alert channel will be facilitated through the EOC communications process. This will serve to better notify contractors if there are unanticipated site closures causing detours to other facilities, or any other factors that may impact their visit to one of the City's snow management facilities.

11. Conclusion

This Roadways Emergency Response Plan is intended to be a guiding document providing the City's Roadways, Fleet, and Support Department, and Emergency Management Organization with a phased approach to the emergency response during the next extreme or unusual snow event.

Given the uncertainty of when the next such event may occur, this plan will be reviewed on a regular basis by the RFS Department to ensure that it remains an appropriate approach during an emergency response.