Environmental Noise and Vibration Study

12506 & 12698 Heart Lake Road, Caledon, Ontario

Tribal Partners Canada Inc. and TDMSI

201-2700 Steeles Avenue W, Vaughan, ON L4K 3C8

Prepared by:

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Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By	Authorized By
0	October 14, 2025	C. Jakubec	A. K. Haniff	A. K. Haniff

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Table of Contents

Tables in Text

Appended Figures

Appendices

Acronyms and Abbreviations

dB	Decibels
dBA	Decibels (A-weighted)
dBAI	Decibels (A-weighted), Impulsive
D-series	Series of guidelines by the Ministry of Environment, Conservation, and Parks
EASR	Environmental Activity and Sector Registry
ECA	Environmental Compliance Approval
EPA	Environmental Protection Act
G	Ground absorption factor
Guideline D-2	D-series guideline addressing sewage treatment
Guideline D-3	D-series guideline addressing gas and oil pipelines
Guideline D-4	D-series guideline addressing landfills
Guideline D-5	D-series guideline addressing water services
Guideline D-6	D-series guideline addressing industries; *Compatibility between Industrial Facilities and Sensitive Land Uses*
HVAC	Heating Ventilation and Air Conditioning
ISO	International Organization for Standardization
kg/m^2	Kilograms per square metre
L_{eq}	Energy Equivalent Sound Level
L_{LM}	Logarithmic Mean Impulse Sound Level
m	Metres
m^2	Square metres
MECP	Ministry of the Environment, Conservation and Parks
MMAH	Ontario Ministry of Municipal Affairs and Housing
MUA	Make-up Air
NPC-300	MECP Publication NPC-300
OPA	Official Plan Amendment
PORs	Points of reception
PPS	Provincial Planning Statement
PWL	Sound Power Level
Rd	Road
SLM	Sound Level Meter

SPA	Site Plan Approval
SPL	Sound Pressure Level
ZBA	Zoning By-law Amendment
SLR	SLR Consulting (Canada) Ltd.
Tribal	Tribal Partners Canada Inc.
ON	Ontario

1.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by Tribal Partners Canada Inc., and its management arm TDMSI (Tribal) to conduct an environmental noise and vibration assessment for the proposed 12506 & 12698 Heart Lake Road industrial/employment project in Caledon, Ontario (ON) in support of an official plan amendment (OPA) and zoning bylaw amendment (ZBA).

1.1 Nature of the Subject Lands

The official address of the proposed development is 12506 & 12698 Heart Lake Road in Caledon, ON and will be located northwest of highway 410. The current lands are used for agricultural purposes.

The proposed development will consist of four warehouse/ industrial buildings with a gross floor area of 158,167 square metres (m^2). The buildings will have:

- 32 loading docks along the south façade of Building A;
- 32 loading docks along the north façade of Building B;
- 43 loading docks along the north façade of Building C;
- 45 loading docks along the south façade of Building C;
- 45 loading docks along the north façade of Building D; and
- 50 loading docks along the south façade of Building D.

Road access will be from Heart Lake Road and the proposed Larson Peak extension.

The development drawings are included in Appendix A.

1.2 Nature of the Surroundings

The lands surrounding the development are dominated by agricultural lands, industrial lands, and residential. One and two storey single family homes are located around the proposed site on Bonnieglen Farm Boulevard and Heart Lake Road. These residences correspond to the nearest noise sensitive receptors to the development.

The surrounding topography is mainly flat with no significant variations.

A context plan is shown in Figure 1.

2.0 Assessment Framework

The intent of this report is to identify any existing and potential land use compatibility issues and to identify and evaluate options to achieve appropriate design, buffering and/or separation distances between the proposed industrial land uses, including residential uses, and nearby industrial areas and/or major facilities. Recommended measures intended to eliminate or mitigate negative impacts and adverse effects are provided.

The requirements of Ontario's planning regime are organized such that generic policy is informed by specific policy, guidance, and legislation, as follows:

- The Ministry of Environment, Conservation, and Parks (MECP) D-series of guidelines set out methods to determine if assessments are required (areas of influence, recommended separation distances, and the need for additional studies); then
- MECP and Municipal regulations, policies, standards and guidelines then set out the requirements of additional air quality, noise and vibration studies and the applicable policies, standards, guidelines and objectives to ensure that adverse effects do not occur.

2.1 D-Series of Guidelines

The D-series of guidelines were developed by the MECP in 1995 as a means to assess recommended separation distances and other control measures for land use planning proposals in an effort to prevent or minimize ‘adverse effects’ from the encroachment of incompatible land uses where a facility either exists or is proposed. D-series guidelines address sources including sewage treatment (Guideline D-2), gas and oil pipelines (Guideline D3), landfills (Guideline D-4), water services (Guideline D-5) and industries (Guideline D-6).

For this project, the applicable guideline is Guidelines D-6 - *Compatibility between Industrial Facilities and Sensitive Land Uses*. Guideline D-6 specifically addresses issues of air quality, odour, dust, noise, and litter from industrial facilities.

Adverse effect is a term defined in the Environmental Protection Act and “means one or more of

- impairment of the quality of the natural environment for any use that can be made of it,
- injury or damage to property or to plant or animal life,
- harm or material discomfort to any person,
- an adverse effect on the health of any person,
- impairment of the safety of any person,
- rendering any property or plant or animal life unfit for human use,
- loss of enjoyment of normal use of property, and
- interference with the normal conduct of business”.

2.1.1 Guideline D-6 Requirements

To minimize the potential to cause an adverse effect from industrial operations, areas of influence and recommended minimum setback distances are included within Guideline D-6. The areas of influence and recommended separation distances from the guideline are provided in the table below.

Table A: Guideline D-6 - Potential Influence Areas and Recommended Minimum Setback Distances for Industrial Land Uses

Industry Classification	Area of Influence	Recommended Minimum Setback Distance
Class I – Light Industrial	70 metres (m)	20 m
Class II – Medium Industrial	300 m	70 m
Class III – Heavy Industrial	1000 m	300 m

Industrial categorization criteria are supplied in Guideline D-6-2, and are shown in the following table:

Table B: Guideline D-6 - Industrial Categorization Criteria

Category	Outputs	Scale	Process	Operations / Intensity	Possible Examples
Class I Light Industry	• Noise: Sound not audible off-property • Dust: Infrequent and not intense • Odour: Infrequent and not intense • Vibration: No ground-borne vibration on plant property	• No outside storage • Small-scale plant or scale is irrelevant in relation to all other criteria for this Class	• Self-contained plant or building which produces/ stores a packaged product • Low probability of fugitive emissions	• Daytime operations only • Infrequent movement of products and/ or heavy trucks	• Electronics manufacturing and repair • Furniture repair and refinishing • Beverage bottling • Auto parts supply • Packaging and crafting services • Distribution of dairy products • Laundry and linen supply

Category	Outputs	Scale	Process	Operations / Intensity	Possible Examples
Class II Medium Industry	• Noise: Sound occasionally heard off-property • Dust: Frequent and occasionally intense • Odour: Frequent and occasionally intense • Vibration: Possible ground-borne vibration, but cannot be perceived off-property	• Outside storage permitted • Medium level of production allowed	• Open process • Periodic outputs of minor annoyance • Low probability of fugitive emissions	• Shift operations permitted • Frequent movements of products and/ or heavy trucks with the majority of movements during daytime hours	• Magazine printing • Paint spray booths • Metal command • Electrical production • Manufacturing of dairy products • Dry cleaning services • Feed packing plants
Class III Heavy Industry	• Noise: Sound frequently audible off property • Dust: Persistent and/ or intense • Odour: Persistent and/ or intense • Vibration: Ground-borne vibration can frequently be perceived off-property	• Outside storage of raw and finished products • Large production levels	• Open process • Frequent outputs of major annoyances • High probability of fugitive emissions	• Continuous movement of products and employees • Daily shift operations permitted	• Paint and varnish manufacturing • Organic chemical manufacturing • Breweries • Solvent recovery plants • Soaps and detergent manufacturing • Metal refining and manufacturing

2.1.2 Requirements for Assessments

The D-Series of Guidelines require that studies be conducted to assess impacts where sensitive land uses are proposed within the potential area of influence of a facility. This report is intended to fulfill this requirement.

The D-series guidelines reference previous versions of the noise guidelines (Publications NPC-205 and LU-131). However, the D-Series of guidelines are still in force, still represent current MECP policy and are specifically referenced in numerous other current MECP policies. In applying the D-series guidelines, the current policies, regulations, standards and guidelines have been used (e.g., Publication NPC-300).

2.1.3 Requirements for Minimum Separation Distances

Guideline D-6 also *recommends* that no sensitive land use be placed within the Recommended Minimum Separation Distance. However, it should be noted that this is a recommendation only. Section 4.10 of the Guideline allows for development within the separation distance, in cases of redevelopment, infilling, and transitions to mixed use, provided that the appropriate studies are conducted and that the relevant noise guidelines are met.

3.0 Industry Classification

Based on the proposed facility description the potential for noise impacts on the surrounding sensitive land uses exists. Potential sources of noise impacts include roof top mechanical units, idling truck and truck traffic inside the proposed development. According to the D-6 Guidelines, the facility could be classified as a Class I or II industry. Due to the main noise being generated by trucking activities at a dry storage facility, a Class I has been deemed appropriate for this site.

3.1 Minimum Separation Distance and Potential Area of Influence

Based on the D-6 Guidelines, the Project site has 20 metres (m) recommended minimum separation and potential area of influence up to 70 m.

These separation distances are illustrated in Figure 2.

The proposed industrial development is surrounded by existing noise sensitive land uses. As a result, a detailed noise study was completed for the proposed development.

The local area surrounding the project is being changed more towards industrial/commercial uses. The surrounding existing noise sensitive land uses may change to become industrial commercial in the near future. This study should be updated, if any of the surrounding land uses are converted to be non-noise sensitive.

4.0 Applicable Guideline Limits

4.1 Industrial (Stationary) Sources

4.1.1 Guidelines

4.1.1.1 Ministry of the Environment, Conservation and Parks Publication NPC-300 Guidelines for Stationary Noise

The applicable MECP noise guidelines for new sensitive land uses adjacent to existing industrial commercial uses are provided in MECP Publication NPC-300. NPC-300 revokes and replaces the previous noise assessment guideline, Publication LU-131 and Publication NPC-205, which was previously used for assessing noise impacts as part of Certificates of Approval / Environmental Compliance Approvals granted by the MECP for industries.

The new guideline sets out noise limits for two main types of noise sources:

- Non-impulsive, “continuous” noise sources such as ventilation fans, mechanical equipment, and vehicles while moving within the property boundary of an industry. Continuous noise is measured using 1-hour average sound exposures (Energy Equivalent Sound Level [L_{eq}] [1-hr] values), in Decibels (A-weighted) (dBA); and
- Impulsive noise, which is a “banging” type noise characterized by rapid rise time and decay. Impulsive noise is measured using a logarithmic mean (average) level (L_{LM}) of the impulses in a one-hour period, in Decibels (A-weighted), Impulsive (dBAI).

Furthermore, the guideline requires an assessment at, and provides separate guideline limits for:

- Outdoor points of reception (e.g., back yards, communal outdoor amenity areas); and
- Façade points of reception such as the plane of windows on the outdoor façade which connect onto noise sensitive spaces, such as living rooms, dens, eat-in kitchens, dining rooms and bedrooms.

The applicable noise limits at a point of reception are the higher of:

- The existing ambient sound level due to road traffic, or
- The exclusion limits set out in the guideline.

The following tables set out the exclusion limits from the guideline.

Table C: NPC-300 Exclusion Limits for Non-Impulsive Sounds (L_{eq} (1-hr), dBA)

Time of Day	Class 1 Area	
	Plane of Windows of Noise Sensitive Spaces	Outdoor Points of Reception
7 am to 7 pm	50	50
7 pm to 11 pm	50	50
11 pm to 7 am	45	n/a

Table D: NPC-300 Exclusion Limits for Impulsive Sounds (L_{LLM}, dBAI)

Time of Day	No. of Impulses in a 1-hour Period	Class 1 Area	
		Plane of Windows of Noise Sensitive Spaces	Outdoor Points of Reception
7 am to 11 pm	9 or more	50	50
	7 to 8	55	55
	5 to 6	60	60
	4	65	65
	3	70	70
	2	75	75
	1	80	80
11 pm to 7 am	9 or more	45	n/a
	7 to 8	50	n/a
	5 to 6	55	n/a
	4	60	n/a
	3	65	n/a
	2	70	n/a
	1	75	n/a
Notes: n/a - Not Applicable. Outdoor points of reception are not considered to be noise sensitive during the overnight period.			

The applicable guideline limits for infrequent events such as emergency generator set testing are +5 decibels (dB) higher than the values in Table C and are evaluated separately from other noise sources.

4.1.2 Application of the NPC-300 Guidelines

The stationary noise guidelines apply only to residential land uses and to noise-sensitive commercial and institutional uses, as defined in NPC-300 (e.g., schools, daycares, hotels). For the Project, the stationary noise guidelines only apply to the residential near the development, including:

- Individual residences; and
- Outdoor amenity area associated with the residences.

All of the above have been considered as noise-sensitive points of reception in the analysis.

The acoustic environment surrounding the proposed development is considered a Class 1 area, as roadway noise and existing commercial activities are expected to be audible during all times of the day and night.

5.0 Points of Reception

Noise-sensitive receptors with the potential to be impacted by the proposed development are the residential residences located along Heart Lake Road and Bonnielgen Farm Boulevard. SLR conducted a site visit to the proposed facility on December 31, 2024 to identify the surrounding sensitive receptors.

Modelled receptor locations include windows along all building façades. As a conservative assessment of noise impacts, all windows were assumed to be located in a noise-sensitive space (i.e. a living/dining room or bedroom). Unless otherwise noted, the upper floor window locations are considered the “worst-case” for noise impacts. The floors/façade without windows were excluded from the study.

Table E summarizes the points of reception (PORs) included in this assessment. The context plan in Figure 3 also shows the location of each POR with respect to the development.

Table E: Worst-Case Point of Reception Summary

ID	Address	Description	Modelled Receptor Height (metres [m])
POR 01-08	149-200 Bonnielgen Farm Boulevard	2-Storey Residence	4.5
POR 09	12304 Heart Lake Road	2-Storey Residence	4.5
POR 10	12405 Heart Lake Road	1-Storey Residence	1.5
POR 11	12423 Heart Lake Road	2-Storey Residence	4.5
POR 12	12435 Heart Lake Road	2-Storey Residence	4.5
POR 13	12600 Heart Lake Road	1-Storey Residence	1.5
POR 14	12611 Heart Lake Road	2-Storey Residence	4.5
POR 15	12612 Heart Lake Road	2-Storey Residence	4.5
POR 16	12632 Heart Lake Road	2-Storey Residence	4.5
POR 17	12785 Heart Lake Road	2-Storey Residence	4.5
POR 18	12799 Heart Lake Road	2-Storey Residence	4.5
POR 19	12830 Heart Lake Road	1-Storey Residence	1.5

The local area surrounding the project is being changed more towards industrial/commercial uses. The surrounding existing noise sensitive land uses may change to become industrial commercial in the near future. This study should be updated, if any of the surrounding land uses are converted to be non-noise sensitive.

6.0 Stationary Noise Impacts

6.1 Stationary Noise Sources

An investigation of “dry storage” facilities, where refrigeration “reefer” trucks are not required, has been completed. The location of the modelled stationary noise sources can be seen in Figures 4a, 4b, and 4c.

Traffic Counts for moving trucks were provided by Lea Consulting the traffic consultant for the proposed facility. Data used in the assessment can be found in Appendix B.

6.1.1.1 Non-Impulsive “Continuous” Noise Sources

The following non-impulsive “continuous” noise sources have been modelled:

- Office heating ventilation and air conditioning (HVAC) (x4);
- Rooftop make-up air (MUA)s (x15);
- Rooftop Exhaust Fans (x23);
- Emergency Generator (x4);
- Idling Trucks at Entrance and Loading Bays (x40); and
- Moving Trucks (Day: 27 Trucks; Evening: 27 Trucks; Night: 15 Trucks). Trucks will not enter/exit through the northern most drive-way (closest to Building A) or via Larson Peak Road, and will be limited to the other drive-ways off Heart Lake Road.

6.1.1.2 Impulsive Noise Sources

Impulsive noise can occur from truck tractor trailers coupling and uncoupling at loading docks, and from forklifts loading the parked trucks, while travelling over the loading dock plates. Under the Publication NPC-300 noise guidelines the log-average of both of these types of impulses are assessed together versus the applicable noise guideline (L_{LM} measured in dBAI). For modelling purposes, the multiple types of impulses were combined to obtain an overall impulsive noise sound power level of 108 dBAI, presenting two coupling/uncoupling impulses, and 20 forklift impulses for loading and unloading trailers. The impulse noise were modelled as line sources, distributing the sound emission along the loading dock areas.

6.2 Stationary Noise Modelling

Noise impacts from stationary sources were modelled using Cadna/A, a software implementation of the internationally recognized ISO-9613-2 (1996) environmental noise propagation algorithms. Cadna/A / ISO-9613 is the preferred noise model of the MECP. The ISO-9613 equations account for:

- Source to receiver geometry;
- Distance attenuation;
- Atmospheric absorption;
- Reflections off of the ground and ground absorption;
- Reflections off of vertical walls; and
- Screening effects of buildings, terrain, and purpose-built noise barriers (noise walls, berms, etc.).

One (1) order of reflection were considered to account for effects from the proposed development and surrounding buildings. As described in ISO 9613-2, ground factor values that represent the effects of ground absorption on sound levels range between 0 and 1. A global ground absorption factor of G = 0.3 (mostly reflective) was assumed.

Changes in ground elevation for the surrounding area were included in the modelling using topography from the Ontario Digital Terrain Model.

Sound level for data for mechanical equipment, trucking, and impulsive noise were based on SLR's database. Actual sound levels for facility equipment should be included and used in future designs.

Sound levels were predicted at residential building facades (at a worst-case first-floor or second floor window) and at the worst-case outdoor point of reception (located on the property, within 30 m of the house, at the location with the greatest noise level from facility operations, and at a height of 1.5 m above grade).

6.3 Required Noise Mitigation Measures

Impacts from noise were predicted for each of the two scenarios outlined above at the surrounding noise sensitive receptors outlined in Table E. Noise mitigation measures were investigated to ensure that the applicable Publication NPC-300, Class 1 Area noise guideline limits are met.

The following noise mitigation measures are required:

1) Noise barriers are required at Buildings A, B, and D, as shown in Figure 5**.**
2) Emergency generators must at a minimum be fitted with industrial grade silencers.

Noise barriers can be constructed using noise walls, earthen berms, or a combination of the two. Where noise walls are used, the walls should have a minimum face density (mass per unit area) of 20 kilograms per square metre (kg/m^2) and should be free of gaps and cracks. Any openings at the bottom of the barrier which may be required for drainage should be small (less than 25 mm high) and localized (not continuous along the bottom of the wall). The wall should be designed to withstand any wind loads. There are a number of commercial products and designs available which meet these requirements, including walls made of wood.

As the application advances through the OPA/ZBA application, the overall site plan may change which may result in acoustical mitigation recommendations being revised and reported on by the Acoustical Consultant. Additionally, when available, detailed mechanical information will be factored into the analysis. At a minimum, revised acoustical analysis will be required through Site Plan Application (SPA) and at the building permit stage, as required by the Town of Caledon.

6.4 Predicted Mitigated Stationary Noise Levels

6.4.1 Normal Operations

Mitigated sound levels from normal operations at all buildings are presented in Table F below. Sound levels from emergency generator set testing are presented in Table G.

Table F: Predicted Sound Levels – Non-Impulsive Sources, Normal Operations – Mitigated

Receptor	Façade Windows			Outdoor Amenity		Meets Class 1 Limits?
	Day	Evening	Night	Day	Evening	
POR 01 Bonnieglen Farm Blvd	43	43	43	41	41	Yes
POR 02 Bonnieglen Farm Blvd	42	42	42	40	40	Yes
POR 03 Bonnieglen Farm Blvd	42	42	42	42	42	Yes
POR 04 Bonnieglen Farm Blvd	41	41	41	41	41	Yes
POR 05 Bonnieglen Farm Blvd	43	43	42	43	43	Yes
POR 06 Bonnieglen Farm Blvd	43	43	43	44	44	Yes
POR 07 Bonnieglen Farm Blvd	39	39	39	38	38	Yes
POR 08 Bonnieglen Farm Blvd	41	41	40	41	41	Yes
POR 09 12304 Heart Lake Road	37	37	36	36	36	Yes
POR 10 12405 Heart Lake Road	43	43	42	38	38	Yes
POR 11 12423 Heart Lake Road	45	45	44	38	38	Yes
POR 12 12435 Heart Lake Road	45	45	44	38	38	Yes
POR 13 12600 Heart Lake Road	45	45	43	45	45	Yes
POR 14 12611 Heart Lake Road	45	45	43	41	41	Yes
POR 15 12612 Heart Lake Road	47	47	45	43	43	Yes
POR 16 12632 Heart Lake Road	45	45	44	43	43	Yes
POR 17 12785 Heart Lake Road	34	34	34	32	32	Yes
POR 18 12799 Heart Lake Road	33	33	33	29	29	Yes
POR 19 12830 Heart Lake Road	33	33	32	32	32	Yes

Notes:
All sound levels are L_{eq} (1hr) values in dBA.

Table G: Predicted Sound Levels – Generator Set Testing – Mitigated

Receptor	Façade Windows			Outdoor Amenity		Meets Class 1 Limits?
	Day	Evening	Night	Day	Evening	
POR 01 Bonnieglen Farm Blvd	46	n/a	n/a	46	n/a	Yes
POR 02 Bonnieglen Farm Blvd	53	n/a	n/a	54	n/a	Yes
POR 03 Bonnieglen Farm Blvd	50	n/a	n/a	51	n/a	Yes
POR 04 Bonnieglen Farm Blvd	52	n/a	n/a	52	n/a	Yes
POR 05 Bonnieglen Farm Blvd	51	n/a	n/a	52	n/a	Yes
POR 06 Bonnieglen Farm Blvd	51	n/a	n/a	49	n/a	Yes
POR 07 Bonnieglen Farm Blvd	44	n/a	n/a	46	n/a	Yes
POR 08 Bonnieglen Farm Blvd	41	n/a	n/a	41	n/a	Yes
POR 09 12304 Heart Lake Road	30	n/a	n/a	28	n/a	Yes
POR 10 12405 Heart Lake Road	30	n/a	n/a	30	n/a	Yes
POR 11 12423 Heart Lake Road	32	n/a	n/a	30	n/a	Yes
POR 12 12435 Heart Lake Road	35	n/a	n/a	28	n/a	Yes
POR 13 12600 Heart Lake Road	33	n/a	n/a	31	n/a	Yes
POR 14 12611 Heart Lake Road	39	n/a	n/a	36	n/a	Yes
POR 15 12612 Heart Lake Road	43	n/a	n/a	36	n/a	Yes
POR 16 12632 Heart Lake Road	47	n/a	n/a	36	n/a	Yes
POR 17 12785 Heart Lake Road	28	n/a	n/a	28	n/a	Yes
POR 18 12799 Heart Lake Road	30	n/a	n/a	25	n/a	Yes
POR 19 12830 Heart Lake Road	27	n/a	n/a	27	n/a	Yes

Notes:
All sound levels are L_{eq} (1hr) values in dBA.
n/a – Not applicable. Assumes generator sets are tested during daytime hours.

6.4.2 Impulsive Noise

Mitigated impacts from impulsive noise from tractor-trailer coupling and uncoupling and from loading/ unlading activities are presented in Table H below.

Table H: Predicted Sound Levels – Impulsive Sources – Mitigated

Receptor	Façade Windows	Outdoor Amenity	Meets Class 1 Limits?
	Day/ Evening/ Night	Day/ Evening	
POR 01 Bonnieglen Farm Blvd	43	40	Yes
POR 02 Bonnieglen Farm Blvd	43	40	Yes
POR 03 Bonnieglen Farm Blvd	44	45	Yes
POR 04 Bonnieglen Farm Blvd	39	39	Yes
POR 05 Bonnieglen Farm Blvd	43	44	Yes
POR 06 Bonnieglen Farm Blvd	45	46	Yes
POR 07 Bonnieglen Farm Blvd	31	30	Yes
POR 08 Bonnieglen Farm Blvd	43	43	Yes
POR 09 12304 Heart Lake Road	40	39	Yes
POR 10 12405 Heart Lake Road	44	35	Yes
POR 11 12423 Heart Lake Road	44	28	Yes
POR 12 12435 Heart Lake Road	38	36	Yes
POR 13 12600 Heart Lake Road	39	38	Yes
POR 14 12611 Heart Lake Road	43	40	Yes
POR 15 12612 Heart Lake Road	43	39	Yes
POR 16 12632 Heart Lake Road	45	41	Yes
POR 17 12785 Heart Lake Road	26	26	Yes
POR 18 12799 Heart Lake Road	26	19	Yes
POR 19 12830 Heart Lake Road	24	24	Yes

Notes:
All sound levels are L_{LM} values in dBAI.
Frequent impulses assumed.

7.0 Vibration Assessment

The proposed development is not anticipated to contain any significant industrial vibration sources, such as large stamping presses or forges. Under applicable MECP guidelines, a detailed vibration assessment is not required. Adverse impacts from industrial vibration from the proposed warehouse operations is not anticipated.

8.0 Conclusions and Recommendations

A compatibility assessment has been completed, examining the potential for noise and vibration impacts from the proposed development project and the effect on its surroundings. Based on the results of our studies:

- With the inclusion of the following noise mitigation measures, adverse noise impacts from the proposed development (stationary sources) are not anticipated from the proposed industrial development**.**
    1) Noise barriers are required for Buildings A, B, and D, as shown in Figure 5**.**
    2) Emergency generators must at a minimum be fitted with industrial grade silencers.
- Adverse vibration impacts from the proposed development are not anticipated from the proposed residential development.
- The requirements of MECP Guideline D-6 and Publication NPC-300 are met.
- As the application advances through the OPA/ZBA application, the overall site plan may change which may result in acoustical mitigation recommendations being revised and reported on by the Acoustical Consultant. Additionally, when available, detailed mechanical information will be factored into the analysis. At a minimum, revised acoustical analysis will be required through Site Plan Application (SPA) and at the building permit stage, as required by the Town of Caledon

9.0 Closure

Sincerely,

SLR Consulting (Canada) Ltd.

Colin Jakubec, E.I.T
Acoustical Consultant

Aaron K. Haniff, P.Eng.
Principal, Acoustical Engineer

10.0 References

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Figures

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12506 & 12698 Heart Lake Road, Caledon, Ontario

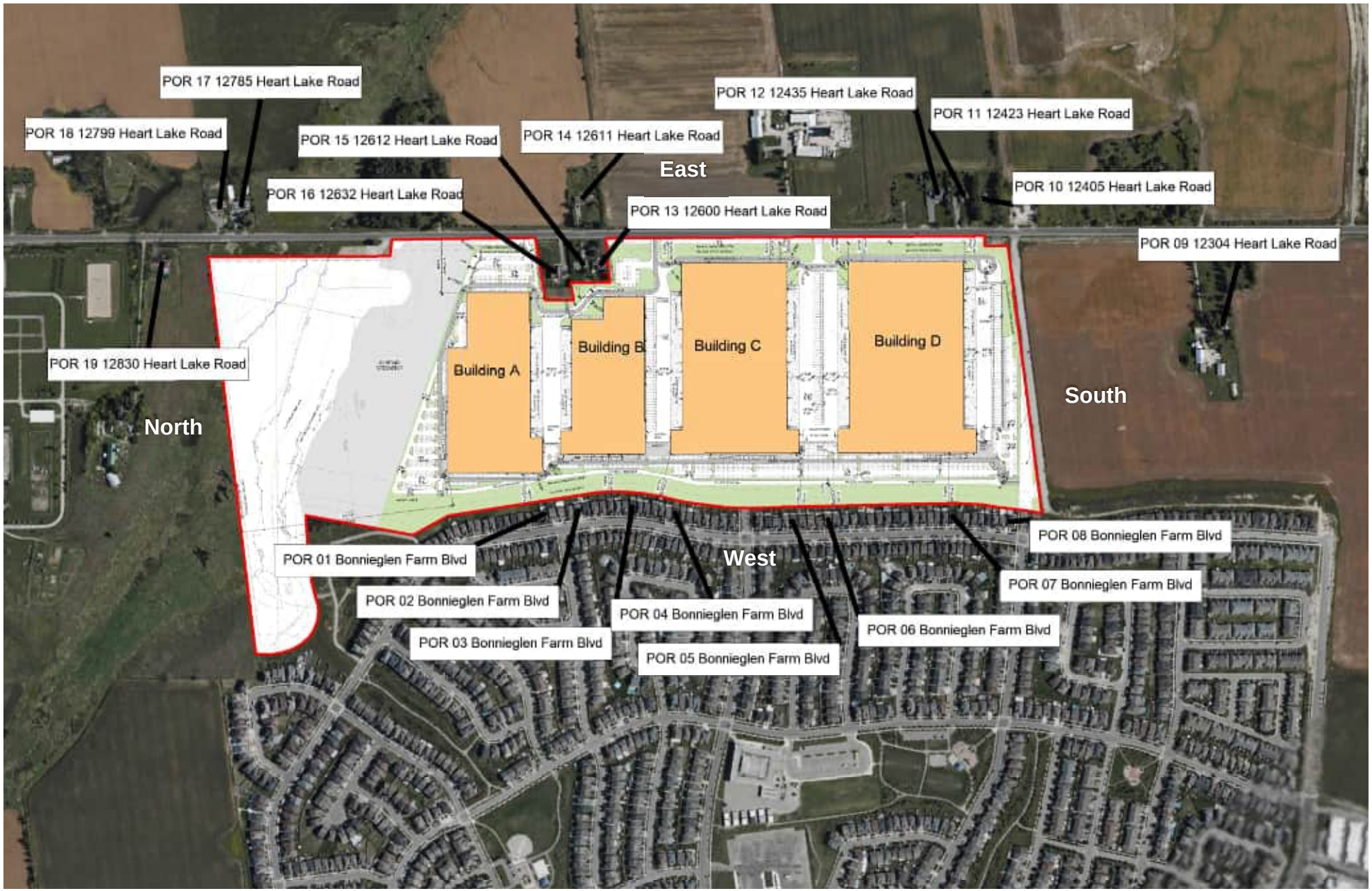
Tribal Partners Canada Inc. and TDMSI

SLR Project No.: 241.031852.00001

October 14, 2025

TRIBAL PARTNERS CANADA INC AND TDMSI	True North	Scale: 1:15,000	METRES	SLR
12506 & 12698 HEART LAKE ROAD - CALEDON, ONTARIO		Date: Oct 2025 Rev 0.0	Figure No. 1	
SITE AND CONTEXT PLAN		Project No. 241.031852.00001		

TRIBAL PARTNERS CANADA INC AND TDMSI	True North	Scale: 1:8,000	METRES	SLR
12506 & 12698 HEART LAKE ROAD - CALEDON, ONTARIO		Date: Oct 2025 Rev 0.0	Figure No. **2**	
MECP GUIDELINE D-6 SEPARATION DISTANCES		Project No. 241.031852.00001		



TRIBAL PARTNERS CANADA INC AND TDMSI

12506 & 12698 HEART LAKE ROAD - CALEDON, ONTARIO

POINTS OF RECEPTION

True North

Scale: 1:8,000 METRES

Date: Oct 2025 Rev 0.0

Project No. 241.031852.00001

Figure No. **3**

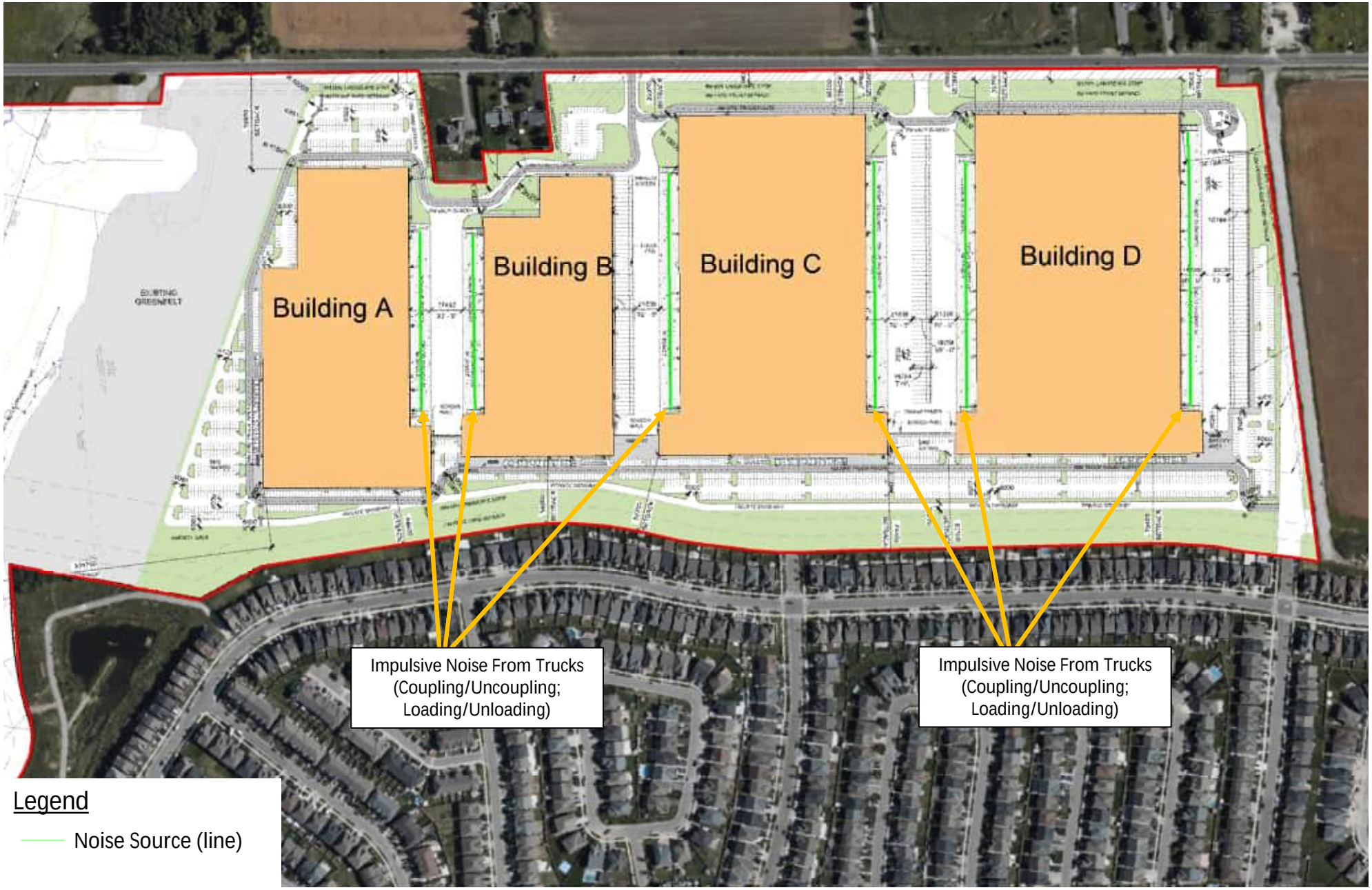
SLR

TRIBAL PARTNERS CANADA INC AND TDMSI	True North	Scale: 1:4,500	METRES	SLR
12506 & 12698 HEART LAKE ROAD - CALEDON, ONTARIO		Date: Oct 2025 Rev 0.0	Figure No. **4a**	
STATIONARY SOURCE LOCATIONS – NON-IMPULSIVE SOURCES		Project No. 241.031852.00001		

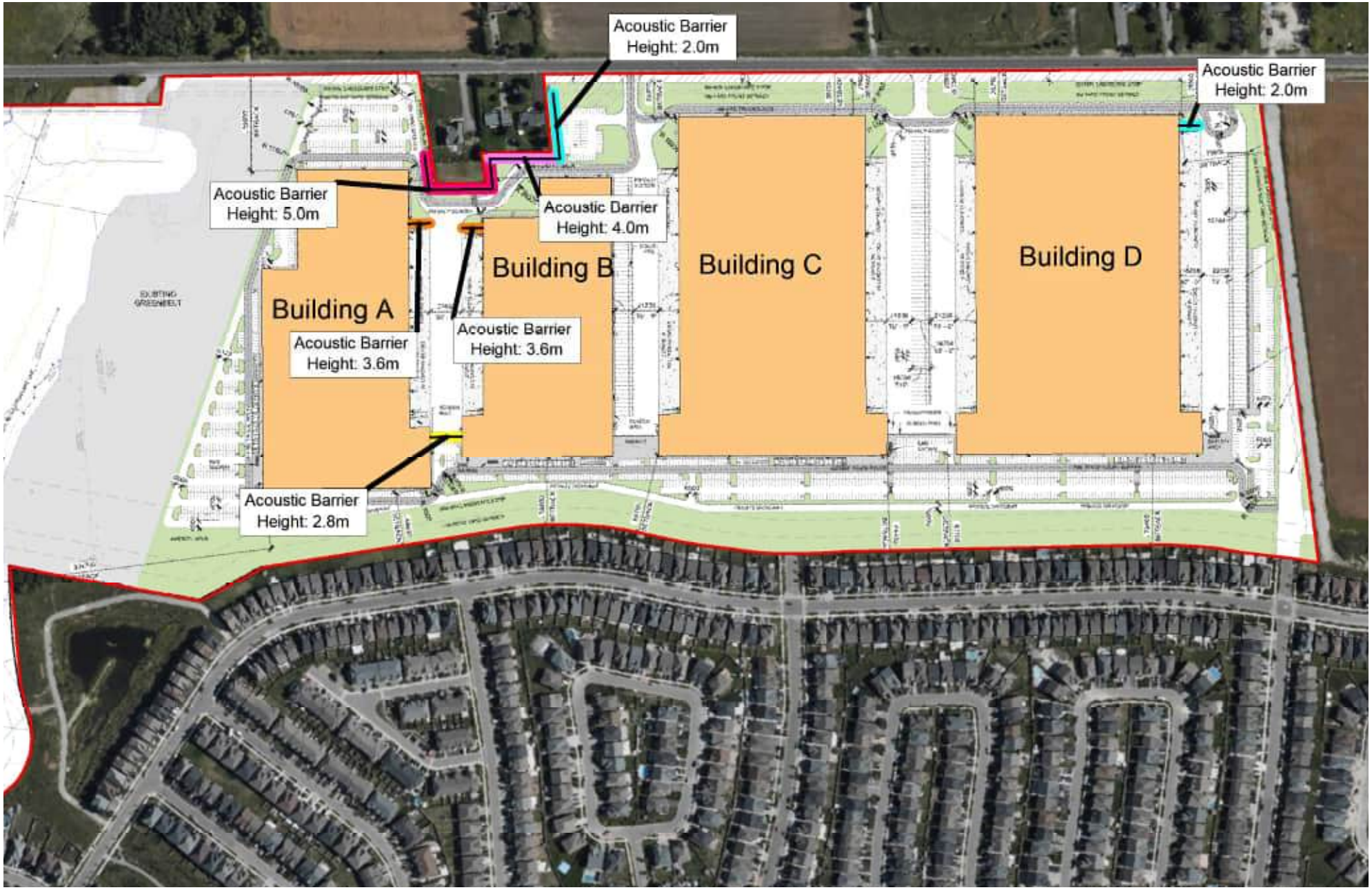
Legend

+ Noise Source (point)

TRIBAL PARTNERS CANADA INC AND TDMSI	True North	Scale: 1:4,500	METRES	SLR
12506 & 12698 HEART LAKE ROAD - CALEDON, ONTARIO		Date: Oct 2025 Rev 0.0	Figure No. **4b**	
STATIONARY SOURCE LOCATIONS – NON-IMPULSIVE EMERGENCY SOURCES		Project No. 241.031852.00001		



TRIBAL PARTNERS CANADA INC AND TDMSI	True North	Scale: 1:4,500	METRES	SLR
12506 & 12698 HEART LAKE ROAD - CALEDON, ONTARIO		Date: Oct 2025 Rev 0.0	Figure No. **4c**	
STATIONARY SOURCE LOCATIONS – IMPULSIVE SOURCES		Project No. 241.031852.00001		



TRIBAL PARTNERS CANADA INC AND TDMSI

12506 & 12698 HEART LAKE ROAD - CALEDON, ONTARIO

REQUIRED NOISE BARRIER LOCATIONS – DRY STORAGE OPERATIONS

True North

Scale: 1:4,500 METRES

Date: Oct 2025 Rev 0.0

Project No. 241.031852.00001

Figure No. **5**

SLR

Appendix A Development Drawings

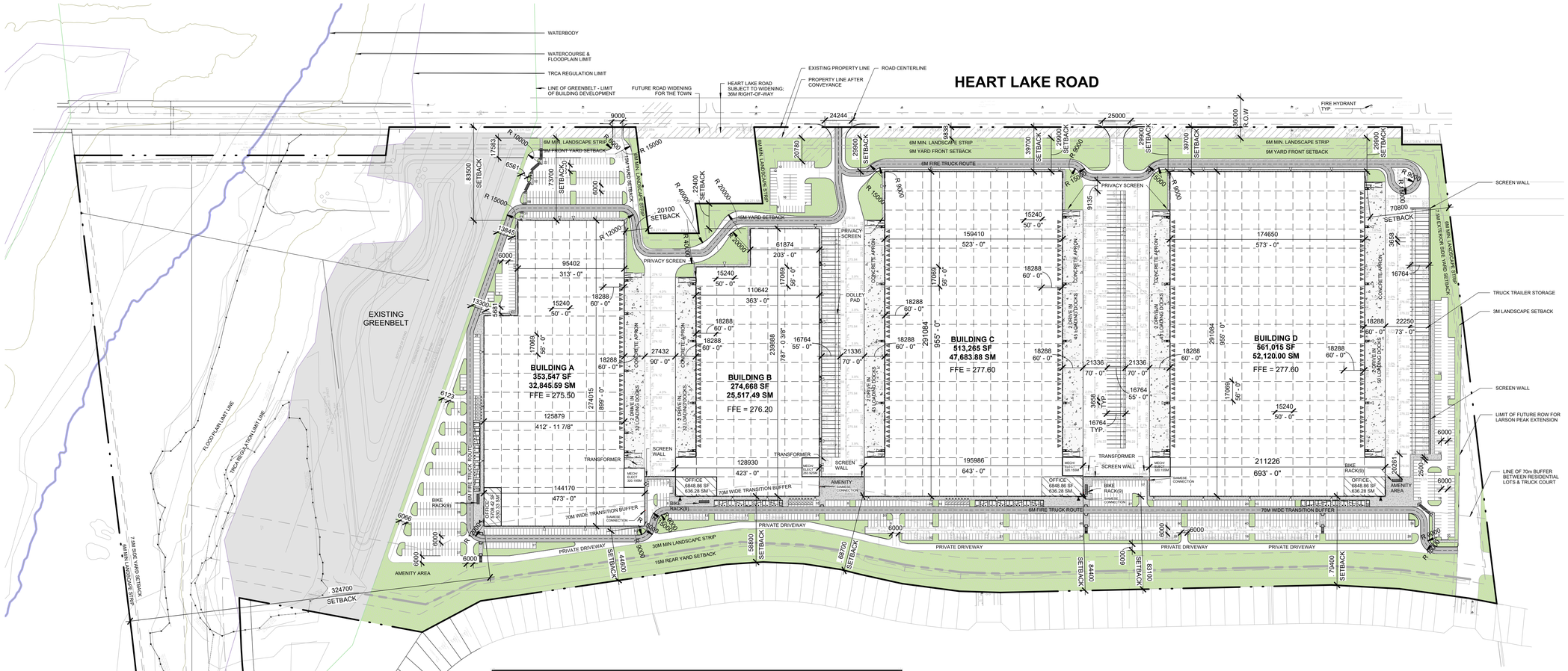
Environmental Noise and Vibration Study

12506 & 12698 Heart Lake Road, Caledon, Ontario

Tribal Partners Canada Inc. and TDMSI

SLR Project No.: 241.031852.00001

October 14, 2025



PARKING REQUIREMENTS		
	REQUIRED	PROVIDED
BUILDING A	244	380
BUILDING B	201	294
BUILDING C	331	361
BUILDING D	357	386
TOTAL	1133	1421

BARRIER-FREE PARKING		
	REQUIRED	PROVIDED
BUILDING A	7	16
BUILDING B	7	16
BUILDING C	9	16
BUILDING D	10	16
TOTAL	33	64

LOADING REQUIREMENTS		
	REQUIRED	PROVIDED
BUILDING A	6	32
BUILDING B	5	32
BUILDING C	8	88
BUILDING D	8	95
TOTAL	27	247

LANDSCAPE REQUIREMENTS		
	REQUIRED	PROVIDED
MIN. LANDSCAPE AREA	10%	12.00%
MIN. PLANTING STRIP WIDTH	6M	>6M
MIN. PLANTING STRIP (INT. SIDE YARD)	1.5M	YES

BIKE PARKING REQUIRMENTS		
	REQUIRED	PROVIDED
	0	27
TOTAL	0	27

ZONING REQUIREMENTS	
ZONING AREA	PRESTIGE INDUSTRIAL (MP) AND ENVIRONMENTAL PROTECTION
CURRENT ZONE	ENVIRONMENTAL PROTECTION AREA (EPA2) AND AGRICULTURAL

BUILDING AREA		
	SQ.M.	SQ.FT.
BUILDING A	32,845.59	353,547
BUILDING B	25,517.49	274,668
BUILDING C	47,683.88	513,265
BUILDING D	52,120.00	561,015
TOTAL	158,166.96	1,702,495

HEIGHT AND SETBACKS		
	REQUIRED	PROVIDED
MAX. BUILDING AREA	50%	31%
MAX. BUILDING HEIGHT	18M	13.1M
FRONT YARD SETBACK	9M	>9M
EXTERIOR SIDE YARD SETBACK	7.5M	>7.5M
INTERIOR SIDE YARD SETBACK	6M	>6M
REAR YARD SETBACK	15M	>15M
RESIDENTIAL ZONE SETBACK - LOADING	70M	>70M
RESIDENTIAL ZONE SETBACK - PARKING	30M	>30M
MIN. DRIVEWAY SETBACK ABUTTING A RESIDENTIAL ZONE	4.5M	>4.5M
MIN. DRIVEWAY SETBACK FROM ANY OTHER LOT LINE	1.5M	>1.5M
MIN. PARKING SPACE SETBACK FROM ANY FRONT LOT LINE	6M	>6M
MIN. PARKING SPACE SETBACK FROM ANY OTHER LOT LINE	3M	>3M

PARKING SPACE SIZES		
	REQUIRED	PROVIDED
STANDARD SIZE	2.75 X 6.0 M	YES
AISLE WIDTH	6M	YES
FIRE ROUTE AISLE WIDTH	12.5 M	25.0 M (MAX)

N

OVERALL SITE PLAN

SCALE: **1 : 2000**

powers brown architecture

411 Richmond Street E
Suite 206
Toronto, Ontario M5A 3S5
647.931.9787

www.powersbrown.com

PROJECT TITLE

TRIBAL HEART LAKE ROAD

12506 HEART LAKE ROAD, CALEDON, ONTARIO

A PROJECT FOR

MATTHEWS TRIBAL

GENERAL NOTES

- DESIGNATED FIRE ACCESS LANE - MINIMUM 6M
- NOT IN SCOPE
- LANDSCAPE
- SIDEWALK PAVING
- EV — ELECTRIC VEHICLE
- PRINCIPLE ENTRANCE
- GRADE DOOR
- SERVICE ENTRANCE
- PROPOSED FIRE HYDRANT (FH)
- EXISTING FIRE HYDRANT (EFH)

A PROVIDE FIRE LANE STRIPING PER LOCAL JURISDICTION

B FIRE DEPARTMENT ACCESS LANE SITE CONCRETE PAVING TO BE CAPABLE OF WITHSTANDING 90,000 LBS UNDER ALL WEATHER CONDITIONS

C FIRE LANE RADII TO BE 12M

△	DATE	REVISION
1	2025-10-02	Issued for ZBA/OPA

PROJECT NO: 255011
DRAWN BY: MZ
CHECKED BY: AS

SHEET NAME

OVERALL SITE PLAN

SEAL

SHEET NUMBER

AS101

Appendix B Noise Source Data

Environmental Noise and Vibration Study

12506 & 12698 Heart Lake Road, Caledon, Ontario

Tribal Partners Canada Inc. and TDMSI

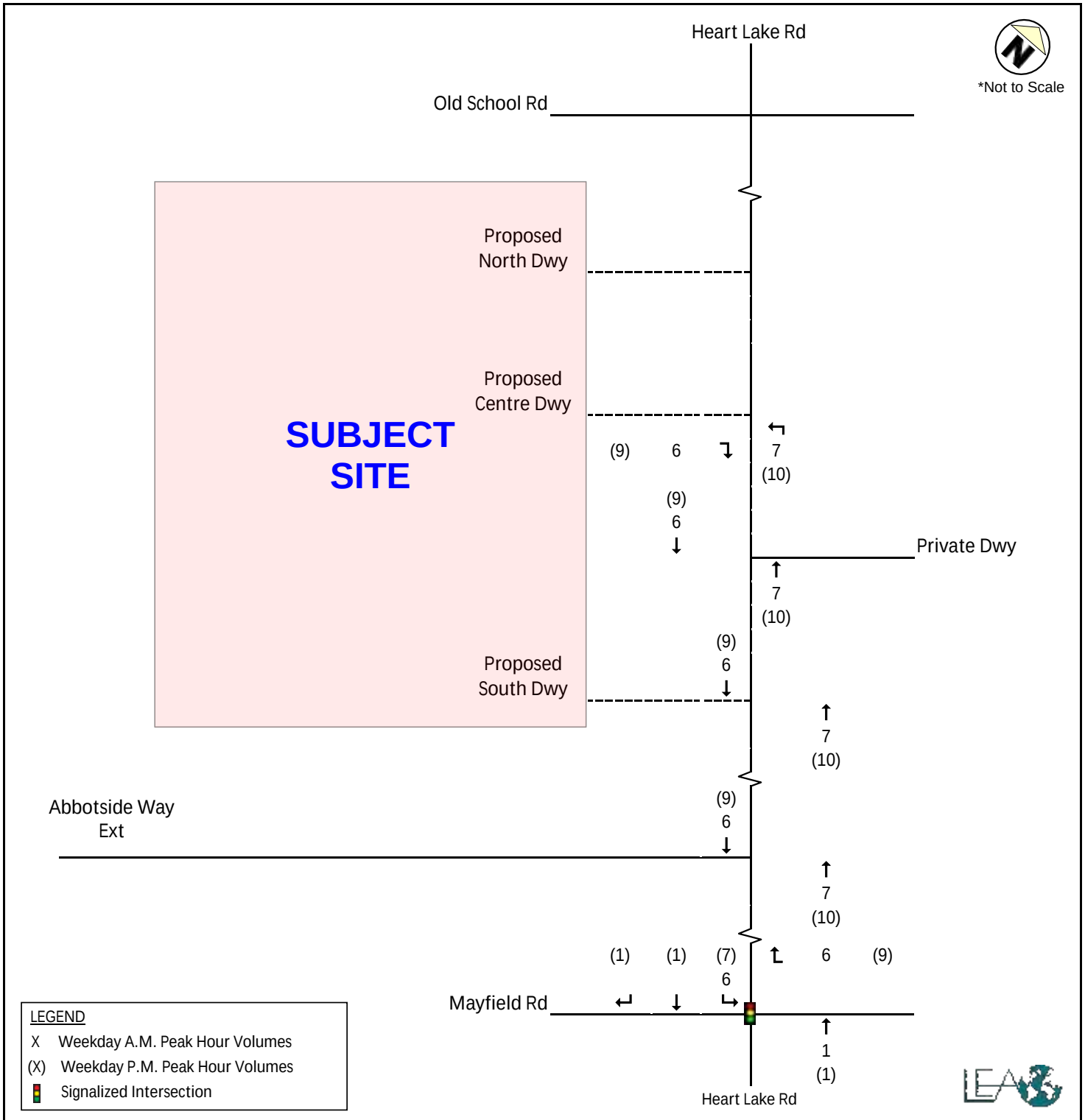
SLR Project No.: 241.031852.00001

October 14, 2025

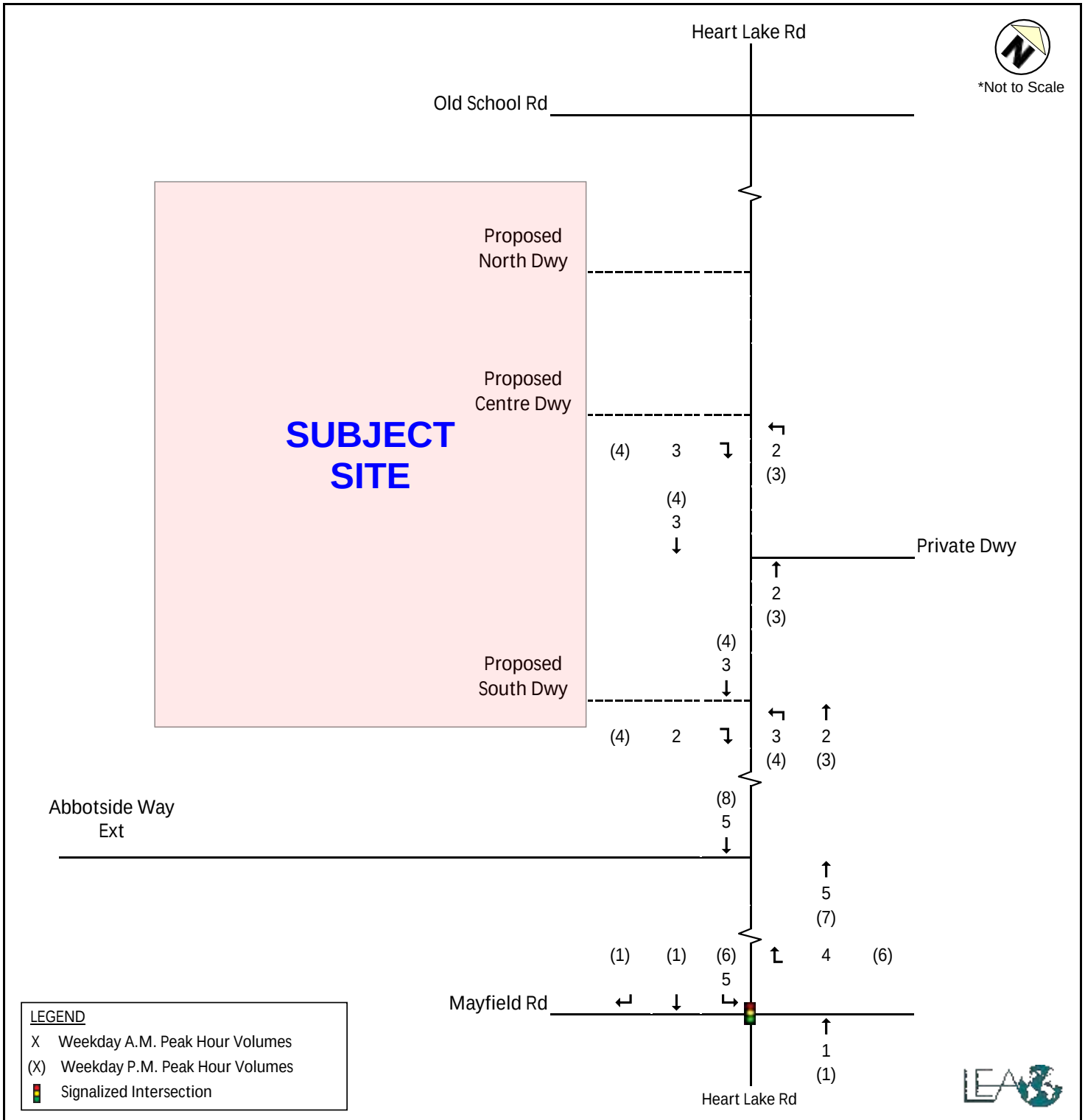
Name	Sel.	M.	ID	Result. PWL			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Height		Coordinates				
				Day	Evening	Night	Type	Value	norm.	Day	Evening	Night	R	Area		Day	Special	Night						X	Y	Z		
				(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)		(m^2)		(min)	(min)	(min)	(dB)	(Hz)		(m)		(m)	(m)	(m)		
Office HVAC Unit 01			SS_A	85.5	85.5	85.5	Lw	HVAC_10ton		0	0	0							0		(none)	1	g	594620.4	4846333	13.19		
Office HVAC Unit 02			SS_B	85.5	85.5	85.5	Lw	HVAC_10ton		0	0	0							0		(none)	1	g	594762.2	4846217	13.19		
Office HVAC Unit 03			SS_C	85.5	85.5	85.5	Lw	HVAC_10ton		0	0	0							0		(none)	1	g	594996.3	4845987	14.72		
Office HVAC Unit 04			SS_D	85.5	85.5	85.5	Lw	HVAC_10ton		0	0	0							0		(none)	1	g	595188.3	4845797	14.72		
Emergency Generator		~	EMG_A	105.5	105.5	105.5	Lw	Egen_Exhaust		0	0	0			Silex_II	60	0	0	0		(none)	2	g	594728.9	4846262	14.19		
Emergency Generator		~	EMG_B	105.5	105.5	105.5	Lw	Egen_Exhaust		0	0	0			Silex_II	60	0	0	0		(none)	2	g	594848.4	4846158	14.19		
Emergency Generator		~	EMG_C	105.5	105.5	105.5	Lw	Egen_Exhaust		0	0	0			Silex_II	60	0	0	0		(none)	2	g	595016.3	4845994	15.72		
Emergency Generator		~	EMG_D	105.5	105.5	105.5	Lw	Egen_Exhaust		0	0	0			Silex_II	60	0	0	0		(none)	2	g	595070.2	4845938	15.72		
Makeup Air Unit 01			SS_A	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594714	4846298	13.19		
Makeup Air Unit 02			SS_A	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594761.8	4846348	13.19		
Makeup Air Unit 03			SS_A	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594811.6	4846395	13.19		
Makeup Air Unit 04			SS_A	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594843.9	4846431	13.19		
Makeup Air Unit 05			SS_B	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594911.6	4846331	13.19		
Makeup Air Unit 06			SS_B	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594865	4846285	13.19		
Makeup Air Unit 07			SS_B	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594818.3	4846236	13.19		
Makeup Air Unit 08			SS_C	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	595083.1	4846261	14.72		
Makeup Air Unit 09			SS_C	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	595034.5	4846215	14.72		
Makeup Air Unit 10			SS_C	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594988	4846166	14.72		
Makeup Air Unit 11			SS_C	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	594938.3	4846117	14.72		
Makeup Air Unit 12			SS_D	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	595350.4	4845998	14.72		
Makeup Air Unit 13			SS_D	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	595305.1	4845949	14.72		
Makeup Air Unit 14			SS_D	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	595256.3	4845901	14.72		
Makeup Air Unit 15			SS_D	75.8	75.8	75.8	Lw	GEN_MUA_Casing++GEN_MUA_Inlet		0	0	0							0		(none)	1	g	595205.4	4845849	14.72		
Exhaust Fan 01			SS_A	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594812.8	4846462	13.19		
Exhaust Fan 02			SS_A	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594778.6	4846428	13.19		
Exhaust Fan 03			SS_A	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594732.2	4846378	13.19		
Exhaust Fan 04			SS_A	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594682.2	4846329	13.19		
Exhaust Fan 05			SS_B	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594851.3	4846202	13.19		
Exhaust Fan 06			SS_B	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594898.5	4846253	13.19		
Exhaust Fan 07			SS_B	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594947.4	4846301	13.19		
Exhaust Fan 08			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595115.1	4846229	14.72		
Exhaust Fan 09			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595067.3	4846180	14.72		
Exhaust Fan 10			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595017.9	4846133	14.72		
Exhaust Fan 11			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	594972.3	4846083	14.72		
Exhaust Fan 12			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595003.8	4846051	14.72		
Exhaust Fan 13			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595051.3	4846101	14.72		
Exhaust Fan 14			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595099.6	4846150	14.72		
Exhaust Fan 15			SS_C	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595148.5	4846199	14.72		
Exhaust Fan 16			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595319.4	4846030	14.72		
Exhaust Fan 17			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595269.8	4845980	14.72		
Exhaust Fan 18			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595221.4	4845933	14.72		
Exhaust Fan 19			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595173.1	4845882	14.72		
Exhaust Fan 20			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595138.9	4845918	14.72		
Exhaust Fan 21			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595189.4	4845965	14.72		
Exhaust Fan 22			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595237.2	4846015	14.72		
Exhaust Fan 23			SS_D	90	90	90	Lw	Gen_ExFan_M		0	0	0							0		(none)	1	g	595286.3	4846062	14.72		
Idling Trucks 01 at Entrance			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				13	13	9	0		(none)	2.5	r	595257.5	4846179	2.5		
Idling Trucks 02 at Entrance			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				14	14	9	0		(none)	2.5	r	595081	4846354	2.5		
Idling Trucks 03			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594759.5	4846280	2.5		
Idling Trucks 04			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594785.9	4846307	2.5		
Idling Trucks 05			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594811.8	4846334	2.5		
Idling Trucks 06			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594829.4	4846351	2.5		
Idling Trucks 07			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594848	4846370	2.5		
Idling Trucks 08			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594867.6	4846351	2.5		
Idling Trucks 09			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594848.7	4846332	2.5		
Idling Trucks 10			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594829.7	4846313	2.5		
Idling Trucks 11			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594802.5	4846286	2.5		
Idling Trucks 12			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594777.6	4846259	2.5		
Idling Trucks 13			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594899.4	4846143	2.5		
Idling Trucks 14			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594920.2	4846164	2.5		
Idling Trucks 15			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594940.5	4846185	2.5		
Idling Trucks 16			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594967.5	4846212	2.5		
Idling Trucks 17			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	594991.3	4846236	2.5		
Idling Trucks 18			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595007.6	4846252	2.5		
Idling Trucks 19			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595029.2	4846274	2.5		
Idling Trucks 20			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595172.9	4846141	2.5		
Idling Trucks 21			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595155.3	4846122	2.5		
Idling Trucks 22			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595129.1	4846095	2.5		
Idling Trucks 23			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595106.7	4846072	2.5		
Idling Trucks 24			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595088	4846055	2.5		
Idling Trucks 25			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595070.9	4846036	2.5		
Idling Trucks 26			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595047.4	4846013	2.5		
Idling Trucks 27			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595086.6	4845967	2.5		
Idling Trucks 28			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595118.7	4845999	2.5		
Idling Trucks 29			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595149.4	4846031	2.5		
Idling Trucks 30			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595176.1	4846058	2.5		
Idling Trucks 31			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595193.5	4846075	2.5		
Idling Trucks 32			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595215.6	4846099	2.5		
Idling Trucks 33			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle		0	0	0				5	5	5	0		(none)	2.5	r	595385.8	4845967	2.5		

Idling Trucks 34			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle	0	0	0				5	5	5	0		(none)	2.5	r	595361.6	4845942	2.5				
Idling Trucks 35			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle	0	0	0				5	5	5	0		(none)	2.5	r	595339.3	4845919	2.5				
Idling Trucks 36			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle	0	0	0				5	5	5	0		(none)	2.5	r	595324.8	4845904	2.5				
Idling Trucks 37			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle	0	0	0				5	5	5	0		(none)	2.5	r	595298.8	4845879	2.5				
Idling Trucks 38			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle	0	0	0				5	5	5	0		(none)	2.5	r	595279.7	4845860	2.5				
Idling Trucks 39			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle	0	0	0				5	5	5	0		(none)	2.5	r	595265.6	4845846	2.5				
Idling Trucks 40			SS_B	93.1	93.1	93.1	Lw	HeavyTruckIdle	0	0	0				5	5	5	0		(none)	2.5	r	595247.7	4845827	2.5				
Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Correction			Sound Reduction		Attenuation	Operating Time			K0	Freq.	Direct.	Moving Pt. Src					ht
			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)		(m^2)		(min)	(min)	(min)	(dB)	(Hz)		Day	Evening	Night	(km/h)		
Truck Impulses 1	~	IMP	100.2	100.2	100.2	78.3	78.3	78.3	Lw	Loading	108	-7.8	-7.8	-7.8							0		(none)						1.5
Truck Impulses 2	~	IMP	100.2	100.2	100.2	78.4	78.4	78.4	Lw	Loading	108	-7.8	-7.8	-7.8							0		(none)						1.5
Truck Impulses 3	~	IMP	100.2	100.2	100.2	77.1	77.1	77.1	Lw	Loading	108	-7.8	-7.8	-7.8							0		(none)						1.5
Truck Impulses 4	~	IMP	100.2	100.2	100.2	76.9	76.9	76.9	Lw	Loading	108	-7.8	-7.8	-7.8							0		(none)						1.5
Truck Impulses 5	~	IMP	100.2	100.2	100.2	76.9	76.9	76.9	Lw	Loading	108	-7.8	-7.8	-7.8							0		(none)						1.5
Truck Impulses 6	~	IMP	100.2	100.2	100.2	76.5	76.5	76.5	Lw	Loading	108	-7.8	-7.8	-7.8							0		(none)						1.5
Trucks Building A+B from Center D		SS	97.2	97.2	95	67.7	67.7	65.5	PWL-Pt	HeavyTruckPassby		0	0	0							0		(none)	10	10	6	15	2.5	
Trucks Building C from Center Dwy		SS	91.8	91.8	90.5	63.7	63.7	62.5	PWL-Pt	HeavyTruckPassby		0	0	0							0		(none)	4	4	3	15	2.5	
Trucks Building C and D from Soutl		SS	94.8	94.8	93.6	66.8	66.8	65.5	PWL-Pt	HeavyTruckPassby		0	0	0							0		(none)	8	8	6	15	2.5	
Trucks Building D from South Dwy		SS	95.3	95.3	93.1	64.7	64.7	62.5	PWL-Pt	HeavyTruckPassby		0	0	0							0		(none)	5	5	3	15	2.5	

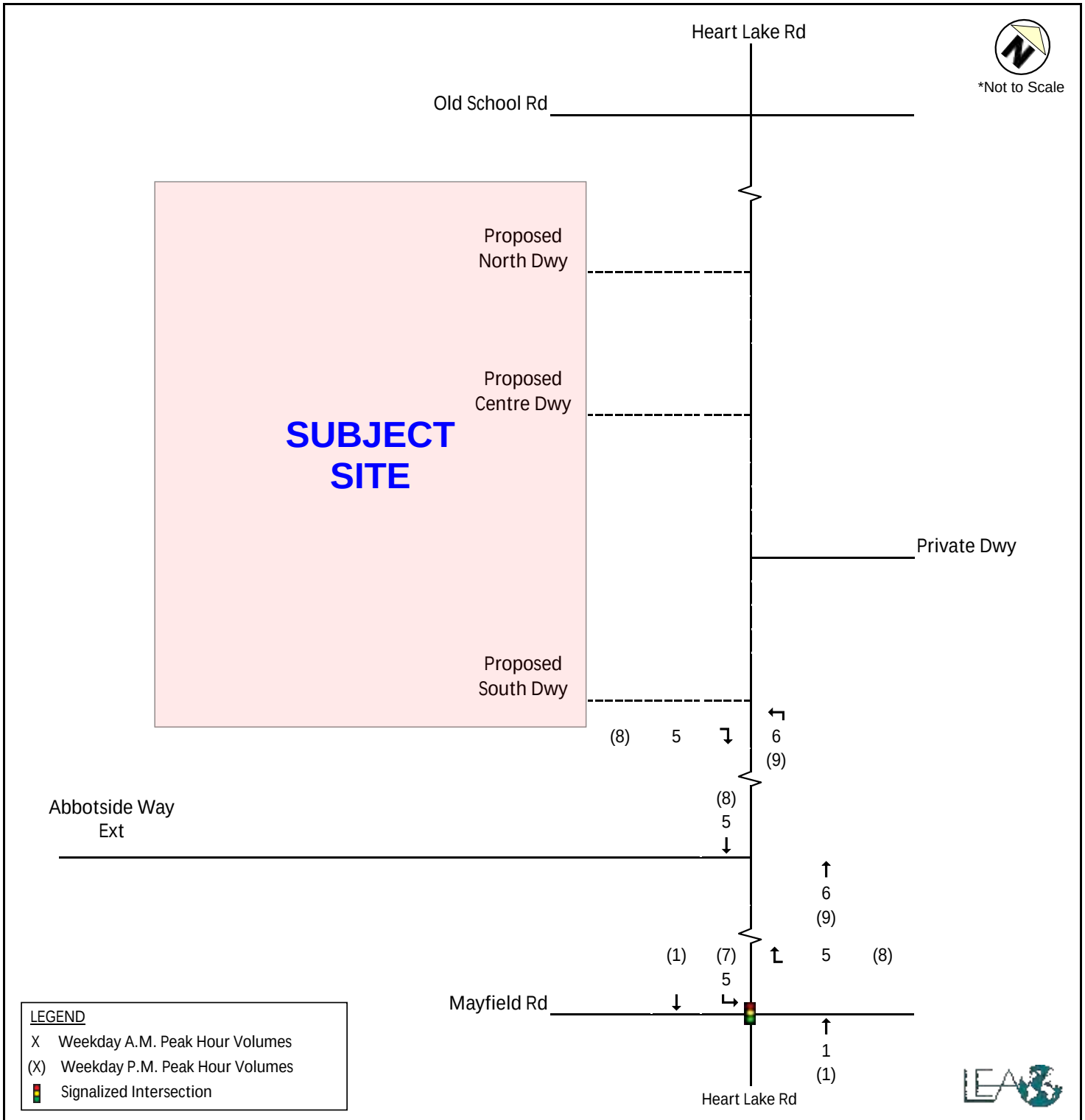
Name	ID	Overall	Type	1/3 Oktave Spectrum (dB)											
		A		Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin
HVAC Unit (10 ton)	HVAC_10ton	85.5	Lw		80	83	84	84	83	81	77	73	67	85.5	90.8
Generic 3500 cfm MUA - Casing	GEN_MUA_Casing	68.2	Lw			72	79	69	67	60	48	34	25	68.2	80.4
Generic 3500 cfm MUA - Inlet	GEN_MUA_Inlet	74.9	Lw			78	79	73	75	69	63	56	45	74.9	83.1
Generic Exhaust Fan- Medium	Gen_ExFan_M	90	Lw			99	99	92	88	82	78	72	66	90	102.6
Heavy Truck - Passby	HeavyTruckPassby	99.5	Lw (c)		98.2	101.4	101.1	96.5	96.3	95.6	91.5	84.1	78	99.5	106.8
Heavy Truck - Idling	HeavyTruckIdle	93.1	Lw (c)		19	93	88	83	90	87	88	82	71	93.1	97.1
Loading Impulse	Loading	70.9	Lw		68.4	68.4	64.9	67.4	66.1	66.2	63.6	61.8	55.9	70.9	75.4
EGen Exhaust	Egen_Exhaust	121.2	Lw (c)	A		87.8	97.5	105.5	107.3	111.6	116	116	114.5	121.2	122.9



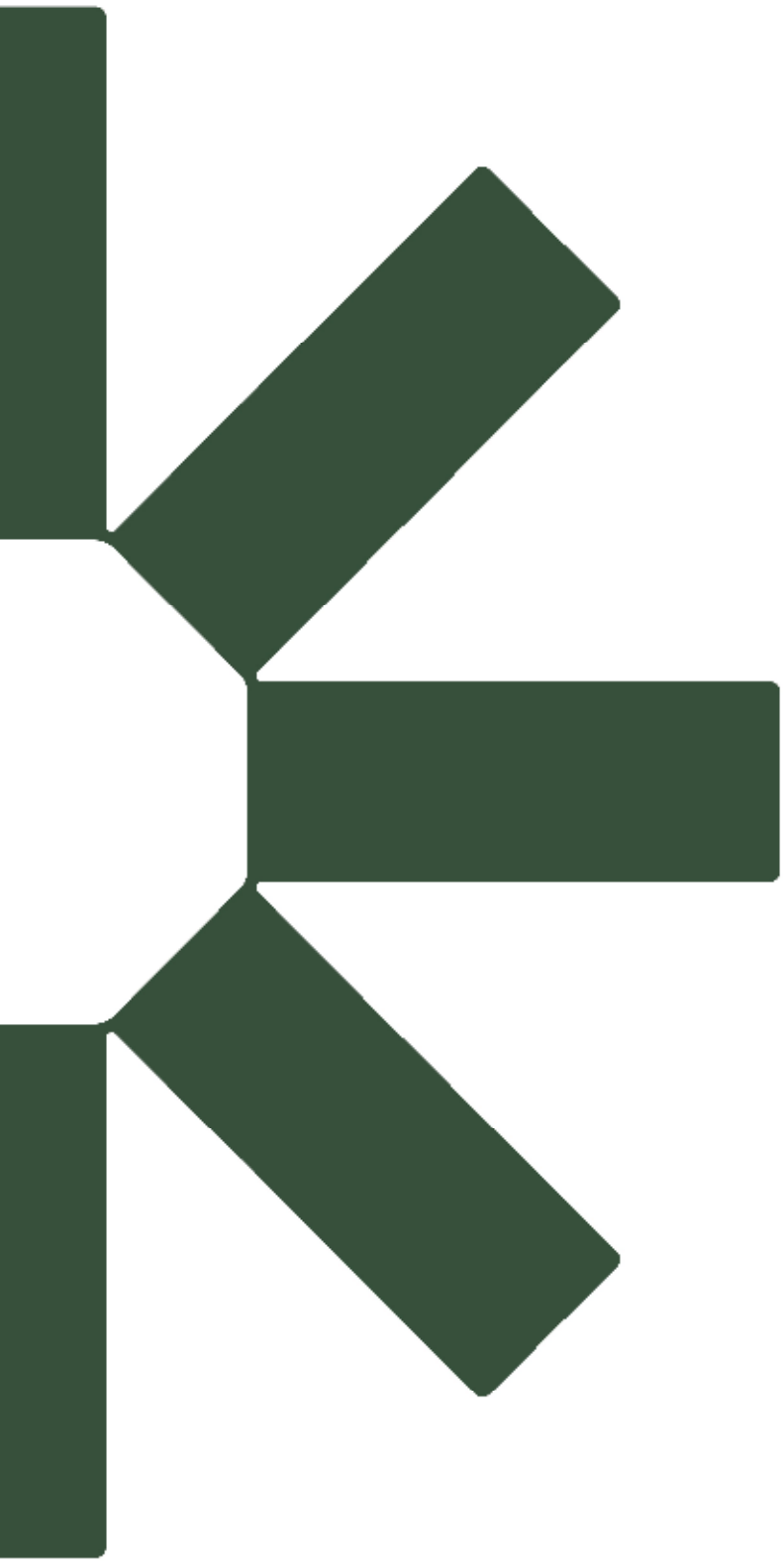
WAREHOUSE A+B TRUCK SITE TRAFFIC
Proposed Warehouse Development
12506 Heart Lake Rd (Caledon)



WAREHOUSE C TRUCK SITE TRAFFIC
Proposed Warehouse Development
12506 Heart Lake Rd (Caledon)



WAREHOUSE D TRUCK SITE TRAFFIC
Proposed Warehouse Development
12506 Heart Lake Rd (Caledon)



Making Sustainability Happen