

TOWN OF CALEDON
PLANNING
RECEIVED
April 20, 2026

Environmental Noise and Vibration Assessment

4848 Mayfield Road, Caledon

12341433 Canada Inc.

4848 Mayfield Road
Caledon, ON L7C 1P3

Prepared by:

SLR Consulting (Canada) Ltd.

100 Stone Road West, Suite 201
Guelph, ON N1G 5L3

SLR Project No:

241.V30663.00000

July 19, 2023



Table of Contents

1.0	Introduction	1
1.1	Nature of the Subject Lands	1
1.2	Nature of the Surroundings.....	1
2.0	Assessment Framework	2
2.1	MECP D-Series of Guidelines	2
2.1.1	Guideline D-6 Requirements	2
2.1.2	Requirements for Assessments	3
2.1.3	Requirements for Minimum Separation Distances.....	3
3.0	Industry Classification	3
3.1	Proposed Development Classification	3
3.2	Minimum Separation Distance and Potential Area of Influence.....	3
4.0	Environmental Noise Guidelines	5
4.1	Industrial (Stationary) Sources	5
4.1.1	Ministry of Environment Publication NPC-300	5
4.1.2	Application of NPC-300 Guidelines.....	6
5.0	Points of Reception	6
5.1	Existing Homes	6
5.2	Future Noise-Sensitive Land Uses	7
5.3	Worst-Case Points of Reception	7
6.0	Stationary Source Assessment	8
6.1	Facility Stationary Noise Sources.....	8
6.1.1	Continuous Sources	8
6.1.2	Impulsive Sources	8
6.2	Stationary Source Modelling	8
6.3	Predicted Sound Levels	9
6.3.1	Continuous Sources	9
6.3.2	Impulsive Sources	10
7.0	Environmental Vibration	10
8.0	Conclusions and Recommendations	11

9.0	References.....	12
10.0	Statement of Limitations	12

Tables in Text

Table 1:	Guideline D-6 – Potential Influence Areas and Recommended Minimum Setback Distances for Industrial Land Uses
Table 2:	Guideline D-6 – Industrial Categorization Criteria
Table 3:	NPC-300 Minimum Exclusionary Limits for Non-Impulsive Sound ($L_{eq}(1\text{-hr})$, dBA)
Table 4:	NPC-300 Minimum Exclusionary Limits for Impulsive Sound ($L_{LM}(1\text{-hr})$, dBA)
Table 5:	Worst-Case Point of Reception Summary
Table 6:	Predicted Worst-Case Sound Levels from Facility – Continuous Sources
Table 7:	Predicted Worst-Case Sound Levels from Facility – Impulsive Sources

Appended Figures

Figure 1:	Site Plan
Figure 2:	Context Plan
Figure 3:	MECP Guideline D-6 – Setback Distances
Figure 4:	Modelled Points of Reception
Figure 5:	Modelled Continuous Noise Source Locations
Figure 6:	Modelled Impulsive Noise Source Locations
Figure 7:	Predicted Sound Level Contours – Stationary Sources – Daytime/Evening
Figure 8:	Predicted Sound Level Contours – Stationary Sources – Night-time

Appendices

Appendix A	Concept Plan
Appendix B	Official Plan and Zoning Information
Appendix C	Source Sound Level Data

1.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by 12341443 Canada Inc. (the Client) to conduct an environmental noise and vibration assessment for the proposed truck and trailer parking facility at 4848 Mayfield Road in Caledon, Ontario (the Project Site). This study was completed to support a temporary zoning by-law amendment (ZBA) and site plan application (SPA) for the proposed development.

1.1 Nature of the Subject Lands

The Project Site is located at 4848 Mayfield Road in Caledon, Ontario, and is currently occupied by RNG Transport Inc., a trucking company.

The Facility is to have up to 16 dedicated truck and trailer parking spots, located towards the north end of the Project Site. There is an existing two-storey dwelling on the property that is used as an office building, and an outbuilding along the west side of the Project Site used for storage of tools and for performing minor maintenance to trucks. The minor maintenance activities are intended only for the Facility-owned trucks, and not for the purpose of a commercial repair operation.

Sources associated with the Facility include truck movements, truck idling, and coupling/uncoupling of trucks from trailers. These sources could be active during the daytime, evening, or night-time, but the most active operations are understood to typically occur in the morning between approximately 6:00 AM to 7:00 AM when most trucks and trailers leave the Facility, and then again between approximately 5:00 PM and 7:00 PM when most trucks and trailers return. Minor maintenance work on Facility-owned trucks is to be done inside the existing outbuilding with a bay door opening facing northward. There are no significant sources of mechanical noise (e.g., HVAC equipment, generators, etc.) at the Facility.

A site plan is shown in **Figure 1**, and the concept plan is provided for reference in **Appendix A**.

1.2 Nature of the Surroundings

The Project Site is currently surrounded by the following:

- Agricultural lands to the north;
- “Ecoland” landscaping company and agricultural lands, with Bramalea Road and institutional lands (containing Mayfield Secondary School) beyond to the east;
- Mayfield Road, with existing and future residential subdivision dwellings beyond to the south; and
- Agricultural lands planned for future industrial uses, with Dixie Road beyond to the west.

The closest existing residences are two-storey single family dwellings located approximately 320 m southwest of the Project Site in the Mayfield Village subdivision, along Russell Creek Drive in Brampton, Ontario.

The closest future residences are expected to be residential dwellings located on the lands south of Mayfield Road, across from the Project Site, within the Countryside Villages Secondary Plan Area 48(b) according to the City of Brampton Official Plan. SLR contacted the City of Brampton Planning and Development group and obtained the proposed Draft Plan of Subdivision (refer to **Appendix B**) for Countryside Villages. The areas nearest and most exposed to the Facility are to be designated for Detached Dwellings, Semi-Detached Dwellings, and Townhouse Dwellings.

A context plan showing the Project Site and surrounding area is provided in **Figure 2**.

2.0 Assessment Framework

The intention of this study is to identify any existing and potential land use compatibility issues associated with the Facility. Furthermore, this study is intended to identify and evaluate options to achieve appropriate design, buffering and/or separation distances between the proposed commercial/industrial land use and nearby existing and future noise-sensitive land uses (e.g., residential uses). Recommended measures intended to eliminate or mitigate negative impacts and adverse effects are provided, where necessary.

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

- 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 set out the requirements for 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 MECP 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 those related to 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 summarized in **Table 1**.

Table 1: Guideline D-6 – Potential Influence Areas and Recommended Minimum Setback Distances for Industrial Land Uses

Industry Classification	Area of Influence	Recommended Minimum Setback Distance (m)
Class I – Light Industrial	70 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 **Table 2** on the following page.

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 an industry. This report is intended to fulfill this requirement.

The D-series guidelines reference previous versions of the MECP noise guidelines (i.e., 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

3.1 Proposed Development Classification

Based on the Facility description, the potential for noise impacts on the surrounding sensitive land uses exists. Potential sources of noise truck movements, truck idling, impulsive noise from truck/trailer coupling and uncoupling within the Project Site, and noise breakout due to minor maintenance of trucks owned by the Facility (no commercial repair operation). According to the D-6 Guidelines, the Facility would be classified as a Class II Industry.

3.2 Minimum Separation Distance and Potential Area of Influence

Based on the D-6 Guidelines, the Project site has a 70 m recommended minimum separation and potential area of influence up to 300 m. These separation distances are illustrated in **Figure 3**. There are existing and future noise-sensitive land uses within the 300 m Area of Influence that are the focus of this assessment.

Table 2: Guideline D-6 – Industrial Categorization Criteria

Category	Outputs	Scale	Process	Operations/ Intensity	Possible Examples
Class I Light Industry	<ul style="list-style-type: none"> • Noise: Sound not audible off-property • Dust: Infrequent and not intense • Odour: Infrequent and not intense • Vibration: No ground-borne vibration on plant property 	<ul style="list-style-type: none"> • No outside storage • Small-scale plant or scale is irrelevant in relation to all other criteria for this Class 	<ul style="list-style-type: none"> • Self-contained plant or building which produces/stores a packaged product • Low probability of fugitive emissions 	<ul style="list-style-type: none"> • Daytime operations only • Infrequent movement of products and/or heavy trucks 	<ul style="list-style-type: none"> • 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
Class II Medium Industry	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Outside storage permitted • Medium level of production allowed 	<ul style="list-style-type: none"> • Open process • Periodic outputs of minor annoyance • Low probability of fugitive emissions 	<ul style="list-style-type: none"> • Shift operations permitted • Frequent movements of products and/or heavy trucks with the majority of movements during daytime hours 	<ul style="list-style-type: none"> • Magazine printing • Paint spray booths • Metal command • Electrical production • Manufacturing of dairy products • Dry cleaning services • Feed packing plants
Class III Heavy Industry	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Outside storage of raw and finished products • Large production levels 	<ul style="list-style-type: none"> • Open process • Frequent outputs of major annoyances • High probability of fugitive emissions 	<ul style="list-style-type: none"> • Continuous movement of products and employees • Daily shift operations permitted 	<ul style="list-style-type: none"> • Paint and varnish manufacturing • Organic chemical manufacturing • Breweries • Solvent recovery plants • Soaps and detergent manufacturing • Metal refining and manufacturing

4.0 Environmental Noise Guidelines

4.1 Industrial (Stationary) Sources

4.1.1 Ministry of Environment Publication NPC-300

The applicable MECP noise guidelines for new industrial land uses adjacent to residential/noise sensitive uses are provided in MECP Publication NPC-300. The guidelines set out sound level limits for two main types of noise sources:

- Non-impulsive, “continuous” noise source such as from ventilation fans, mechanical equipment, and vehicles moving within the property boundary of an industry. Continuous noise is measured using 1-hour average sound levels (L_{eq} (1-hr) values), in 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 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 planes of windows on outdoor façades which connect to noise sensitive spaces such as living rooms, dens, eat-in kitchens, dining rooms and bedrooms.

The applicable sound level limits at a point of reception (POR) are the higher of:

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

Table 3 set out the exclusion limits from the guideline for continuous, non-impulsive sounds in a Class 2 area. Exclusion limits for impulsive sounds in a Class 2 area are summarized in **Table 4**.

Table 3: NPC-300 Minimum Exclusionary Limits for Non-Impulsive Sounds (L_{eq} (1-hr), dBA)

Time of Day	Hourly Sound Level Limit – Class 2 Area	
	Plane of Window of Noise-Sensitive Space	Outdoor Point of Reception
Daytime (0700-1900h)	50	50
Evening (1900-2300h)	50	45
Night-time (2300-0700h)	45	n/a ^[1]
Notes:	[1] Sound level limits are not applicable during night-time hours at outdoor points of reception.	

Based on the planned Facility operations, both continuous and impulsive sources may occur.

Table 4: NPC-300 Minimum Exclusionary Limits for Impulsive Sounds ($L_{LM}(1\text{-hr})$, dBA)

Time of Day	No. of Impulses in a 1-hour Period	Hourly Sound Level Limit – Class 2 Area	
		Plane of Window of Noise-Sensitive Space	Outdoor Point of Reception
Daytime/Evening (0700-1900h)	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
Night-time (2300-0700h)	9 or more	45	n/a ^[1]
	7 to 8	50	n/a ^[1]
	5 to 6	55	n/a ^[1]
	4	60	n/a ^[1]
	3	65	n/a ^[1]
	2	70	n/a ^[1]
	1	75	n/a ^[1]

Notes: [1] Sound level limits are not applicable during night-time hours at outdoor points of reception.

4.1.2 Application of NPC-300 Guidelines

The stationary source 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 areas surrounding the Project site, the stationary noise guidelines apply to:

- Individual residences (existing and future); and
- Outdoor amenity area associated with the residences (existing and future).

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

The acoustic environment surrounding the proposed development is considered a Class 2 area, as roadway noise and commercial activities are expected to be dominant and audible during the daytime and evening, with lower sound levels during the night-time.

5.0 Points of Reception

5.1 Existing Homes

Existing noise-sensitive PORs with the potential to experience noise from the Facility are two-storey residential dwellings in the Mayfield Village subdivision, approximately 320 m to the southwest. The nearest dwellings are located along Russell Creek Drive at the eastern extent of the development.

5.2 Future Noise-Sensitive Land Uses

Based on a review of the currently available Draft Plan of Subdivision (refer to **Appendix B**) and the City of Brampton Official Plan (Countryside Villages Secondary Plan Area 48(b), SLR identified possible future residential dwellings in proximity to the Facility.

Using the proposed lot layout for Countryside Villages, SLR developed typical building footprints for future potential two-storey detached/semi-detached and three-storey townhouse dwellings. These future residential dwellings located in proximity to the Facility have been considered as noise-sensitive PORs in this assessment.

5.3 Worst-Case Points of Reception

Modelled PORs locations include top-floor windows along worst-case (i.e., most exposed) building façades of the residential dwellings, and the associated outdoor PORs (OPORs). The top floor windows of detached and semi-detached dwellings were assessed at a 2nd storey height (4.5 m), and for townhouses, at a 3rd storey height (7.5 m). As a conservative assessment of noise impacts, all windows were assumed to interface with noise-sensitive spaces (e.g., a living/dining room or bedroom).

OPORs are defined as any location outdoors within 30 metres of a façade of a dwelling, typically in backyards or front yards, terraces or patios. For OPOR assessment locations, the most exposed usable outdoor spaces with 30 m of the dwelling façades were assessed using sound level contours.

Table 5 summarizes the worst-case points of reception (PORs) considered in this assessment.

The locations of the PORs are shown in **Figure 4**.

Table 5: Worst-Case Point of Reception Summary

POR ID	Description	Approx. Distance to Facility Property Line (m)
POR01	Existing 2-Storey Detached Dwelling – 175 Russell Creek Drive, Brampton	353
POR02	Future 2-Storey Detached Dwelling – Stand Circle (Block 112) ¹	102
POR03	Future 2-Storey Detached Dwelling – Thorold Drive (Lot 243) ¹	73
POR04	Future 3-Storey Townhouse Dwelling – Tapscott Crescent (Block 244) ¹	52
POR05	Future 3-Storey Townhouse Dwelling – Tapscott Crescent (Block 278) ¹	67
POR06	Future 2-Storey Detached Dwelling – Tapscott Crescent (Lot 308) ¹	68
POR07	Future 2-Storey Detached Dwelling – Tapscott Crescent (Lot 308) ¹	68
Notes:	[1] The road name obtained from the Draft Plan of Subdivision in Appendix B ; the road has not yet been constructed as of the time of this assessment.	

6.0 Stationary Source Assessment

6.1 Facility Stationary Noise Sources

6.1.1 Continuous Sources

Based on correspondence with the Client, continuous sources of noise during predictable worst-case hourly operations of the Facility and considered in this assessment include the following.

- Twelve (12) moving trucks travelling at 10 km/hr during a worst case hour;
- Twelve (12) trucks idling for 10 minutes each during a worst-case hour; and
- One open bay door with noise breakout due to use of tools (i.e., impact wrenches, compressed air tools) for minor maintenance of Facility-owned trucks.

The predictable worst-case operation is expected to occur during a night-time hour between 6:00 AM and 7:00 AM but could potentially occur during any hour of the day.

Sound level data used in the assessment were based on generic historical data from the SLR in-house database. A summary of the equipment sound power levels and operating conditions/assumptions are included in **Appendix C**.

The locations of the modelled continuous noise sources are shown in **Figure 5**.

6.1.2 Impulsive Sources

Based on correspondence with the client, impulsive sources of noise during predictable worst-case hourly operations of the Facility and considered in this assessment include the following.

- Six (6) trucks coupling to trailers.

The worst-case number of trucks coupling to the trailers was confirmed by the Client, as not all truck/trailer combinations involve coupling/decoupling on a daily basis. The applicable impulsive guideline limits for 5-to-6 impulses in a worst-case hour were applied in the assessment.

The predictable worst-case operation is expected to occur during a night-time hour between 6:00 AM and 7:00 AM but could potentially occur during any hour of the day.

Sound level data used in the assessment were based on SLR measurement of a truck coupling to a trailer conducted at the Facility on November 2, 2022. The sound power level is included for reference in **Appendix C**.

The locations of the impulsive noise sources are shown in **Figure 6**.

6.2 Stationary Source Modelling

Noise impacts from stationary sources were modelled using Cadna/A, a software implementation of the internationally recognized ISO-9613-2 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.).

Two (2) orders of reflection were considered to account for effects from the Facility and surrounding buildings. 1 m contours were used to model the Project site topography and surrounding area.

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 $G = 1.0$ was applied, as the surrounding area is primarily agricultural land. Localized built-up areas (e.g., the gravel driveway to the Facility and the residential subdivisions south of Mayfield Road) were modelled with a ground absorption factor of $G = 0.5$. Mayfield Road was modelled with a ground absorption factor of $G = 0.0$ (reflective).

6.3 Predicted Sound Levels

6.3.1 Continuous Sources

Predictable-worst case daytime/evening/night-time sound levels from the Facility continuous noise sources were assessed at the surrounding noise-sensitive PORs identified in **Section 5**.

The predicted sound levels are summarized in **Table 6**, with sound level contours shown in **Figure 7**. Sound level contours are shown for an assessment height of 1.5 m above grade, representative of outdoor PORs.

Table 6: Predicted Worst-Case Sound Levels from Facility – Continuous Noise Sources

Point of Reception ID	Predicted Worst-Case Sound Level L_{eq} (1-hour) (dBA)	Applicable Sound Level Limits (dBA)			Meets Applicable Limits (Y/N)?
		Daytime/Evening/Night-time	Daytime	Evening	
POR01	33	50	50	45	Y
POR02	41	50	50	45	Y
POR03	43	50	50	45	Y
POR04	45	50	50	45	Y
POR05	43	50	50	45	Y
POR06	42	50	50	45	Y
POR07	41	50	50	45	Y

The predicted sound levels at all PORs meet the applicable Class 2 minimum exclusionary limits during all time periods.

The sound level contours also show that all outdoor POR sound levels are predicted to meet applicable guideline limits.

Therefore, mitigation measures are not anticipated to be required for the Facility continuous noise sources.

6.3.2 Impulsive Sources

Predictable-worst case daytime/evening/night-time sound levels from the Facility impulsive noise sources were assessed at the surrounding noise-sensitive PORs identified in **Section 5**.

The predicted sound levels are summarized in **Table 7**, with sound level contours shown in **Figure 8**. Sound level contours are shown for an assessment height of 1.5 m above grade, representative of outdoor PORs.

Table 7: Predicted Worst-Case Sound Levels from Facility – Impulsive Noise Sources

Point of Reception ID	Predicted Worst-Case Sound Level L_{eq} (1-hour) (dBA)	Applicable Sound Level Limits (dBA)			Meets Applicable Limits (Y/N)?
	Daytime/Evening/Night-time	Daytime	Evening	Night-time	
POR01	42	60	60	55	Y
POR02	49	60	60	55	Y
POR03	51	60	60	55	Y
POR04	50	60	60	55	Y
POR05	51	60	60	55	Y
POR06	51	60	60	55	Y
POR07	51	60	60	55	Y

The predicted sound levels at all PORs are below the applicable Class 2 minimum exclusionary limits during all time periods.

The sound level contours also show that all outdoor POR sound levels are predicted to be below applicable guideline limits.

Therefore, mitigation measures are not anticipated to be required for the Facility impulsive noise sources.

7.0 Environmental Vibration

The Facility is not anticipated to be a significant industrial vibration, as it will not contain equipment such as large stamping presses or forges.

All trucks travelling into and out of the Facility are rubber-tired, and the driveway into the Facility is located further away from the nearest potential sensitive receptors located south of Mayfield Road than existing traffic along Mayfield Road travelling at 60 km/hr to 80 km/hr. Existing truck traffic along Mayfield Road is not of concern with respect to vibration. Therefore, truck movements at the Facility located more than 55 m away from the nearest residential dwelling foundations are also not expected to be of concern.

8.0 Conclusions and Recommendations

The potential for environmental noise and vibration impacts from the proposed truck and trailer parking Facility at 4848 Mayfield Road, Caledon onto noise-sensitive points of reception has been assessed.

Predicted sound levels from continuous sources including truck movements, truck idling, and minor truck maintenance work are predicted to meet the minimum exclusionary limits for a Class 2 area at all nearby noise-sensitive points of reception during predictable worst-case operation.

Predicted sound levels from impulses associated with truck and trailer coupling/decoupling are also predicted to meet the minimum exclusionary limits for a Class 2 area at all nearby noise-sensitive points of reception during predictable worst-case operation.

Environmental vibration from sources at the Facility are not anticipated to be of concern at the nearest residences located south of Mayfield Road.

The requirements of MECP Guideline D-6 and MECP Publication NPC-300 are predicted to be met. No additional noise mitigation measures are recommended for the Facility.

Sincerely,

SLR Consulting (Canada) Ltd.



Keni Mallinen, M.A.Sc., P.Eng.
Acoustics Engineer



R. L. Scott Penton, P.Eng.
Principal Acoustics Engineer

Distribution: 1 electronic copy – 12341443 Canada Inc.
 1 electronic copy – SLR Consulting (Canada) Ltd.

9.0 References

International Organization for Standardization, ISO 9613-2: Acoustics – Attenuation of Sound During Propagation Outdoors Part 2: General Method of Calculation, Geneva, Switzerland, 1996.

Ontario Ministry of the Environment, Conservation and Parks, Publication NPC-300: Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning, 2013.

10.0 Statement of Limitations

This report has been prepared and the work referred to in this report has been undertaken by SLR Consulting (Canada) Ltd. (SLR) for 12341443 Canada Inc., hereafter referred to as the “Client.” It is intended for the sole and exclusive use of the Client. The report has been prepared in accordance with the Scope of Work and agreement between SLR and the Client. Other than by the Client, the Town of Caledon and the Region of Peel in their role as land use planning approval authorities, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted unless payment for the work has been made in full and express written permission has been obtained from SLR.

This report has been prepared in a manner generally accepted by professional consulting principles and practices for the same locality and under similar conditions. No other representations or warranties, expressed or implied, are made.

Opinions and recommendations contained in this report are based on conditions that existed at the time the services were performed and are intended only for the client, purposes, locations, time frames and project parameters as outlined in the Scope of Work and agreement between SLR and the Client. The data reported, findings, observations and conclusions expressed are limited by the Scope of Work. SLR is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. SLR does not warranty the accuracy of information provided by third party sources.

Figures

Environmental Noise and Vibration Assessment

4848 Mayfield Road, Caledon

12341433 Canada Inc.

SLR Project No. 241.V30663.00000

July 19, 2023



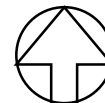


12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

SITE PLAN

True North



Scale:

N.T.S.

METRES

Date: July 19, 2023



Rev 1.0

Figure No.

Project No.
241.V30663.00000

1



Legend	
	Facility Buildings
	Facility Property Line (approx.)



12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

CONTEXT PLAN

True North



Scale: 1:10,000

Date: July 19, 2023



Project No.
241.V30663.00000

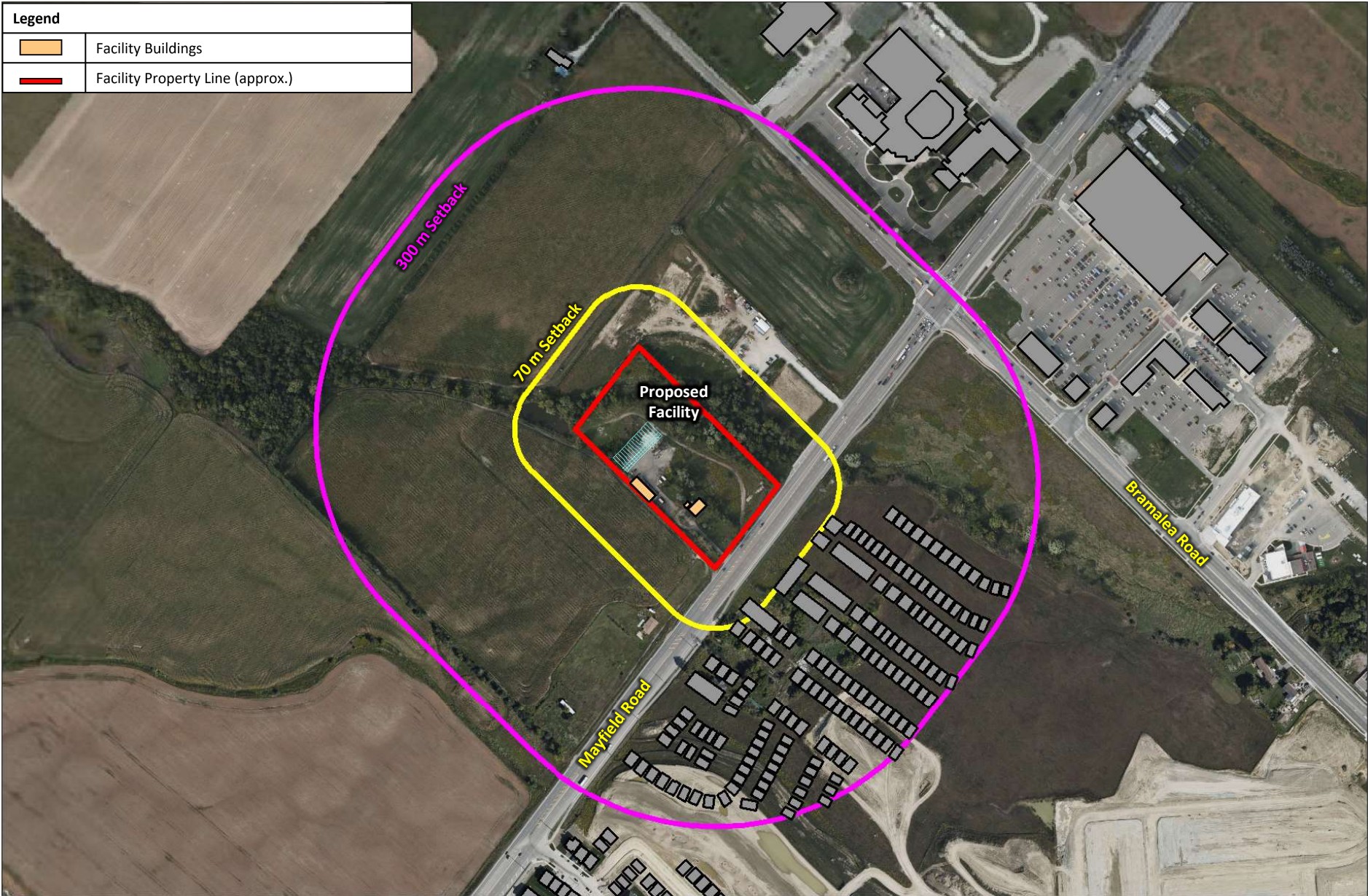
METRES

Figure No.

2



Legend	
	Facility Buildings
	Facility Property Line (approx.)



12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

MECP GUIDELINE D-6 – SETBACK DISTANCES

True North



Scale: 1:6,000

Date: July 19, 2023




Project No.
241.V30663.00000

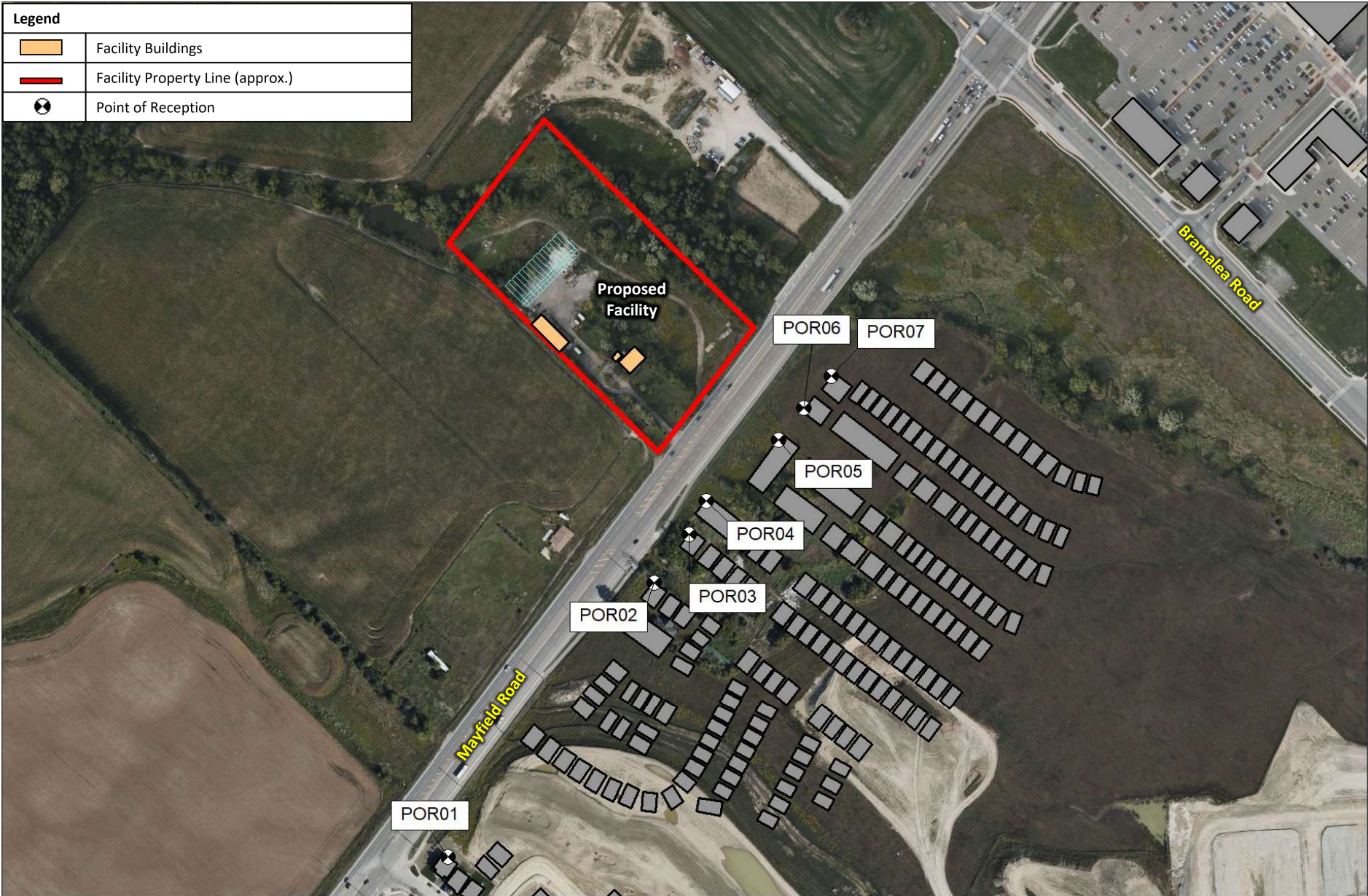
METRES

Rev 1.0

Figure No.
3



Legend	
	Facility Buildings
	Facility Property Line (approx.)
	Point of Reception

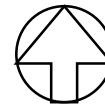


12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

MODELLED POINTS OF RECEPTION

True North



Scale: 1:4,000

Date: July 19, 2023 Rev 1.0





Project No.
241.V30663.00000

METRES

Figure No.

4



Legend	
	Facility Buildings
	Facility Property Line (approx.)
	Point Source
	Line Source



12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

MODELLED CONTINUOUS NOISE SOURCE LOCATIONS

True North



Scale: 1:2,000

METRES

Date: July 19, 2023




Rev 1.0

Figure No.

Project No.
241.V30663.00000

5



Legend	
	Facility Buildings
	Facility Property Line (approx.)
	Point Source



12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

MODELLED IMPULSIVE NOISE SOURCE LOCATIONS

True North



Scale: 1:2,000

METRES

Date: July 19, 2023






Rev 1.0









Project No.
241.V30663.00000

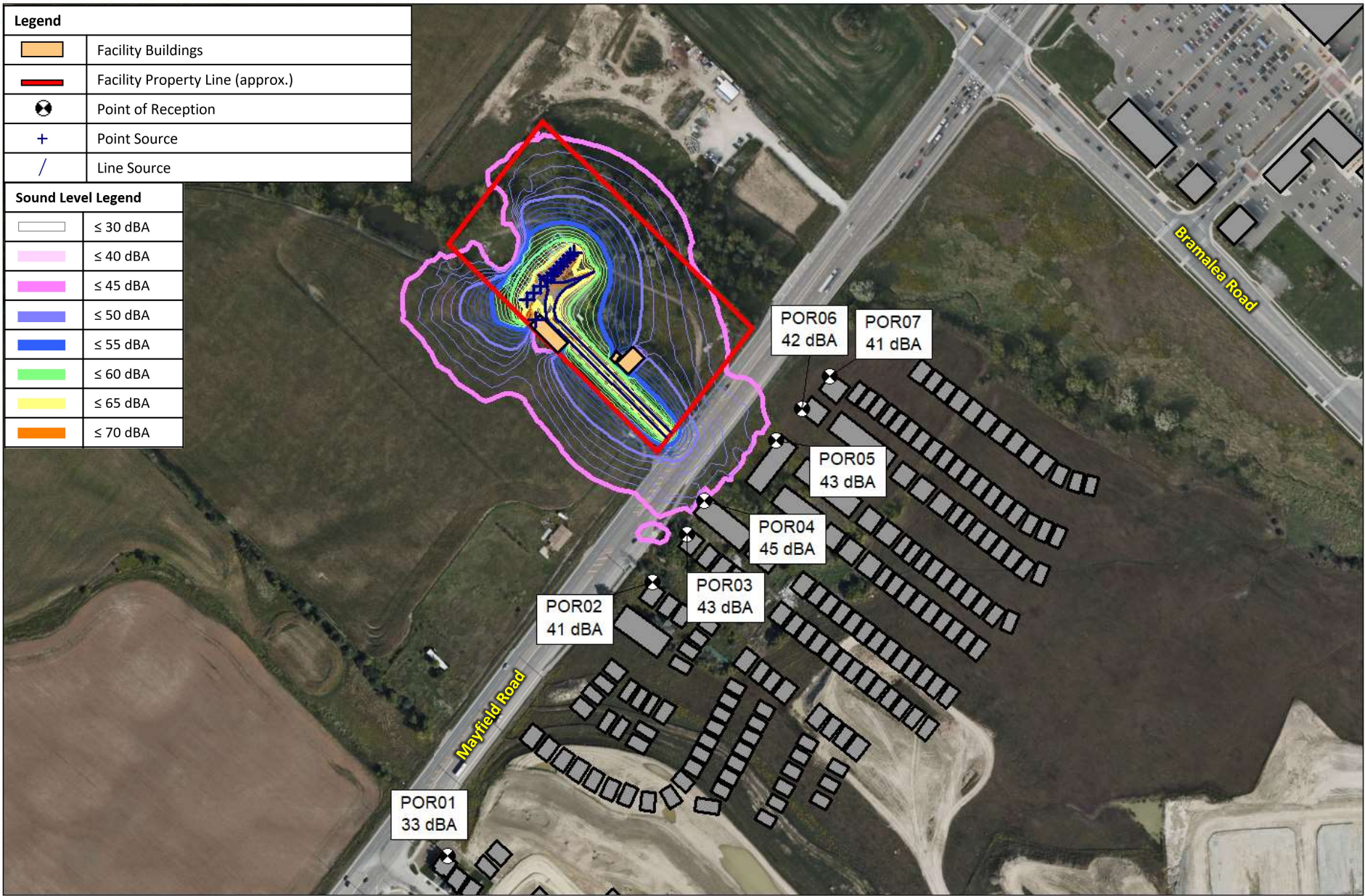
Figure No.

6



Legend	
	Facility Buildings
	Facility Property Line (approx.)
	Point of Reception
	Point Source
	Line Source

Sound Level Legend	
	≤ 30 dBA
	≤ 40 dBA
	≤ 45 dBA
	≤ 50 dBA
	≤ 55 dBA
	≤ 60 dBA
	≤ 65 dBA
	≤ 70 dBA



12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

PREDICTED SOUND LEVELS AND CONTOURS – CONTINUOUS SOURCES –
WORST-CASE HOUR

True North



Scale: 1:4,000

Date: July 19, 2023 Rev 1.0





Project No.
241.V30663.00000









METRES

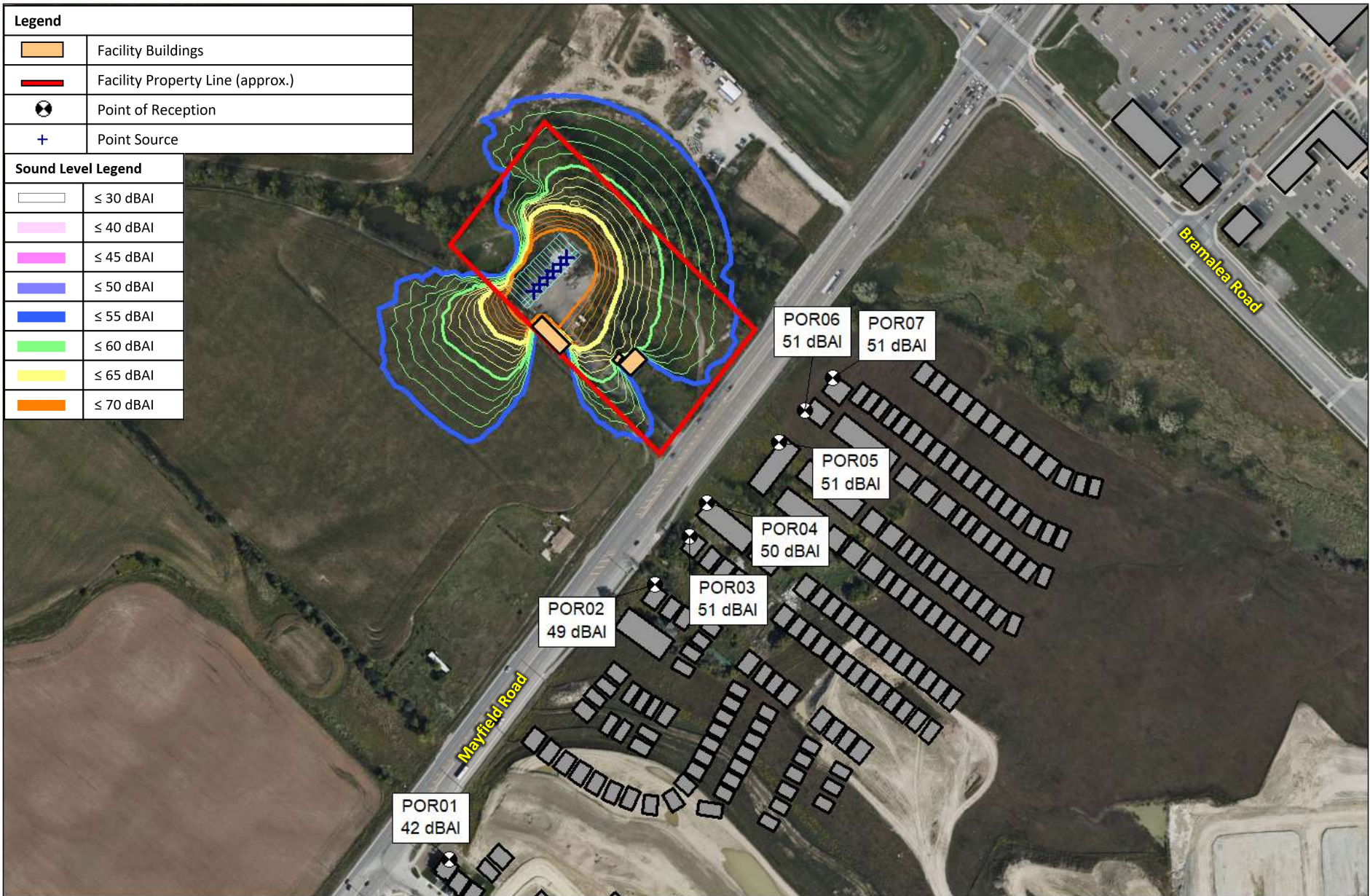
Figure No.

7



Legend	
	Facility Buildings
	Facility Property Line (approx.)
	Point of Reception
	Point Source

Sound Level Legend	
	≤ 30 dBAI
	≤ 40 dBAI
	≤ 45 dBAI
	≤ 50 dBAI
	≤ 55 dBAI
	≤ 60 dBAI
	≤ 65 dBAI
	≤ 70 dBAI



12341443 CANADA INC.

4848 MAYFIELD ROAD, CALEDON, ONTARIO

PREDICTED SOUND LEVELS AND CONTOURS – IMPULSIVE SOURCES –
WORST-CASE HOUR

True North



Scale: 1:4,000

Date: July 19, 2023 Rev 1.0

Project No.
241.V30663.00000

METRES

Figure No.

8



Appendix A Concept Plan

Environmental Noise and Vibration Assessment

4848 Mayfield Road, Caledon

12341433 Canada Inc.

SLR Project No. 241.V30663.00000

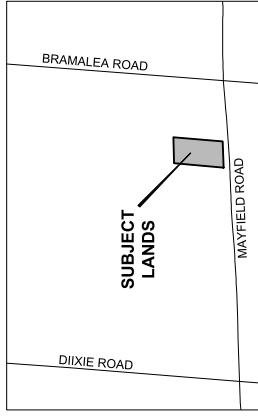
July 19, 2023



P:\1384-001\4. Drawings\2021_05_May\Truck And Trailer Plan May 20_21.dwg



*Preliminary Development Concept Plan
for discussion purposes only*



KEY MAP

SUBJECT LANDS

BRAMALEA ROAD

MAYFIELD ROAD

DIXIE ROAD

TRUCK AND TRAILER PARKING PLAN

12341433 CANADA INC.

4848 MAYFIELD ROAD
PART OF LOT 18, CONCESSION 4, EHS
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEL

DEVELOPMENT STATISTICS

SITE AREA: 2,71ha (6.7ac)
TOTAL PARKING PROVIDED: 16 SPACES

NOTES:

TYPICAL TRAILER PARKING SPACE = 23 m x 3.66 m



SCALE: 1:1000
May 20, 2021



Glen Schmitt & Associates Inc.

Appendix B Official Plan and Zoning Information

Environmental Noise and Vibration Assessment

4848 Mayfield Road, Caledon

12341433 Canada Inc.

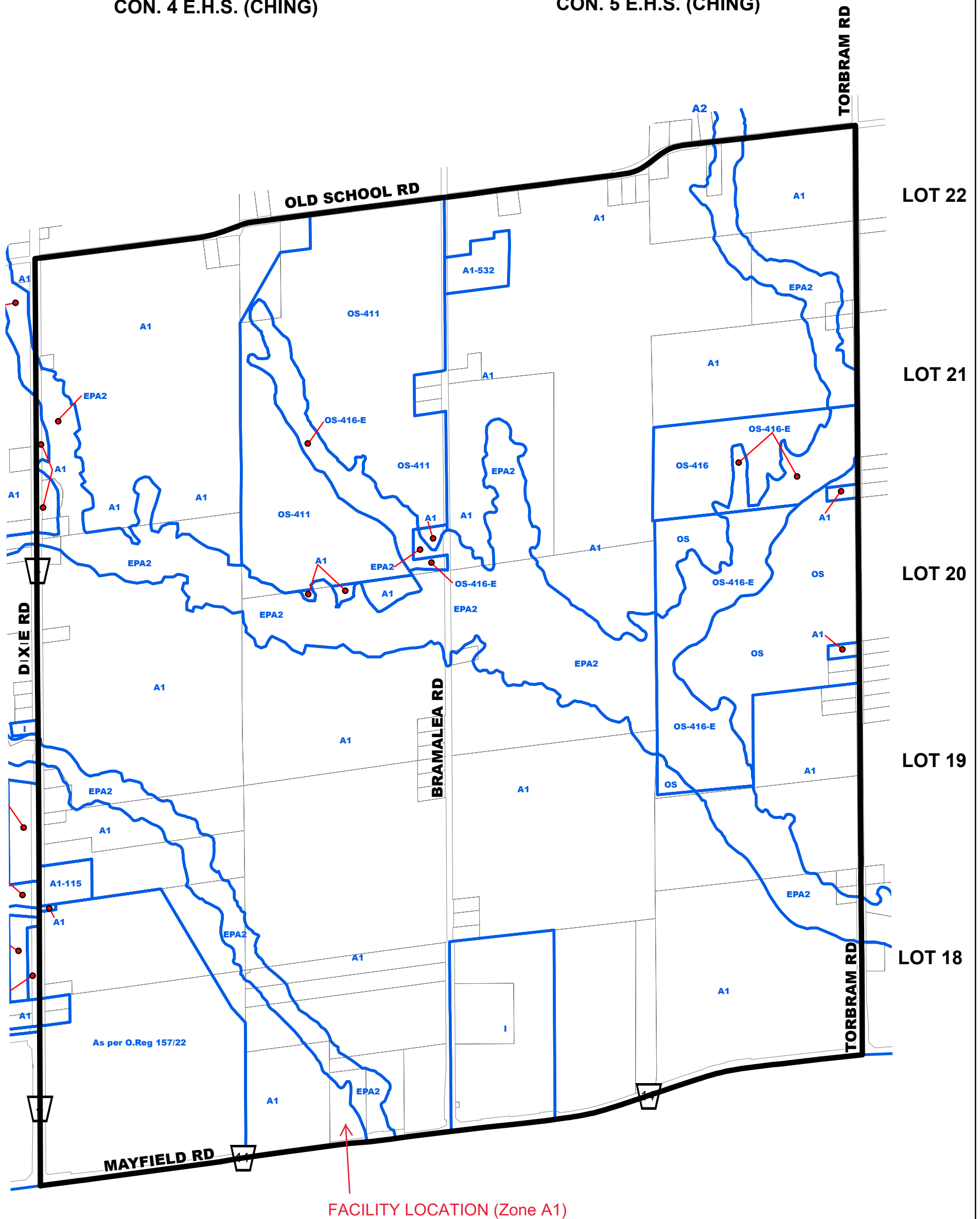
SLR Project No. 241.V30663.00000

July 19, 2023

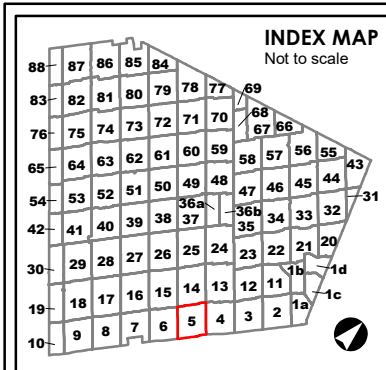


CON. 4 E.H.S. (CHING)

CON. 5 E.H.S. (CHING)



This copy is provided for convenience only. If necessary, the original may be referred to in the office of the Town Clerk.



A2 ZONE SYMBOL

A2-### ZONE SYMBOL
Note: Number of suffixes represent Exceptions which can be looked up in the Exceptions section of the By-law.

ZONE BOUNDARY

STRUCTURAL ENVELOPE MAP

NIAGARA ESCARPMENT DEVELOPMENT CONTROL AREA
Lands lying within the Development Control area pursuant to the Niagara Planning and Development Act are subject to permit requirements under Ontario Regulations 685/50, as amended.

OAK RIDGES MORaine CONSERVATION PLAN AREA BOUNDARY

WELLHEAD PROTECTION AREA BOUNDARY
WP-2 WP-5 WP-10 WP-25
Zone Maps amended to indicate the 2, 5, 10, and 25 year Wellhead Protection Areas.

The base data on this map is provided for convenience only. The Town of Caledon is not responsible for any deficiency or inaccuracy in the base data, and will not accept any liability whatsoever therefor. The reproduction of the base data, in whole or in part, by any means is prohibited without the prior written permission of the Town of Caledon.

BY-LAW 2006-50
ZONE MAP 5
SCHEDULE "A"

0 140 280 560 1m

TOWN OF CALEDON

Date: 3 April 2006 Revised: June 22, 2022

File: S:\POLICY SECTION\GIS\zoning_bylaw2015_mxd

5

SECTION 2
ESTABLISHMENT OF ZONES

2.1 ZONES

The Provisions of this By-law apply to all lands within the limits of the Town of Caledon. All lands in the Town, with the exception of those lands within the Niagara Escarpment Plan Area that are subject to Development Control administered by the Niagara Escarpment Commission pursuant to the Niagara Escarpment Planning and Development Act and lands designated Environmental Policy Area and Open Space Policy Area within the Town's Official Plan are contained within one or more of the following Zones:

ZONE	SYMBOL
Residential Zones	
Estate Residential	RE
Rural Residential	RR
Residential One	R1
Residential Two	R2
Residential Townhouse	RT
Mixed Density Residential	RMD
Multiple Residential	RM
Commercial Zones	
Core Commercial	CC
Village Core Commercial	CCV
General Commercial	C
Neighbourhood Commercial	CN
Village Commercial	CV
Highway Commercial	CH
Bolton Highway Commercial	CHB
Village Highway Commercial	CHV
Tourist Camp Commercial	CT
Industrial Zones	
Prestige Industrial	MP
Serviced Industrial	MS
Unserviced Industrial	MU
Airport Industrial	MA
Extractive Industrial	MX
Waste Management Industrial	MD
Institutional Zone	
Institutional	I
Agricultural and Rural Zones	
Agricultural	A1
Agricultural –Oak Ridges Moraine	A1-ORM

Rural	A2
Rural – Oak Ridges Moraine	A2-ORM
Small Agricultural Holdings	A3
Small Agricultural Holdings – Oak Ridges Moraine	A3-ORM

Environmental Zones

Environmental Policy Area 1 Zone	EPA1
Environmental Policy Area 1 Zone – Oak Ridges Moraine	EPA1-ORM
Environmental Policy Area 2 Zone	EPA2
Environmental Policy Area 1 Zone – Oak Ridges Moraine	EPA2-ORM

Open Space Zones

Open Space	OS
Open Space – Oak Ridges Moraine	OS-ORM

2.2 ZONE SYMBOLS

The *Zone* symbols may be used in this By-law and on the Schedules to this By-law to refer to *lots, buildings and structures* and to the *use of lots, buildings and structures* permitted by this By-law.

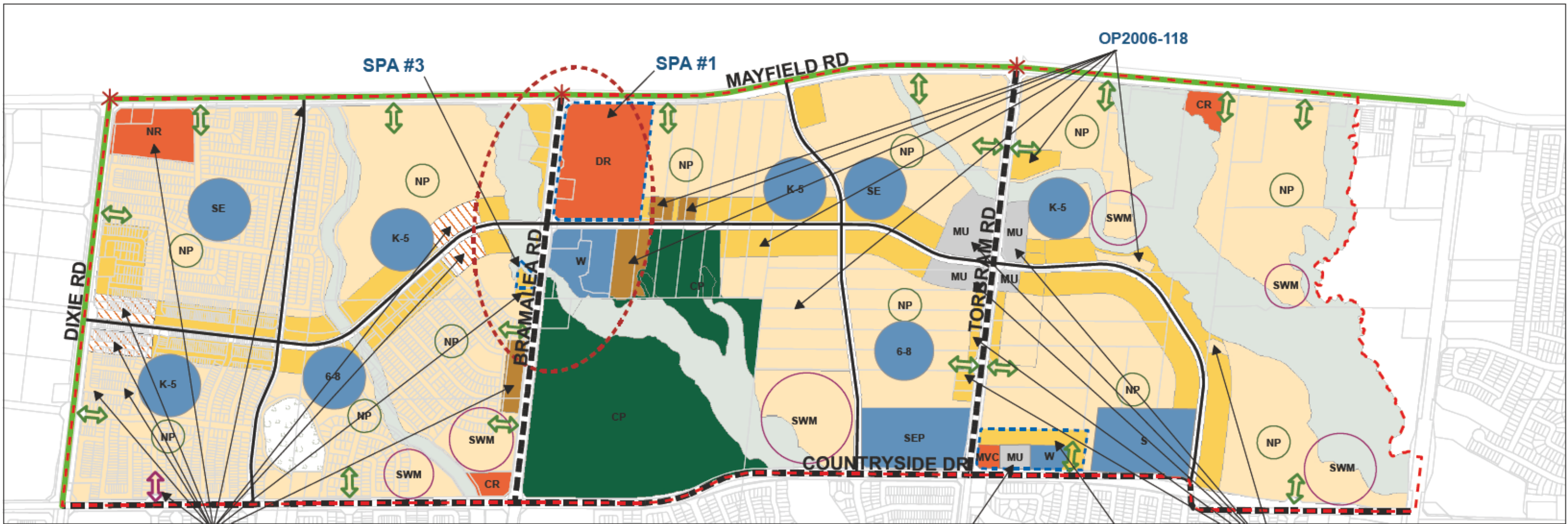
2.3 ZONE SCHEDULES

The *Zones* and *Zone* boundaries are shown in SCHEDULE A, *Zone Maps* 1 through 88 and SCHEDULE B, Structural Envelope “SE” Maps are attached to and form part of this By-law.

2.4 DETERMINING ZONE BOUNDARIES

When determining the location of *zone* boundaries as shown in any Schedule forming part of this By-law, the following provisions shall apply:

- a) a boundary indicated as following a highway, *street, lane*, railway right-of-way, utility corridor or watercourse shall be the centerline of such highway, *street, lane*, railway right-of-way, utility corridor or watercourse unless the context otherwise requires;
- b) a boundary indicated as following a shoreline shall follow such shoreline, and in the event of change in the shoreline, the boundary shall be construed as moving with the actual shoreline;
- c) a boundary indicated as following *lot lines* shown on a registered Plan of Subdivision, or the municipal boundaries of the Town of Caledon shall follow such *lot lines*;
- d) where a boundary is indicated as running parallel to a *street line* and the distance from the *street line* is not indicated, the boundary shall be deemed to be parallel to such a *street line* and the distance from the *street line* shall be determined according to the scale shown in the Schedule(s);



ROAD NETWORK

- * GATEWAY
- ↕ POTENTIAL INTERSECTION
- COLLECTOR ROAD
- MINOR ARTERIAL
- MAJOR ARTERIAL (REGIONAL)
- ↕ INTERSECTION

RECREATION OPEN SPACE

- CP CITY WIDE PARK
- NP NEIGHBOURHOOD PARK

COMMERCIAL

- DR DISTRICT RETAIL
- MVC MOTOR VEHICLE COMMERCIAL
- CR CONVENIENCE RETAIL
- NR NEIGHBOURHOOD RETAIL COMMERCIAL
- M.U. MIXED USE
- VILLAGE_CORE
- SPECIAL_POLICY_AREA
- AREA SUBJECT TO THIS AMENDMENT

INSTITUTIONAL

- K-5 PUBLIC JUNIOR ELEMENTARY SCHOOL SITE
- 6-8 PUBLIC MIDDLE SCHOOL SITE
- SE SEPERATE ELEMENTARY SCHOOL
- SEP SEPARATE SECONDARY SCHOOL SITE
- S PUBLIC SECONDARY SCHOOL SITE
- W PLACE OF WORSHIP

NATURAL HERITAGE & ENVIRONMENTAL MANAGEMENT

- VALLEYLAND
- SWM STORMWATER MANAGEMENT FACILITY
- WOODLOT

RESIDENTIAL

- LOW DENSITY
- MEDIUM DENSITY
- MEDIUM / HIGH DENSITY RESIDENTIAL
- LIVE / WORK

Schedule SP 48 (a) COUNTRYSIDE VILLAGES SECONDARY PLAN AREA 48 Chapter 48 (b)

SCHEDULE J TO OFFICIAL PLAN
AMENDMENT NUMBER OP2006-033
COUNTRYSIDE VILLAGES SECONDARY PLAN

Chapter SP48 (b)

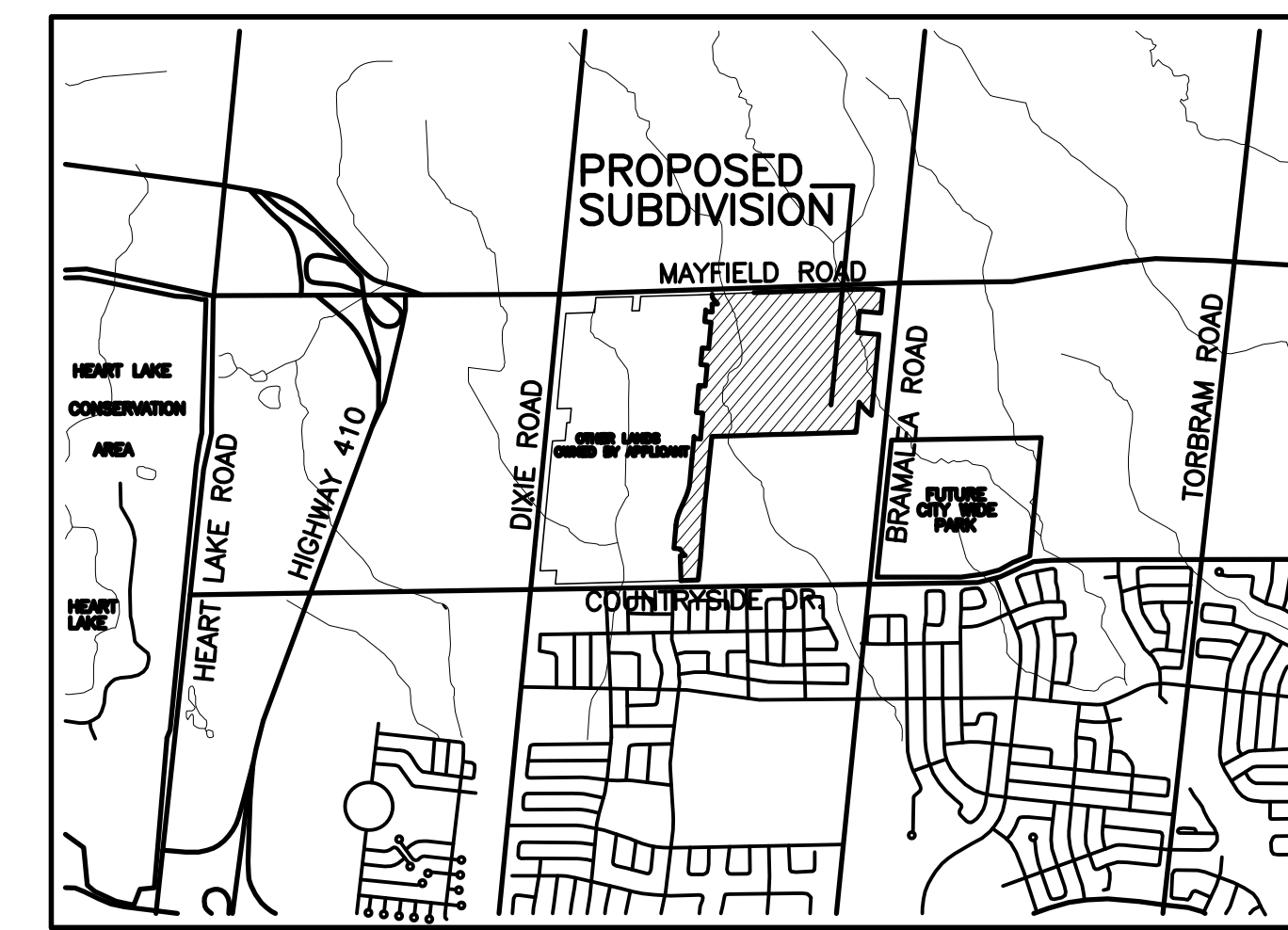
LAST UPDATE: OP2006-118

Date: 2016 06 07



DRAFT PLAN OF SUBDIVISION PART OF LOTS 16 and 17, CONCESSION 4, E.H.S GEOGRAPHIC TOWNSHIP OF CHINGUACOUSY NOW IN THE CITY OF BRAMPTON REGIONAL MUNICIPALITY OF PEEL

DRAFT PLAN T-21T-11005B REVISED OCT 8, 2019



KEY PLAN

SCHEDULE OF LAND USE

TOTAL AREA OF LAND = 117.620±Ha. (290.645±Acs)

TOTAL AREA OF LAND TO BE SUBDIVIDED = 47.300±Ha. (116.881±Acs)

DETACHED DWELLINGS	BLOCKS	LOTS	UNITS	±Ha.	±Acs.
LOTS 1, 7, 8, 20-32, 37-39, 44-47, 53-67, 76, 77, 83-89, 104, 117-120, 128-137, 149-154, 179-187, 226, 227, 241-243, 259, 333-340, 350 and 376 MIN. LOT FRONTAGE=13.7m. MIN. LOT AREA=370sq.m. plus BLOCKS 410, 411 and 422	3	93	93	4.105	10.144
LOTS 2-6, 9-19, 33-36, 40-43, 48-52, 68-75, 78-82, 90-99, 103, 105-107, 111, 114-116, 121-127, 138-148, 155-178, 188, 189, 194-221, 224, 225, 228-240, 245-258, 260-262, 264-272, 285-292, 296-301, 315-327, 330-332, 341-349, 377-386, 391-396 and 400-405 MIN. LOT FRONTAGE=11.6m. MIN. LOT AREA=310sq.m. plus BLOCKS 407-409, 412-418, 423, and 424	12	234	234	8.607	21.268
LOTS 100-102, 108-110, 113, 190-193, 222, 223, 263, 273, 282-284, 302, 303, 310-314 and 387-390 MIN. LOT FRONTAGE=9.8m. MIN. LOT AREA=260sq.m.	29	29	29	0.889	2.197
SEMI-DETACHED DWELLINGS					
LOTS 274-276, 280, 281, 293-295, 304-306, 308, 309, 328, 329, 397 and 398 MIN. LOT FRONTAGE=18.3m. MIN. LOT AREA=500sq.m.	17	34	34	0.946	2.338
TOWNHOUSE DWELLINGS					
BLOCKS 112, 244, 277-279, 307 and 399 MIN. UNIT FRONTAGE=7.5m. plus BLOCK 406	7	46	46	1.065	2.632
BLOCKS 351-356 and 369-375 MIN. UNIT FRONTAGE=6.1m. plus BLOCKS 419-421	13	61	61	1.413	3.492
BLOCKS 365-368 MIN. UNIT FRONTAGE=4.5m.	4	24	24	0.352	0.869
LIVE/WORK TOWNHOUSE DWELLINGS					
BLOCKS 357-364 MIN. UNIT FRONTAGE=6.1m.	8	47	47	0.953	2.355
MEDIUM DENSITY RESIDENTIAL					
BLOCKS 425-427 ESTIMATED DENSITY 50 UNITS/HECTARE	3	92	92	1.795	4.435
SUBTOTAL	54	373	373	678.5*	20.606
BLOCKS 429 and 430 - ELEMENTARY SCHOOL	2			4.191	10.356
BLOCK 431 - WOODLOT	1			1.864	4.606
BLOCK 432 - PARK	1			0.550	1.359
BLOCKS 433 and 434 - VALLEY LAND	2			4.718	11.658
BLOCKS 435-441 - 10m. BUFFER	7			2.600	6.425
BLOCKS 442-445, 448 AND 459 - OPEN SPACE	6			0.270	0.667
BLOCK 449 - CHANNEL	1			2.301	5.686
BLOCKS 450-453 - BUFFER	4			0.076	0.188
BLOCKS 454-456 - ROAD WIDENING	3			0.409	1.011
BLOCKS 457 and 458 - ENTRY FEATURES	2			0.001	0.002
STREETS AND LANEWAYS				9.714	24.004
2.9.0m. WIDE TOTAL LENGTH= 477.9m. AREA= 1.383±Ha.					
2.5.5m. WIDE TOTAL LENGTH= 151.9m. AREA= 0.355±Ha.					
2.1.5m. WIDE TOTAL LENGTH= 228.9m. AREA= 0.490±Ha.					
1.8.5m. WIDE TOTAL LENGTH= 319.9m. AREA= 0.590±Ha.					
1.8.0m. WIDE TOTAL LENGTH= 390.9m. AREA= 0.702±Ha.					
1.6.5m. WIDE TOTAL LENGTH= 302.9m. AREA= 0.500±Ha.					
8.0m. WIDE TOTAL LENGTH= 467.9m. AREA= 0.374±Ha.					
TOTAL				LENGTH= 5559.9m. AREA= 9.714±Ha.	

TOTAL	83	373	373	678.5*	47.300	116.881
--------------	-----------	------------	------------	---------------	---------------	----------------

NOTE - LOT NUMBERS 428, 446, AND 447 NOT USED

NOTE - * SUBJECT TO FINAL CALCULATIONS

NOTE - ELEVATIONS RELATED TO CANADIAN GEODETIC DATUM

OWNER'S CERTIFICATE

I AUTHORIZE KLM PLANNING PARTNERS INC. TO PREPARE AND SUBMIT THIS DRAFT PLAN OF SUBDIVISION TO THE CITY OF BRAMPTON FOR APPROVAL.

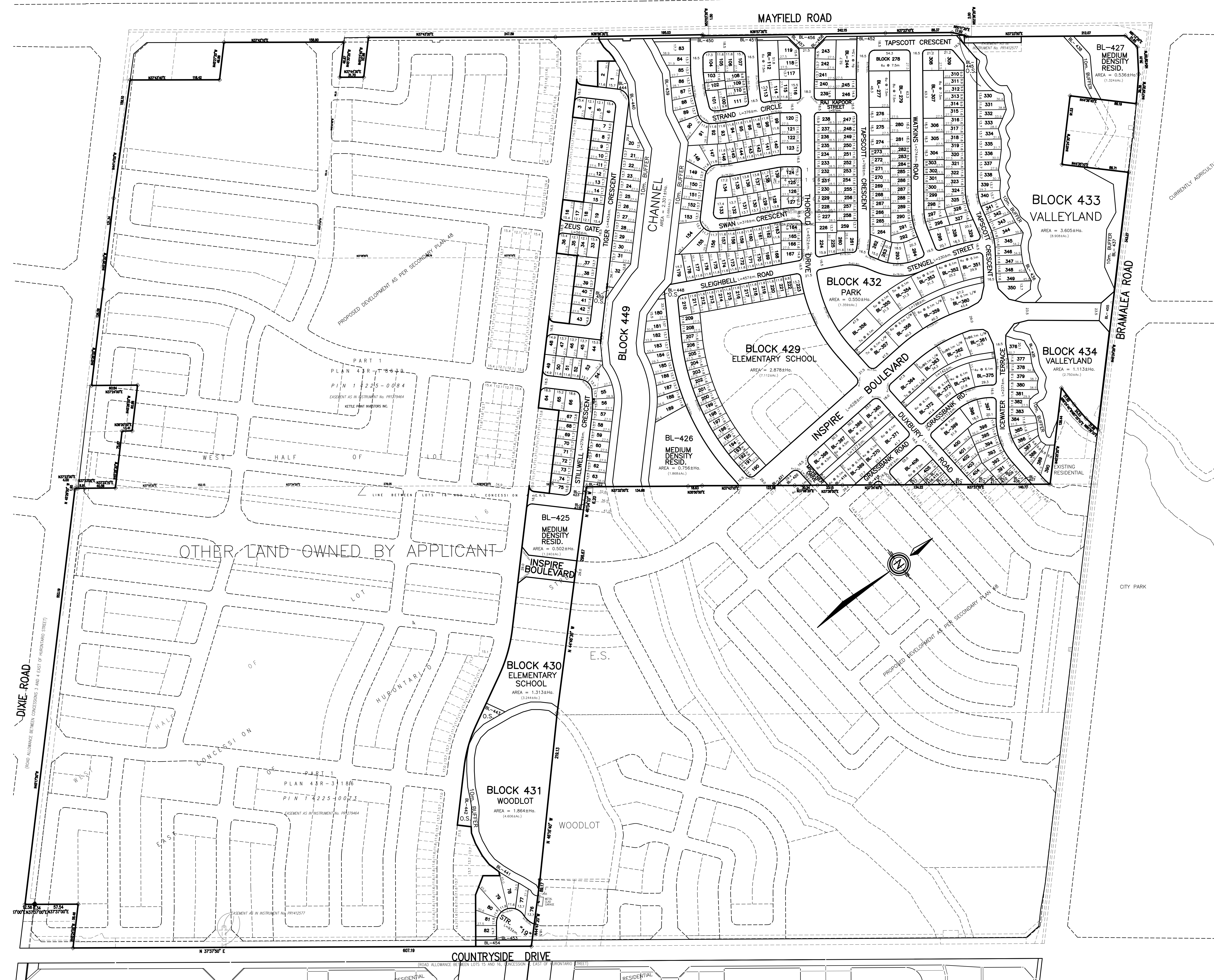
OWNER

WOLVERLEIGH CONSTRUCTION LTD.
PATILDA CONSTRUCTION INC.
KETTLE POINT INVESTORS INC.

c/o

DG GROUP
30 FLORAL PARKWAY
SUITE 300
CONCORD, ONTARIO
L4K 4R1

ROBERT De GASPERIS
A.S.O.



SECTION 51, PLANNING ACT, ADDITIONAL INFORMATION

- A. AS SHOWN ON DRAFT PLAN
- B. AS SHOWN ON DRAFT PLAN
- C. AS SHOWN ON DRAFT PLAN
- D. SEE SCHEDULE OF LAND USE
- E. AS SHOWN ON DRAFT PLAN
- F. AS SHOWN ON DRAFT PLAN
- G. AS SHOWN ON DRAFT PLAN
- H. MUNICIPAL PIPED WATER AVAILABLE AT TIME OF DEVELOPMENT
- I. CLAY-LOAM
- J. AS SHOWN ON DRAFT PLAN
- K. SANITARY AND STORM SEWERS, GARBAGE COLLECTION, FIRE PROTECTION
- L. AS SHOWN ON DRAFT PLAN

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED AS SHOWN ON THIS PLAN, AND THEIR RELATIONSHIP TO THE ADJACENT LAND ARE ACCURATELY AND CORRECTLY SHOWN.

DATE -----, 2011 STEVE BALABAN OLS

PROJECT No. P-2109
SCALE 1:2000 OCT 8, 2019
(2109DES9) X-REF: (2109MAS & 2109MTOPO)
KLM DWG. No. - 19:1
PLANNING PARTNERS INC. 64 JARDIN DRIVE - UNIT 1B, CONCORD ONTARIO L4K 3P3
TEL: (905)669-4055 FAX: (905)669-0097 design@klmplanning.com
Planning • Design • Development

Appendix C Source Sound Level Data

Environmental Noise and Vibration Assessment

4848 Mayfield Road, Caledon

12341433 Canada Inc.

SLR Project No. 241.V30663.00000

July 19, 2023



STATIONARY SOURCE SOUND LEVEL DATA

Source Description	Calculated Sound Power Level (1/1 Octave Bands), dB									Modelled Sound Power Level (dBA)	Source Notes
	31.5	63	125	250	500	1000	2000	4000	8000		
4848 Mayfield Road, Caledon - Truck and Trailer Parking Facility											
Heavy Truck Movement	98.2	101.4	101.1	96.5	96.3	95.6	91.5	84.1	78.0	99.5	Based on historical data from SLR database - Up to 12 truck movements per hour during worst-case hour - Truck travel speed of 10 km/hr
Heavy Truck Idling		93.0	88.0	83.0	90.0	87.0	88.0	82.0	71.0	93.1	Based on historical data from SLR database - Up to 12 trucks idling for 10 minutes each in a worst-case hour
Open Bay Door - Impact Wrench	82.6	77.9	82.4	75.8	79.3	78.4	85.6	85.1	84.9	91.0	Based on historical data from SLR database - Operates 1 minute per hour during worst-case hour - +10 dB penalty for quasi-steady-state impulsive sound quality
Open Bay Door - Compressed Air	101.1	100.5	95.8	89.3	86	86.3	83.5	84.8	80.8	92.1	Based on historical data from SLR database - Operates 10 minutes per hour during worst-case hour - +5 dB penalty for tonal sound quality
Truck+Trailer Coupling/Uncoupling Impulse	107.7	94.7	96.1	93.6	103.4	107.2	104.0	103.2	97.6	111.0	Based on SLR source measurement conducted November 10, 2022 - Up to 6 impulses of truck coupling to trailer during worst-case hour

global **environmental** and **advisory** solutions
www.slrconsulting.com

