

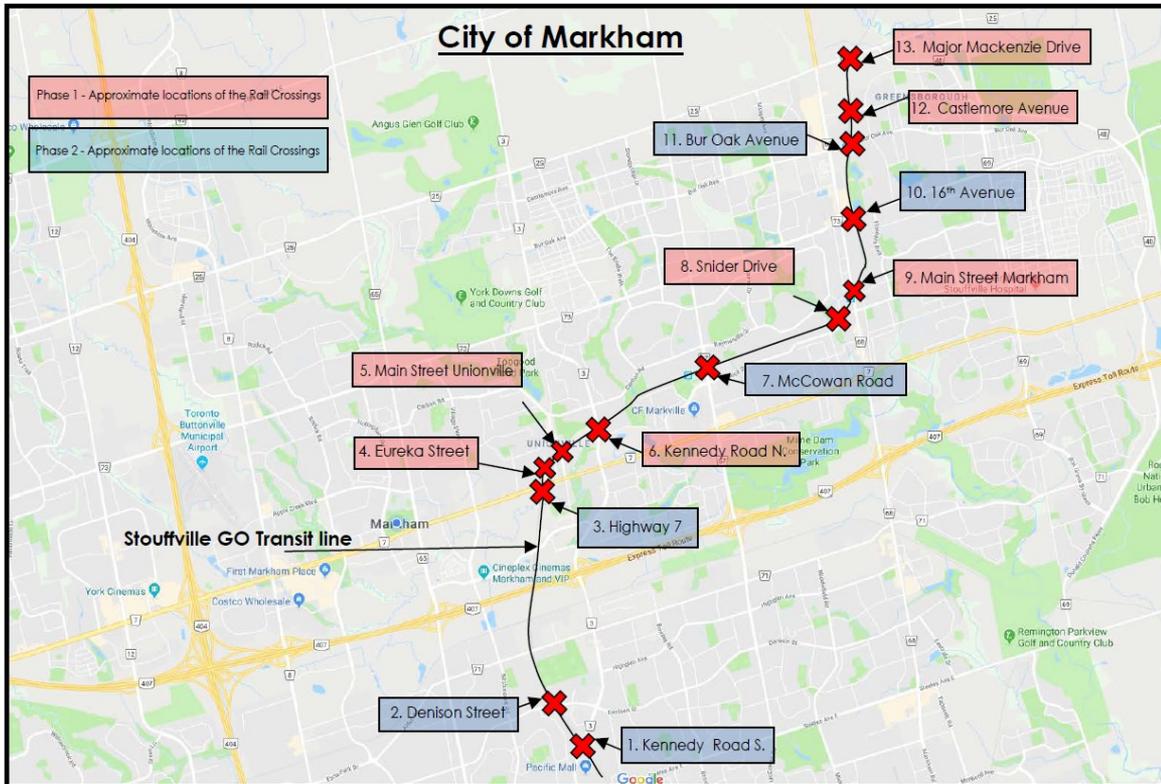
Whistle Cessation Project and Financial Update

**Development Services Committee
April 21, 2020**

Project Overview

- Whistle cessation was implemented for 13 urban at grade crossings on the Stouffville GO Line in compliance with Transport Canada legislation and Metrolinx protocol
- Formed partnership with York Region and Metrolinx under a tri-party memorandum of understanding (executed in Jan 2018)
- The project involves many parties, and both technical design and construction were complicated and challenging
- The construction was divided into 3 contract packages based on when the design was completed and approved

Map of Crossing Locations



Phase 1 – Eureka, Main St Unionville, Kennedy N, Snider, Main St Markham, Castlemore, Major Mac
Implemented: Sept 2018

Phase 2A – Kennedy S, Denison, Hwy 7, 16th Ave
Implemented: Nov 2019

Phase 2B – McCowan, Bur Oak
Implemented: Feb 2020

Legislation & Governance (1 of 2)

Whistle Cessation Legislation & Governance

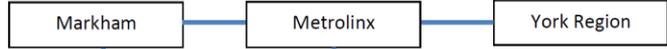
Legislation &
Design Standards

- Federal Railway Safety Act
- Canadian Rail Operating Rules
 - Procedure to Apply to Stop Train Whistling at a Public Grade Crossing
 - Grade Crossings Regulations
 - Grade Crossings Standards

Metrolinx Safety Protocols for Whistle Cessation

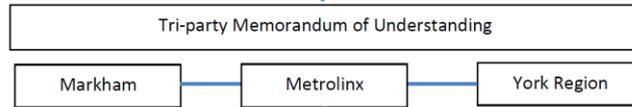
Funding Partners:

Tri-party Memorandum of Understanding

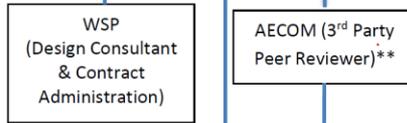


Legislation & Governance (2 of 2)

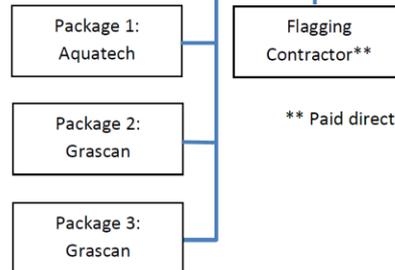
Funding Partners:



Design & Construction:



Construction Contracts:



** Paid directly by Markham

Challenges with the Project

- Specialized materials required long lead time to procure
- Complicated Design Review and Permit Issuance Process
- Availability of Flagging
- Service Changes from Metrolinx eliminated weekend work
- Inclement Weather
- Design Related Issues – redesign during construction phase
- Implementation Requirements from Metrolinx

Cost Overrun and Delay Claim

Table 5 – Award Costs and Overruns

Description	Supplier	Award Amount	Approved Overrun	Remaining Overrun	Total Cost
		a	b	c	d=a+b+c
Consultant Cost	WSP	\$ 505,261.08	\$ 309,301.02	\$ 0.00	\$ 814,562.09
Peer Review	AECOM	\$ 287,461.82	\$ 192,065.64	\$ 0.00	\$ 479,527.46
Flagging Costs	Metrolinx	\$ 344,355.84	\$ 823,132.94	\$ 0.00	\$ 1,167,488.78
Construction	Grascan	\$ 2,624,742.68	\$ 655,753.64	\$ 979,454.84	\$ 4,259,951.16
Admin Fees	Markham	\$ 415,814.81	\$ 0.00	\$ 102,432.34	\$ 518,247.15
	Total:	\$ 4,177,636.23	\$ 1,980,253.24	\$ 1,081,887.18	\$ 7,239,776.65

Overruns are for all 3 packages except “Construction” which are for Packages 2 & 3 only.

Remaining Overrun

Table 6 – Remaining Overruns

Description	Supplier	PO Number	Original Amount	Increase
Package 2 Contract	Grascan	PD 18118	\$ 1,298,457.60	\$ 877,259.88
Package 3 Contract	Grascan	PD 18210	\$ 576,582.34	\$ 102,194.95
Capital Admin Fees			\$ 415,814.81	\$ 102,432.34
			Total:	\$ 1,081,887.18

Available Funding and Overrun

Table 8 – Available Funding and Overruns

Account No. / Description	Markham	York	Metrolinx	Total
	a	b	C	d=a+b+c
Account 16053 / 17038 Budget	\$2,367,805.67	\$3,784,183.41	\$79,971.00	\$6,231,960.08
Final Project Cost	\$3,238,085.49	\$3,960,888.46	\$40,802.70	\$7,239,776.65
Variance:	(\$870,279.82)	(\$176,705.06)	\$39,168.30	(\$1,007,816.57)
Allocate Excess Metrolinx Funds*:	\$32,557.67	\$6,610.63	\$39,168.30	\$0
Variance (offset):	(\$837,722.15)	(\$170,094.42)	\$0	(\$1,007,816.57)

There is \$74,071 available funding in existing Whistle Cessation Accounts (16053 & 17038)