

Maintenance Fees for Pavers on City Streets

Date: November 3, 2016
To: Public Works & Infrastructure Committee
From: Acting General Manager, Transportation Services
Wards: All
Reference: P:\2016\Cluster B\TRA\pr\pw16012pr.docx

SUMMARY

"Streetscape enhancements" are created in many forms throughout the City of Toronto to improve walkability, accessibility, safety, and character. In addition to lighting, street furniture, and planting, many third parties (private developers, Business Improvement Areas (BIAs), and agencies) have installed custom pavers into the sidewalk.

While there are many positive aesthetic attributes for sidewalk pavers in the City of Toronto, they do represent a more complicated treatment than standard concrete sidewalks. With the growing pressures for streetscape projects, there is an increasing burden placed on Transportation Services to maintain these third party encroachments across different streets. This has led to a number of issues, notably accessibility, consistency, and significantly higher maintenance costs.

Previous maintenance arrangements have attempted to mitigate the increased maintenance pressure for paver sidewalks. Some projects have been required to purchase additional pavers which Transportation Services stores for ongoing repairs. This results in storage costs to the City, and complicated inventory management. More importantly, it did not cover the labour costs of relaying the pavers when existing ones failed, nor the costs for contractor time spent searching the City yards for matching pavers. These costs have been covered by the City's Transportation Services Division, rather than third parties.

Accordingly, Transportation Services has recently streamlined the use of pavers through the creation of a standard palette of pavers, and developed an approach to maintain paver sidewalks over the long-term.

In order to provide the funds necessary to maintain paver sidewalks, this report seeks to charge a maintenance fee for all future paver sidewalk installations undertaken by third parties.

RECOMMENDATIONS

The Acting General Manager, Transportation Services, recommends that:

1. City Council amend City of Toronto Municipal Code Chapter 441, Fees and Charges to add the following new user fees for 2017 where third parties replace concrete or asphalt with pavers in the City's right-of-way to cover the costs of long-term maintenance, subject to the annual inflation rate:

a) One-time Paver Maintenance Fee - \$55 sq. metre of paving installed plus all applicable taxes

b) An additional percentage of up to 15% of the above fee for complex designs based upon recommendations as outlined in this report

2. City Council authorize the City Solicitor to introduce the necessary bills to give effect to City Council's decision.

FINANCIAL IMPACT

The One-Time Paver Maintenance Fee is proposed to be \$55.00 per square meter of pavers installed. This will be paid by the third party in addition to the capital expenditure for the streetscape project. The fee was developed in close consultation with Road Operations Managers in Transportation Services, who have direct responsibility for the maintenance of city roads and sidewalks, and based on a 5 year review of sidewalk paver maintenance contract pricing.

As projects are approved, the One-time Paver Maintenance Fee will be paid into the Paver Maintenance Reserve Fund, (XR1413) available solely for paver maintenance of the named project. These funds will be available to Transportation Services to use when maintenance work is required on pavers in the designated project area. The funds will not be available for any retroactive projects, or areas outside the project scope.

The amount of funds required for paver maintenance will depend on the volume of projects approved for installation in the City's right of way.

Going forward careful auditing of these reserve funds will be undertaken by Transportation Services to ensure the fee is appropriate for the work. This also provides an opportunity to assess whether the fees are sufficient or will need to be adjusted accordingly.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

This report is a new request being presented to the Public Works and Infrastructure Committee

COMMENTS

While there are many positive aesthetic attributes for sidewalk pavers in the City of Toronto, they do represent a more complicated treatment than standard concrete sidewalks. This has led to a number of issues, notably accessibility, consistency, and significantly higher maintenance costs..

Compliance with the Streetscape Manual

Custom and non-standard pavers are inconsistent with two main principles of the City's Streetscape Manual: coherence and durability. Coherence is especially important on complex City streets to ensure the City's pedestrian network is unified and continuous so that users of all ages and abilities can understand the designation of safe pedestrian space free of other sidewalk activities like cafes, street furniture, bike parking, and marketing.

Higher Maintenance Costs

Pavers suffer from freeze/thaw periods more than concrete sidewalks. Over time, the pavers can become unsettled, creating potential trip hazards on City streets. To re-level pavers, they must be removed and reinstalled by hand with new sand added between the joints. A comparable type of maintenance is not required for concrete sidewalks. The result is that the costs of maintaining sidewalks with pavers is more frequent and more expensive than concrete sidewalks.

Previous maintenance arrangements have attempted to mitigate the increased maintenance pressure for paver sidewalks. Some projects have been required to purchase additional pavers which Transportation Services stores for ongoing repairs. This results in storage costs to the City, and complicated inventory management. More importantly, it did not cover the labour costs of relaying the pavers when existing ones failed, nor the costs for contractor time spent searching the City yards for matching pavers. These costs have been covered by the City's Transportation Services Division, rather than third parties.

According to Article IV (Sections 31, 32, and 37) of Chapter 743 in the Toronto Municipal Code, the City cannot be responsible for maintenance of any third party encroachment, including pavers. Despite this, and efforts made by both City staff and third parties, the maintenance arrangement for sidewalk pavers to date has not been cost neutral to the City.

Transportation Services does not have the capacity to manage and maintain the current practice. Long term maintenance must be carefully prioritized and considered as part of initial design and delivery of all streetscape projects.

Accessibility and Equity

The most common accessibility complaint is that of poorly maintained sidewalks.. Uneven joints between pavers can be experienced as "bumpy" by persons using wheelchairs or mobility devices. For persons with chronic pain, travelling over these surfaces can be acutely painful. The public relies on the City's sidewalks to navigate the City. Concrete sidewalks are particularly good for maintaining accessibility as they are smoother, more consistent, and have less trip hazards or bumps.

Well-maintained sidewalks are an essential part of the City's transportation network and offer a necessary service to those who travel on foot or using mobility devices. The recommendations in this report will assist in ensuring that the City has sufficient funds to provide for long-term maintenance of pavers in the travelled portion of the sidewalk.

New City Standard Palette

In order to address these concerns, a new standard paver palette was developed in close partnership with Staff from City Planning and Economic Development and Culture. Wherever possible, third parties will continue to consider materials (primarily concrete) as directed in the City's existing streetscape manual which can be fully maintained by the City at no additional cost to the applicants. Where applicants wish to use pavers, they will be directed to the City's new standard palette of pavers with placement guidelines (Appendix 1 – Guidelines for the use of pavers of city streets provides a summary of the palette options). Where third parties propose pavers beyond those in the City Standard palette, these unique pavers will be reviewed by a staff working group and will require approval of the General Manager Transportation Services.

A frequent cause of maintenance issues in the sidewalk is utility companies undertaking their infrastructure work which lies beneath the surface of the public right-of-way. The current process for utility cut repairs is being reviewed and will be reported on separately in 2017.

Consultation

In addition to consultation with internal City Divisions, City staff have also met with its Accessibility Advisory Panel (AAPT), BILD, and TABIA to review the standard paver palette and to discuss the paver maintenance fees.

AAPT strongly supported the implementation of an improved maintenance regime. BILD had no objections to the fee or guidelines. Representatives from TABIA agreed that improved maintenance is required on City Streets and understood the necessity for a fee, thus providing a reduced administrative and operating budget burden on BIA's.

New Maintenance Fee

Municipal Code Chapter 743, Streets and Sidewalks, Use of, stipulates that some types of third party encroachments must be cost neutral to the City. Over the years, the City has made various arrangements with third parties to mitigate the maintenance costs of pavers. Unfortunately, these efforts have not been entirely successful and with the increasing number of third party encroachments the scale of the maintenance burden has become untenable.

Use of City Standard Pavers

In order to ensure paver sidewalks are maintained at no extra cost to the City, it is recommended that the City of Toronto charge a maintenance fee that is sufficient to cover costs and is consistently applied and easily managed by City staff. The One-Time Paver Maintenance Fee is proposed to be \$55.00 per square meter of pavers installed. This will be paid by the third party in addition to the capital expenditure for the streetscape project. The fee was developed based on a 5 year review of sidewalk paver maintenance contract pricing. The maintenance fee is intended to cover all City labour costs for conducting maintenance work on the paver encroachments for the lifespan of the sidewalk.

Use of Patterns

In instances where a third party proposes the use of a complex paver pattern (such as herringbone), it is proposed that they pay \$55.00 per square meter of paving installed plus an additional premium of up to 15% of this amount, based on the complexity of the design. This additional fee shall reflect the additional labour costs associated with the need to refer to the original design templates for guidance, cutting and fitting of standard pavers to specific designs. The exact percentage would be based on the recommendation of the Paver Working Group based on the estimated additional labour costs of maintaining complex design installations.

Use of Non-standard pavers

Where a proposal for non-standard pavers is accepted by the General Manager of Transportation Services, the \$55/square meter fee plus up to 15% will be required. In addition, the third party will also be responsible for provision of the non-standard pavers to the encroachment site, whenever the City advises that paver maintenance is required. If the third party uses the City standard palette, all replacement pavers will be provided by the City.

As a result of this new fee, Transportation Services will be able to continue to maintain sidewalks in the public right of way and will take on the maintenance responsibility for these encroachments.

Table 1 Summary of Third Party Requirements

Materials	Maintenance Fee	Additional Fee for Maintenance of Complex Patterns	Materials provided by third party
City Streetscape Manual	No	No	No
City Standard Palette Pavers	\$55/Sq. M. of pavers installed	Yes	No
Non-Standard or Custom Pavers	\$55/Sq. M. of pavers installed	Yes	Yes

Agreements and Approval Process

The new fee will be administered through the street work permit process, with the fee being paid prior to an applicant receiving a permit to commence the paver work in the public right of way. Applications for paver work in the public right of way shall be assessed by the General Manager, Transportation Services, in accordance with the requirements of Attachment 1 of this report. Where an applicant fails to meet the requirements set out in Attachment 1, the application shall be refused by the General Manager, Transportation Services. Where an application is approved, payment of the maintenance fee will be required and initial installation of the pavers will be conducted by the third party paver applicant at their sole cost and expense, including the purchase of any City standard pavers.

The General Manager, Transportation Services, will also require approved paver applicants to enter into an agreement with the City. This agreement shall include terms and conditions acceptable to the General Manager, Transportation Services, including that should the monies paid to the City as part of the new maintenance fee be completely spent, the City may, at its sole discretion, elect to remove the pavers and replace them with another surface. Should the applicant wish to have the pavers remain on the right of way, the agreement will provide the option that the applicant can pay additional funds to the City to cover all future maintenance costs. This agreement shall also include terms and conditions as outlined in Attachment 2.

All applicants for street work permits for pavers after January 1st 2017 will have to pay the fee.

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SIGNATURE

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ATTACHMENTS

Attachment 1 - Guidelines for the Use of Pavers on City Streets
Attachment 2 - Terms and Conditions

Attachment 1 Guidelines for the Use of Pavers on City Streets

City Standard Palette

The following paver colours are suitable for use in the sidewalk boulevard:

Paver colour	Use in pedestrian clearway	Use in Furniture zone or banding
Medium Grey	Yes	Yes
Light Grey	Yes	Yes
Dark Grey	No	Yes
Dark Red	No	Yes
Light Red	No	Yes

The following sizes are suitable for City standard pavers:

- a) 100mm x 200mm x 70mm
- b) 200mm x 200mm x 70mm
- c) 400mm x 200mm x 70mm

Placement Guidelines

Occasionally some patterns may be accommodated, but on the whole the use of pavers must be uniform throughout the city to ensure an accessible pedestrian network. Placement of street materials will be contingent on accessibility, sustainability, design, and maintenance implications.

Typical Street: All designers are encouraged to follow the City's Streetscape Manual: concrete sidewalks with standard paver banding. The City will assume full maintenance responsibility for these treatments.

Options for Enhanced Streetscapes: If a third party wishes to use City Standard pavers instead of concrete in the sidewalk, the following conditions must be met:

- a) All sidewalk clearways are medium or light grey, or a random mix of the two with no more than 30% of the mix using the darker coloured pavers.
- b) The furniture zone or banding can be dark grey, a mix of light and dark red, or medium/light grey.
- c) Three unit sizes are available but cannot be mixed.
- d) If City Standard pavers are used in complex or unique patterns, an extra fee may be required as well as approval from the Paver Working Group. Additional fees for complex and unique pavers will be based on labour and materials estimates taking into consideration the need to readily access template patterns, and to precisely cut and fit pavers to fit the patterns.

Areas of Special Significance with Non-Standard or Custom Pavers: Occasionally, there will be areas of considerable public significance which merit a more distinctive paver design. In such cases, the Paver Working Group (made up of representatives from Transportation Services, City Planning, and Economic Development) will review the proposal and work with the third party to develop an optimal design, taking into consideration accessibility, maintenance, sustainability, and place-making.

Paver requirements

At a minimum, the following criteria must be met for all applications to install pavers on the City right of way. Any application failing to meet these standards will not be approved and/or granted a permit for street work by the General Manager, Transportation Services:

- All pavers must have a top radius of 6mm or less for joints;
- All pavers must maintain a high colour contrast between pedestrian zones and vehicle zones;
- The paver must be made of robust material that will withstand the weight of snowplows over the long term and rated by the manufacturer for outdoor use;
- A supply of replacement pavers must be available over the lifespan of the sidewalk;
- The use of pavers must adhere to City standards, policies, and guidelines and all provincial and federal legislation;
- Paver patterns cannot create legibility issues for road users;
- The overall paver type and design (including any pattern) must be context sensitive and consistent with adjacent streets including recognition of major cultural and civic institutions, and adhering to the street typology; and
- Any other criteria deemed necessary by the General Manager, Transportation Services.

Once designs are finalized with the Paver Working Group, and provided that a maintenance fee is paid and the proposal is accompanied by a maintenance agreement with the third party in perpetuity, a recommendation for approval will then be made to the General Manager, Transportation Services for final sign off. The third party will be responsible for all storage or sourcing of unique paver materials and onsite coordination with City crews when repairs are undertaken. The City shall provide reasonable notice wherever possible of the timing of such repairs. This maintenance agreement is to be agreed upon and signed before any enhancement works begin.

Amendments to the Guidelines

From time to time, City staff may be required to make technical or non-substantive amendments to these guidelines to ensure conformity with City by-laws, standards and policies and as required by law.

PW17.7 - Attachment 2

Attachment 2

Terms and Conditions for third party installations of pavers in the sidewalk

- (1) The applicant shall construct the encroachment to the satisfaction of the Acting General Manager, Transportation Services;
- (2) The applicant shall comply with the insurance and indemnity requirements of § 743-23 of Chapter 743, Streets and Sidewalks, Use of;
- (3) The City shall maintain the right to place pipes, cables, wires, poles and other infrastructure within the encroachment;
- (4) The applicant shall, if required by the Acting General Manager, Transportation Services, remove or permit the removal of the encroachment. The applicant shall have no claim against the City should the City elect to remove the encroachment at any time;
- (5) The applicant shall pay the fees specified in Chapter 441, Fees and Charges;
- (6) The applicant shall pay all costs associated with preparing the agreement;
- (7) Where additional City standard pavers are required by the General Manager, Transportation Services, in conducting maintenance work, the applicant shall pay to the City the cost of those additional City Standard pavers. Where the applicant fails to provide payment for the additional standard pavers within the time specified by the City, the City may remove the encroachment and restore the street;
- (8) Where unique pavers are installed, the applicant shall maintain a stock of the unique pavers and provide unique pavers to the City upon request. Where the applicant is unable to provide the unique pavers within the time specified by the City, the City may remove the encroachment and restore the street;
- (9) The City will not repair or replace any temporary asphalt to missing or deteriorated pavers or utility cuts or until the permanent restoration is undertaken; emergency and temporary repairs will be undertaken in asphalt.
- (10) Any other conditions considered appropriate by the Acting General Manager, Transportation Services.