



c. <u>18</u>	
Communication	
COUNCIL:	<u>May 23/18</u>
FAA Rpt. No.	<u>5</u> Item <u>14</u>

DATE: May 23, 2018

TO: Hon. Mayor Bevilacqua and Members of Council
Corporate Management Team

FROM: Stephen Collins, Deputy City Manager, Public Works

RE: **Metrolinx Barrie Corridor Noise Barrier Adjacent to Rutherford Station**

This memo has been prepared to respond to a request by Councillor Yeung-Racco at the May 7th Finance, Administration and Audit Committee meeting, informing Council on the current costs to maintain the existing privacy fence, and the timing of the future noise barrier, along the Metrolinx Barrie rail corridor from McNaughton Road to Highway 407.

Background

In late 2017, Metrolinx implemented all-day service on the Barrie corridor, serving both Maple and Rutherford GO stations. This has resulted in significantly more service to our community, with an increased number of trains travelling along the Barrie corridor, from 8 trains per day in both directions to 36. The trains now run from 6:00am to 11:13pm.

Since the implementation of all-day service, the City has received several complaints from residents who reside along the Barrie corridor, in particular near Rutherford station. The complaints include higher levels of noise and pollution from the increased commuter rail traffic.

PLANNED IMPROVEMENTS

Metrolinx identified in the Barrie Rail Corridor Expansion Transit Project Assessment Process report (Barrie TPAP), completed in August 2017, that noise barriers are required to mitigate the noise impacts related to future track and service expansion on the Barrie corridor. These barriers are to be constructed as part of the Barrie Rail Corridor Expansion which is scheduled to commence in 2018.

The sections of the Barrie corridor that will have noise barriers installed, as identified by Metrolinx, are illustrated in Attachment 1. Generally, noise barriers will be constructed adjacent to residential areas from McNaughton Road to Highway 407.

EXISTING FENCE

The City currently maintains a privacy fence along the Barrie corridor where residences are in proximity to the tracks. However, this existing fence has been deteriorating for the last few years. The deterioration has been accelerated by wind storms in 2017 and in early May this year. Since 2016, City staff have been required to install temporary fencing or replace segments of fence at locations where the fence has collapsed.

In 2016 and 2017, the costs to replace segments of fence that have collapsed totaled \$146,000. Another \$281,750 of replacements are currently needed, mostly as a result of the wind storm that occurred on May 4, 2018.

Current Status

CONSTRUCTION OF THE NEW NOISE BARRIER

Metrolinx has indicated to staff that they are currently mobilizing their resources to construct the new noise barriers. They hope to construct the barriers prior to the start of construction at Rutherford GO station, which is scheduled to commence in early 2019. This will minimize the potential for construction conflicts with the station upgrades at Rutherford GO. However, Metrolinx staff have indicated that they cannot commit to a specific timeframe. Metrolinx will be formally contacting the City within the next month to discuss the construction timeframe and details of the noise barriers.

REPAIRS TO EXISTING FENCE

Following the May 4, 2018 wind storm, staff inspected the City-owned fencing along the Barrie GO corridor, and estimated that 234 panels must be replaced in several segments between Steeles Avenue and north of Major Mackenzie Drive. However, review of the Barrie TPAP indicates that new sound barriers will be constructed at all the segments where City repairs and replacements are required.

Metrolinx is planning to construct the new fence to a more stringent standard of noise reduction than the City's standard privacy fencing. Any replacement fence erected by the City will eventually be replaced or made redundant by the new Metrolinx fence. As such, the most efficient outcome would be for Metrolinx to construct the new fencing throughout the corridor as soon as possible, serving the dual purpose of replacing the existing damaged fencing and meeting Metrolinx's obligations to mitigate the impacts of the rail service expansion.

As Metrolinx's fencing construction schedule is currently under review, City staff will determine a fence replacement strategy once Metrolinx confirms their construction timelines.

INTERIM MEASURES

The City has installed temporary fencing (orange "snow fence") to secure damaged fence segments, while staff await procurement of a fence repair & replacement contract. City staff will regularly monitor the condition of the temporary fencing to ensure that it continues to restrict pedestrian access to the railway.

The fence repair & replacement contract is expected to be awarded in June, and repairs will be completed throughout the summer. The repairs needed along the Barrie GO corridor will be included within this contract as a provisional item, to allow the City to proceed with procurement without having to wait for finalization of Metrolinx's construction plans.

Once Metrolinx's construction plan is finalized, staff will assess multiple fencing options, each with different cost, sturdiness, aesthetic and acoustic characteristics. For example, leaving the temporary "snow fence" may be acceptable for segments where Metrolinx plans to construct its new fence within a short timeframe; however, adjacent residents would have to endure train noise until the new fence is constructed.

If a longer timeframe is expected before Metrolinx's barrier is built, the City may consider installing metal fencing with mesh backing. Such fencing is sturdier, taller and more aesthetically pleasing than the temporary "snow fence", but less costly than the City's standard permanent fence. However, the metal fencing with mesh backing will not significantly reduce noise.

Financial Impact

The estimated cost to replace all segments of damaged fence along the Barrie GO corridor is approximately \$281,750, if the City constructs its standard permanent fencing. However, Metrolinx is considering constructing upgraded noise barriers by the end of 2018, which would replace or make redundant any of the fence replacements completed by the City.

The preferred timing for Vaughan residents would be for Metrolinx to accelerate their reconstruction of the fencing along the Barrie GO corridor, potentially eliminating the need for the City to replace the current damaged segments, and reducing the need for on-going monitoring of temporary fencing.

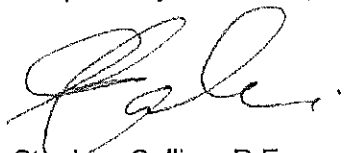
Conclusion

Staff have installed temporary fencing between the Barrie corridor and neighboring residences because of the deteriorating fence. Metrolinx is aware of the issue and intends to construct an upgraded noise barrier as soon as possible. Locations where Metrolinx is unable to construct the noise barrier in a short period of time may need to be replaced. Metrolinx will be reaching out to City staff shortly to discuss the details of construction.

For more information on future Metrolinx work, please contact: Vince Musacchio, Director, Infrastructure Planning and Corporate Asset Management, ext. 8311

For more information on existing City assets, please contact: Zoran Postic, Director, Transportation Services, Parks and Forestry Operations, ext. 6137

Respectfully submitted,



Stephen Collins, P.Eng.
Deputy City Manager, Public Works

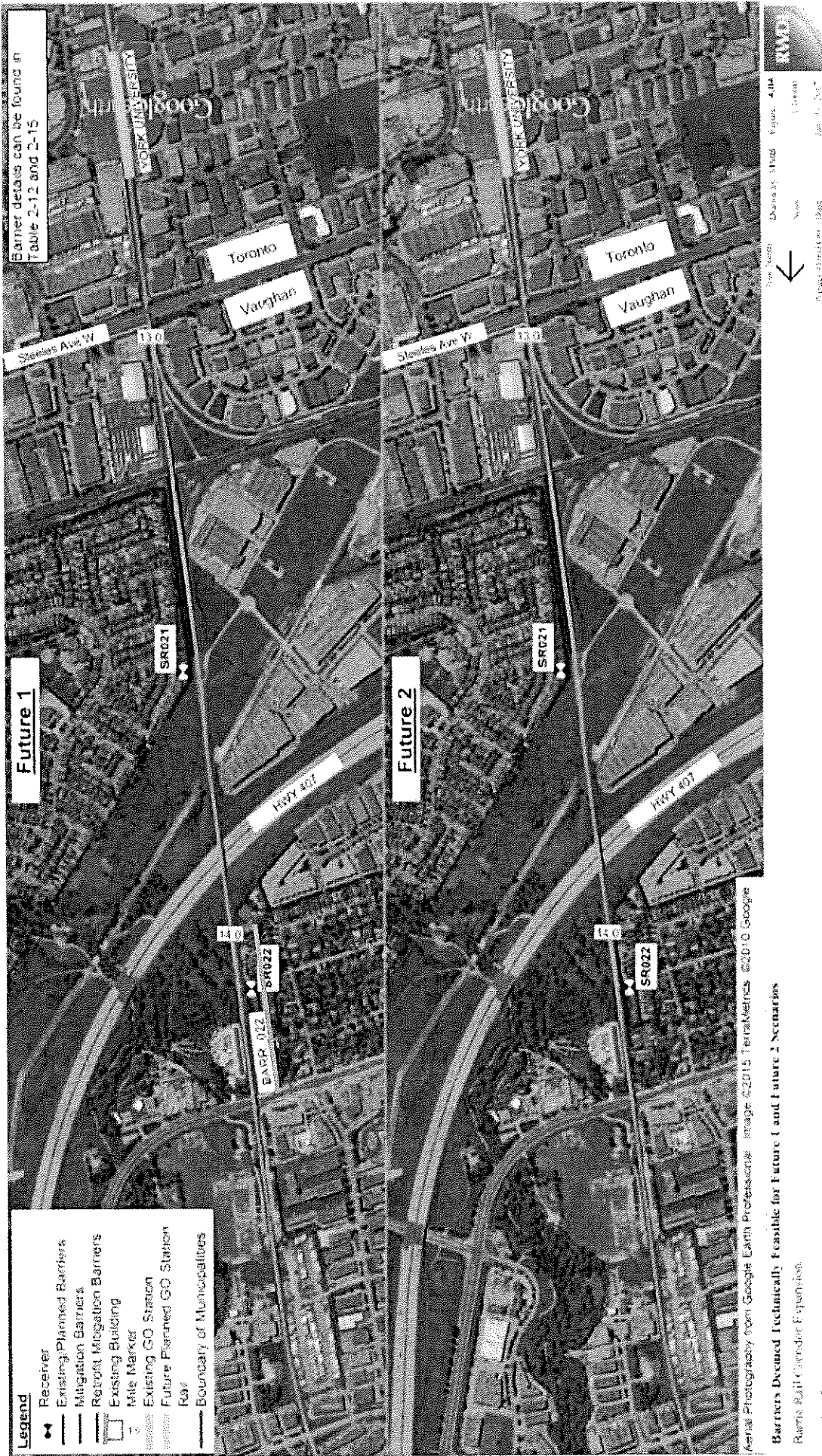
CC: Vince Musacchio, Director, Infrastructure Planning and Corporate Asset Management
Zoran Postic, Director, Transportation Services, Parks and Forestry Operations
Selma Hubjer, Manager, Transportation Planning
Elaine Chang, Manager of Business and Contract Services

Attachment 1: Future Proposed Noise Barrier Locations (Extract from Barrie TPAP)

Attachment 2: Summary of Fence Repair Costs since 2016

Attachment 1: Future Proposed Noise Barrier Locations (Extract from Barrie TPAP)

*Note: The longer of the retrofit (orange) mitigation barriers shown in Future 1 or Future 2 will be installed by Metrolinx. In this extract, Existing/Planned (blue) barriers indicate





Barrier details can be found in Table 2.12 and 2.15

Aerial Photography from Google Earth Professional. Image ©2015 TerraMetrics. ©2010 Google

Barriers Deemed Technically Feasible for Future 1 and Future 2 Scenarios

Barrie Rail Corridor Expansion

Version 1.0

ent 2: Summary of Fence Repair Costs since 2016

Block	Street Name / Address	Fence Height	2016 Costs			2017 Costs (Including Fall Wind Storm)			2018 Current Estimate*			Totals Last 3		
			Post	Panel	Cost	Post	Panel	Cost	Post	Panel	Cost	Post	Panel	Cost
15	Hartley Crt	8			\$0			\$0	2	4	\$4,140	2	4	
17	Westway Cres	10	7	12	\$13,200	16	19	\$28,000	27	43	\$64,400	50	74	
17	Royal Appian Cres	10	1	2	\$2,200	7	2	\$7,200	2	4	\$5,520	10	8	
18	Ardwell Cres	8			\$0	9	16	\$15,000	18	27	\$31,050	27	43	
18	Foxfield Cres	8			\$0	9	17	\$15,600	17	29	\$31,740	26	46	
18	Marlott Rd	8	1	2	\$1,800	16	25	\$24,600	18	30	\$33,120	35	57	
18	Patna Cres	8			\$0	5	7	\$7,200	17	26	\$29,670	22	33	
18	Ridgefield Cres	8			\$0	12	23	\$21,000	17	27	\$30,360	29	50	
18	Silver Arrow Cres	8			\$0	3	6	\$5,400	12	16	\$19,320	15	22	
19	Lindenshire Ave	8			\$0	3	5	\$4,800	20	27	\$32,430	23	32	
TOTALS			9	16	\$17,200	80	120	\$128,800	150	233	\$281,750	239	369	

ote, 2018 is estimate only based on initial inspections. Exact quantities and pricing will be provided once contract has been secured. Price Estimat
ical contract costs.