
DATE: July 30, 2012

REPORT TITLE: **DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE REPAIR OR REPLACEMENT**

FROM: Dan Labrecque, Commissioner of Public Works

RECOMMENDATION

That the Region of Peel continue with the current driveway restoration service that is provided after the repair or replacement of water infrastructure;

And further, that the current driveway restoration service be developed as a formal policy.

REPORT HIGHLIGHTS

- Peel's current process and standards for restoration of driveways, following repair or replacement of water infrastructure and service, is adequate and similar to those provided by neighbouring municipalities.
- The financial impact to enhance this service to cover restoration of entire driveway lengths would be significant and therefore should not be adopted.
- Area municipalities have expressed that they do not support the concept of a Regional full driveway restoration service, as they would not be able to assume the financial burden of a similar program.

DISCUSSION

1. Background

Driveway restoration is a specific service provided in the process of the repair or replacement of infrastructure. In Peel, the majority of this service is incurred at the residential level. Peel's current process for the restoration of driveways after the repair or replacement of water infrastructure, addresses the extent of surface area to which a driveway is restored and the method of restoration for different types of driveways. The portion of driveway that Peel restores under the current restoration process is that portion under municipal ownership and any privately owned portion that has been impacted by the infrastructure work. The cost of this work is 100 percent funded by Peel. The possibility of enhancing this program to include additional restoration that encompasses the entire private portion has been discussed, but further analysis has indicated this to be financially unfeasible and contradictory to the wishes of local municipalities.

July 30, 2012

DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE REPAIR OR REPLACEMENT

2. Procedures

a) Driveway Restoration

Current Practice

Typically, the Region will restore driveways up to the point of alteration with a 1 to 2 metre (3.28 to 6.56 feet) radius beyond or around the affected area. In instances where the driveway has been constructed within that year, Peel will also reseal the entire asphalt driveway.

The majority of driveways in Peel are comprised of asphalt. The remaining driveways are generally gravel/granular base, patterned concrete or interlocking brick/stone and are of greater expense to restore.

The restoration standards for the most common type of driveway, asphalt, are sub divided into four distinct types (Appendix I, Figures 1-4).

Option for Complete Private Side Restoration Service

The Region would be required to extend the restoration of the driveway entirely including the private portion of the driveway (ie. up to a garage or dwelling). Regardless of the driveway material, this would result in significant financial increases.

b) Cost of Service

Current

Approximately 40 to 50 percent of residential water services are located in the driveway, and therefore driveway restoration costs regardless of driveway type are bundled in the base contract for the infrastructure replacement. Costs are subject to the tendered contract and economic market at the time. As such, a fixed unit cost per driveway or surface area is not available. The following table shows the total cost for driveway restoration for the past five years.

**Table 1
Asphalt Restoration Costs**

	2007	2008	2009	2010	2011
Restoration Costs (Asphalt Only)	\$128,545	\$115,137	\$255,221	\$391,892	\$279,847
<i>*Note: 2010 costs higher due to advanced projects funded by Internal Stimulus Funding</i>					

Complete Driveway Restoration (including privately owned portion)

Since the number of driveways per length of water replacement or repair varies and driveway size varies, a sample analysis of two watermain replacement projects completed in 2011 has been conducted. The following table shows the anticipated increase in restoration costs to Peel for complete driveway restoration.

July 30, 2012

DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE REPAIR OR REPLACEMENT

Table 2
Actual Asphalt Restoration Costs Comparison to Possible Full Restoration

(Note: The average total driveway size was calculated using municipal by-law data related to single family detached homes)

	Project 11-1375D	Project 11-1345F
Total Kilometres of Watermain Replaced	1.749	2.719
# of driveways	372	268
# of driveways restored	169	80
Total asphalt restored m²	1500	1206
Unit Cost per m² of asphalt	\$28.70	\$30.00
Actual restoration costs paid	\$43,050	\$36,180
Average (Avg) Total Driveway Size m² (Single detached home)	40.2	63.8
Potential Cost for Complete Private Side Restoration	\$194,982	\$153,120
% Variance Over Actual	353%	323%

Table 2 shows that expanding the driveway restoration service could cost the Region up to 350 percent more per project to perform complete driveway restoration. This figure may be higher for those driveways composed of interlocking brick or concrete.

Table 3
Potential Future Cost of Total Asphalt Restoration in 2012 and 2013 Repair and Replacement Program

Year	Kilometres of Watermain to be Replaced	No. of Residential Properties Affected	Avg % Requiring Restoration (Avg from Table 2)	Avg Size of Full Driveway (Using By-law Data)	Unit Cost of Asphalt (Avg from Table 2)	Potential Full Cost (Asphalt only)
2012	56	4,705	39%	63.7 m2	\$29.35	\$3,430,613
2013	59	4,597				\$3,351,866

(Note: Unit costs are exclusive of inflation, market fluctuations etc.)

3. Restoration Program in Other Municipalities

Asphalt driveway restoration programs in neighbouring municipalities were explored. None of the municipalities identified provided complete private side driveway restoration as part of their services.

i) Brampton

July 30, 2012

PW-E1-4-

DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE REPAIR OR REPLACEMENT

- A 1.0 metre (3.28 feet) patch application the length of the repair is common practice
 - A full apron replacement (the area between the sidewalk and the road) is only applied when both a curb and sidewalk repair are done through an apron or the homeowner can prove that the driveway was repaved within the previous two years
- ii) **Caledon**
- Repair to the point where the municipality has disturbed the condition surface or where required to make a reasonable gradient
- ii) **Mississauga**
- Reinstatement of the entire asphalt driveway apron (boulevard portion) when a curb or sidewalk repair adjacent to the driveway is performed.
 - For curb repairs with no existing sidewalk, a patch the width of the driveway is applied
- iv) **Halton**
- A driveway wide patch is applied to the area from the road to the saw cut (repair cut)
- v) **Toronto**
- Typically, asphalt restorations are extended 300mm (11.81 inches) on all sides of the cut.
 - Whenever the restoration area is more than half of the width of the driveway, the restoration is extended to include the entire width of the driveway.
 - Whenever a cut of any size is made in the driveway apron – the area between the edge of sidewalk and the back of curb – the entire area of the apron shall be restored.
- vi) **Durham**
- Restoration patch matches exact area of removal

CONCLUSION:

Peel's current driveway restoration service is on par with that of other municipalities in the GTA and with that of the Cities' of Mississauga and Brampton and the Town of Caledon. Furthermore, the local municipalities have expressed concern that if the Region adopted a full restoration program, that they would also be expected to follow suit and this would result in additional financial obligations.

The Region's existing program includes adequate restoration of surface area in driveways that is disrupted by municipal works in a method that strives to match the restoration to the original status. Increasing this service to include complete restoration of the private side will result in significant financial increases and is therefore not recommended to be adopted as an enhancement to the existing service.

DW-E15-

July 30, 2012

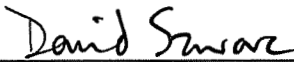
**DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE
REPAIR OR REPLACEMENT**




(ceding Jon)

Dan Labrecque
Commissioner of Public Works

Approved for Submission:



D. Szwarc, Chief Administrative Officer

 For further information regarding this report, please contact Mark Schiller at extension 4394 or via email at mark.schiller@peelregion.ca

Authored By: Carol Warner

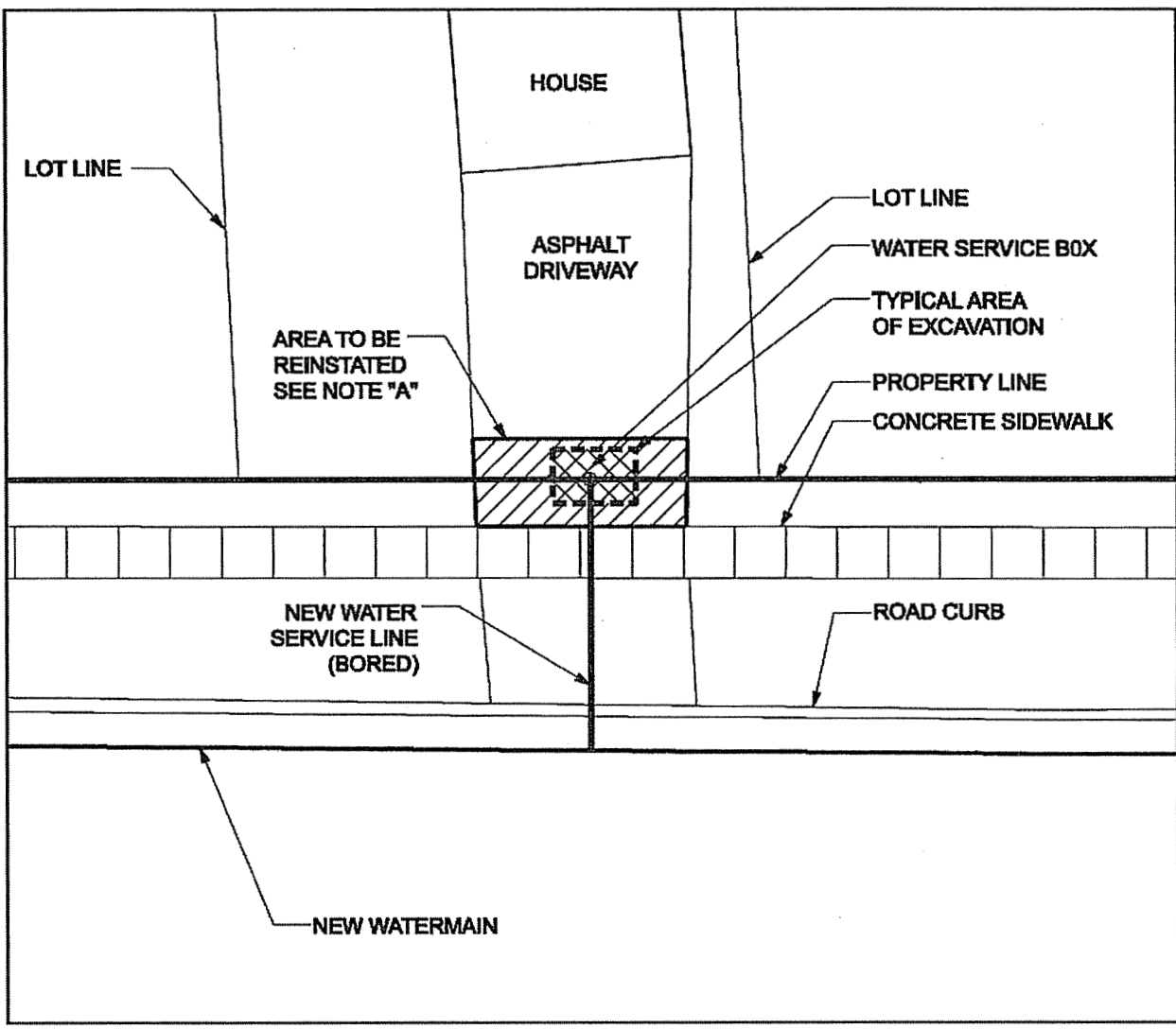
c. Legislative Services

July 30, 2012
DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE
REPAIR OR REPLACEMENT

APPENDIX I

Driveway Restoration Figures

Figure 1: Trenchless Driveway Reinstatement – (With sidewalk through driveway)

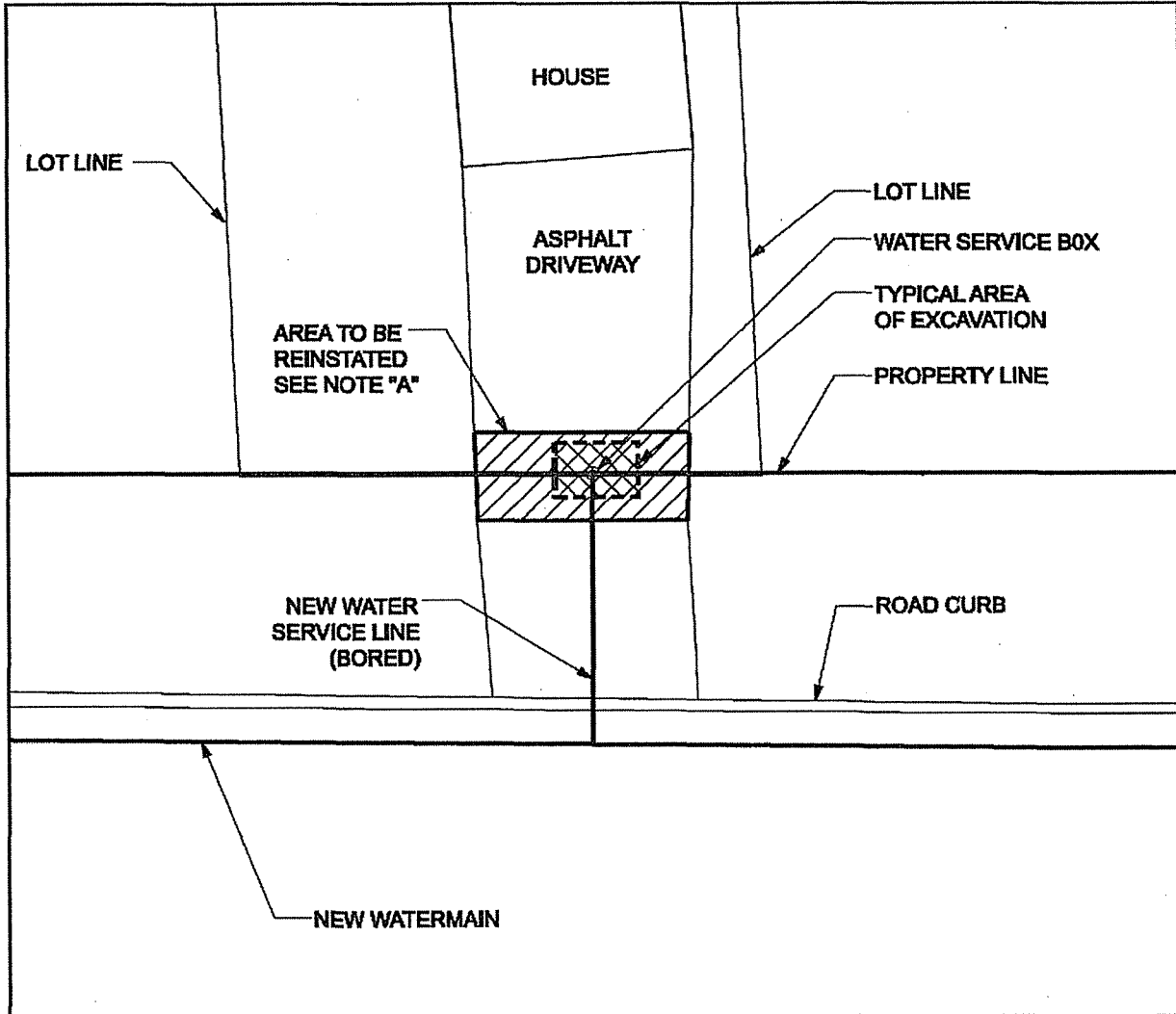


July 30, 2012

- 1 -

DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE REPAIR OR REPLACEMENT

Figure 2: Trenchless Driveway Reinstatement – (Without sidewalk)

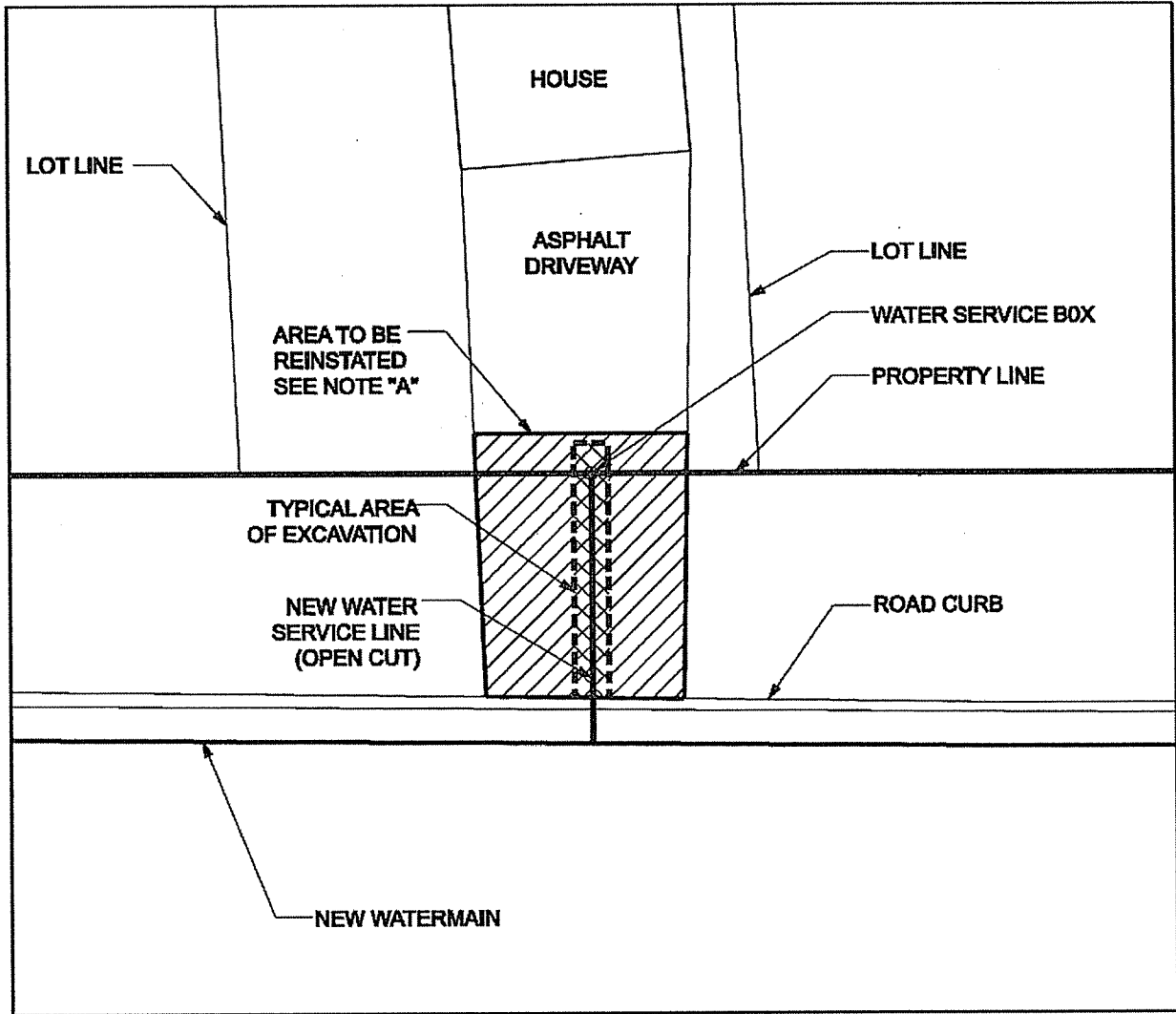


July 30, 2012

- 2 -

DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE REPAIR OR REPLACEMENT

Figure 3: Open Cut Driveway Reinstatement – (Without sidewalk)



July 30, 2012

- 3 -

DRIVEWAY RESTORATION SERVICE IN THE EXECUTION OF WATER INFRASTRUCTURE REPAIR OR REPLACEMENT

Figure 4: Open Cut Driveway Reinstatement – (With sidewalk through driveway)

