

Snowstorm 2020 Local Snow Removal Initiative – Information on Costs for One-Time Clearing of Secondary Paths in City Parks

ISSUE

This report provides detail on the cost and ramifications of a one-time clearing of secondary pathways in City of Saskatoon (City) owned parks.

BACKGROUND

The November 2020 snowstorm, with an estimated 35 to 38 cm of snowfall, caused park pathways to become difficult to traverse. Several snow events have also occurred since the snowstorm ended on November 9, with Environment and Climate Change Canada reporting 53 cm of snow in Saskatoon as of late November. Immediately after the snowstorm, the Parks Division began clearing primary pathways in all parks as per the approved and funded service level. For reference, primary pathways in parks are those major pathways with lighting and asphalt surfacing. Primary pathways are all to be cleared within 48 hours of a snow event.

At its November 30, 2020 Regular Business Meeting, City Council the following was resolved:

“With the current COVID-19 situation, and efforts by the City and Tourism Saskatoon to get people to enjoy Saskatoon’s winter and not just endure it, could Administration provide a report at the December Council meeting on the cost and ramifications of a one-time clearing of secondary paths in the City’s parks.”

For clarification, in this report, the term “secondary pathways” within City-owned parks mean any unlit park path surfaced with either asphalt, red shale or crusher dust and having sufficient width to accommodate snow clearing equipment.

CURRENT STATUS

Currently, there is a combined total of 35.4 km of secondary paths throughout City parks that the Parks Division does not clear, under its Winter Works program service levels. Operating costs for snow clearing are budgeted at \$1,340 per km of path per winter season, based on the assumption of an average ten snow events per season. A snow event involves the accumulation of 5 cm or more of snow and/or drifting events from high winds that require subsequent clearing.

DISCUSSION/ANALYSIS

Costs for One-Time Secondary Path Clearing

At the current operating costs, in a typical year, a one-time clearing of all secondary paths would cost approximately \$4,800 ($\$134/\text{km} \times 35.4 \text{ km} = \$4,743$). Some complicating factors tied to the current state of the secondary paths include: they are covered with excessive snow (in many locations 35+ centimeters of snow from the

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November 2020 snow events); and this snow has now experienced compaction, a few freeze-thaw cycles, and drifting events, making it hard-packed and more difficult to clear. Based on the experience of clearing the primary paths following the November snowstorm, Administration anticipates resources required for a one-time clearing of the secondary pathways to be closer to three times the one-event standard. This would mean the cost would be approximately \$14,400.

The Administration estimates the secondary paths could all be cleared within 5 to 7 days of project start, but this timeline could be extended if the snowpack is significantly compacted. Also, if a snow event were to begin while the one-time clearing operation was in progress, Administration would switch to the primary pathways of the Winter Works program approved service level and return to the secondary path clearing once the primary paths were finished.

Permanent Service Level Increase for Secondary Paths

Clearing secondary paths on an ongoing basis (ten snow events per season) would cost \$47,430 per season. In addition, 30 km of the secondary paths are surfaced with crusher dust or red shale, and numerous clearings over a snow season will result in path degradation. If secondary paths with aggregate surfaces are cleared during numerous snow events, an additional \$22,080 is required for path restoration and maintenance each spring season, for a total of approximately \$70,000 annually.

Secondary paths would not be able to be cleared within the current service level of being cleared within 48 hours for primary paths. To accomplish this same service level, additional equipment and staffing would be required. Administration anticipates the secondary paths could be cleared within 4 to 5 days of the ending of a snow event.

Communication Plan

There is an important distinction between one-time clearing and a permanent service level increase. After an initial clearing, Administration anticipates that with typical winter conditions, including more snow events and drifting events from high winds, the secondary paths would again ultimately become difficult to traverse at some point during the remainder of the winter season. Therefore, a clear communications plan to manage expectations will be necessary for a one-time project.

Service Level Changes

If there is a desire to proceed with increasing the snow removal service level to include secondary pathways in the future budgets, Administration would create a secondary path clearing plan. Specifically, the objective of the clearing of secondary paths would be to increase walking opportunities by expanding the number of loops or circuits a walker may be able to take in a park and adding some variety and options for walks of varying lengths. This information could be presented in advance of the next applicable budget cycle.

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FINANCIAL IMPLICATIONS

For the current winter season, a one-time secondary path clearing would require an additional \$14,400 to be allocated to the Parks Winter Works program, as this amount is currently unfunded. Any future permanent increase to service levels would require additional funding and would need to be considered during the 2022 or future Operating Budget deliberations.

NEXT STEPS

If funding were to be allocated for a one-time secondary path clearing, then depending on the fiscal year the funding is allocated from (i.e. 2020 or not until 2021), the timing of the work would be scheduled accordingly.

REPORT APPROVAL

Written by: Dave Hutchings, Superintendent, Parks
Konrad Andre, Performance Improvement Coordinator, Parks
Reviewed by: Darren Crilly, Director of Parks
Approved by: Lynne Lacroix, General Manager, Community Services

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