112. REQUEST FOR NOISE EXEMPTION
METROLINX REGIONAL EXPRESS RAIL – BARRIE RAIL CORRIDOR EXPANSION
WARDS 1 & 4
(Addendum No. 1)

MOVED by Councillor Iafrate
seconded by Regional Councillor Ferri

1) That the recommendation contained in the following report of the Director of By-law & Compliance, Licensing & Permit Services, dated June 28, 2016, be approved; and

2) That temporary noise barriers be erected where feasible to mitigate noise on abutting lands.

CARRIED

Recommendation

The Director of By-law & Compliance, Licensing & Permit Services, in consultation with the Deputy City Manager, Community Services, recommends:

1. That Metrolinx, be granted a noise exemption for the period of July 4, 2016 through December 31, 2016, in accordance with the City's Noise By-law 96-2006, for the purposes of construction activities located at both the Maple GO and Rutherford GO Stations associated with the Regional Express Rail (RER) initiative.

2. That this request for extension be granted with the following conditions:

   a) That construction communication notices be sent to surrounding residents and business owners within a 60 metre radius, in keeping with City standards, advising them of the impending work;

   b) That the construction communication notices to residents and business owners include contact information for Metrolinx;

   c) That the Applicant take measures to minimize any unnecessary noise, including but not limited to idling of construction vehicles and/or equipment, revving of engines, use of airbrakes, banging of tailgates and to maintain equipment in good working order (including muffling devices) to minimize noise impacts;

   d) Select travel routes that will assist in avoiding noise sensitive areas where possible;

   e) That no construction takes place on Statutory Holidays.

Contribution to Sustainability

This noise exemption request will support the Regional Express Rail (RER) initiative, contributing to accessible and frequent local transit service associated with GO Transit routes, supporting compact urban form and offering alternative modes of transportation and is consistent with the City's Community Sustainability and Environmental Master Plan – Green Directions, which identified the goal of ensureing the City is easy to get around and has a low environmental impact.

Economic Impact

Adoption of this report has no adverse economic impact for the City.

…/2

Communications Plan

The Applicant has provided public notice in June 2016 of the impending construction activities (Attachment No. 1). The Applicant has been instructed by the City to provide additional notification of the commencement of construction in local Vaughan newspapers and in letter form to surrounding residents and businesses in and around both locations (Maple GO and Rutherford GO Stations) within a 60 metre radius that may be affected by the construction activities of this project.

Purpose

This report is to request Council approval of a request from Metrolinx for a noise exemption to By-law 96-2006.

Background - Analysis and Options

The City of Vaughan Noise By-law 96-2006 delegates authority to grant noise exemptions for construction purposes up to eleven days to the Department Head/Director of By-law & Compliance, Licensing & Permit Services.

Metrolinx has written to City of Vaughan By-law & Compliance, Licensing & Permit Services, (Attachment No. 2) requesting an exemption to the City's Noise By-law for the purposes of construction in connection with RER (which will provide a two-way, all-day (TWAD) service of its rail corridors, a key obejctive for GO Transit as identified in "The Big Move" and "GO 2020".

The project scope entails the installation of two tunnels at each location, track upgrades (removal and re-installation), island platform construction and associated infrastructure, such as tunnels, snowmelt systems, elevators, stairs, platform shelters mini platforms, canopies, etc.

Construction work associated with the tunnel installations include, but is not limited to:

- Installtion of approximately 70 Caissons (after hours, only when required between August 1, 2016 to September 5, 2016).
- Installation of precast concrete tunnel segments (continual work over four weekends in September 2016, between 7:30 pm Friday through to 5:30am Monday);

Construction work activities that will occur outside of the Noise By-law restrictions will include the use of caisson rigs (large scale drilling equipment), backhoes with hoe rams, dump trucks, loaders, cranes, heavy duty pumps, concrete trucks, vibratory rollers and plate packers, tower lights, generators, welding machines, cutting torches and propane torches.

Noise Mitigation

The Applicant has provided a Noise and Vibration Impact Assessment document provided by Valcoustics Canada Limited, which includes cataloguing of areas that may be impacted by construction noise (Attachment No. 4).

The Applicant will be required to minimize idling of construction vehicles, avoid revving of engines, banging of tailgates and use of airbrakes, as well as be required to maintain equipment in good working order (including the use of muffling devices) to minimize noise impacts and to select travel routes to avoid noise sensitive areas where possible.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

This noise exemption is directly related to the Term of Council Priority and Service Excellence Strategy Map by:

…/3

1) Continuing to develop transit options to get around the City;
2) Improve municipal road network;
3) Invest, renew and manage infrastructure and assets;
4) Catalogue of impacted areas.

Regional Implications

The proposed work is being carried out by Metrolinx and its agents and contractors.

Conclusion

This request for noise exemption is necessary municipal work in connection with the RER initiative. The request exceeds the delegated authority of the Director of By-law & Compliance, Licensing & Permit Services; therefore, Council authorization for the exemption to the By-law is required to permit Metrolinx to proceed as planned.

Attachments

1. Metrolix – Notice to Residents & Businesses
2. Letter of Intent
3. Project Maps
4. Catalogue of Impacted Areas

Report prepared by:

Janice Heron,
Office Coordinator, By-law & Compliance, Licensing & Permit Services

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

COUNCIL JUNE 28, 2016

REQUEST FOR NOISE EXEMPTION
METROLINX REGIONAL EXPRESS RAIL – BARRIE RAIL CORRIDOR EXPANSION
WARDS 1 & 4

Recommendation

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Report prepared by:

Janice Heron,
Office Coordinator, By-law & Compliance, Licensing & Permit Services

Respectfully submitted,

Gus Michaels
Director, By-law & Compliance,
Licensing & Permit Services

ATTACHMENT NO. 1

TRANSFORMING TRANSIT IN YOUR AREA

Maple GO Station Pedestrian Tunnel Construction

JUNE 2016

Metrolinx, an agency of the Province of Ontario, is working to transform the way the region moves by building a seamless, convenient and integrated transit network across the Greater Toronto and Hamilton Area (GTHA). Over the next ten years, Metrolinx is transforming the existing GO rail system to deliver a whole new rapid transit experience to your community. With more frequent train service you'll have more options to get you where you need to go.

THE LOCAL PROJECT

In order to run two-way, all day train service on the Barrie corridor, the Maple GO Train station requires infrastructure upgrades to support the future additional track. A pedestrian tunnel will need to be constructed at the station to allow for passengers to safely cross under the train tracks to reach the second platform, which will be constructed once the tunnels are completed. Estimated platform construction is expected in 2018.

WHAT TO EXPECT

Residents living nearby the station can expect to see and hear regular construction vehicles operating during the construction of the tunnel, including a drill rig, excavator, concrete trucks, load trucks to carry materials in and out, and a small crane. Due to increasing rail service, crews may need to work occasionally in the evening and overnight hours to ensure safe working conditions, as some of this work cannot take place when trains are operating. If overnight work is required, lights will be used to ensure safe working conditions; however, they will be focused away from nearby homes and businesses when possible.

TIMING

The Maple GO station tunneling construction will begin this summer and construction is expected to take approximately 6 months to complete. The majority of the work will take place between 9 a.m. and 3 p.m. from Monday to Friday; however, we will need to work 4 continuous weekends (55 hours from Friday at 9 p.m. – Monday 4 a.m.) between the months of September to November. Additional weekend work may also be required. More information about timing and dates will be communicated closer to the date.

SERVICE IMPACTS

There will be no service impacts as part of this construction. All trains will continue to run as scheduled, unless otherwise communicated. Metrolinx is committed to keeping local residents and businesses informed about construction activities and minimizing potential disruptions related to this work.

DRAFT

STAY CONNECTED

If you have any questions or would like to be added to our email distribution list to receive updates, please contact us at jennifer.capan@gotransit.com or 416-202-4732 or follow us on Twitter @metrolinx or visit us at metrolinx.com

METROLINX
An agency of the Government of Ontario

TRANSFORMING TRANSIT IN YOUR AREA

Rutherford GO Station Pedestrian Tunnel construction

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THE LOCAL PROJECT

In order to run two-way, all day train service on the Barrie corridor, the Rutherford GO Train station requires infrastructure upgrades to support the future additional track. A pedestrian tunnel will need to be constructed at the station to allow for passengers to safely cross under the train tracks to reach the second platform, which will be constructed once the tunnels are completed. Estimated platform construction is expected in 2018.

DRAFT

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Residents living nearby the station can expect to see and hear regular construction vehicles operating during the construction of the tunnel, including a drill rig, excavator, concrete trucks, load trucks to carry materials in and out, and a small crane. Due to increasing rail service, crews may need to work occasionally in the evening and overnight hours to ensure safe working conditions, as some of this work cannot take place when trains are operating. If overnight work is required, lights will be used to ensure safe working conditions; however, they will be focused away from nearby homes and businesses when possible.

TIMING

The Rutherford GO station tunneling construction will begin this summer and construction is expected to take approximately 5 months to complete. The majority of the work will take place between 9 a.m. and 3 p.m. from Monday to Friday; however, we will need to work 4 continuous weekends (55 hours from Friday at 9 p.m. – Monday 4 a.m.) between the months of September to November. Additional weekend work may also be required. More information about timing and dates will be communicated closer to the date.

SERVICE IMPACTS

There will be no service impacts as part of this construction. All trains will continue to run as scheduled, unless otherwise communicated. Metrolinx is committed to keeping local residents and businesses informed about construction activities and minimizing potential disruptions related to this work.

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METROLINX
An agency of the Government of Ontario

ATTACHMENT NO.2

METROLINX
An agency of the Government of Ontario
Une agence du gouvernement de l'Ontario

Phone: (416) 202-5056
Fax: (416) 869-9342
Email: Cathy.Borsa@metrolinx.com

June 23 2016

City of Vaughan
By-law and Compliance, Licensing and Permit Services
2141 Major Mackenzie Drive, 1st floor
Vaughan, Ontario, L6A 1T1

Subject: Maple and Rutherford GO Station, Noise Exemption Application

Attention: Janice Heron

Dear Janice,

APPLICATION FOR NOISE EXEMPTION (CONSTRUCTION) – MAPLE AND RUTHERFORD GO STATIONS

GO Transit currently offers peak period, peak direction rail service on six (6) of its seven (7) rail corridors. The only exception is the Lakeshore East and West Corridors, which run in both directions, from morning through to night time, seven days a week at regular intervals of thirty (30) minutes and a higher frequency in the peak periods. Provision of a two-way, all-day (TWAD) service on all of its rail corridors is one of the key objectives for GO Transit, as identified in both *The Big Move* and *GO 2020*.

To meet this objective, the remaining six (6) rail corridors would require a minimum of two tracks and upgrades at each of its stations to service the tracks. The majority of the Barrie corridor is a single track with exceptions at the southerly end of the corridor and some shunting tracks in between. In addition to infrastructure improvements along the rail corridor, new infrastructure is also required at existing stations to serve the new tracks. To this end, a project entailing station upgrades associated with TWAD service was initiated for the Maple and Rutherford GO stations. Station upgrades will include construction of an island platform and any associated infrastructure e.g., tunnels, snowmelt system, elevators, stairs, platform shelters, mini platforms, canopies, etc.

The attached application for noise exemption is for the project to install two tunnels at the Maple and Rutherford GO stations; see attached drawings. The projects are anticipated to commence by July 4, 2016 and installation is expected to be complete by December 31, 2016. Brief details of the work for both sites are as follows:

- Installation of approximately 70 caissons; this work will be done on weekdays. Between 9:00 am to 3:00 pm and is expected from August 1 to September 5,

2016. There may be some work occurring in the evening hours but only when unavoidable.

- Installation of precast concrete tunnel segments and undercutting of main track line including cutting of a segment of rail and re-welding; the tunnel segments will be installed over four weekends with work starting after 7:30 pm on Friday and stopping before 5:30 am on Monday. This work will be done after September 5, 2016. It is expected that undercutting of the main track line will also be done over the same time frame.

We expect the following equipment will be used by the contractor:

- Hi-rail backhoe or excavator with undercutting attachment
- Caisson rigs
- Backhoes equipped with hoe ram
- Dump Trucks
- Loaders
- Cranes
- Pumps (heavy duty)
- Concrete trucks (ready mix)
- Double drum walk-behind vibratory rollers
- Vibratory plate packers
- Tower lights, generators and adequate lights;
- Welding Machines
- Cutting torches & Propane torches

In support of the application, we attach the following:

- Sample copy of letter notifying surrounding businesses and homeowners
- Copy of Noise and Vibration Study undertaken by Valcoustics for Maple and Rutherford Stations
- A map of the area
- Drawing No. C-200 showing the General Plan of the Work
- Fee payment of $150

Sincerely,

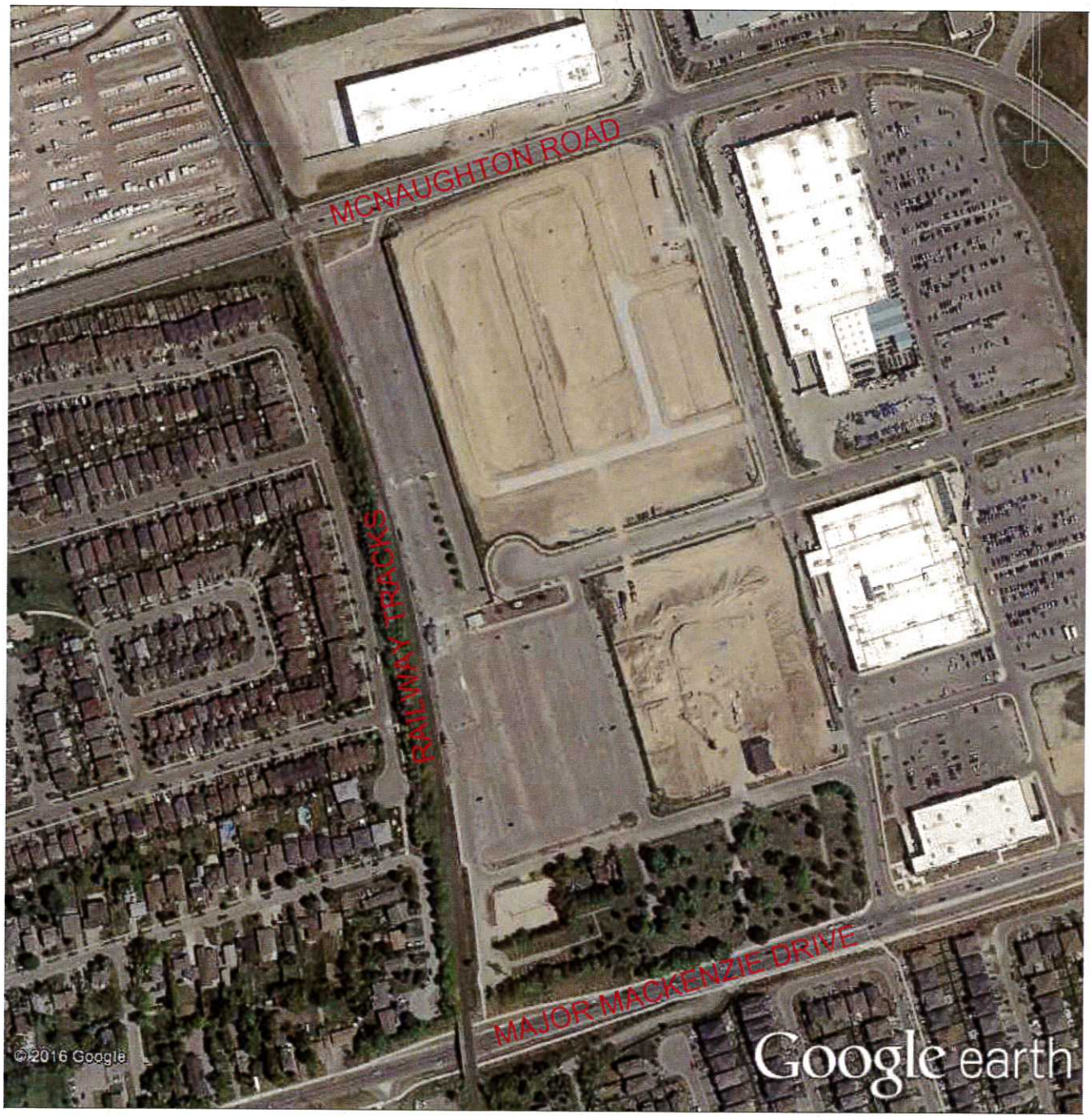
Cathy Borsa

Cathy Borsa B.A., PMP, LEED*AP
Manager, Corridor Infrastructure - Barrie
Metrolinx

Enclosure:

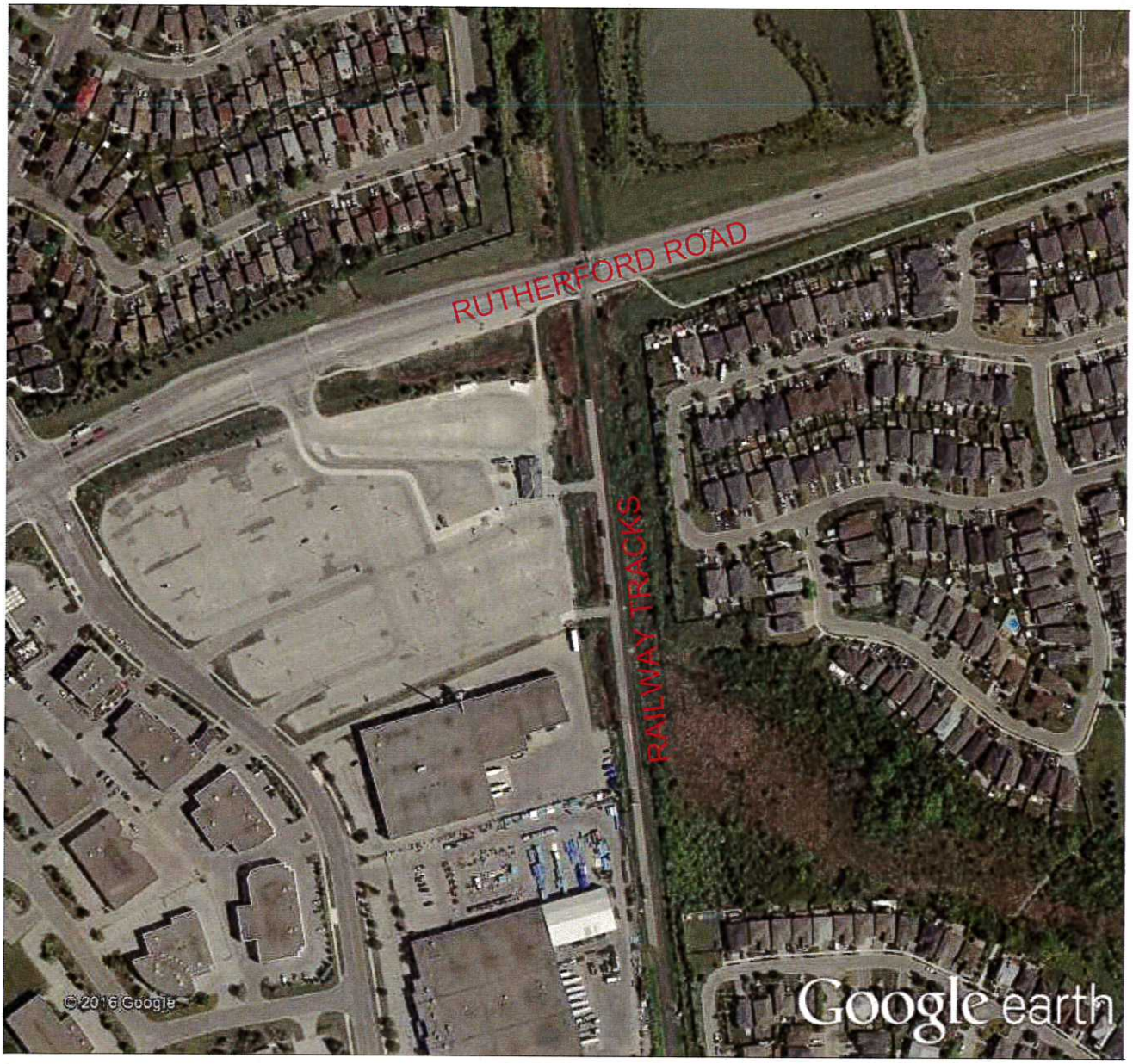
c.c. Joceli Pierossi, Metrolinx
Douglas Smith, Metrolinx
Istvan Szatmari, Metrolinx
Shabir Alidina, Cole Engineering

ATTACHMENT NO. 3



MAPLE GO STATION

N.T.S.



RUTHERFORD GO STATION

N.T.S.

ATTACHMENT No. 4

APPENDIX A

CATALOGUE OF SENSITIVE RECEPTORS

RUTHERFORD

95 & 91 Patna Crescent

87 & 83 Patna Crescent

81 & 77 Patna Crescent

73 & 69 Patna Crescent

63 & 59 Patna Crescent

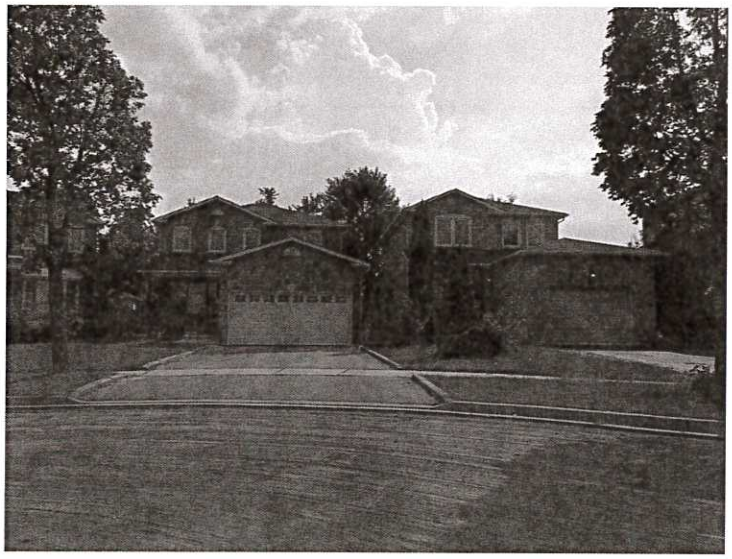
55 & 53 Patna Crescent

49 & 45 Patna Crescent

41 & 39 Patna Crescent

35 & 33 Patna Crescent

29 & 27 Patna Crescent



23 & 21 Patna Crescent

17 & 15 Patna Crescent

584 & 590 Barrhill Road

598 & 604 Barrhill Road

610 & 616 Barrhill Road

2077 Westburne Drive

152 & 150 Royal Appian Crescent

153 & 151 Royal Appian Crescent

186 & 184 Royal Appian Crescent

187 & 189 Royal Appian Crescent

131 Westway Crescent

128 Westway Crescent

146 – 156 Westway Crescent

160 – 172 Westway Crescent

APPENDIX B

CATALOGUE OF SENSITIVE RECEPTORS

MAPLE

9 Hill Street

2 and 10 Simcoe Street

16 Simcoe Street

22 Simcoe Street

28 Simcoe Street

28 Simcoe Street

72 & 74 Railway St.

51 Railway Street

192 & 190 Lindenshire Avenue

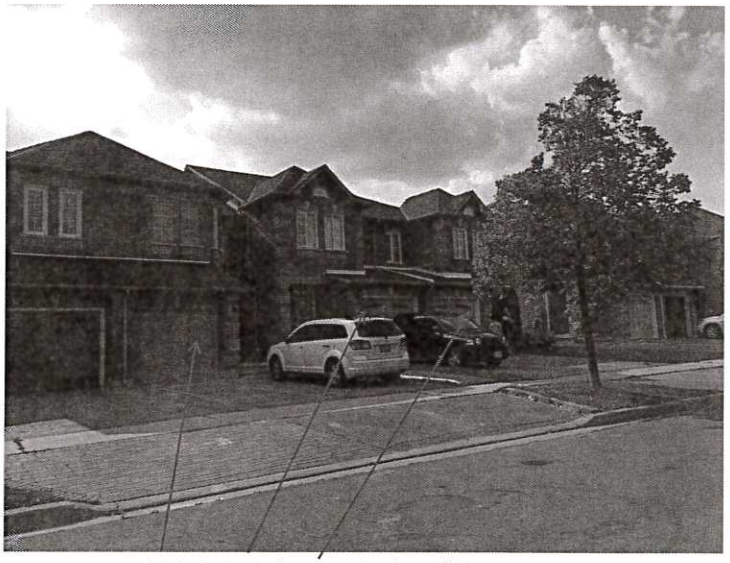
186 & 184 Lindenshire Avenue

1 & 3 Stonebriar Drive

170 & 168 Lindenshire Avenue

164 & 162 & 160 Lindenshire Avenue

154 & 152 & 150 Lindenshire Avenue



160 & 158 & 156 Lindenshire Avenue

150 & 148 Lindenshire Avenue

146 & 144 Lindenshire Avenue

142 & 140 Lindenshire Avenue

138 & 136 Lindenshire Avenue

134 & 132 Lindenshire Avenue

130 & 128 Lindenshire Avenue

126 & 124 Lindenshire Avenue

1 & 5 Falvo Street

106 & 102 Lindenshire Avenue

100 & 98 Lindenshire Avenue

96 & 94 Lindenshire Avenue

90 & 88 & 86 Lindenshire Avenue

77 & 79 Lindenshire Avenue

Proposed Residential

Proposed Residential

APPENDIX C

SOURCE SOUND LEVEL DATA

114-380 GO TWAD/Rutherford Station

Point Sources

Name	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)	(dB)	(Hz)		(m)		(m)	(m)	(m)
Diesel Generator (400 kW)	~	GENSET	100.0	100.0	100.0	Lw	GENSET		0.0	0.0	0.0							0.0		(none)	2.50	r	620681.27	4855036.55	222.09
Exhaust Fan	~	EF1	72.9	72.9	72.9	Lw	EF1		0.0	0.0	0.0							0.0		(none)	4.50	r	620701.13	4854938.58	224.00
Condensing Unit	~	CND1	69.7	69.7	69.7	Lw	CND1		0.0	0.0	0.0							0.0		(none)	4.50	r	620696.37	4854935.91	224.00
Auger Drill Rig		DRILL	115.0	115.0	115.0	Lw	115		0.0	0.0	0.0							0.0	500	(none)	2.50	r	620743.70	4854999.85	220.00
Auger Drill Rig		DRILL	115.0	115.0	115.0	Lw	115		0.0	0.0	0.0							0.0	500	(none)	2.50	r	620755.57	4854916.76	219.00

Line Sources

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving Pt. Src			
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Number			Speed
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Evening	Night	(km/h)
Public Address System	~	PA1	114.6	114.6	114.6	89.7	89.7	89.7	Lw	PA+10*log10(21)		0.0	0.0	0.0				2.00	2.00	2.00	0.0		(none)				
Public Address System	~	PA2	114.6	114.6	114.6	89.7	89.7	89.7	Lw	PA+10*log10(21)		0.0	0.0	0.0				2.00	2.00	2.00	0.0		(none)				

Area Sources

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving Pt. Src		
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Number		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Evening	Night
Dozer and Dump Truck		Cons_Noise	115.0	115.0	115.0	79.1	79.1	79.1	Lw	115		0.0	0.0	0.0							0.0	500	(none)			

Sound Level Library

Name	ID	Type	Oktave Spectrum (dB)												Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	
400 kW Generator in Enclosure (75 dBA @ 7m)	GENSET	Lw		113.8	111.6	109.0	101.6	99.1	90.1	85.8	80.7	76.6	100.0	116.9	Manufacturer's data (Generac SG400)
3000 CFM Exhaust Fan	EF1	Lw		0.0	77.0	76.0	76.0	71.0	65.0	64.0	56.0	50.0	72.9	81.7	Manufacturer's data (Greenheck GB-180)
18200 BTUH Split System Condensing Unit	CND1	Lw		0.0	74.0	69.0	69.0	67.0	64.0	62.0	58.0	52.0	69.7	77.1	Manufacturer's data (LG LSU181)
Public Address System (82 dBA @ platform)	PA	Lw		0.0	76.0	86.0	99.2	101.7	95.4	90.8	85.8	80.6	101.4	104.6	ANSI S3.5-1997 (Table 4)

(c) Valcoustics Canada Ltd.

114-380 GO TWAD/Maple Station

Point Sources

Name	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)	(dB)	(Hz)		(m)		(m)	(m)	(m)
Emergency Generator (400 kW)	~	GENSET	100.0	100.0	100.0	Lw	GENSET		0.0	0.0	0.0							0.0		(none)	2.50	r	620017.03	4857362.75	252.06
Condensing Unit		CND1	69.7	69.7	69.7	Lw	CND1		0.0	0.0	0.0							0.0		(none)	1.50	r	619966.66	4857415.81	250.36
Exhaust Fan		EF1	72.9	72.9	72.9	Lw	EF1		0.0	0.0	0.0							0.0		(none)	1.50	r	619967.66	4857412.46	250.29
Auger Drill Rig	~	DRILL	115.0	115.0	115.0	Lw	115		0.0	0.0	0.0							0.0	500	(none)	2.50	r	619970.76	4857286.01	250.03
Auger Drill Rig	~	DRILL	115.0	115.0	115.0	Lw	115		0.0	0.0	0.0							0.0	500	(none)	2.50	r	619944.33	4857395.95	250.71

Line Sources

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving Pt. Src			
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Number			Speed
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Evening	Night	(km/h)
Public Address System		PA1	114.6	114.6	114.6	89.7	89.7	89.7	Lw	PA+10*log10(21)		0.0	0.0	0.0				2.00	2.00	2.00	0.0		(none)				
Public Address System		PA2	114.6	114.6	114.6	89.7	89.7	89.7	Lw	PA+10*log10(21)		0.0	0.0	0.0				2.00	2.00	2.00	0.0		(none)				

Area Sources

Name	M.	ID	Result. PWL			Result. PWL"			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving Pt. Src		
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night				Number		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m²)		(min)	(min)	(min)	(dB)	(Hz)		Day	Evening	Night
Dozer and Dump Truck	~	Cons_Noise	115.0	115.0	115.0	79.1	79.1	79.1	Lw	115		0.0	0.0	0.0							0.0	500	(none)			

Sound Level Library

Name	ID	Type	Oktave Spectrum (dB)												Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	
400 kW Generator in Enclosure (75 dBA @ 7m)	GENSET	Lw		113.8	111.6	109.0	101.6	99.1	90.1	85.8	80.7	76.6	100.0	116.9	Manufacturer's data (Generac SG400)
3000 CFM Exhaust Fan	EF1	Lw		0.0	77.0	76.0	76.0	71.0	65.0	64.0	56.0	50.0	72.9	81.7	Manufacturer's data (Greenheck GB-180)
18200 BTUH Split System Condensing Unit	CND1	Lw		0.0	74.0	69.0	69.0	67.0	64.0	62.0	58.0	52.0	69.7	77.1	Manufacturer's data (LG LSU181)
Public Address System (82 dBA @ platform)	PA	Lw		0.0	76.0	86.0	99.2	101.7	95.4	90.8	85.8	80.6	101.4	104.6	ANSI S3.5-1997 (Table 4)

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