

McOrmond Drive Multi-Way Boulevard – Winter Level of Service

ISSUE

What winter maintenance level of service should be provided for access lanes and angled parking along McOrmond Drive? The current service level for snow and ice management does not address this road configuration.

BACKGROUND

Between 2016 and 2018, a new road layout was constructed in both directions on McOrmond Drive between Fedoruk Drive and Feheregyhazi Boulevard. The new layout is referred to as multi-way boulevard. It consists of McOrmond Drive as the main road and a separated one-way access lane with angled parking for access to adjacent development and the surrounding pedestrian environment (e.g., trail network). Appendix 1 includes an illustration of the cross-section of the multi-way boulevard with snow storage locations. Appendix 2 contains photographs and Appendix 3 provides a site map of the McOrmond Drive multi-way boulevard.

The layout of access lanes and angled parking along this section of McOrmond Drive was not contemplated when the service level for snow and ice management was approved in 2017. The access lane is similar to some downtown streets with angled parking. The 2016 Functional Plan for McOrmond Drive through Aspen Ridge indicates snow would be graded and stored in the median and on boulevards, rather than hauled away.

Development along the McOrmond Drive access lanes is ongoing. One land parcel east of McOrmond Drive has been developed to date. There are six more vacant parcels. With the development of the first parcel in 2021, business frontages were built along the access lane. The business frontages being placed in this manner is required by the Zoning Bylaw No. 8770. The access lane allows vehicles to access angled parking which serves adjacent businesses. The businesses do not own or maintain the angled parking. There is also on-site parking within the development that can be used to access the businesses.

History

During the winter of 2021-2022, snow graded from McOrmond Drive was placed in the median separating opposing lanes of traffic on McOrmond Drive, and on the boulevard separating McOrmond Drive and the access lane.

Snow graded from the access lane and angled parking was placed on the boulevard (grass landscape strip) adjacent to the businesses, as planned in 2016 and illustrated in Appendix 1. Snow was graded after every snow event, but concerns were raised by adjacent business owners about the large snow piles in front of the newly opened

businesses blocking access for pedestrians from their parked cars to the sidewalk. The snow piles are shown in Figure 4, in Appendix 2.

Current Status

2016 Winter Maintenance Plan

The plan created in 2016 was for placement of snow on the boulevard (grass landscape strip) along business frontages. Administration recommends this plan should not be implemented as the snow piles block pedestrian access to the sidewalk and businesses and result in safety concerns due to slip, trip and fall hazards.

2022-23 Winter Maintenance Plan

The plan for the upcoming winter is to grade the access lane and angled parking only when driving and access to parking is impacted due to snow accumulation or drifting. Instead of storing the snow on the boulevard (grass landscape strip) between the angled parking and businesses, the plan is to push the snow to the next block and store it in the parking stalls without any adjacent development. This plan will not impact parking availability for any occupied businesses, and it does not require any additional funding.

Unless otherwise directed, the Administration will proceed with this plan for the upcoming winter.

Note: This plan can only be used while there are still vacant lots.

Long-Term Winter Level of Service for Multi-Way Boulevards

An approved long-term winter level of service is needed for this section of McOrmond Drive as well as any other locations in Saskatoon where this road layout may be constructed in the future.

OPTIONS

Potential long-term options for the snow and ice management service level on the access lanes and adjacent angled parking along McOrmond Drive are provided below. The cost estimates included in the table are based on a full adjacent development scenario and reflect the cost of winter maintenance on the access lanes and angled parking in front of all land parcels east and west of McOrmond Drive (see Appendix 3).

The options vary in the frequency of grading and whether the snow from snow grading is stored in the angled parking stalls or hauled away.

McOrmond Drive Multi-Way Boulevard – Winter Level of Service

Level of Service (LOS) Option	Description	Snow Removed?	Snow Graded?	Parking Availability Impact	Estimated Average Annual Cost
Option 1 - Local Street LOS	<p>Snow is left to pack under traffic. No snow grading after every snow event (snowfall > 5 cm).</p> <p>Snow grading only when inaccessible due to drifting or when snowpack is 15 cm or more to prevent rutting prior to the spring melt.</p> <p>Snow stored in parking stalls.</p>	No	Not regularly, only when mobility is impacted due to drifting or snow accumulation.	<p>Minimal.</p> <p>In the infrequent scenario where snow grading takes place and snow is pushed into adjacent angled parking, about 25% of the parking stalls will not be available for parking.</p>	<p>\$ 600</p> <p>Assumed one occurrence every five years.</p>
Option 2 - Priority 3 Street LOS	<p>After every snow event (snowfall > 5 cm), snow will be graded within 72 hours.</p> <p>Snow stored in parking stalls.</p>	No	Yes, every snow event.	About 25% of the parking stalls will not be available for parking.	<p>\$ 3,000</p> <p>The cost is based on five (5) snow events per winter.</p>
Option 3 - New Access Road and Angled Parking LOS A	After every snow event (snowfall > 5 cm), snow will be graded within 72 hours and then removed within two (2) days.	Yes	Yes, every snow event.	Minimal.	<p>\$ 100,000</p> <p>The cost is based on five (5) snow events per winter.</p>
Option 4 - New Access Road and Angled Parking LOS B	When snowfall accumulation is 10 cm or more, snow will be graded within 72 hours and then removed within two (2) days.	Yes	Yes, when snowfall accumulation is 10 cm or more.	Minimal but greater than Option 3. May be some impacts until trigger is met for snow removal.	<p>\$ 70,000</p> <p>The cost is based on three (3) occurrences per winter.</p>

Option 1 – Local Street LOS

Option 1 is the same as the level of service for local streets. This option would result in vehicles driving on packed snow. These driving and parking conditions would slow down vehicle movement and may impact parking maneuvers. With the expected high parking demand along businesses frontages, driving and parking on packed snow could provide mobility issues for vehicles and pedestrians accessing businesses and increase the risk of minor vehicle collisions.

It is assumed that snow grading would be triggered on average every five (5) years to prevent rutting before the spring melt. In this scenario, graded snow would be piled in a few parking stalls within the block that was graded. The snow piles would make those parking stalls unavailable for parking, reduce the visibility of some business frontages, and present a slip, trip, and fall hazard until the snow piles melt.

Option 2 – Priority 3 Street LOS

This option would result in typical winter driving and parking conditions observed on the city's Priority 3 streets. Snow on the access lane and angled parking would be graded within 72 hours after every snow event (snowfall > 5 cm). Graded snow would be piled in a few parking stalls within the block that was graded. The snow piles would make those parking stalls unavailable for parking, reduce the visibility of some business frontages, and present a slip, trip, and fall hazard until the snow piles melt. The risk of mobility issues and vehicle collisions due to road conditions would be lower than in Option 1 due to less or no snowpack.

Option 3 – New Access Road and Angled Parking LOS A

This option would result in the same driving and parking conditions as Option 2. Snow on the access lane and angled parking would be graded within 72 hours after every snow event. Additionally, all graded snow would be removed within the next two (2) days. This would result in full parking capacity being available within two days after a snow event. The risk of mobility issues and minor vehicle collisions due to road conditions would be the same as in Option 2, but lower than in Option 1. The overall negative impact on the parking capacity, visibility of adjacent businesses, and safety would be minimal. The estimated cost of \$100,000 every winter is primarily due to snow removal operations after every snow event. The cost is based on five (5) snow events per winter. Additional operating funding for snow and ice management would be required to deliver this level of service.

Option 4 – New Access Road and Angled Parking LOS B

This option would result in driving and parking conditions that are not as good as in Options 2 and 3, but better than in Option 1. Vehicles would drive on packed snow until snow accumulation reaches 10 cm. Once this threshold is reached, the snow would be graded within 72 hours, piled up in a few stalls within the block that was graded, and then removed within the next two (2) days. The snow piles would make a few parking stalls unavailable for parking, reduce the visibility of some business frontages, and present a slip, trip, and fall hazard for up to two days after the 10 cm snow accumulation threshold is reached. It is estimated that this scenario would occur three (3) times every winter. The risk of minor vehicle mobility issues and collisions due to road conditions would be somewhat higher than in Options 2 and 3, but lower than in Option 1. The estimated cost of \$70,000 every winter is due to snow removal operations once the 10 cm snow accumulation threshold is reached. Additional operating funding for snow and ice management would be required to deliver this level of service.

Summary

Not grading snow will mean that vehicles will be driving on snowpack and the risk of mobility issues for vehicles and pedestrians accessing the business and minor vehicle collisions will increase.

Snow grading of the access lanes and angled parking will make the driving conditions similar to those on Saskatoon's priority streets.

If the snow is graded, the snow pile from the snow grading can either be left in parking stalls or hauled away. Snow piles left in parking stalls will reduce the parking availability, reduce the visibility of some business frontages, and present a slip, trip, and fall hazard until the snow piles melt.

A detailed comparison of the options is provided in Appendix 4.

RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council:

1. That Option 4 – New Access Road and Angled Parking LOS be approved: when snowfall accumulation is 10 cm or more, snow will be graded within 72 hours and removed within 2 days;
2. That Administration includes the new service level for multi-way boulevards in the Snow and Ice Management service level document; and
3. That operating funding required to support the New Access Road and Angled Parking LOS, based on forecasted progress of development along these corridors, be included in the indicative rate in the Snow and Ice Service Line in future Multi-Year Business Plan and Budget submissions.

RATIONALE

Option 4 is recommended because it would provide good driving conditions and result in full parking capacity nearly always available with only short-duration negative impacts on the visibility of business frontages and safety. It is less costly than Option 3 because it would allow more snow to accumulate before initiating snow grading but would still maintain good winter driving conditions.

Option 1 is not recommended because most local streets do not have the same concentration of business frontages and parking demand that are expected along the McOrmond Drive multi-way boulevard and all other multi-way boulevards that may be constructed in Saskatoon in the future.

Option 2 is not recommended because of the negative impact that the snow piles within parking stalls would have on the visibility of business frontages and safety.

FINANCIAL IMPLICATIONS

The Administration’s plan for winter of 2022-23 will have minimal impact on the 2022-23 Snow and Ice Management service line.

If the recommendations are approved as presented, an operational funding request to support the forecasted adjacent development will be included in the Administration’s indicative budget for the 2024-2025 Multi-Year Business Plan and Budget deliberations.

Additional operating funding requests for winter maintenance on access lanes and angled parking paralleling remaining vacant parcels along the McOrmond Drive multi-

way boulevard, and any other future multi-way boulevard in Saskatoon, will be brought forward to future Multi-Year Business Plan and Budget deliberations in accordance with the forecasted progress of development along undeveloped land parcels adjacent to these corridors.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

There are no additional implications or considerations.

COMMUNICATION ACTIVITIES

If the recommendations are approved, the Snow and Ice Management Service Level document will be updated and posted on the City of Saskatoon’s external website.

APPENDICES

1. Multi-Way Boulevard, Winter-Time Cross Section
2. Photographs of McOrmond Drive Multi-Way Boulevard
3. Map of McOrmond Drive Multi-Way Boulevard
4. Option Comparison Chart

Report Approval

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