

November 25, 2020

North Town Development Ltd.
36 Gordon Mackay Road, Unit 4
North York, Ontario
M9N 2V6

Attention: Mr. Domenic Cirillo

VIA EMAIL

domenic.cirillo@gmail.com

Gentlemen:

Re: Addendum to Preliminary Environmental Noise and Vibration Report
Revised September 18, 2019
Proposed Residential Development
1291 Shore Acres Drive
Town of Innisfil
Our File: 16-120-01



As requested by the Town of Innisfil, Jade Acoustics Inc. has reviewed the updated draft plan of the subdivision and the update (Addendum letter) to the traffic study.

A Preliminary Environmental Noise and Vibration Report dated September 18, 2019, was originally prepared by Jade Acoustics Inc. for the proposed residential development. The lot numbering as well as modifications to the lot fabric and road configuration are some of the changes implemented to the draft plan included in the original noise report. Also, a Preliminary Transportation Impact Study dated August, 2019, was prepared by NexTrans Consulting for the proposed development and subsequently updated via an Addendum letter dated November 2, 2020, to reflect the latest draft plan.

The following information was used as part of the updated review and analysis:

- Draft Plan prepared by Humphries Planning Group Inc. dated September 28, 2020; and
- An Addendum Transportation Study letter dated November 2, 2020, prepared by NexTrans Consulting.

Jade Acoustics Inc. reviewed the provided Addendum Traffic Study. It was determined that there was a minor change associated with the ultimate traffic volume predicted for Shore Acres Drive. Previously, the Ultimate AADT volume for Shore Acres Drive was 6,823 vehicles. Based on the latest study, the Ultimate AADT volume is 6,845. From an



acoustic standpoint, this marginal change in traffic volume is considered to be acoustically insignificant (i.e. a calculation was completed that resulted in less than 0.1 dBA change in predicted sound levels at the sample lots analyzed). The rail traffic data is applicable to 2029 and had been assumed to be applicable to 2030. As the distance between the proposed lots and the rail is very large the acoustic analysis with respect to the rail noise remains unchanged.

In regard to the original noise report, sample calculations were completed for Lots 1, 12 and 24 (as presented in Table 2). The location and number for Lot 1 is consistent with the original report. For Lot 24, the lot number at this location is now Lot 23. For Lot 12, it was the furthest east lot and was flanking Shore Acres Drive. For this latest Draft Plan, there are no lots flanking Shore Acres Drive and the furthest east lot is now Lot 13. A subsequent change to the analysis has been completed to include Lot 13 in Table 2, which is a representative lot of the lots that front onto Shore Acres Drive.

Attached are Tables 1, 2, 3, Notes to Table 3 and Figure 2 reflecting the latest Draft Plan numbering, road traffic information and site layout as well as showing the acoustic requirements for the residential lots within the respective development.

As a general note for all lots, and consistent with the original noise report, all rear yard amenity spaces have a predicted unmitigated sound level of less than 55 dBA; and therefore, no acoustic barriers are required.

All other findings within the original detailed noise report remain applicable.

If there are any questions, please call.

Yours truly,

JADE ACOUSTICS INC.

Per:

Aaron Keey, P.Eng.



Att.

AK/DCG/jg

J:\Letters\2016\16-120-01 Nov 25-20 1291 Shore Acres Drive (Addendum to PENVR).doc

TABLE 1

PROPOSED RESIDENTIAL DEVELOPMENT

1291 SHORE ACRES DRIVE

TOWN OF INNISFIL

SUMMARY OF ROAD AND RAIL TRAFFIC DATA

A. ROAD TRAFFIC

ROAD	SHORE ACRES DRIVE
AADT (Ultimate)*	6,845
No. of Lanes	2
Speed (km/h)	50
Medium Trucks (%)	4.5
Heavy Trucks (%)	0.5
Day/Night Split (%) **	90/10

* AADT: Ultimate Annual Average Daily Traffic

** Assumed

B. RAIL TRAFFIC

	Passenger (METROLINX/GO TRANSIT)*	
	Day	Night
No. of Trains	36	6
No. of Cars	12	12
No. of Locomotives	1	1
Speed (km/hr)	113	113

* Data applicable to Year 2029

Note: Day (7:00 a.m. to 11:00 p.m.).
Night (11:00 p.m. to 7:00 a.m.).



TABLE 2
PROPOSED RESIDENTIAL DEVELOPMENT
1291 SHORE ACRES DRIVE
TOWN OF INNISFIL

**SAMPLE OF PREDICTED UNMITGATED SOUND LEVELS OUTDOORS DUE TO
TRANSPORTATION SOURCES**



Lots	Location*	Source	Distance (m)	Leq (dBA)			
				Day		Night	
				Separate	Combined	Separate	Combined
Lot 1	Rear Yard	GO Transit/Metrolinx	260	48	--	--	--
	Side Wall	Shore Acres Drive	19	55	57/58**	48	51/53**
		GO Transit/Metrolinx	254	52/55**		47/51**	
Lot 13	Front Wall	Shore Acres Drive	19	58	--	51	--
Lot 23	Side Wall	GO Transit/Metrolinx	188	54/57**	--	49/53**	--

* Rear yard location taken 3 m from the centre of the rear wall and 1.5 m above grade. Wall locations were taken 4.5 m above ground for two storey dwellings.

** Without whistle/with whistle

TABLE 3
PROPOSED RESIDENTIAL DEVELOPMENT
1291 SHORE ACRES DRIVE
TOWN OF INNISFIL

SUMMARY OF MINIMUM NOISE CONTROL MEASURES



Lots	Air Conditioning ⁽¹⁾	Exterior Wall ^{(2)*}	Window ^{(3)*}	Acoustic Fence ⁽⁴⁾	Warning Clause ⁽⁵⁾
Lots 1, 2 and 22	Provision for Adding	Standard	Standard	No	A, B, C
Lots 3 to 13	Provision for Adding	Standard	Standard	No	A, B
Lots 20, 21 and 23 to 27	--	Standard	Standard	No	A, C
All other lots	No special requirements				

* Based on preliminary calculations. See Section 5.1.1 for details.

NOTES TO TABLE 3

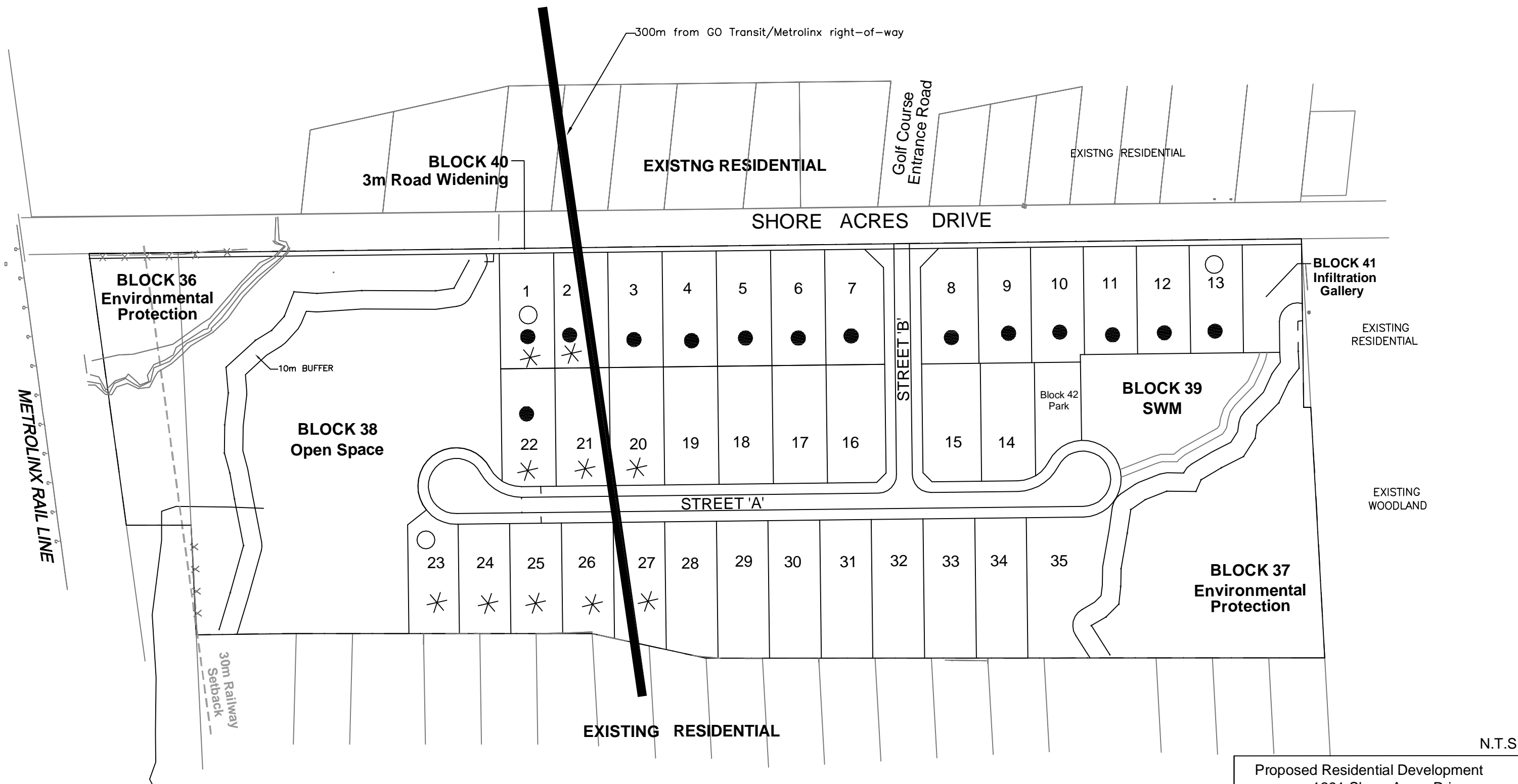
1. Provision for adding central air conditioning would involve a ducted heating system sized to accommodate the addition of central air conditioning by the occupant at a later date. The air cooled condenser unit AHRI sound rating must not exceed 7.6 bels and should be placed in a noise insensitive location which complies with municipal by-laws.
2. STC – Sound Transmission Class Rating (Reference ASTM-E413). Results shown are based on an assumed wall area of 55% of the associated floor area for the wall facing the noise source and for the wall perpendicular to the noise source.
3. STC – Sound Transmission Class Rating (Reference ASTM-E413). Results shown are based on an assumed glazed area of 25% of the associated floor area for the window facing the noise source and for the window perpendicular to the noise source. A sliding glass walkout door should be considered as a window and be included in the percentage of glazing. Requirements are to be finalized once building plans are available.
4. Sound barriers must be of solid construction with no gaps and have a minimum surface density of 20 kg/m^2 . Earthen berms, solid walls/fences of adequate density or combinations of berms and walls/fences may be used.
5. Suggested warning clauses to be included in the subdivision agreement and to be included in offers of purchase and sale or lease agreements on designated lots:
 - A. “Purchasers/tenants are advised that despite the inclusion of noise control features in this development area and within the dwelling units, noise due to increasing road and/or rail traffic may continue to be of concern, occasionally interfering with the activities of the occupants as the sound levels may exceed the noise criteria of the Municipality and the Ministry of the Environment, Conservation and Parks. I, the purchaser hereby agree to place this clause in all subsequent offers of purchase and sale when I sell the property.”
 - B. “Purchasers/tenants are advised that this dwelling unit can be fitted with a central air conditioning system at the owner’s option and expense which will enable occupants to keep windows closed if road traffic noise interferes with the indoor activities. If central air conditioning is installed, the air cooled condenser unit shall have an AHRI sound rating not exceeding 7.6 bels and shall be located so as to have the least possible noise impact on outdoor activities of the occupants and the neighbours.”



C. "Warning: GO Transit/Metrolinx or its assigns or successors in interest has or have a right-of-way within 300 m from the land the subject hereof. There may be alterations to or expansions of the rail facilities on such right-of-way in the future including the possibility that the railway or its assigns or successors as aforesaid may expand its operations, which expansion may affect the living environment of the residents in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating measures in the design of the development and individual dwelling(s). GO Transit/Metrolinx will not be responsible for any complaints or claims arising from use of such facilities and/or operations on, over or under the aforesaid right-of-way."

6. Conventional ventilated attic roof construction meeting typical construction practices is satisfactory in all cases.





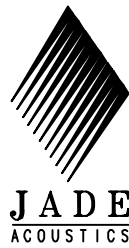
N.T.S

Legend:

- Provision for Adding Central Air Conditioning and Warning Clause (See text and Table 3 for details)
- Analyzed Lots
- * Warning Clause C (see Table 3)

Proposed Residential Development
1291 Shore Acres Drive
Town of Innisfil
County of Simcoe

Date: November 2020 Our File: 16-120-01



JADE
ACOUSTICS

PLAN OF SUBDIVISION
SHOWING MINIMUM
NOISE ABATEMENT
MEASURES

FIGURE 2