

Snow plough damage to sod along sidewalks and other landscape features within the road right of way

Date: April 27, 2023

To: Etobicoke York Community Council

From: Director, Operations and Maintenance

Wards: Ward 1 - Etobicoke North, Ward 2 – Etobicoke Centre, Ward 3 – Etobicoke-Lakeshore, Ward 5 – York South-Weston, Ward 7 - Humber River-Black Creek

SUMMARY

Following the recent 2022-23 winter season, there has been concerns over snow plough damage to property and sod along sidewalks and other landscape features within the public road right of way.

The purpose of this report is to respond to the April 3, 2023 Etobicoke York Community Council's direction for an update concerning the extent of damage, the plan to make repairs, an overview of the responsibilities of the City, the snow clearing contractor, and of residents, and on progress toward making repairs this spring.

RECOMMENDATIONS

The Director of Operations and Maintenance recommends that:

1. Etobicoke York Community Council receives this report for information

FINANCIAL IMPACT

Transportation Services confirms that there are no immediate financial implications in the current budget year or in future years resulting from the recommendations included in this report. Funding for unforeseen financial implications arising from this report will be included for consideration in future budget submissions.

DECISION HISTORY

The Etobicoke York Community Council:

1. Requested the Director, Operations and Maintenance, Transportation Services, to report to the May 15, 2023 Etobicoke York Community Council with a report on the extent of plow damage within the district, the plan to make repairs, an overview of the responsibilities of the City, the snow clearing contractor, and of residents, and on progress toward making repairs this spring

<https://secure.toronto.ca/council/agenda-item.do?item=2023.EY4.22>

COMMENTS

Sidewalk Clearing Operations

Transportation Services is responsible for providing winter maintenance services on approximately 7,400 km of sidewalks. There are corresponding council approved levels of service which establish a set of criteria, thresholds and performance outcomes.

Winter mechanical sidewalk clearing, which involves combined de-icing (salting) and ploughing, is activated once 2cm of snow has accumulated, with a safe and passable pavement outcome. Presently, the mechanical sidewalk snow clearing program is only provided in areas of the City where it is mechanically feasible to do so. In Etobicoke/York, most sidewalks meet the criteria to receive mechanical sidewalk clearing. Sidewalks served include those on arterial, collector and local roads. Moreover, the sidewalks are located within residential, commercial and industrial areas, along with school zones and transit routes. It takes approximately 12 hours to complete a single round. Multiple rounds of sidewalk clearing may be required, particularly in response to large snowfalls. Therefore, sidewalk clearing can continue up to 72 hours after the snow has stopped falling. Staff may also initiate sidewalk clearing or de-icing in response to icy conditions.

Mechanical sidewalk snow clearing is delivered by contractors working on behalf of the City. The five wards comprising Etobicoke/York are served by three contracts within an established geographical zone. The current contracts began October 2022 continuing for a seven year term, with three individual option years. The equipment used by the contractors remains the same throughout the duration of the contract with the exception of some equipment that may be replaced or upgraded periodically. All City contracted Equipment complied with prescribed specifications, width and dimension requirements, thus the plow blades and the equipment tires are not wider than the sidewalk.

Property/Sod Damage Caused by Mechanical Sidewalk Clearing Equipment

As a result of mechanically snow clearing sidewalks, there are instances where the clearing operation results in damages to the areas on either side of the sidewalk. In Etobicoke/York, the areas on either side of the sidewalk are typically composed of soft surface grass boulevards. However, there can also be different types of infrastructure

located adjacent to the sidewalk such as driveways, precast concrete curb stones, driveway curbs, stairs, walkways, fences and retaining walls. In most cases this infrastructure is located on City property, which extends beyond the edge of the sidewalk towards the private property.

As per City of Toronto Municipal Code Chapter 743, Streets and Sidewalks, Use of, owners and occupiers of land adjoining the street are permitted under the Chapter to maintain certain encroachments as long as they conform to certain specified criteria, including that they do not interfere with the City's ability to keep the street free of snow and ice. Also, unless otherwise specified in Chapter 743, encroachments other than soft landscaping are required to be set back a minimum of 0.5m from the edge of the sidewalk closest to the street line (line dividing public and private property).

A couple of provisions within Chapter 743, such as Section 743-31G and Section 743-32C of Chapter 743, provide that, the City is not responsible for repairing or replacing any encroachment damaged as a result of clearing and removing litter, graffiti, posters, snow or ice, or as a result of street repairs or reconstruction.

However, in accordance the current winter maintenance agreement the City does hold the vendor responsible for damages that have been determined by the City to be a direct result of their sidewalk clearing operations. There are no direct costs to the City for performing these repairs.

Winter Maintenance Agreements

There are two sections within the winter maintenance agreements regarding property and sod damage and the contractor's responsibilities to make the repairs. Section 5.11 (Work Quality) states that the Vendor will be required to correct any sidewalk, plowing, and salting operation deficiencies found on the assigned route and the Vendor shall correct these deficiencies at no cost to the City. Moreover, Section 5.12 (Repairs to Damage) states that any damage to public and or private property as a result of the Winter Maintenance Services shall be the responsibility of the Vendor. The Vendor shall be responsible for all remediation work including the replacement of sod damaged on lawns, and damaged driveway Pavement, facades, or any other damage to property at the Vendor's expense. If the Vendor fails to satisfactorily repair or replace any damaged sod, driveway Pavement, facades, or any other damage to property, the City will make the repair or replacement at the expense of the Vendor.

Process for Reporting Winter Damages

In the event that sod or other encroachments are damaged as a result of mechanical sidewalk snow clearing, residents can submit a Service Request through 311 which is input as one of the three problem codes for this type of damage:

- CSROSR-02 Boulevards-Plough Damage (boulevard refers to the public right-of-way between the curb and the private property line)
- CSROWWM-04 Road-Plough Damage
- CSROSWM-17 Roadside –Plough Damage (Roadside refers to the side of the road such as curbs and catch-basins)

Once a Service Request has been placed through 311, an investigation will be completed by Transportation Services' staff. As part of the investigation, staff will conduct a site visit and document their findings. If damage is determined to be the result of a winter maintenance operation and work is required, the contractor is notified of the locations and they are added to a list for future repairs by the contractor. If the damage is determined to not be the result of the winter maintenance operation, the investigation notes will be added to the file and the service request closed. Residents can contact 311 for updates and the results of the investigation.

Alternatively, residents may choose to submit a claim through the City's claim submission process. When a claim is submitted, the City's adjuster sends a copy of the claim to Transportation Services for response. Transportation Services' staff conduct a site investigation to review the claim and take measurements, photos and notes regarding the claim in question. The investigation report is then forwarded to the City's claims adjuster for inclusion in the claim file. The claims adjuster will review and make a decision on the outcome and then communicate with the claimant.

The following table represents the 2022-23 winter season property/sod damage Services Requests for Etobicoke/York:

		Ward 1	Ward 2	Ward 3	Ward 5	Ward 7	Total
CSROSR-02	BOULEVARDS- PLOUGH DAMAGE	140	533	311	134	77	1195
CSROWWM-04	ROAD- PLOUGH DAMAGE	2	12	9	3	1	27
CSROSWM-17	ROADSIDE - PLOUGH DAMAGE	32	123	91	34	19	299
	Total	174	668	411	171	97	1521

Winter Mechanical Sidewalk Clearing Damages Factors

During a typical winter season, there are a number of factors which can contribute to the amount of damages resulting from mechanical sidewalk snow clearing. This includes the inability to differentiate the sidewalk from the boulevard in snow covered dimly lit conditions, and warm ground temperatures, which make the ground susceptible to damage. Both of these factors are influenced by the weather conditions and the number of freeze thaw cycles during a winter season. In addition to the two factors above, the presence of encroachments located immediately adjacent to the sidewalk also increases the likelihood of damages.

Snow Covered Conditions

When mechanical sidewalk snow clearing is activated in response to snow accumulation, the equipment operators follow the path of the sidewalk while clearing. In a snow covered condition, both the boulevard and sidewalk are covered in snow, and therefore it may be difficult to differentiate between the two features. After mechanical sidewalk snow clearing is completed, there are windrows left on either side of the

sidewalk. When temperatures remain low after sidewalk clearing, the windrows remain in place and serve as a guideline for future sidewalk clearing operations. When there is a freeze/thaw cycle between winter events and the snow melts away, there are no longer windrows in place to guide future operations. During subsequent sidewalk clearing events, the sidewalks and boulevard are again covered in snow and again operators may not be able to differentiate the sidewalk and boulevard. During recurring freeze thaw cycles and subsequent sidewalk clearing events, it is more likely that damage will occur as operators do not have guidelines to follow from the previous winter event.

Ground Temperatures

Ground temperatures and soil conditions can also increase the likelihood of damage from mechanical sidewalk snow clearing. During periods of warm temperature and or repeated freeze/thaw cycles, the topsoil may not freeze and may retain additional moisture. When the topsoil is not frozen and has a high moisture content, it is more susceptible to damage from mechanical sidewalk snow clearing equipment.

In the first few months of the past winter season there were above average temperatures and rain conditions immediately preceding snowfalls requiring the activations of services. Subsequently, the ground was not yet frozen and the rainfall caused the ground to become heavily saturated with water. Consequently, the sod was susceptible to damage from either the plow blade or the sidewalk clearing equipment tires. The warm temperatures and rain also meant that snow has quickly melted and that there were less windrows left over the previous clearing operations to provide operators with guidelines to follow the sidewalk. Each time they plow, they have to try to follow the alignment of the sidewalk in snow covered and or low light conditions.

Encroachments and Low Light Conditions

The presence of encroachments immediately adjacent to the sidewalks can increase the likelihood of damages in two ways. First, encroachments which abut the sidewalk present an obstacle for snow clearing equipment and may not be visible underneath snow accumulation and or windrows. They also may not provide sufficient space for the equipment to clear the area. Secondly, when an operator attempts to avoid hitting an encroachment they may have to veer away from the intended path of travel which can result in damages to the boulevard area opposite the encroachment, that being most often sod.

Investigation of some of the areas identified to suffer sod damage showed some instances where the sidewalk equipment had to deviate from the sidewalk to avoid encroachments such as hedges, fences, and driveway border curbs, thus forcing the equipment into the boulevard. Furthermore, the operators are often clearing snow-covered sidewalks during evening hours with low visibility that adds to the challenge of not seeing the sidewalk edges and trying to stay on course. The blades are not wider than the sidewalk, although the results can make it look as if they are.

Finally, it is important to note that historically during the first year of a multi-year winter maintenance contract there are a higher number of SRs, as the contractor becomes

familiar with neighbourhood beats and are refining their operations. The first year (2015-16) of the previous multi-year winter maintenance contracts, experienced higher than average sod damage SRs.

Damage Remediation and Repairs

Notwithstanding these above-mentioned explanations, there were some areas where with excessive sod damage. In accordance with the winter maintenance agreements Transportation Services will ensure that its contractor repair sod damage resulting from winter operations by late spring-early summer.

In April 2023 all of the winter maintenance contractors were officially notified through staff correspondence about their contractual obligations to repair damage caused by winter maintenance operations and were provided a list of all locations to be remediated. The address list could be amended if additional locations are reported and discovered proactively by staff are recorded through the 311 Service Request process.

For repairs to sod, the Vendor must ensure that the finished grade and depth of topsoil are satisfactory to match existing grades and irregular sections must be squared off. Sodding shall not be completed in excessively wet conditions, freezing temperatures or on top of frozen soil. Sod must be layered in rows perpendicular to the slope with staggered joints having close contact between the sod and soil by light rolling. Lastly, at all sod restoration locations the vendor must provide Notice to the impacted properties once the restorations have been completed. Attached to this report is a copy of the notice to be provided.

Communications

In March and April Transportation Services staff sent emails to the Councillor's Office regarding property/sod damage resulting from winter maintenance operations. The emails concerned staff's investigations into plough damage Service Requests and offered messages that could be used to address constituent's questions and concerns regarding this subject matter.

Improvements to Existing Processes

Transportation Services will ensure that repairs to sod damage will be executed this spring/summer resulting from winter operations, but staff understand that it is ideal to avoid excessive damage in the first place. To that end staff are in discussions with the contractor regarding what measures can be taken to reduce the volume of damages especially when there is a large deviation from the path of the sidewalk. Staff have also requested the vendor to review the location of the damages received so far in relation to their routes to determine if there are any trends where a specific a route is experiencing a higher volume of damage.

Other efforts to reduce the number of damages will involve the City will have preconstruction meetings as early as possible given the unpredictability of the winter season to ensure that if there are early winter storms we can activate crews efficiently and with care for our transportation network. Prior to the season starting, Transportation Services will also be instructing the contractors to conduct a walk-over of all sidewalks. Furthermore, Transportation is developing an enhanced communication strategy specifically with regards to damages as a result of sidewalk snow clearing.

Some damage to sod during mechanical sidewalk clearing operations is unavoidable, however staff will continue working with the vendors on ways damage can be kept to a minimum.

CONTACT

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SIGNATURE

Vincent Sferrazza
Director, Operations and Maintenance
Transportation Services Division

ATTACHMENTS

1. Winter Damages Repairs Notice

Attachment 1 - Winter Damages Repairs Notice

Soft Surface Repairs caused by Winter Services

Contractors working on behalf of The City of Toronto have performed restorations to soft surfaces damages as result of winter maintenance services at this address.

OTHER IMPORTANT DETAILS

Repairs to soft surfaces, which includes either sod or seeding, are completed during the ideal growth season in the spring from approximately April to June.

After restoration has been completed. It is the homeowner's responsibility to regularly water the new sod/seed placed adjacent to their property to ensure that the restored area is properly maintained. It is recommended to wait a minimum of 4-6 weeks before cutting the grass in the newly sodded or seeded areas.

Please be advised that sod and seed not regularly watered will not be replaced.

Refer to - TORONTO MUNICIPAL CODE CHAPTER 743, STREETS AND SIDEWALKS, USE OF 743-70 December 18, 2019 ARTICLE V Maintaining Boulevards [Adopted 2012-03-07 by By-law 375-201230] § 743-36.

	Work Hours: Work will take place from 7 a.m. to 5 p.m., with work after hours and on weekends as required.
	Restoration: Lawn seeding and/or laying of sod will be done as needed during ideal growing time during the season - in the spring (April to June). <i>We request homeowners to water the new sod in front of their property to ensure proper growth.</i>

NEED MORE INFORMATION?

If you have questions about the repairs, please call 311

TTY Hearing Impaired Service	416-338-0889 (7 Days a week, 8:00 am – 5:00 pm, closed holidays)
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