From:	"Johnston, Sadhu" <sadhu.johnston@vancouver.ca></sadhu.johnston@vancouver.ca>	
To:	"Direct to Mayor and Council - DL"	
CC:	"City Manager's Correspondence Group - DL"	
	"Nelms, Cheryl" <cheryl.nelms@vancouver.ca></cheryl.nelms@vancouver.ca>	
Date:	10/15/2019 4:06:52 PM	
Subject:	Subject: Memo - Sidewalk Rehabilitation - Tree Impacts on West 12th Ave - Granville to Birch St	
Attachments:	Memo to Mayor & Council - ENG - Sidewalk Rehabilitation - Tree Impacts;pdf	

Good Afternoon Mayor and Council,

Please see the attached memo from Cheryl Nelms regarding Sidewalk Rehabilitation. A short summary of the memo is as follows:

- Notification of upcoming sidewalk repairs and associated tree management strategy on W 12th Ave between Granville St and Birch St;
- A summary of sidewalk replacement scope. This work will repair and widen damaged sidewalks to create a safer and more comfortable experience for people of all ages and abilities; and
- Overview of expected impacts to existing trees and replanting plans.

If you have any questions, please feel free to contact Cheryl Nelms, Acting GM of Engineering Services, at 604.873.7348 or Cheryl.nelms@vancouver.ca

Best, Sadhu

Sadhu Aufochs Johnston | City Manager Office of the City Manager | City of Vancouver 604.873.7627 | sadhu.johnston@vancouver.ca

Pronouns: he, him, his



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the Musqueam, Squamish, and Tsleil-Waututh peoples.



ENGINEERING SERVICES

City Engineer / General Manager

### MEMORANDUM

October 10, 2019

TO: Mayor and Council

CC: Sadhu Johnston, City Manager Paul Mochrie, Deputy City Manager Lynda Graves, Administration Services Manager, City Manager's Office Rena Kendall-Craden, Civic Engagement and Communications Director Katrina Leckovic, City Clerk Neil Monckton, Chief of Staff, Mayor's Office Alvin Singh, Communications Director, Mayor's Office Anita Zaenker, Chief of Staff, Mayor's Office

FROM: Cheryl Nelms Acting General Manager, Engineering Services

SUBJECT: Sidewalk Rehabilitation – Tree Impacts; W 12<sup>th</sup> Ave (Granville St to Birch St)

This memo provides notification of upcoming sidewalk repairs and the associated tree management strategy on W 12th Ave between Granville St and Birch St. This work will repair and widen damaged sidewalks to create a safer and more comfortable experience for people of all ages and abilities.

#### Background

The mature trees along the north and south sides of this segment of West 12th Ave are mostly species with shallow root systems. The sidewalks are narrow compared to current City standards, and tree roots have caused significant damage (see Figure A).

In an attempt to mitigate tripping hazards, the City has made numerous maintenance repairs to the sidewalk over the years. These repairs are insufficient to address accessibility concerns and more extensive work is now required.

The City's Seniors Advisory Committee (SAC) and local stakeholders have raised concerns that the sidewalks are challenging to navigate for people with reduced mobility and feel unsafe. Staff have completed a site visit with SAC members and local senior-serving organizations to receive additional feedback.

#### **Tree Impacts**

In order to make necessary repairs and prevent future damage to the sidewalks, staff anticipate needing to remove up to 24 existing trees along West 12th Ave from Granville St to Birch St.

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Engineering is working closely with arborists from the Park Board to evaluate the health of these trees and to preserve as many as possible. Based on a ground penetrating radar survey of the tree root systems and visual inspection of the trees, three categories have been identified which are summarized in the table below and depicted in Figure B.

Risk	Approach	Number of Trees
Green	These trees will remain in place and protected throughout construction	3
Yellow	During excavation for construction, the surface roots will be exposed and inspected by an arborist to determine if the root system is robust enough to sustain and stabilize the tree after trimming to accommodate sidewalk construction	8
Red	Trees required to be removed as part of sidewalk construction.	16

SAC and the South Granville Seniors Community Centre are in support of the anticipated tree removals.

Engineering Services is committed to retaining existing trees wherever possible and re-planting any trees that are removed in a ratio of 1:1 throughout the project and in the surrounding neighbourhood. To mitigate potential for future damage to the sidewalks due to tree roots, species will be carefully selected in consultation with arborists and planted in modern tree pits.

If you have any questions or concerns, please do not hesitate to contact me at <u>cheryl.nelms@vancouver.ca</u> or 604-873-7348.

My Nil

Cheryl Nelms, P.Eng., PhD Acting General Manager, Engineering Services 604.873.7348 | cheryl.nelms@vancouver.ca

# FIGURE A: Examples of Sidewalk Damage due to Tree Root Growth



## FIGURE B: 12<sup>th</sup>, Granville to Hemlock Sidewalk Rehabilitation

Scope Overview and Tree Impact Summary



LEGEND Keep (3) Remove (15) Decision on site (9)

- Reconstruct sidewalks within this area, improving widths and providing tree pits to meet current standards. New curb ramps will be provided on the south side of 12<sup>th</sup> Ave at the lane east of Granville St.
- 2. Shift sidewalk alignment to improve widths and provide sufficient space for tree pits to meet current standards.

Trees will be replanted in a ratio of 1:1 throughout the project and in the surrounding neighbourhood.