REPORT

5500 DUNDAS STREET WEST

TORONTO, ONTARIO

NOISE AND VIBRATION IMPACT STUDY

RWDI #2600994

December 18, 2025

SUBMITTED TO

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VERSION HISTORY

Index	Date	Description	Prepared by	Reviewed by
1	December 17, 2025	DRAFT	Adam Cho	Lorenzo Carboni
2	December 18, 2025	FINAL	Adam Cho	Lorenzo Carboni

SIGNATURES

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EXECUTIVE SUMMARY

Rowan Williams Davies & Irwin Inc. (RWDI) was retained to prepare a Noise and Vibration Impact Study for the proposed mixed-use development located at 5500 Dundas Street West in Toronto, Ontario. The proposed development will consist of 2 buildings: (1) a 14-storey building and (2) a 16-storey building. This assessment was completed to support the Zoning Bylaw Amendment (ZBA) submission as required by the City of Toronto.

The following noise control measures are recommended for the proposed development:

1. Installation of central air-conditioning so that all suites' windows can remain closed.
2. The inclusion of noise warning clauses related to:
    a. Transportation sound levels at the building façade and in the outdoor amenity areas
    b. Proximity to commercial/industrial land-use
3. Minimum sound isolation performance:
    a. Suite window glazing with minimum sound isolation performance up to STC-36
    b. Suite exterior balcony door with minimum sound isolation performance of STC-25
    c. Suite exterior wall construction with minimum sound isolation performance of STC-45
4. Construction of perimeter noise barriers along the outdoor amenity areas with the applicable warning clauses.

The potential noise levels from stationary sources of sound were evaluated. Based on the noise modeling results and setback distances, the proposed development is anticipated to exceed Class 1 sound level criteria along the façades due to existing stationary sources associated with the surrounding commercial and industrial facilities. The proposed development is expected to meet the Class 4 sound level criteria. The proposed development will not infringe on the environmental compliance of any existing industries. With windows closed, appropriate indoor sound levels attributable to the stationary sources would be achieved for the proposed development. We recommend that the development be permitted to proceed, despite a lack of strict compliance with NPC-300 Class 1 criteria.

At this stage in design the noise levels produced by the development on itself and its surroundings could not be quantitatively assessed. However, the effect on both the building itself and its surroundings is expected to be feasible to meet the applicable criteria. We recommend that the building design is evaluated prior to building permit to ensure that the acoustical design is adequately implemented in order to meet the applicable criteria.

Based on the results of the analysis, including implementation of the recommendations presented in this report, the proposed development is feasible with respect to noise and vibration.

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1 INTRODUCTION

RWDI was retained to prepare a Noise and Vibration Impact Study for the proposed development located at 5500 Dundas Street West in Toronto, Ontario. The proposed development site is located on the north side of Dundas Street West, between Billingham Road and Paulart Drive.

The proposed development will consist of: 2 buildings: (1) a 14-storey building and (2) a 16-storey building, each including a 4-storey podium. The context site plan is shown in **Figure 1**.

The site is exposed to noise from road traffic from: Dundas Street West to the south; Paulart Drive to the East; Billingham Road to the West; and The East Mall Crescent to the West.

The site is exposed to noise from rail traffic from the Canadian Pacific (CP) Galt Subdivision, which also carries the Metrolinx Milton GO rail service located approximately 300 m to the south of the development. Given the setback distance, the assessment of vibration from the rail is not required per the Railway Association of Canada's Guidelines for New Development in Proximity to Railway Operations (RAC, 2013).

An assessment of nearby stationary sources was completed. Conservative assumptions for potential noise emissions from all facilities within 70 m of the development property line and for Class II facilities within 300 m of the development property line were included in the stationary source assessment.

This assessment was completed to support the Zoning Bylaw Amendment (ZBA) submission as required by the City of Toronto. This assessment was based on design drawings dated December 5, 2025. A copy of the drawings is included in **Appendix A.**

2 APPLICABLE CRITERIA

Applicable criteria for transportation noise sources (road and rail), stationary noise sources and rail vibration are adopted from the Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300 Environmental Noise Guideline (MOE, 2013), with a summary of the applicable criteria included with **Appendix B**.

The proposed development site would be characterized as a "Class 1 Area", which is defined according to NPC-300 as an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as "urban hum."

3 SITE VISIT

A site visit to the proposed development site was conducted on December 8th, 2025, by RWDI to obtain a better understanding of the acoustic environment of the area and the surrounding facilities. Roadway noise was dominant within the development lands and there was a significant audible "urban hum", which is characteristic of a Class 1 Area.

Honeydale Mall, located to the south of the development at 5555 Dundas Street West has been fully closed since 2013 with its parking currently being used as storage for the nearby Tesla dealership. However, the mall's rooftop HVAC noise sources were included in this assessment, assuming that an industry with similar noise emissions may eventually occupy that space.

4 THE EFFECTS OF THE ENVIRONMENT ON THE PROPOSED DEVELOPMENT

4.1 Transportation Source Assessment

4.1.1 Road Traffic Volume Data

Turning Movement Counts (TMCs) at the intersections of Dundas Street West and The East Mall Crescent, Dundas Street West and Billingham Road, and Dundas Street West and Paulart Drive provided detailed traffic volumes for the two peak hours: 08:00 to 09:00 and 16:00 to 17:00 (16:15-17:15 was the peak PM hour for Billingham Road). The TMCs were used to determine the traffic volume and types of vehicles on each link during the AM and PM peak hours which were assumed to be 9% and 10% of the Annual Average Daily Traffic (AADT), respectively.

A typical arterial road daytime/nighttime split of 85%/15% was applied for Dundas Street West and The East Mall Crescent and a typical local road daytime/nighttime split of 90%/10% was applied for Billingham Road and Paulart Drive. Traffic volumes for each of the respective roadways were increased at a rate of 2% per year to represent the predicted 10-year horizon volumes.

A summary of the traffic data used is included in **Table 1** below with more detailed information included in **Appendix C**.

Table 1: Road Traffic Volumes

Roadway	Segment	2035 Future Traffic (AADT)	% Day/Night	Speed Limit (km/hr)	% Medium Trucks	% Heavy Trucks
Dundas Street West	East of Highway 427	31978	85% /15%	60	4	7
Paulart Drive	North of Dundas Street West	1121	90% / 10%	30	0.5	0.7
Billingham Road	North of Dundas Street West	475	90% / 10%	30	0.5	0.8
The East Mall Crescent	North of Dundas Street West	13153	85% /15%	40	6	10

4.1.2 Rail Traffic Volume Data

GO transit rail traffic on the GO Metrolinx corridor, located approximately 300 m to the south of the site, was obtained from Metrolinx.

Freight rail volumes are not provided by the rail authorities (CN and CP). As such, historical freight volumes provided by CP were applied to this project and grown at an annual rate of 2.5% to a horizon year of 2035.

The data used for the analysis is summarized in **Table 2**, with details of the data used included in **Appendix C**.

Table 2: Rail Volumes and Configuration

Train Type	Daytime	Nighttime	Type of Locomotive	No. of Locomotives	No. of Cars	Speed (km/h)
GO Milton	20	2	Diesel	1	12	113
CP Freight	12	11	Diesel	4	120	95

4.1.3 Representative Receptors

The selection of receptors affected by transportation noise sources was based on the drawings reviewed for this assessment. Using the "building evaluation" feature of Cadna/A, each façade of the residential buildings was assessed.

Outdoor Living Areas (OLAs) would include outdoor areas intended and designed for the quiet enjoyment of the outdoor environment and which are readily accessible from the building. OLAs may include any common outdoor amenity spaces associated with a multi-unit residential development (e.g. courtyards, roof-top terraces), and/or private backyards and terraces with a minimum depth of 4 m provided they are the only outdoor living area for the occupant. Daytime sound levels were assessed at the following identified OLAs:

- OLA_01a: Building B, Level 5 north outdoor amenity, west
- OLA_01b: Building B, Level 5 north outdoor amenity, central
- OLA_01c: Building B, Level 5 north outdoor amenity, east
- OLA_02a: Building B, Level 5 south outdoor amenity and terraces, west
- OLA_02b: Building B, Level 5 south outdoor amenity and terraces, east
- OLA_03a: Building A, Level 5 north outdoor amenity, west
- OLA_03b: Building A, Level 5 north outdoor amenity, central
- OLA_03c: Building A, Level 5 north outdoor amenity, east
- OLA_04: Building A, Level 5 south outdoor amenity
- OLA_05: Ground level outdoor amenity

The OLAs are indicated in **Figure 2**.

4.1.4 Analysis and Results

Sound levels due to the adjacent roads were predicted by inputting sound emission data from the Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT) method (MOE, 1989) into line sources in the Cadna/A software package. Sound propagation was assessed according to ISO-9613.

To assess the effect of transportation noise on suites, the maximum sound level on each façade was determined with the results summarized in **Table 3**.

Table 3: Predicted Ground Transportation Source Sound Levels – Plane of Window

Building	Façade	Road		Rail		Road + Rail		Notes
		Day L_{EQ}, 16hr	Night L_{EQ}, 8hr	Day L_{EQ}, 16hr	Night L_{EQ}, 8hr	Day L_{EQ}, 16hr	Night L_{EQ}, 8hr	
Building A Podium	North	57	53	51	53	58	56	1
	East	69	65	57	59	69	65	2
	South	72	67	57	59	72	68	2
	West	69	64	53	56	69	65	2
Building A Tower	North	58	54	52	55	59	57	1
	East	67	62	58	61	67	64	2
	South	70	66	59	61	70	67	2
	West	65	61	54	57	66	62	2
Building B Podium	North	57	52	51	53	58	55	1
	East	69	64	53	55	69	64	2
	South	72	68	56	58	72	68	2
	West	71	66	55	57	71	67	2
Building B Tower	North	59	53	51	54	59	56	1
	East	65	61	56	59	66	63	2
	South	70	66	58	61	70	66	2
	West	67	62	52	55	67	63	2

Note(s):
1. Installation of air conditioning is required to allow for windows and doors to remain closed, warning clause "Type D". Refer to **Appendix D** for guidance regarding air-conditioning as a mitigation measure.
2. The acoustical performance of building components must be specified to meet the indoor sound level criteria.

To assess the effect of transportation noise on the qualifying OLAs for the development, predicted sound level results are summarized in **Table 4**.

Table 4: Transportation Sound Levels in Outdoor Living Areas (OLAs)

Receptor	Description	Daytime L_{EQ}, 16hr	Notes
OLA01a	Building B, Level 5 North Outdoor Amenity, West	60	2
OLA01b	Building B, Level 5 North Outdoor Amenity, Central	56	2
OLA01c	Building B, Level 5 North Outdoor Amenity, East	55	1
OLA02a	Building B, Level 5 South Outdoor Amenity and Terraces, West	69	3
OLA02b	Building B, Level 5 South Outdoor Amenity and Terraces, East	69	3
OLA03a	Building A, Level 5 North Outdoor Amenity, West	56	2
OLA03b	Building A, Level 5 North Outdoor Amenity, Central	57	2
OLA03c	Building A, Level 5 North Outdoor Amenity, East	61	3
OLA04	Building A, Level 5 South Outdoor Amenity	69	3

Note(s):

1. The predicted sound level meets the NPC-300 criterion for OLAs. Noise control measures are not required.
2. For OLA sound levels >55 dBA and ≤60 dBA, noise controls may be applied to meet the 55 dBA criterion. If noise control measures are not provided, a warning clause "Type A" is recommended.
3. Noise mitigation is recommended to meet the ≤55 dBA OLA sound level criterion. If noise controls are not feasible to meet the 55 dBA criterion for technical, economic or administrative reasons, an exceedance of 5 dB may be acceptable (to a maximum sound level of 60 dBA). In this case, a warning clause "Type B" is recommended.

4.2 Stationary Source Assessment

Stationary sources could be grouped into two categories: Those that have a permit with the Ontario Ministry of the Environment, Conservation and Parks (MECP) through an Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR); and those that are exempt from ECA or EASR permit requirements.

In the case where a stationary source has an Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR) permit with the MECP, and would be put in a position where it is no longer in compliance with the applicable sound level criteria due to the encroachment of the proposed new development, source specific mitigation and/or formal classification of the proposed development lands as a "Class 4 Area" (refer to C.4.4.2 "Class 4 Area" in NPC-300) would be required. In this case, coordination and agreements between the stationary source owner, proposed new development owner, the land-use planning authority and potentially the MECP would be needed.

In the case where a stationary source is exempt from ECA or EASR permit requirements with the MECP, the noise provisions of the applicable Municipal Code / Noise By-Law and guidance from NPC-300 would be applicable. In this case, mitigation of sound levels due to stationary sources would be from a due diligence perspective to meet the sound level criteria in the local noise by-law, and to avoid nuisance complaints from future occupants of the proposed new development.

4.2.1 Stationary Source Modeling

RWDI conducted a screening level land-use compatibility assessment based on the guidance of the Ministry of the Environment D-6 Guideline (MOE, 1995a). Stationary sources of noise surrounding the proposed development were identified using a combination of source identification during a site visit conducted on December 8th, 2025, publicly available aerial and street-level imagery, business listing and The Ministry of the Environments Access Environment database. All facilities with significant noise sources within a 70 m setback of the proposed development and Class II facilities within a 300 m setback of the proposed development are included in the assessment. No Class III facilities are located within 1000 m of the proposed development.

Pure Foods Meat Solutions and the New Zealand and Australian Lamb Co. to the south were identified as having a facility with an existing EASR.

Properties that were identified for stationary source modelling are:

- 1 The East Mall Crescent commercial building to the west;
- Pharma Medical Science College of Canada to the west;
- Islington Chrysler Dodge Jeep Ram Fiat Dealership to the east;
- Enterprise Rent-A-Car to the south;
- Active Green+Ross Tire & Automotive Centre to the south-east;
- Food Basics/Distribution Centre to south-west;
- Honeydale Mall to the south;
- Westowne Mazda to the south-east;
- Pure Food Meat Solutions to the south-east; and
- The New Zealand and Australian Lamb Company to the south-east.

Each of the facilities listed above are shown in **Figure 1**.

4.2.1.1 Representative Receptors

The selection of receptors affected by stationary noise sources was based on the drawings reviewed for this assessment. Using the "building evaluation" feature of Cadna/A, each façade of the residential buildings was assessed. Stationary source noise was evaluated for outdoor points of reception (OPORs) at the worst-case location within each OLA.

4.2.1.2 Assumed Sources and Sound Power Levels

RWDI proxy data were used for the sound power levels of the HVAC units, dust collector and idling trucks included in the model. The assumed sound power levels included in the screening level stationary source assessment are presented in **Table 5**. The locations of the sources summarized in **Table 5** included in the stationary source assessment are illustrated in **Appendix E**, **Figure E.1**.

Table 5: Stationary Source Sound Power Level Assumptions

Source Description	Source ID (as shown in Figure E.1)	Sound Power Level (dBA)	Duty Cycle	
			Daytime and Evening (07:00h – 23:00h)	Nighttime (23:00h – 07:00h)
1-Fan HVAC Unit	HVAC_1Fan	82	Continuous	30min/hour[1]
2-Fan HVAC Unit	HVAC_2Fan	85	Continuous	30min/hour[1]
3-Fan HVAC Unit	HVAC_3Fan	87	Continuous	30min/hour[1]
4-Fan HVAC Unit	HVAC_4Fan	88	Continuous	30min/hour[1]
6-Fan HVAC Unit	HVAC_6Fan	90	Continuous	30min/hour[1]
8-Fan HVAC Unit	HVAC_8Fan	91	Continuous	30min/hour[1]
Large Make-up Air Unit	MUA_large	75	Continuous	30min/hour[1]
Small Make-up Air Unit	MUA_small	85	Continuous	30min/hour[1]
Compressor and Air Impact Wrench	Comp_and_Wrench	100[2]	15min/hour	-
Idling Refrigerated Truck	RF_idle	92	Continuous	Continuous
Mazda Car Wash	Car_Wash	90	Continuous	-
Transport Truck Movements	Truck_Movement	79	Continuous	Continuous

Note(s):
1. HVAC and Make-up Air Units for the Food Basics/Distribution Centre, Honeydale Mall, and Pure Foods Meat Solutions were assumed to operate continuously during nighttime hours.
2. Compressor and air impact wrench sound power level includes a 10 dB penalty for quasi steady impulsive characteristic.

The assumed sound power level values and duty-cycles for the stationary sources are based on reasonable assumptions for the source type.

4.2.1.3 Elevated Background Sound Levels

Elevated background sound levels due to road noise were calculated to account for the busy roadways in the area, as sound level limits are expected to be above the exclusion limits in some cases. Volumes for the quietest daytime and nighttime hour were assumed to be 2.5% and 0.2% of the Annual Average Daily Traffic volume for daytime and night-time respectively, according to the typical hourly traffic distribution, published by the Institute of Traffic Engineers (ITE, 2010). Unlike when assessing road traffic as a noise source, traffic volumes were not grown to a horizon year for the purpose of ambient road noise calculations.

Based on the traffic volumes for the quietest daytime and nighttime hours, sound power levels were predicted by using the ORNAMENT (MOE, 1989) algorithms. These levels were then used as the basis for line sources in the Cadna/A software package, and sound pressure levels were calculated using ISO 9613 (ISO, 1994 and ISO, 1996).

Background sound levels were predicted at various points along each façade and each outdoor point of reception. The worst-case receptors are considered the locations on the proposed development that experience the highest

sound level from stationary sources relative to the background sound level (i.e. high stationary source impact, low background sound level).

4.2.1.4 Analysis and Results

Stationary source noise modelling was carried out using the Cadna/A software package, a commercially available implementation of the ISO 9613 (ISO, 1994 and ISO, 2024) algorithms.

The predicted sound levels during the worst-case 1-hour from existing stationary sources are compared against the applicable Class 1 Area limits, presented in **Table 6**. Class 4 Area criteria is also presented in **Table 6** for additional context, discussed further in 4.3.2.

Table 6: Predicted Sound Levels at Worst-case Receptor Locations – Continuous Stationary Sources

Building/ Receptor	Façade	Predicted Sound Level		Criteria			
		Daytime-Evening 7:00-23:00 $L_{EQ, 1hr}$ (dBA)	Nighttime 23:00-7:00h[1] $L_{EQ, 1hr}$ (dBA)	Class 1 Daytime / Nighttime $L_{EQ, 1hr}$ (dBA)	Complies with Class 1 Criteria? (Daytime / Nighttime)	Class 4 Daytime / Nighttime $L_{EQ, 1hr}$ (dBA)	Complies with Class 4 Criteria? (Daytime / Nighttime)
Building A Podium	North	44	42	62[2]/ 56[2]	Yes / Yes	62[2]/ 56[2]	Yes / Yes
	East	51	50	60[2]/ 45	Yes / Yes	60 / 55	Yes / Yes
	South	55	53	64[2]/ 45	Yes / Yes	64[2]/ 55	Yes / Yes
	West	53	52	59[2]/ 45	Yes / No	60 / 55	Yes / Yes
Building A Tower	North	44	42	63[2]/ 56[2]	Yes / Yes	63[2]/ 56[2]	Yes / Yes
	East	53	53	63[2]/ 49[2]	Yes / No	63[2]/ 55	Yes / Yes
	South	56	55	60[2]/ 49[2]	Yes / No	60 / 55	Yes / Yes
	West	54	53	56[2]/ 45	Yes / No	60 / 55	Yes / Yes
Building B Podium	North	50	47	50 / 45	Yes / No	60 / 55	Yes / Yes
	East	49	49	66[2]/ 56[2]	Yes / Yes	66[2]/ 56[2]	Yes / Yes
	South	56	55	66[2]/ 55[2]	Yes / Yes	66[2]/ 55	Yes / Yes
	West	57	55	60[2]/ 49[2]	Yes / No	60 / 55	Yes / Yes
Building B Tower	North	51	48	51[2]/ 50[2]	Yes / No	60 / 55	Yes / Yes
	East	51	51	64[2]/ 49[2]	Yes / No	64[2]/ 55	Yes / Yes
	South	56	55	60[2]/ 49[2]	Yes / No	60 / 55	Yes / Yes
	West	56	54	60[2]/ 49[2]	Yes / No	60 / 55	Yes / Yes
OPOR_01	-	56	-[1]	60[2] / -	Yes / -	60[2] / -	Yes / -

Building/ Receptor	Façade	Predicted Sound Level		Criteria			
		Daytime-Evening 7:00-23:00 $L_{EQ, 1hr}$ (dBA)	Nighttime 23:00-7:00h[1] $L_{EQ, 1hr}$ (dBA)	Class 1 Daytime / Nighttime $L_{EQ, 1hr}$ (dBA)	Complies with Class 1 Criteria? (Daytime / Nighttime)	Class 4 Daytime / Nighttime $L_{EQ, 1hr}$ (dBA)	Complies with Class 4 Criteria? (Daytime / Nighttime)
OPOR_02	-	58	-[1]	68[2] / -	Yes / -	68[2] / -	Yes / -
OPOR_03	-	46	-[1]	60[2] / -	Yes / -	60[2] / -	Yes / -
OPOR_04	-	55	-[1]	66[2] / -	Yes / -	66[2] / -	Yes / -

Note(s):
1. Outdoor areas are not assessed during the nighttime period.
2. Elevated background sound level limits applied as applicable.

As shown in **Table 6**, the daytime-evening continuous sound levels are predicted to exceed the Class 1 criteria along the Building A podium west façade and the Building B podium north façade. Nighttime continuous sound levels are predicted to exceed the Class 1 criteria at most façade locations based on screening level noise modelling analysis. The OPORs are predicted to comply with the applicable Class 1 sound level criteria. Predicted sound levels from stationary sources are predicted to comply with Class 4 sound level limits at the proposed development.

The EASR registered facilities completed their noise assessments using the secondary screening method. Based on modeling for these facilities on an individual basis, they are expected to meet the Class 1 limits at the proposed development. It should also be noted that a notice of decision dated November 20, 2025, allows for a 22-storey building at 5507 and 5509 Dundas Street West. This development is in closer proximity to the EASR registered facilities where impacts are expected to be higher than at the proposed development at 5500 Dundas Street West. Therefore, the proposed development is not expected to infringe on the compliance of these facilities.

4.3 Recommendations

Based on the noise and vibration assessment results, the following recommendations were determined for the project. Recommendations are provided for both transportation sources and stationary sources.

4.3.1 Transportation Sources

The following recommendations are provided to address transportation sources.

4.3.1.1 Building Façade Components

Due to the elevated transportation sound levels in the area, acoustical design of the façade components including spandrel, window glazing, and exterior doors, are recommended to be specified for the proposed development.

To assess the development's feasibility, preliminary window glazing, and exterior balcony door sound isolation requirements were determined. These were based on following assumptions:

- Typical residential living room:
  - Glazing 60% of façade, Door: 20% of façade
  - 55% Façade to floor area Ratio
- Typical residential bedroom:
  - Glazing 80% of façade, Door: N/A
  - 81% Façade to floor area Ratio
- Acoustical character of rooms: High absorption finishes/furniture for bedrooms and intermediate absorption finishes/furniture for living rooms.

Based on the predicted plane of window sound levels and the assumptions listed above, recommendations for the minimum sound insulation ratings for the building components were determined using the National Research Council of Canada "BPN-56 method" (NRCC, 1985). The reported results are in terms of Sound Transmission Class (STC) ratings as summarized in **Table 7**.

Table 7: Recommended Façade Component Minimum Sound Insulation Rating

Portion of Development	Façade	Window Glazing	Exterior Door	Façade Wall
Building A Podium	North	OBC	OBC	OBC
	East	STC-33	STC-25	STC-45
	South	STC-34	STC-26	STC-45
	West	STC-29	STC-25	STC-45
Building A Tower	North	OBC	OBC	OBC
	East	STC-33	STC-25	STC-45
	South	STC-34	STC-25	STC-45
	West	STC-30	STC-25	STC-45
Building B Podium	North	OBC	OBC	OBC
	East	STC-30	STC-25	STC-45
	South	STC-34	STC-26	STC-45
	West	STC-33	STC-25	STC-45
Building B Tower	North	OBC	OBC	OBC
	East	STC-31	STC-25	STC-45
	South	STC-34	STC-25	STC-45
	West	STC-29	STC-25	STC-45

Note(s):
1. "OBC" denotes that the noise insulation design is not required to be specified. Building envelope assemblies meeting the minimum Ontario Building Code (OBC) requirements will also exhibit sufficient noise reduction to meet the interior sound level criteria.

The maximum requirement for the window glazing was determined to be STC-34, and STC-26 for the exterior door, which is considered feasible as this can be achieved by various double-glazed configurations of insulated glazing units.

Taking into account the assumptions used as a basis to determine the glazing requirements, the applicable indoor transportation source sound level criteria are predicted to be achieved.

We recommend that the façade construction is reviewed during detailed design to ensure that the indoor sound level limits will be met, and that the window/door supplier is requested to provide STC laboratory test reports as part of shop drawing submittal to confirm that the glazing/door components will meet the minimum STC requirements.

4.3.1.2 Ventilation Recommendations

Due to the transportation sound levels at the plane of the façade, central air conditioning is recommended for the proposed development to allow for windows and doors to remain closed as a noise mitigation measure. Further, prospective purchasers or tenants should be informed by a warning clause "Type D".

4.3.1.3 Outdoor Living Areas

Due to transportation sources, sound levels in the OLAs are predicted to be elevated. The combined (rail and road) daytime average sound levels for the OLAs are in the range of 55 to 69 dBA. To reduce the transportation sound levels in OLAs to meet the applicable criteria, noise barriers are considered.

The target transportation source sound level for OLAs is 55 dBA. Sound levels in excess of 60 dBA are not permitted in any cases. Noise mitigation to reduce sound levels in OLAs to 55 dBA is recommended.

Where unmitigated sound levels in an OLA are below 55 dBA, no mitigation is required.

Where unmitigated sound levels in an OLA are between 55 and 60 dBA, barriers are optional, however if barriers are not provided, a warning clause must be included.

Where the unmitigated sound levels in an OLA are greater than 60 dBA, barriers to meet the 55 dBA criteria are required. The barrier heights needed to meet 55 dBA may not be feasible for technical, economic, or administrative reasons beyond the scope of environmental noise engineering. In these cases, an excess of up to 5 dB is allowed with the inclusion of a warning clause. The barrier heights resulting in a 5 dB excess are presented as the minimum permissible level of mitigation that must be included for a viable OLA.

The recommended geometry of the noise barriers required to meet the 55 dBA criteria are shown in **Figure 3a**. The barrier geometry for the minimum permissible level of mitigation is shown in **Figure 3b**. The barrier heights are summarized in **Table 8**. General guidance with respect to noise barrier design is included with **Appendix D**.

Table 8: Barrier Height Recommendations for OLAs

Receptor	Description	Predicted OLA Sound Level	Barrier Height (m) to Meet Sound Level Criterion	
		Daytime L_{EQ}, 16hr (dBA)	≤ 55 dBA[1]	≤ 60 dBA[2]
OLA01a	Building B, Level 5 North outdoor amenity, West	60	3.5 m	-

Receptor	Description	Predicted OLA Sound Level	Barrier Height (m) to Meet Sound Level Criterion	
		Daytime L_{EQ}, 16hr (dBA)	≤ 55 dBA[1]	≤ 60 dBA[2]
OLA01b	Building B, Level 5 North Outdoor Amenity	56	3.5 m	-
OLA01c	Building B, Level 5 North outdoor amenity	55	-	-
OLA02a	Building B, Level 5 South Outdoor Amenity and Terraces, West	69	3.8 m	2.0 m
OLA02b	Building B, Level 5 South Outdoor Amenity and Terraces, East	69	3.8 m	2.0 m
OLA03a	Building A, Level 5 North Outdoor Amenity, West	56	2.2 m	-
OLA03b	Building A, Level 5 North Outdoor Amenity, Central	57	2.2 m	-
OLA03c	Building A, Level 5 North Outdoor Amenity, East	61	2.2 m	-
OLA04	Building A, Level 5 South Outdoor Amenity	69	3.7 m	2.0 m
OLA05	Ground Level Outdoor Amenity	65	4.0 m	2.0 m

Note(s):
1. Refer to Figure 3a for individual barrier geometry to meet sound level criterion.
2. Refer to Figure 3b for individual barrier geometry to meet minimum permissible requirements.
3. If noise control measures are not provided, a warning clause "Type A" is required.
4. If noise control measures to meet 55 dBA are not feasible, a warning clause “Type B” is required.

4.3.2 Stationary Sources

Based on the noise modeling results and setback distances, the sound levels at the proposed development are anticipated to exceed Class 1 sound level criteria at the façades of the proposed development due to existing stationary sources associated with surrounding commercial/industrial facilities.

Predicted sound levels from stationary sources are predicted to comply with Class 4 sound level limits at the proposed development. A Class 4 application would be recommended in the case where the proposed development would infringe on the environmental compliance of any existing industries. However, the proposed development will not infringe on the environmental compliance of any existing industries since the nearby stationary sources are commercial in nature. The Ministry of Environment, Conservation, and Parks has provided guidance that the intent of a Class 4 area is to protect the permit of neighboring industries. For these reasons, a Class 4 classification is not recommended, but Class 4 concepts could be applied. With windows closed, appropriate indoor sound levels as allowed in a Class 4 area, would be achieved for the proposed development. We recommend that the City allows the development to proceed with the noted exceedances of Class 1 limits, provided that the requirements of a Class 4 area (i.e. central air conditioning) are met.

Due to the proximity of the proposed development to the commercial and industrial facilities, a warning clause “Type E” is recommended to inform prospective occupants of the potential for audible noise from these facilities.

4.3.3 Warning Clauses

The following warning clauses are recommended for the proposed development:

1. NPC-300 Type A or B to address transportation sound levels in Outdoor Living Areas (OLAs)
2. NPC-300 Type D to address transportation sound levels at the plane of window
3. NPC-300 Type E to address proximity to commercial/industrial facilities

Warning clauses are recommended to be included on all development agreements, offers of purchase and agreements of purchase and sale or lease. The wording of the recommended warning clauses is included with **Appendix F**.

5 THE EFFECTS OF THE PROPOSED DEVELOPMENT ON ITS SURROUNDINGS AND ON ITSELF

On-site stationary sources for the development are expected to consist of HVAC related equipment in the roof-top mechanical penthouse as well as various exhaust fans. Further, consideration should be given to control airborne and structure-borne noise generated within the proposed development.

Within the development itself the main sources of noise that are likely to affect the uses of the building are the mechanical systems. The potential noise effect of the commercial component of the development is recommended to be reviewed during detailed design, to ensure the applicable criteria will be met.

Provided that best practices for the acoustical design of the building are followed, noise from building services equipment associated with the development are expected to meet the applicable sound level criteria due to the nature (residential/mixed-use) of the proposed development.

We recommend that the potential noise effect of the proposed development is reviewed during detailed design to ensure the applicable sound level criteria will be achieved.

6 CONCLUSIONS

RWDI was retained to prepare a Noise and Vibration Impact Study for the proposed mixed-use development located at 5500 Dundas Street West in Toronto, Ontario.

The following noise control measures are recommended for the proposed development:

1. Installation of central air-conditioning so that all suites' windows can remain closed.
2. The inclusion of noise warning clauses related to:
    a. Transportation sound levels at the building façade and in the outdoor amenity areas
    b. Proximity to commercial/industrial land-use

3. Minimum sound isolation performance:
    a. Suite window glazing with minimum sound isolation performance up to STC-34
    b. Suite exterior balcony door with minimum sound isolation performance of STC-26
    c. Suite exterior wall construction with minimum sound isolation performance of STC-45
4. Construction of perimeter noise barriers along the outdoor amenity areas, with the applicable warning clauses.

The potential noise levels from stationary sources of sound were evaluated. Based on the noise modeling results and setback distances, the proposed development is anticipated to exceed Class 1 sound level criteria along the façades due to existing stationary sources associated with the surrounding commercial and industrial facilities. The proposed development is expected to meet the Class 4 sound level criteria. The proposed development will not infringe on the environmental compliance of any existing industries. With windows closed, appropriate indoor sound levels attributable to the stationary sources would be achieved for the proposed development.

At this stage in design the noise levels produced by the development on itself and its surroundings could not be quantitatively assessed. However, the effect on both the building itself and its surroundings is expected to be feasible to meet the applicable criteria. We recommend that the building design is evaluated prior to building permit to ensure that the acoustical design is adequately implemented in order to meet the applicable criteria.

Based on the results of the analysis, including implementation of the recommendations presented in this report, the proposed development is feasible with respect to noise and vibration.

7 REFERENCES

1. Ontario Ministry of the Environment (MOE), August 2013, Publication NPC-300, Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning (MOE, 2013).
2. Ontario Ministry of the Environment (MOE), 1989, ORNAMENT Ontario Road Noise Analysis Method for Environment and Transportation, Technical Publication (MOE, 1989)
3. Ontario Ministry of the Environment (MOE) Publication Guideline D-6, "Compatibility Between Industrial Facilities and Sensitive Land Uses", July 1995 (MOE, 1995).
4. Controlling Sound Transmission into Buildings (BPN-56), National Research Council Canada (NRCC, 1985).
5. Federal Transit Administration, U.S. Department of Transportation, Transit Noise and Vibration Impact Assessment, 2018 (FTA, 2018).
6. The Railway Association of Canada (RAC), Guidelines for New Development in Proximity to Railway Operations (RAC, 2013).
7. Institute of Transportation Engineers (ITE), 2010, *Traffic Engineering Handbook, 6th Edition* (ITE, 2010)
8. International Organization for Standardization (ISO), 1994b, International Standard ISO 9613-1:1994, Acoustics – Attenuation of Sound during propagation outdoors. Part 1: Calculation of the absorption of sound by the atmosphere. (ISO, 1994)
9. International Organization for Standardization (ISO), 1996, International Standard ISO 9613-2:1996, Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation (ISO, 1996)
10. Ontario Ministry of the Environment (MOE), 1978, Model Municipal Noise Control Bylaw, which includes Publication NPC-103 – Procedures, and Publication NPC-104 – Sound Level Adjustments.

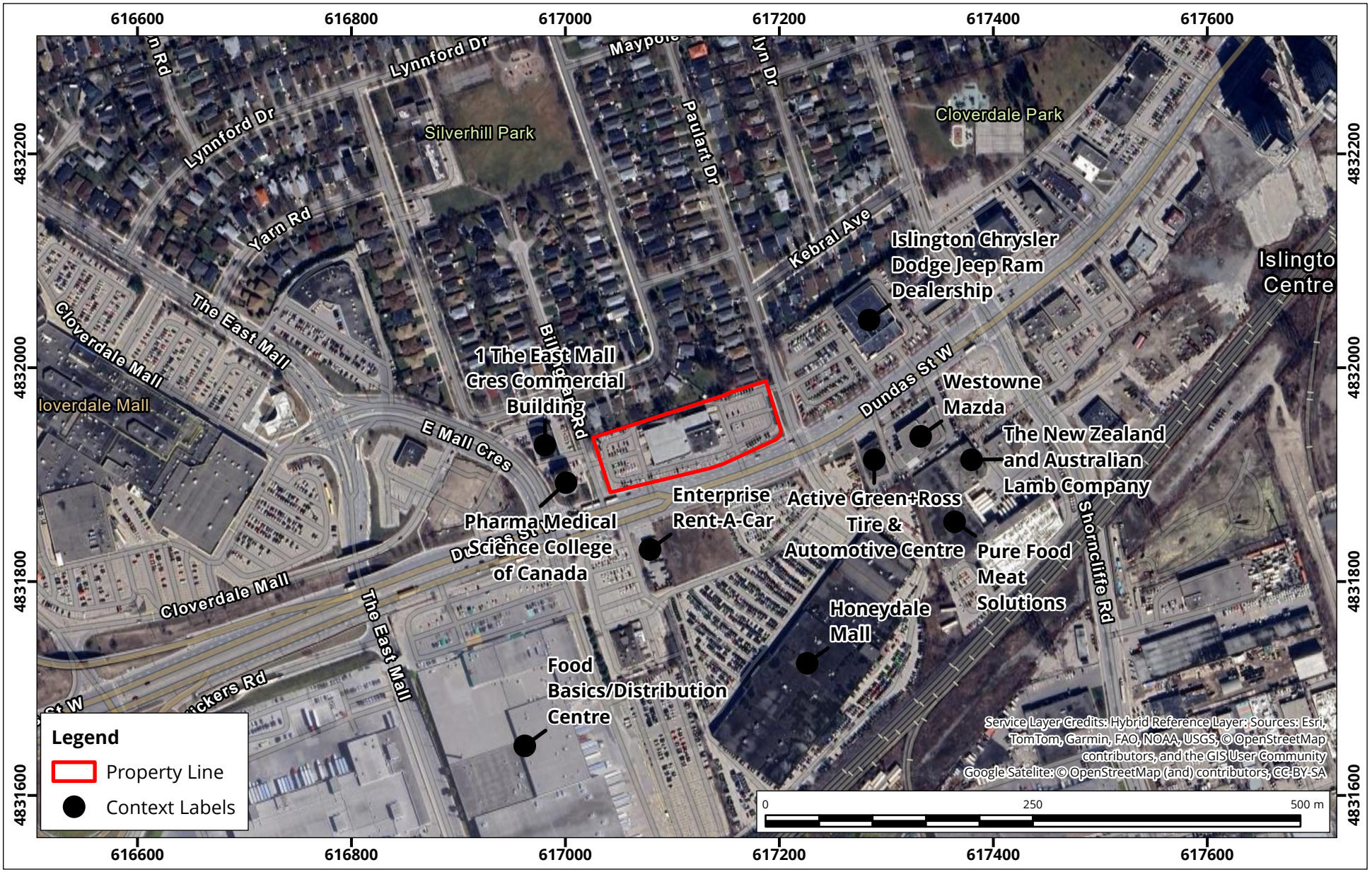
STATEMENT OF LIMITATIONS

This report entitled 5500 Dundas Street West was prepared by Rowan Williams Davies & Irwin ("RWDI") for FCHT Holdings (Ontario) Corporation ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared. Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

FIGURES



Site Context Plan

Map Projection: NAD 1983 UTM Zone 17N

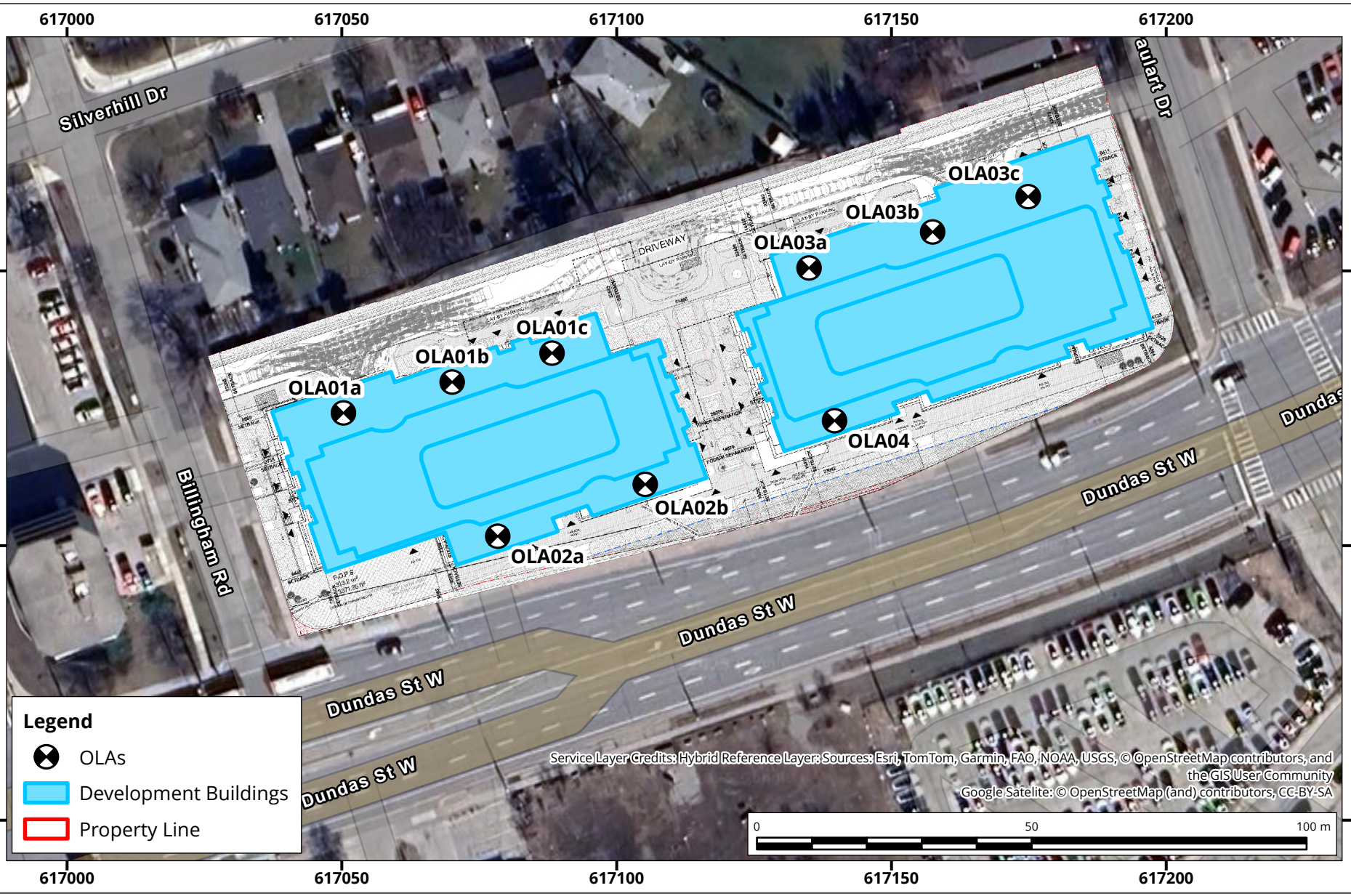
5500 Dundas St W

True North

Project #: 2600994

Drawn by:CWM	Figure:	1
Approx. Scale:	1:5,000	
Date Revised:	Dec 17, 2025	

Map Document: \\rwdgroup.net\rwd\VM_Jobs\2026\2600994\03Work\Items\20Environmental Noise\Analysis\04 ArcGIS - 5500 Dundas St W\5500 Dundas St W.aprx



Outdoor Living Areas (OLAs) Locations

Location of Common Outdoor Amenity Areas

Map Projection: NAD 1983 UTM Zone 17N

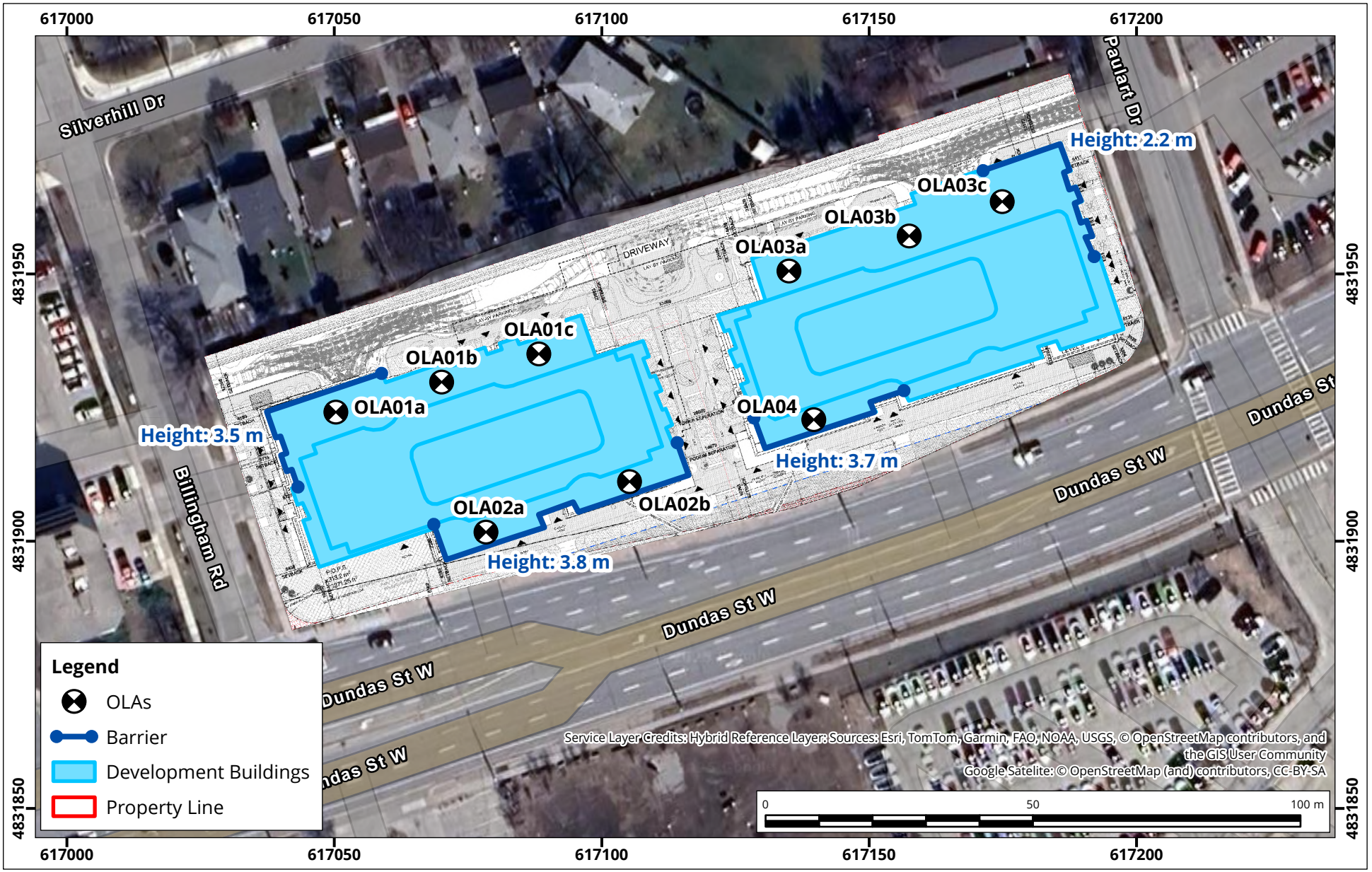
5500 Dundas St W

True North

Project #: 2600994

Drawn by:CWM	Figure: 2
Approx. Scale:	1:1,000
Date Revised:	Dec 17, 2025

Map Document: \\rwdgroup.net\rwd\VM_Jobs\2026\2600994\03\Work\Items\20Environmental\Noise\Analysis\04 ArcGIS - 5500 Dundas\5500 Dundas St W\5500 Dundas St W.aprx



Outdoor Living Areas (OLAs) Mitigation to 55 dBA

Recommended Barrier Geometry and Height to meet 55 dBA

Map Projection: NAD 1983 UTM Zone 17N

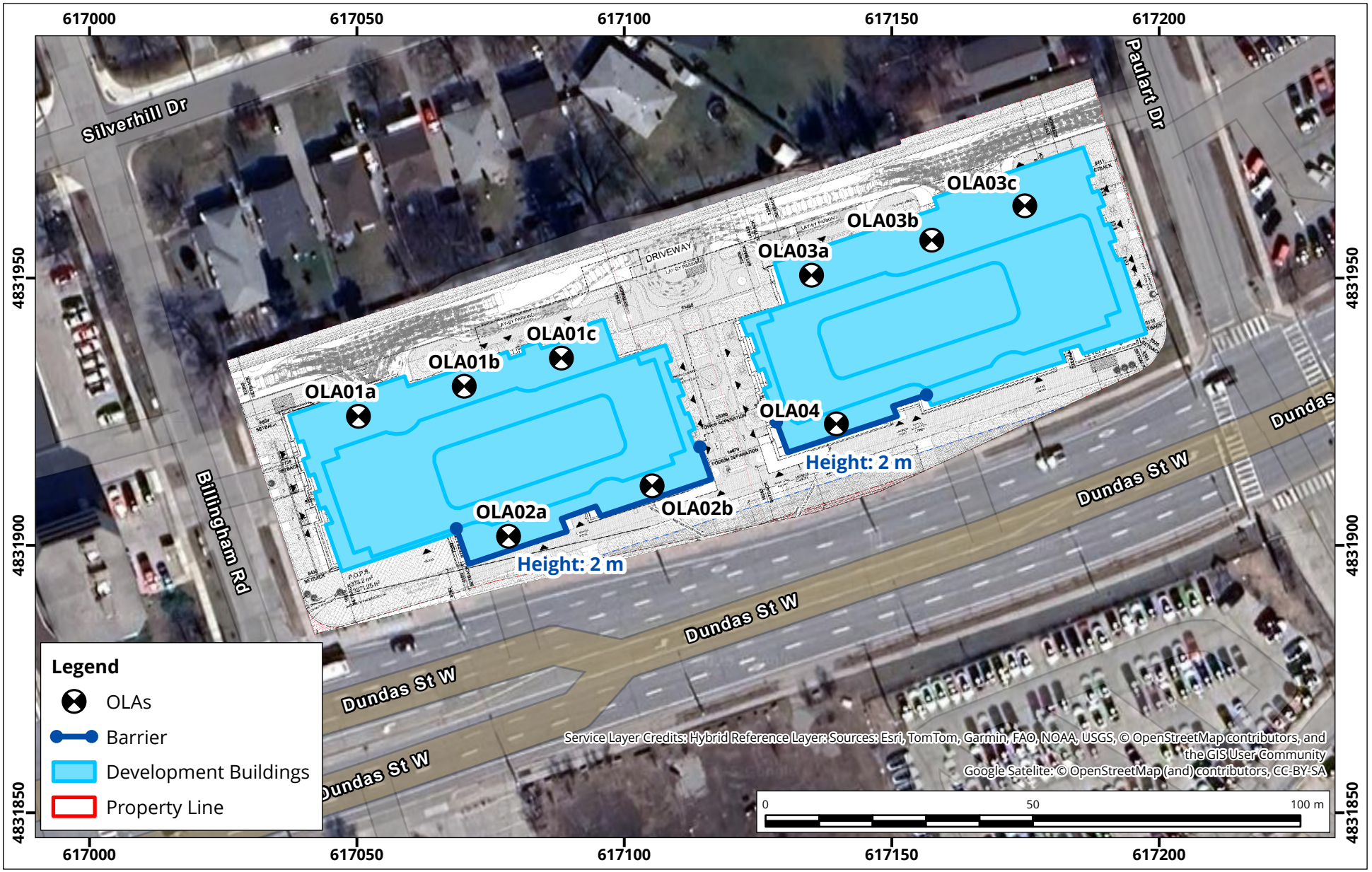
5500 Dundas St W

True North

Project #: 2600994

Drawn by:CWM	Figure: 3a
Approx. Scale:	1:1,000
Date Revised:	Dec 17, 2025

Map Document: \\rwdgroup.net\rwd\VM_Jobs\2026\2600994\03\Work\Items\20Environmental\Noise\Analysis\04 ArcGIS - 5500 Dundas\5500 Dundas St W\5500 Dundas St W.aprx



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Outdoor Living Areas (OLAs) Mitigation to 60 dBA

Recommended Barrier Geometry and Height to meet 60 dBA

True North

Drawn by:CWM	Figure: 3b
Approx. Scale:	1:1,000
Date Revised: Dec 17, 2025	

Map Projection: NAD 1983 UTM Zone 17N

5500 Dundas St W

Project #: 2600994

APPENDIX A

NOTES AND STATISTICS

Green Roof		Provided
Gross Floor Area, as defined in Green Roof Bylaw (m²)		53,208.0 m²
Total Roof Area (m²)		4,788.0 m²
Area of Residential Private Terraces (m²) (Up to Abutting Unit Area)		586.8 m²
Rooftop Outdoor Amenity Space, if in a Residential Building (m²)		1,168.0 m²
Area of Renewable Energy Devices (m2)		0.0 m²
Tower(s) Roof Area with floor plate less than 750m²		N/A
Total Available Roof Space (m²)		3,113.2 m²
Green Roof Coverage	Required	Provided
Coverage of Available Roof Space (m²)	1,867.9 m²	1,935.5 m²
Coverage of Available Roof Space (%)	60%	62%

GROSS SITE AREA:9751.46M²
LESS: 19,56M²
NET SITE AREA: 9731.9 M²

Gross Floor Area, as defined in Green Roof Bylaw:

The total area of each floor level of a building, above and below average grade, measured from the exterior of the main wall of each floor level, including voids at the level of the floor, such as an atrium, mezzanine, stairwell, escalator, elevator, ventilation duct or utility shaft, but excluding areas used for the purpose of parking or loading.

Definitions:

FLOOR PLATE AREA = The total area of a floor of a building, measured from the exterior of the main wall of each floor level, including voids at the level of the floor, such as an atrium, mezzanine, stairwell, escalator, elevator, ventilation duct or utility shaft.

GROSS FLOOR AREA = The total area of each floor level of a building, above and below average grade, measured from the exterior of the main wall of each floor level, including voids at the level of each floor, such as an atrium, mezzanine, stairwell, escalator, elevator, ventilation duct or utility shaft, but excluding areas used for the purposes of parking of loading

LOADING NOTES

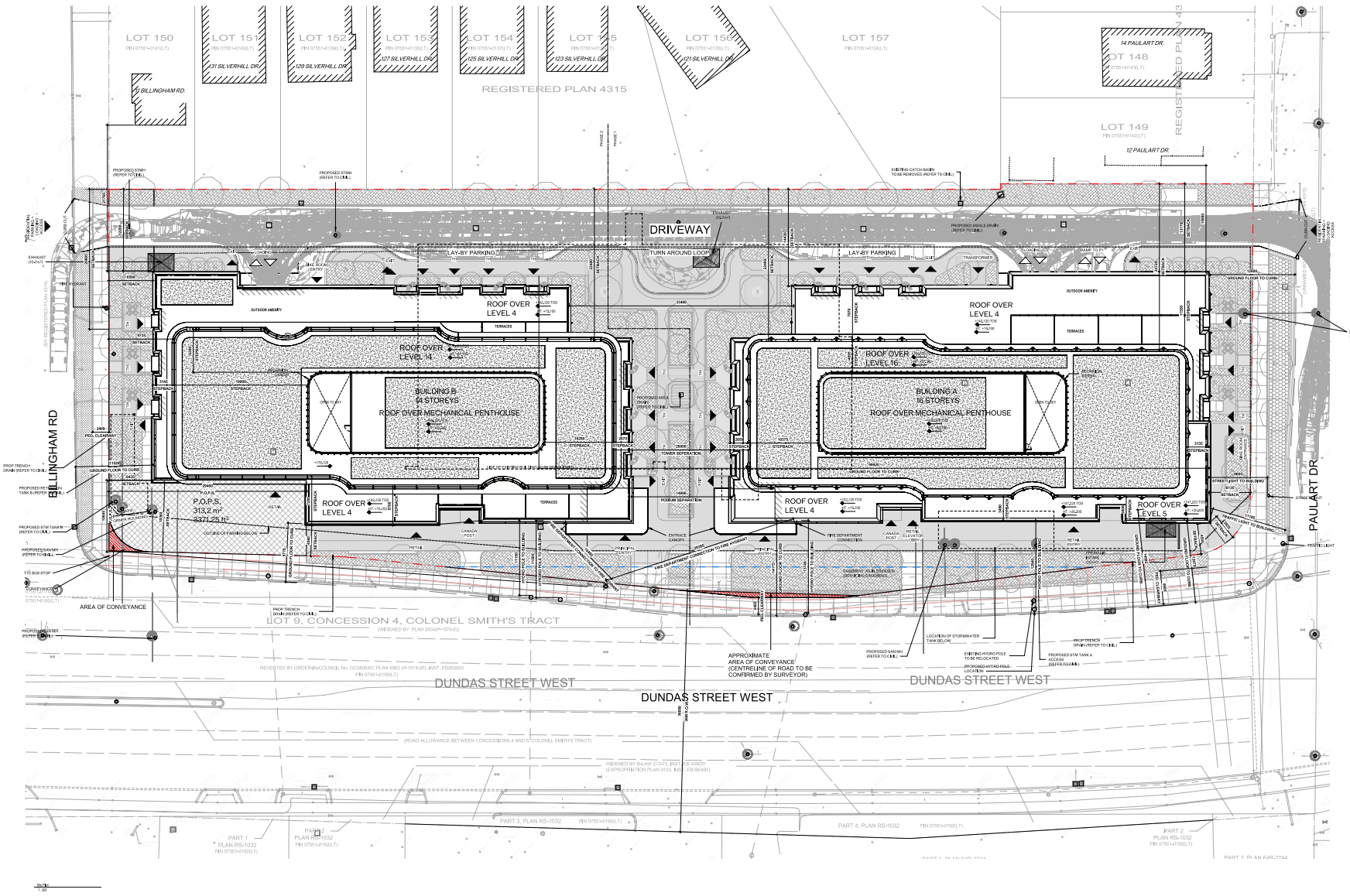
1. TYPE G LOADING SPACE AND ADJACENT STAGING PAD HAVE VERTICAL CLEARANCE OF MIN 4.1 METERS.
OVERHEAD DOOR TO LOADING SPACE WILL HAVE MIN 4.4 METER HEIGHT, 2.1M DEEP STAGING AREA DIRECTLY IN FRONT OF THE LOADING AREA TO HAVE MIN. VERTICAL CLEARANCE OF 6.1M, M-50 M STAGING AREA FOR THE DEVELOPMENT.
2. TYPE G LOADING SPACE WILL BE SHARED BETWEEN RESIDENTIAL AND NON-RESIDENTIAL USES. NON-RESIDENTIAL COMPONENT WILL ONLY SCHEDULE USE OF THE TYPE G LOADING SPACE ON DIFFERENT DAYS FROM THE COLLECTION DAYS OF THE RESIDENTIAL COMPONENT TO ENSURE THAT THE TYPE G LOADING SPACE WILL BE VACANT FOR CITY WASTE COLLECTION.
3. NON-RESIDENTIAL WASTE WILL BE LABELLED AND STORED SEPARATELY FROM THE BINS FOR RESIDENTIAL WASTE.
4. TYPE G LOADING SPACE PROVIDED ALONG PAULAIR DRIVE EAST WITH MIN 200mm THICK BACKFILLED CONCRETE SLAB.
5. WARNING SYSTEM WILL BE PROVIDED ALONG PAULAIR DRIVE EAST WITH MIN 200mm THICK BACKFILLED CONCRETE SLAB.
6. ALL ACCESS DRIVEWAYS TO BE USED BY THE GARBAGE COLLECTION VEHICLE WILL HAVE:
a) MAXIMUM GRADIENT OF 8%;
b) UNIFORM VERTICAL CLEARANCE OF 4.4 METRES THROUGHOUT;
c) MINIMUM WIDTH OF 4.5 METRES THROUGHOUT; AND,
d) MINIMUM OUTSIDE TURNING RADIUS OF 13.0 METRES.
7. NO PARKING TO BE PROVIDED AND MAINTAINED ON LANDS ADJACENT TO THE LOADING SPACE.
8. CONSTRUCT ANY TYPE G LOADING SPACE AND ALL DRIVEWAYS AND PASSAGEWAYS PROVIDING ACCESS THERETO, TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, INCLUDING ALLOWANCE FOR CITY OF TORONTO BULK LIFT AND REAR-END LOADING WITH IMPACT FACTORS WHERE THEY ARE TO BE BUILT AS SUPPORTED STRUCTURES.
9. THE RESIDENTIAL SOLID WASTE ROOM WILL ACCOMMODATE GARBAGE, RECYCLING AND ORGANICS FOR THE RESIDENTIAL COMPONENT OF THE BUILDING VIA USE OF A SCOMPACTER IN THE DEVELOPMENT.
10. THE SOLID WASTE ROOM WILL BE LOCATED ON LEVEL 1.
11. COLLECTION OF WASTE MATERIALS FOR THIS DEVELOPMENT WILL TAKE PLACE IN AN ENCLOSED LOADING BAY. AN ONSITE STAFF PERSON IS RESPONSIBLE FOR MOVING THE BINS FROM THE GARBAGE STORAGE SPACE TO THE COLLECTION POINT AND PROVIDE VEHICULAR DIRECTIVES TO THE COLLECTION VEHICLE OPERATOR AS REQUIRED.
12. THE BUILDING IS DESIGNED WITH A TYPE G LOADING SPACE, A FLASHING WARNING LIGHT SYSTEM AND / OR APPROPRIATE SIGNAGE ADJACENT TO THE SPACE, AT NO COST TO THE CITY, WILL BE IN PLACE AND ACTIVATED DURING COLLECTION AND MINIMUM ACTIVE UNTIL THE VEHICLE EXITS THE SITE, REFER TO TRAFFIC CONSULTANT REPORT FOR SWEPT PATH.
13. THE OWNER WILL ENTER INTO AN AGREEMENT WITH THE CITY FOR WASTE COLLECTION AGREEMENT AND SHOULD PUBLIC WASTE COLLECTION BE USED, ALL NECESSARY APPLICATION AND WAIVER FORMS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CITY WASTE COLLECTION.
14. NON-RESIDENTIAL GARBAGE WILL BE COLLECTED BY LICENSED PRIVATE WASTE MANAGEMENT COMPANY.
15. REFUSE GENERATED BY THE NON-RESIDENTIAL USE MUST BE STORED ON SITE, IN RODENT PROOF CONTAINERS IN ACCORDANCE WITH CHAPTER 841 OF THE MUNICIPAL CODE "WASTE COLLECTION, COMMERCIAL PROPERTIES".
16. TRAINED ON-SITE STAFF MEMBER WILL BE AVAILABLE TO MANOEUVRE BINS FOR THE COLLECTION DRIVER AND ALSO ACT AS A FLAGMAN WHEN THE TRUCK IS REVERSING. IN THE EVENT THE ON-SITE STAFF IS UNAVAILABLE AT THE TIME THE CITY COLLECTION VEHICLE ARRIVES AT THE SITE, THE COLLECTION VEHICLE WILL LEAVE THE SITE AND NOT RETURN UNTIL THE NEXT SCHEDULED COLLECTION DATE.
FOR SPECIFIC TRUCK DIMENSIONS AND TURNING RADII REFER TO TRAFFIC CONSULTANT'S REPORT.

SITE PLAN NOTES

1. THE BUILDING IS TO BE SPRINKLERED.
2. RESIDENTIAL AND/OR PARKING SPACES WILL BE INDIVIDUALLY SIGNED AT THE FRONT OF EACH SPACE FOR THE USE OF RESIDENTIAL VISITORS, BUILDING MANAGEMENT SHALL PROVIDE ENFORCEMENT OF THIS ARRANGEMENT.
3. SIDEWALKS AND BOULEVARDS WITHIN THE RIGHT OF WAY TO HAVE A MINIMUM 1% AND MAXIMUM 4% SLOPE TOWARDS THE ROADWAY.
4. REFER TO SITE SERVICING DOCUMENTS FOR SEWER AND WATER SERVICE INFORMATION.
5. ANY RETAINING WALLS ARE TO BE PROFESSIONALLY ENGINEERED.
6. ALL EXISTING ACCESSES, CURB CUTS, TRAFFIC CONTROL SIGNS, ETC. ALONG THE DEVELOPMENT SITE FRONTAGES THAT ARE NO LONGER REQUIRED ARE TO BE REMOVED, THE BOULEVARD WITHIN THE PUBLIC RIGHT OF WAY, IN ACCORDANCE WITH CITY STANDARDS AND TO THE SATISFACTION OF THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES ARE TO BE REINSTATED.
7. PROPOSED ACCESS TO THE RIGHT-OF-WAY/LANEWAY FOR THIS PROJECT TO BE DESIGNED IN ACCORDANCE WITH CITY STANDARD NO.
8. ALL SIGNAGE SHALL BE SUBJECT TO A SEPARATE SIGN PERMIT.
9. NO SPEED BUMPS SHALL BE INSTALLED ON ANY DESIGNATED FIRE ROUTE.
10. MAX. PORCUPITY OF ALL GROUND LEVEL VENTILATION GRATES MUST BE 20mm X 20mm PER TORONTO GREEN STANDARDS.
11. ALL EXTERIOR LIGHT FIXTURES TO BE 'DARK SKY' COMPLIANT.

UTILITY/SERVICES NOTES

1. THE METHOD OF INSTALLATION FOR THE PROPOSED SERVICE CONNECTIONS WILL BE AT THE DISCRETION OF TORONTO WATER.
2. EXISTING CONNECTIONS NO LONGER IN USE SHALL BE DISCONNECTED BY TORONTO WATER AT THE OWNER'S COST.
3. THE LOCATION OF THE WATER METER SHALL BE TO TORONTO WATER'S SATISFACTION.
4. THE BUILDING IS REQUIRED TO INSTALL AND MAINTAIN A FIRE/BOILER BACKFLOW PREVENTER FOR ALL APPLICABLE WATER SERVICES IN ACCORDANCE WITH THE TORONTO MUNICIPAL CODE, CHAPTER 851 WATER SUPPLY. THE BUILDING CODE AND CSA B64 SERIES STANDARDS.
5. THE BUILDING'S STORM AND SANITARY SYSTEMS MUST BE DESIGNED TO BE ABLE TO OPERATE UNDER MUNICIPAL SURCHARGE CONDITIONS.
6. THE OWNER IS ADVISED THAT SHOULD ANY PARTY, INCLUDING THE APPLICANT OR ANY SUBSEQUENT OWNER, APPLY FOR MORE THAN ONE CONDOMINIUM CORPORATION ENCOMPASSING ANY OR ALL OF THIS DEVELOPMENT OR MAKE AN APPLICATION THAT RESULTS IN A LAND DIVISION, STAFF MAY REQUIRE LEGAL ASSURANCES, INCLUDING BUT NOT LIMITED TO EASEMENTS, WITH RESPECT TO THE APPROVED SERVICES. SUCH ASSURANCES WILL BE DETERMINED AT THE TIME OF APPLICATION FOR CONDOMINIUM APPROVAL.



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Prior to commencement of the Work the Contractor shall verify all drawing dimensions, datums, and levels and the Contract Documents and with the conditions on site, ascertain any discrepancies between the site and the Contract Documents, and bring these items to the attention of the Architect for clarifications.

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www.superkul.ca

LEGEND

- PRINCIPAL ENTRY
- VEHICULAR ENTRY/ EXIT
- FIRE DEPARTMENT CONNECTION
- FIRE HYDRANT
- MANHOLE COVER
- CB CATCH BASIN
- HYDRO POLE
- EL ELECTRICAL STAND
- EXTENT OF BELOW GRADE
- BUILDING ELEMENT ABOVE
- OPEN TO BELOW
- EXTENT OF GROUND FLOOR
- 600X1800mm BICYCLE PARKING SPACE
- GEODETIC ELEVATION
- ELEVATION FROM ESTABLISHED GRADE
- 79.25 EXISTING GRADE ELEVATION P/H
- BARRIER FREE TURNING RADIUS
- PROPERTY LINE
- FFE FINISHED FLOOR ELEVATION
- TOP TOP OF PARAPET
- TOR TOP OF ROOF
- TOS TOP OF STRUCTURE
- TGS TORONTO GREEN STANDARDS
- TPZ TREE PROTECTION ZONE

NOTE:
SURVEY INFORMATION TAKEN FROM "TOPOGRAPHIC SURVEY OF PART OF LOT 6 CONCESSION 2 AND PART OF LOT 51 REGISTERED PLAN 1970, CITY OF TORONTO" BY SPEURT, VAN NOSTRAND & GIBSON LIMITED, DATED MARCH 6, 2015.

- VEGETATION DRIP LINE
- 10M SETBACK FROM VEGETATION DRIP LINE
- LTSTOS (LONG TERM STABLE TOP OF SLOPE) TALUS
- 10M SETBACK FROM LTSTOS (LONG TERM STABLE TOP OF SLOPE) TALUS

No.	Date	Issue/Revision
1	2025.11.28	ISSUED FOR ZBA

ONTARIO ASSOCIATION OF ARCHITECTS
MEMBER

5500 DUNDAS ST W

5500 Dundas St W, Etobicoke, ON M9B 1B7

Title:
Site Plan

Project No. 2413 | Scale As indicated

Drawing No.
A 050

APPENDIX B

CRITERIA

Transportation Sources

Guidance from the Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300 Environmental Noise Guideline was used to assess environmental noise generated by transportation-related sources. There are three aspects to consider, which include the following:

i. Transportation source sound levels in indoor living areas (living rooms and sleeping quarters), which determines building façade elements (windows, exterior walls, doors) sound insulation design recommendations.
ii. Transportation source sound levels at the plane of the window, which determines air-conditioning and ventilation system recommendations and associated warning clauses which inform the future occupants that windows and doors must be closed in order to meet the indoor sound level criteria.
iii. Transportation source sound levels in Outdoor Living Areas (OLAs), which determines OLA noise mitigation and related warning clause recommendations.

Road and Rail

Indoor Sound Level Criteria

For assessing sound originating from transportation sources, NPC-300 defines sound level criteria as summarized in **Table 1** for indoor areas of sensitive uses. The specified values are maximum sound levels and apply to the indicated indoor spaces with the windows and doors closed.

Table 1: Indoor Sound Level Criteria for Road and Rail Sources

Type of Space	Source	Sound Level Criteria (Indoors)	
		Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
Living Quarters Examples: Living, dining and den areas of residences, hospitals, nursing homes, schools and daycare centres	**Road**	45 dBA	
	Rail	40 dBA	
Sleeping Quarters	**Road**	45 dBA	40 dBA
	Rail	40 dBA	35 dBA

NPC-300 also provides guidelines for acceptable indoor sound levels that are extended to land uses and developments which are not normally considered noise sensitive. The guideline sound level criteria presented in **Table 2** are provided to inform good-practice design objectives.

Table 2: Supplementary Indoor Sound Level Criteria for Road and Rail Sources

Type of Space	Source	Sound Level Criteria (Indoors)	
		Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
General offices, reception areas, retail stores, etc.	**Road**	50 dBA	-
	Rail	45 dBA	-
Theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc.	**Road**	45 dBA	-
	Rail	40 dBA	-
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	**Road**	-	40 dBA
	Rail	-	35 dBA
Sleeping quarters of hotels/motels	**Road**	-	45 dBA
	Rail	-	40 dBA

Outdoor Living Areas (OLAs)

Outdoor Living Areas (OLAs) would include outdoor areas intended and designed for the quiet enjoyment of the outdoor environment and which are readily accessible from the building.

OLAs may include any common outdoor amenity spaces associated with a multi-unit residential development (e.g. courtyards, roof-top terraces), and/or private backyards and terraces with a minimum depth of 4m provided they are the only outdoor living area for the occupant. The sound level criteria for outdoor living areas is summarized in **Table 3**.

Table 3: Sound Level Criteria – Outdoor Living Area

Assessment Location	Sound Level Criteria (Outdoors)	
	Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
Outdoor Living Area (OLA) (Combined Road and Rail)	55 dBA	-

Outdoor and Plane of Window Sound Levels

In addition to the sound level criteria, noise control measures and requirements for ventilation and warning clauses requirements are recommended for residential land-uses based on predicted transportation source sound levels incident in the plane of window at bedrooms and living/dining rooms, and/or at outdoor living areas. These recommendations are summarized in **Table 4** below.

Table 4: Ventilation, Building Component, and Warning Clauses Recommendations for Road/Rail Sources

Assessment Location	Transportation Sound Level (Outdoors)		Recommendations
	Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h	
Plane of Window (Road)	> 65 dBA	> 60 dBA	Installation of air conditioning to allow windows to remained closed. The sound insulation performance of building components must be specified and designed to meet the indoor sound level criteria. Warning clause "Type D" is recommended.
	> 55 dBA	> 50 dBA	Applicable for low and medium density development: Forced-air ventilation system to allow for the future installation of air-conditioning. Warning clause "Type C" is recommended. Applicable for high density development: Air conditioning to allow windows to remained closed. Warning clause "Type D" is recommended.
Plane of Window (Rail [1, 2])	> 60 dBA	> 55 dBA	The acoustical performance of building façade components should be specified such that the indoor sound level limits are predicted to be achieved. Warning clause "Type D" is recommended.
	> 60 dBA ($L_{eq,\ 24hr}$) and < 100m from tracks		Exterior walls consisting of a brick veneer or masonry equivalent for the first row of dwellings. Warning clause "Type D" is recommended.
Outdoor Living Area (Combined Road and Rail [3])	≤ 60 dBA > 55 dBA	-	If sound levels are predicted to exceed 55 dBA, but are less than 60 dBA, noise controls may be applied to reduce the sound level to 55 dBA. If noise control measures are not provided, a warning clause "Type A" is recommended.
	> 60 dBA	-	Noise controls (barriers) should be implemented to meet the 55 dBA criterion. If mitigation is not feasible to meet the 55 dBA criterion for technical, economic or administrative reasons, an exceedance of 5 dB may be acceptable (to a maximum sound level of 60 dBA). In this case a warning clause "Type B" would be recommended.

Note(s):

1. Whistle noise is included (if applicable) in the determination of the sound level at the plane of window.
2. Some railway companies (e.g. CN, CP) may require that the exterior walls include a brick veneer or masonry equivalent for the façade facing the railway line, regardless of the sound level.
3. Whistle noise is not included in the determination of the sound level at the OLA.

Rail Layover Sites

NPC-300 provides a sound level limit for rail layover sites to be the higher of the background sound level or 55 dBA $L_{eq,1\text{-}hr,}$ for any one-hour period.

Rail Vibration Criteria

An assessment of rail vibration is generally recommended for developments within 75m of a rail corridor or rail yard, and adjacent to or within a setback of 15m of a transit (subway or light-rail) rail line.

GO, Freight, VIA Train

The generally accepted vibration criterion for sensitive land-uses is the threshold of perception for human exposure to vibration, being a vibration velocity level of 0.14 mm/s RMS in any one-third octave band centre frequency in the range of 4 Hz to 200 Hz.

This vibration criterion is based on a one-second exponential time-averaged maximum hold root-mean-square (RMS) vibration velocity level and is consistent with the Railway Associations of Canada (RAC, 2013) guideline, and the U.S. Federal Transit Authority (FTA, 2018) criterion for residential land-uses.

TTC Streetcar/Subway

If the predicted rms vertical vibration velocity from the Line exceeds 0.1 mm/sec, mitigation methods shall be applied during the detailed design to meet this criterion to the extent technologically, economically, and administratively feasible.

This vibration criterion is based on a one-second exponential time-averaged maximum hold root-mean-square (RMS) vibration velocity level and is consistent with the Toronto Transit Commission (TTC) guidelines for the assessment of potential vibration impact of future expansion (MOEE/TTC, 1993).

Aircraft

Land-use compatibility in the vicinity of airports is addressed in Ministry of the Environment, Conservation, and Parks (MECP) Guideline NPC-300 (MOE, 2013). The guideline provides recommendations for ventilation, and noise control for different Noise Exposure Forecast (NEF) values, which would be based on NEF contour maps available from the airport authority. The NEF values can be expressed as $L_{A,eq,24hr}$ sound levels by using the expression NEF = $L_{Aeq,24hr}$ -32 dBA.

Table 5: Indoor Sound Level Criteria for Aircraft Sources

Assessment Location	Indoor Sound Level Criteria NEF ($L_{eq,\ 24hr}$) [1]
Living/dining/den areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, etc.	NEF- 5 (37 dBA)
Sleeping quarters	NEF-0 (32 dBA)

NPC-300 also provides guidelines for acceptable indoor sound levels that are extended to land uses and developments which are not normally considered noise sensitive. The guideline sound level criteria presented in **Table 6** are provided to inform good-practice design objectives.

Table 6: Supplementary Indoor Sound Level Criteria for Aircraft Sources

Assessment Location	Indoor Sound Level Criteria[1]
General offices, reception areas, retail stores, etc.	NEF-15 (47 dBA)
Individual or semi-private offices, conference rooms, etc.	NEF-10 (42 dBA)
Sleeping quarters of hotels/motels, theatres, libraries, places of worship, etc.	NEF-5 (37 dBA)

Table 7: NPC-300 Sound Level Criteria for Aircraft (Outdoors)

Assessment Location	Outdoor Sound Level Criteria[1]
Outdoor areas, including OLA	NEF-30 (62 dBA)

Table 8: Ventilation, Building Component, and Warning Clauses Recommendations for Aircraft Sources

Assessment Location	Aircraft Sound Level	NPC-300 Requirements
	NEF ($L_{EQ,24\text{-}hr}$)	
Outdoors	≥NEF 30	Air conditioning to allow windows to remained closed. The sound insulation performance of building components must be specified and designed to meet the indoor sound level criteria. Warning clauses “Type D” and “Type B” are recommended.
	< NEF 30 ≥ NEF 25	The sound insulation performance of building components must be specified and designed to meet the indoor sound level criteria. Applicable for low and medium density development: Forced-air ventilation system to allow for the future installation of air-conditioning. Warning clause “Type C” is recommended. Applicable for high density development: Air conditioning to allow windows to remained closed. Warning clause “Type D” is recommended.
	< NEF 25	Further assessment not required

Stationary Sources

NPC-300 Sound Level Criteria – Stationary Sources

Guidance from the MECP NPC-300 Environmental Noise Guideline is used to assess environmental noise generated by stationary sources, for example industrial and commercial facilities.

Noise from stationary sources is treated differently from transportation sources and requires sound levels be assessed for the predictable worst-case one-hour average sound level (L_{eq}) for each period of the day. For assessing sound originating from stationary sources, NPC-300 defines sound level criteria for two types of Points of Reception (PORs): outdoor and plane of window.

Continuous Sources – Regular Operations

The assessment criteria for all PORs is the higher of either the exclusion limit per NPC-300 or the minimum background sound level that occurs or is likely to occur at a POR. The applicable exclusion limit is determined based on the level of urbanization or "Class" of the area. The NPC-300 exclusion limits for continuously operating stationary sources are summarized in **Table 9**.

Table 9: NPC-300 Exclusion Limits – Continuous and Quasi-Steady Impulsive Stationary Sources (LAeq-1hr)

Time Period	Class 1 Area		Class 2 Area		Class 3 Area		Class 4 Area	
	Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window
Daytime 0700-1900h	50 dBA	50 dBA	50 dBA	50 dBA	45 dBA	45 dBA	55 dBA	60 dBA
Evening 1900-2300h	50 dBA	50 dBA	45 dBA	50 dBA	40 dBA	40 dBA	55 dBA	60 dBA
Nighttime 2300-0700h	--	45 dBA	--	45 dBA	--	40 dBA	--	55 dBA

Note(s):

1. The applicable sound level criterion is the background sound level or the exclusion limit, whichever is higher.
2. Class 1, 2 and 3 sound level criteria apply to a window that is assumed to be open.
3. Class 4 area criteria apply to a window that is assumed closed. Class 4 area requires formal designation by the land-use planning authority.

Continuous Sources - Emergency Equipment Testing

Sound level criteria for emergency backup equipment (e.g. generators) operating in non-emergency situations such as testing or maintenance are 5 dB greater than the applicable sound level criteria for stationary sources.

In addition, the operation of emergency equipment under maintenance and testing conditions is assessed separately from all other stationary noise sources.

Impulsive Sources

For impulsive sound, other than quasi-steady impulsive sound, from a stationary source, the sound level criteria at a POR is expressed in terms of the Logarithmic Mean Impulse Sound Level (L_{LM}). As with the continuous noise sources, the assessment criteria for all PORs is the higher of either the exclusion limit per NPC-300 or the minimum background sound level that occurs or is likely to occur at a POR.

A summary of the exclusionary sound level limits is summarized in **Table 10.**

Table 10: NPC-300 Exclusion Limits – Impulsive Stationary Sources (L_{LM})

Time Period	Number of Impulses in Period of 1-Hour	Class 1 and 2 Areas		Class 3 Areas		Class 4 Areas	
		Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window
Daytime (0700-2300h)	9 or more	50 dBAI	50 dBAI	45 dBAI	45 dBAI	55 dBAI	60 dBAI
Nighttime (2300–0700h)		-	45 dBAI	-	40 dBAI	-	55 dBAI
Daytime (0700-2300h)	7 to 8	55 dBAI	55 dBAI	50 dBAI	50 dBAI	60dBAI	65 dBAI
Nighttime (2300–0700h)		-	50 dBAI	-	45 dBAI	-	60 dBAI
Daytime (0700-2300h)	5 to 6	60 dBAI	60 dBAI	55 dBAI	55 dBAI	65 dBAI	70 dBAI
Nighttime (2300–0700h)		-	55 dBAI	-	50 dBAI	-	65 dBAI
Daytime (0700-2300h)	4	65 dBAI	65 dBAI	60 dBAI	60 dBAI	70 dBAI	75 dBAI
Nighttime (2300–0700h)		-	60 dBAI	-	55 dBAI	-	70 dBAI
Daytime (0700-2300h)	3	70 dBAI	70 dBAI	65 dBAI	65 dBAI	75 dBAI	80 dBAI
Nighttime (2300–0700h)		-	65 dBAI	-	60 dBAI	-	75 dBAI
Daytime (0700-2300h)	2	75 dBAI	75 dBAI	70 dBAI	70 dBAI	80 dBAI	85 dBAI
Nighttime (2300–0700h)		-	70 dBAI	-	65 dBAI	-	80 dBAI
Daytime (0700-2300h)	1	80 dBAI	80 dBAI	75 dBAI	75 dBAI	85 dBAI	90 dBAI
Nighttime (2300–0700h)		-	75 dBAI	-	70 dBAI	-	85 dBAI

Note(s):

4. The applicable sound level criterion is the background sound level or the exclusion limit, whichever is higher.

D-Series Guidelines

The MECP D-series guidelines (MOE, 1995) provide direction for land use planning to maximize compatibility of industrial uses with adjacent land uses. The goal of Guideline D-6 is to minimize encroachment of sensitive land uses on industrial facilities and vice versa, in order to address potential incompatibility due to adverse effects such as noise, odour and dust.

For each class of industry, the guideline provides an estimate of potential influence area and states that this influence area shall be used in the absence of the recommended technical studies. Guideline D-6 also recommends a minimum separation distance between each class of industry and sensitive land uses (see **Table 11**). Section 4.10 of D-6 identifies exceptional circumstances with respect to redevelopment, infill and mixed-use areas. In these cases, the guideline suggests that separation distances at, or less than, the recommended minimum separation distance may be acceptable if a justifying impact assessment is provided.

Table 11: Summary of Guideline D-6

Industry Class	Definition	Potential Influence Area [1]	Recommended Minimum Separation Distance [1]
Class I	Small scale, self-contained, daytime only, infrequent heavy vehicle movements, no outside storage.	70 m	20 m
Class II	Medium scale, outdoor storage of wastes or materials, shift operations and frequent heavy equipment movement during the daytime.	300 m	70 m
Class III	Large scale, outdoor storage of raw and finished products, large production volume, continuous movement of products and employees during daily shift operations.	1000 m	300 m

Note(s):

1. Measured from Property Line to Property Line.

Guideline D-6 provides criteria for classifying industrial land uses, based on their outputs, scale of operations, processes, schedule and intensity of operations. **Table 12** provides the classification criteria and examples.

Table 12: Guideline D-6 Industrial Categorization Criteria

Criteria	Class I	Class II	Class III
Outputs	• Sound not audible off property • Infrequent dust and/ or odour emissions and not intense • No ground-borne vibration	• Sound occasionally audible off property • Frequent dust and/ or odour emissions and occasionally intense • Possible ground-borne vibration	• Sound frequently audible off property • Persistent and intense dust and/ or odour emissions • Frequent ground-borne vibration
Scale	• No outside storage • Small scale plant or scale is irrelevant in relation to all other criteria	• Outside storage permitted • Medium level of production	• Outside storage of raw and finished products • Large production levels
Process	• Self-contained plant or building which produces / stores a packaged product • Low probability of fugitive emissions	• Open process • Periodic outputs of minor annoyance • Low probability of fugitive emissions	• Open process • Frequent outputs of major annoyances • High probability of fugitive emissions
Operation / Intensity	• Daytime operations only • Infrequent movement of products and/or heavy trucks	• Shift operations permitted • Frequent movements of products and/or heavy trucks with majority of movements during daytime hours	• Continuous movement of products and employees • Daily shift operations permitted
Examples	• Electronics Manufacturing • Furniture refinishing • Beverage bottling • Auto parts • Packaging services • Dairy distribution • Laundry and linen supply	• Magazine printing • Paint spray booths • Metal command • Electrical production • Dairy product manufacturing • Feed packing plant	• Paint and varnish manufacturing • Organic chemicals manufacturing • Breweries • Solvent recovery plant • Soap manufacturing • Metal manufacturing

APPENDIX C

BA Group
1000 95 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1N6
CANADA

Peak Hour: 08:00 AM - 09:00 AM Weather: Broken Clouds (5 °C)

Start Time	N Approach BILLINGHAM RD				E Approach DUNDAS ST W					S Approach PAULART DR				W Approach DUNDAS ST W					Int. Total (15 min)
	Right	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	Right	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
2025-10-29 08:00:00	3	0	44	3	2	281	0	0	283	2	0	7	2	3	299	0	0	302	590
2025-10-29 08:15:00	5	0	54	5	2	277	0	0	279	1	0	3	1	1	331	0	1	332	617
2025-10-29 08:30:00	5	0	38	5	2	258	0	0	260	1	0	3	1	1	339	0	0	340	606
2025-10-29 08:45:00	4	0	40	4	4	248	0	0	252	3	0	2	3	1	320	0	0	321	580
Grand Total	17	0	176	17	10	1064	0	0	1074	7	0	15	7	6	1289	0	1	1295	**2393**
Approach%	100%	0%		-	0.9%	99.1%	0%		-	100%	0%		-	0.5%	99.5%	0%		-	-
Totals %	0.7%	0%		0.7%	0.4%	44.5%	0%		44.9%	0.3%	0%		0.3%	0.3%	53.9%	0%		54.1%	-
PHF	0.85	0		0.85	0.63	0.95	0		0.95	0.58	0		0.58	0.5	0.95	0		0.95	0.97
Heavy	0	0		0	1	144	0		145	0	0		0	0	148	0		148	293
Heavy %	0%	0%		0%	10%	13.5%	0%		13.5%	0%	0%		0%	0%	11.5%	0%		11.4%	12.2%
Lights	17	0		17	9	920	0		929	7	0		7	6	1141	0		1147	2100
Lights %	100%	0%		100%	90%	86.5%	0%		86.5%	100%	0%		100%	100%	88.5%	0%		88.6%	87.8%
Single-Unit Trucks	0	0		0	0	50	0		50	0	0		0	0	63	0		63	113
Single-Unit Trucks %	0%	0%		0%	0%	4.7%	0%		4.7%	0%	0%		0%	0%	4.9%	0%		4.9%	4.7%
Buses	0	0		0	1	81	0		82	0	0		0	0	67	0		67	149
Buses %	0%	0%		0%	10%	7.6%	0%		7.6%	0%	0%		0%	0%	5.2%	0%		5.2%	6.2%
Articulated Trucks	0	0		0	0	13	0		13	0	0		0	0	18	0		18	31
Articulated Trucks %	0%	0%		0%	0%	1.2%	0%		1.2%	0%	0%		0%	0%	1.4%	0%		1.4%	1.3%
Pedestrians	-	-	176	-	-	-	-	0	-	-	-	14	-	-	-	-	1	-	-
Pedestrians%	-	-	91.7%		-	-	-	0%		-	-	7.3%		-	-	-	0.5%		-
Bicycles on Crosswalk	-	-	0	-	-	-	-	0	-	-	-	1	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	0%		-	-	-	0%		-	-	0.5%		-	-	-	0%		-
Bicycles on Road	0	0		-	0	0	0		-	0	0		-	0	0	0		-	-
Bicycles on Road%	0%	0%			0%	0%	0%			0%	0%			0%	0%	0%			-

BA Group
1000 95 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1N6
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Broken Clouds (11 °C)

Start Time	N Approach BILLINGHAM RD				E Approach DUNDAS ST W					S Approach PAULART DR				W Approach DUNDAS ST W					Int. Total (15 min)
	Right	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	Right	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
2025-10-29 16:15:00	8	0	62	8	3	373	0	0	376	3	0	5	3	3	329	0	0	332	719
2025-10-29 16:30:00	6	0	43	6	0	281	0	0	281	4	0	6	4	2	389	0	0	391	682
2025-10-29 16:45:00	8	0	82	8	3	321	0	0	324	4	0	5	4	1	314	0	0	315	651
2025-10-29 17:00:00	9	0	58	9	2	321	0	0	323	4	0	5	4	2	320	0	0	322	658
Grand Total	31	0	245	31	8	1296	0	0	1304	15	0	21	15	8	1352	0	0	1360	**2710**
Approach%	100%	0%		-	0.6%	99.4%	0%		-	100%	0%		-	0.6%	99.4%	0%		-	-
Totals %	1.1%	0%		1.1%	0.3%	47.8%	0%		48.1%	0.6%	0%		0.6%	0.3%	49.9%	0%		50.2%	-
PHF	0.86	0		0.86	0.67	0.87	0		0.87	0.94	0		0.94	0.67	0.87	0		0.87	0.94
Heavy	1	0		1	1	107	0		108	0	0		0	0	126	0		126	235
Heavy %	3.2%	0%		3.2%	12.5%	8.3%	0%		8.3%	0%	0%		0%	0%	9.3%	0%		9.3%	8.7%
Lights	30	0		30	7	1189	0		1196	15	0		15	8	1226	0		1234	2475
Lights %	96.8%	0%		96.8%	87.5%	91.7%	0%		91.7%	100%	0%		100%	100%	90.7%	0%		90.7%	91.3%
Single-Unit Trucks	1	0		1	0	28	0		28	0	0		0	0	40	0		40	69
Single-Unit Trucks %	3.2%	0%		3.2%	0%	2.2%	0%		2.1%	0%	0%		0%	0%	3%	0%		2.9%	2.5%
Buses	0	0		0	1	67	0		68	0	0		0	0	73	0		73	141
Buses %	0%	0%		0%	12.5%	5.2%	0%		5.2%	0%	0%		0%	0%	5.4%	0%		5.4%	5.2%
Articulated Trucks	0	0		0	0	12	0		12	0	0		0	0	13	0		13	25
Articulated Trucks %	0%	0%		0%	0%	0.9%	0%		0.9%	0%	0%		0%	0%	1%	0%		1%	0.9%
Pedestrians	-	-	244	-	-	-	-	0	-	-	-	21	-	-	-	-	0	-	-
Pedestrians%	-	-	91.7%		-	-	-	0%		-	-	7.9%		-	-	-	0%		-
Bicycles on Crosswalk	-	-	1	-	-	-	-	0	-	-	-	0	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	0.4%		-	-	-	0%		-	-	0%		-	-	-	0%		-
Bicycles on Road	0	0		-	0	2	0		-	0	0		-	0	3	0		-	-
Bicycles on Road%	0%	0%			0%	100%	0%			0%	0%			0%	100%	0%			-

Peak Hour: 08:00 AM - 09:00 AM **Weather: Broken Clouds (5 °C)**

Start Time	N Approach PAULART DR						E Approach DUNDAS ST W						S Approach PAULART DR						W Approach DUNDAS ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2025-10-29 08:00:00	11	0	2	1	4	14	2	276	1	0	3	279	0	0	0	0	3	0	0	320	7	0	1	327	620
2025-10-29 08:15:00	5	0	1	0	1	6	0	259	0	0	2	259	0	0	0	0	3	0	0	331	7	1	0	339	604
2025-10-29 08:30:00	4	0	2	0	0	6	2	256	1	0	1	259	0	0	0	0	4	0	0	318	9	0	0	327	592
2025-10-29 08:45:00	10	0	2	0	1	12	4	230	0	0	0	234	0	0	0	0	2	0	0	308	10	1	0	319	565
Grand Total	30	0	7	1	6	38	8	1021	2	0	6	1031	0	0	0	0	12	0	0	1277	33	2	1	1312	**2381**
Approach%	78.9%	0%	18.4%	2.6%		-	0.8%	99%	0.2%	0%		-	0%	0%	0%	0%		-	0%	97.3%	2.5%	0.2%		-	**-**
Totals %	1.3%	0%	0.3%	0%		1.6%	0.3%	42.9%	0.1%	0%		43.3%	0%	0%	0%	0%		0%	0%	53.6%	1.4%	0.1%		55.1%	**-**
PHF	0.68	0	0.88	0.25		0.68	0.5	0.92	0.5	0		0.92	0	0	0	0		0	0	0.96	0.83	0.5		0.97	0.96
Heavy	1	0	0	0		1	0	144	0	0		144	0	0	0	0		0	0	156	0	0		156	301
Heavy %	3.3%	0%	0%	0%		2.6%	0%	14.1%	0%	0%		14%	0%	0%	0%	0%		0%	0%	12.2%	0%	0%		11.9%	12.6%
Lights	29	0	7	1		37	8	877	2	0		887	0	0	0	0		0	0	1121	33	2		1156	2080
Lights %	96.7%	0%	100%	100%		97.4%	100%	85.9%	100%	0%		86%	0%	0%	0%	0%		0%	0%	87.8%	100%	100%		88.1%	87.4%
Single-Unit Trucks	0	0	0	0		0	0	50	0	0		50	0	0	0	0		0	0	66	0	0		66	116
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	4.9%	0%	0%		4.8%	0%	0%	0%	0%		0%	0%	5.2%	0%	0%		5%	4.9%
Buses	1	0	0	0		1	0	81	0	0		81	0	0	0	0		0	0	70	0	0		70	152
Buses %	3.3%	0%	0%	0%		2.6%	0%	7.9%	0%	0%		7.9%	0%	0%	0%	0%		0%	0%	5.5%	0%	0%		5.3%	6.4%
Articulated Trucks	0	0	0	0		0	0	13	0	0		13	0	0	0	0		0	0	20	0	0		20	33
Articulated Trucks %	0%	0%	0%	0%		0%	0%	1.3%	0%	0%		1.3%	0%	0%	0%	0%		0%	0%	1.6%	0%	0%		1.5%	1.4%
Pedestrians	-	-	-	-	6	-	-	-	-	-	6	-	-	-	-	-	11	-	-	-	-	-	1	-	**-**
Pedestrians%	-	-	-	-	24%		-	-	-	-	24%		-	-	-	-	44%		-	-	-	-	4%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	4%		-	-	-	-	0%		**-**
Bicycles on Road	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**
Bicycles on Road%	0%	0%	0%	0%			0%	0%	0%	0%			0%	0%	0%	0%			0%	0%	0%	0%			**-**

Peak Hour: 04:00 PM - 05:00 PM Weather: Broken Clouds (11 °C)

Start Time	N Approach PAULART DR						E Approach DUNDAS ST W						S Approach PAULART DR						W Approach DUNDAS ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2025-10-29 16:00:00	5	0	4	1	4	10	1	310	2	0	0	313	0	0	0	0	5	0	1	294	10	0	2	305	628
2025-10-29 16:15:00	7	1	3	0	11	11	0	331	3	0	0	334	3	0	0	0	6	3	0	328	20	0	2	348	696
2025-10-29 16:30:00	2	0	2	0	5	4	1	277	1	0	2	279	0	0	1	0	5	1	0	344	17	0	0	361	645
2025-10-29 16:45:00	4	1	1	0	2	6	2	294	2	0	0	298	0	2	0	0	5	2	0	325	9	0	0	334	640
Grand Total	18	2	10	1	22	31	4	1212	8	0	2	1224	3	2	1	0	21	6	1	1291	56	0	4	1348	**2609**
Approach%	58.1%	6.5%	32.3%	3.2%		-	0.3%	99%	0.7%	0%		-	50%	33.3%	16.7%	0%		-	0.1%	95.8%	4.2%	0%		-	**-**
Totals %	0.7%	0.1%	0.4%	0%		1.2%	0.2%	46.5%	0.3%	0%		46.9%	0.1%	0.1%	0%	0%		0.2%	0%	49.5%	2.1%	0%		51.7%	**-**
PHF	0.64	0.5	0.63	0.25		0.7	0.5	0.92	0.67	0		0.92	0.25	0.25	0.25	0		0.5	0.25	0.94	0.7	0		0.93	0.94
Heavy	0	0	1	0		1	0	114	1	0		115	0	0	1	0		1	0	132	0	0		132	249
Heavy %	0%	0%	10%	0%		3.2%	0%	9.4%	12.5%	0%		9.4%	0%	0%	100%	0%		16.7%	0%	10.2%	0%	0%		9.8%	9.5%
Lights	18	2	9	1		30	4	1098	7	0		1109	3	2	0	0		5	1	1159	56	0		1216	2360
Lights %	100%	100%	90%	100%		96.8%	100%	90.6%	87.5%	0%		90.6%	100%	100%	0%	0%		83.3%	100%	89.8%	100%	0%		90.2%	90.5%
Single-Unit Trucks	0	0	0	0		0	0	26	1	0		27	0	0	1	0		1	0	42	0	0		42	70
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	2.1%	12.5%	0%		2.2%	0%	0%	100%	0%		16.7%	0%	3.3%	0%	0%		3.1%	2.7%
Buses	0	0	1	0		1	0	71	0	0		71	0	0	0	0		0	0	73	0	0		73	145
Buses %	0%	0%	10%	0%		3.2%	0%	5.9%	0%	0%		5.8%	0%	0%	0%	0%		0%	0%	5.7%	0%	0%		5.4%	5.6%
Articulated Trucks	0	0	0	0		0	0	17	0	0		17	0	0	0	0		0	0	17	0	0		17	34
Articulated Trucks %	0%	0%	0%	0%		0%	0%	1.4%	0%	0%		1.4%	0%	0%	0%	0%		0%	0%	1.3%	0%	0%		1.3%	1.3%
Pedestrians	-	-	-	-	21	-	-	-	-	-	2	-	-	-	-	-	21	-	-	-	-	-	4	-	**-**
Pedestrians%	-	-	-	-	42.9%		-	-	-	-	4.1%		-	-	-	-	42.9%		-	-	-	-	8.2%		**-**
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	2%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Road	0	0	0	0		-	0	2	0	0		-	0	0	0	0		-	0	4	0	0		-	**-**
Bicycles on Road%	0%	0%	0%	0%			0%	100%	0%	0%			0%	0%	0%	0%			0%	100%	0%	0%			**-**

Spectrum

Turning Movement Count
Location Name: DUNDAS ST W & THE EAST MALL CRES
Date: Wed, Oct 29, 2025 Deployment Lead: Rey Fernandez

BA Group
1000 95 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1N6
CANADA

Peak Hour: 08:00 AM - 09:00 AM **Weather: Broken Clouds (5 °C)**

Start Time	N Approach THE EAST MALL CR						E Approach DUNDAS ST W						S Approach THE EAST MALL CR						W Approach DUNDAS ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2025-10-29 08:00:00	25	5	15	1	1	46	16	239	10	1	53	266	6	1	5	0	3	12	11	282	23	1	1	317	641
2025-10-29 08:15:00	13	11	15	0	1	39	18	271	7	1	56	297	4	2	6	0	1	12	14	308	32	2	2	356	704
2025-10-29 08:30:00	29	17	21	0	3	67	21	206	8	0	38	235	7	2	9	0	4	18	11	312	27	1	4	351	671
2025-10-29 08:45:00	32	13	16	0	1	61	19	247	5	2	34	273	9	5	8	0	5	22	11	298	54	0	1	363	719
Grand Total	99	46	67	1	6	213	74	963	30	4	181	1071	26	10	28	0	13	64	47	1200	136	4	8	1387	**2735**
Approach%	46.5%	21.6%	31.5%	0.5%		-	6.9%	89.9%	2.8%	0.4%		-	40.6%	15.6%	43.8%	0%		-	3.4%	86.5%	9.8%	0.3%		-	**-**
Totals %	3.6%	1.7%	2.4%	0%		7.8%	2.7%	35.2%	1.1%	0.1%		39.2%	1%	0.4%	1%	0%		2.3%	1.7%	43.9%	5%	0.1%		50.7%	**-**
PHF	0.77	0.68	0.8	0.25		0.79	0.88	0.89	0.75	0.5		0.9	0.72	0.5	0.78	0		0.73	0.84	0.96	0.63	0.5		0.96	0.95
Heavy	45	2	7	0		54	8	135	0	0		143	1	0	0	0		1	1	143	37	0		181	379
Heavy %	45.5%	4.3%	10.4%	0%		25.4%	10.8%	14%	0%	0%		13.4%	3.8%	0%	0%	0%		1.6%	2.1%	11.9%	27.2%	0%		13%	13.9%
Lights	54	44	60	1		159	66	828	30	4		928	25	10	28	0		63	46	1057	99	4		1206	2356
Lights %	54.5%	95.7%	89.6%	100%		74.6%	89.2%	86%	100%	100%		86.6%	96.2%	100%	100%	0%		98.4%	97.9%	88.1%	72.8%	100%		87%	86.1%
Single-Unit Trucks	26	2	3	0		31	1	47	0	0		48	0	0	0	0		0	0	64	19	0		83	162
Single-Unit Trucks %	26.3%	4.3%	4.5%	0%		14.6%	1.4%	4.9%	0%	0%		4.5%	0%	0%	0%	0%		0%	0%	5.3%	14%	0%		6%	5.9%
Buses	0	0	4	0		4	7	75	0	0		82	0	0	0	0		0	0	62	2	0		64	150
Buses %	0%	0%	6%	0%		1.9%	9.5%	7.8%	0%	0%		7.7%	0%	0%	0%	0%		0%	0%	5.2%	1.5%	0%		4.6%	5.5%
Articulated Trucks	19	0	0	0		19	0	13	0	0		13	1	0	0	0		1	1	17	16	0		34	67
Articulated Trucks %	19.2%	0%	0%	0%		8.9%	0%	1.3%	0%	0%		1.2%	3.8%	0%	0%	0%		1.6%	2.1%	1.4%	11.8%	0%		2.5%	2.4%
Pedestrians	-	-	-	-	6	-	-	-	-	-	181	-	-	-	-	-	12	-	-	-	-	-	8	-	**-**
Pedestrians%	-	-	-	-	2.9%		-	-	-	-	87%		-	-	-	-	5.8%		-	-	-	-	3.8%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0.5%		-	-	-	-	0%		**-**
Bicycles on Road	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**
Bicycles on Road%	0%	0%	0%	0%			0%	0%	0%	0%			0%	0%	0%	0%			0%	0%	0%	0%			**-**

Peak Hour: 04:00 PM - 05:00 PM Weather: Broken Clouds (11 °C)

Start Time	N Approach THE EAST MALL CR						E Approach DUNDAS ST W						S Approach THE EAST MALL CR						W Approach DUNDAS ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
2025-10-29 16:00:00	150	5	46	0	3	201	36	283	8	1	49	328	8	13	48	0	25	69	4	252	52	0	2	308	906
2025-10-29 16:15:00	92	23	53	1	7	169	42	279	7	1	59	329	19	19	40	0	9	78	4	252	50	0	8	306	882
2025-10-29 16:30:00	79	10	42	0	5	131	52	257	9	1	45	319	15	25	46	0	19	86	1	337	57	1	6	396	932
2025-10-29 16:45:00	65	14	45	0	3	124	46	241	9	0	95	296	15	22	38	0	9	75	1	259	41	1	2	302	797
Grand Total	386	52	186	1	18	625	176	1060	33	3	248	1272	57	79	172	0	62	308	10	1100	200	2	18	1312	**3517**
Approach%	61.8%	8.3%	29.8%	0.2%		-	13.8%	83.3%	2.6%	0.2%		-	18.5%	25.6%	55.8%	0%		-	0.8%	83.8%	15.2%	0.2%		-	**-**
Totals %	11%	1.5%	5.3%	0%		17.8%	5%	30.1%	0.9%	0.1%		36.2%	1.6%	2.2%	4.9%	0%		8.8%	0.3%	31.3%	5.7%	0.1%		37.3%	**-**
PHF	0.64	0.57	0.88	0.25		0.78	0.85	0.94	0.92	0.75		0.97	0.75	0.79	0.9	0		0.9	0.63	0.82	0.88	0.5		0.83	0.94
Heavy	47	0	10	0		57	7	107	1	0		115	0	0	3	0		3	0	119	25	0		144	319
Heavy %	12.2%	0%	5.4%	0%		9.1%	4%	10.1%	3%	0%		9%	0%	0%	1.7%	0%		1%	0%	10.8%	12.5%	0%		11%	9.1%
Lights	339	52	176	1		568	169	953	32	3		1157	57	79	169	0		305	10	981	175	2		1168	3198
Lights %	87.8%	100%	94.6%	100%		90.9%	96%	89.9%	97%	100%		91%	100%	100%	98.3%	0%		99%	100%	89.2%	87.5%	100%		89%	90.9%
Single-Unit Trucks	25	0	3	0		28	0	26	1	0		27	0	0	1	0		1	0	38	11	0		49	105
Single-Unit Trucks %	6.5%	0%	1.6%	0%		4.5%	0%	2.5%	3%	0%		2.1%	0%	0%	0.6%	0%		0.3%	0%	3.5%	5.5%	0%		3.7%	3%
Buses	0	0	7	0		7	6	63	0	0		69	0	0	0	0		0	0	65	0	0		65	141
Buses %	0%	0%	3.8%	0%		1.1%	3.4%	5.9%	0%	0%		5.4%	0%	0%	0%	0%		0%	0%	5.9%	0%	0%		5%	4%
Articulated Trucks	22	0	0	0		22	1	18	0	0		19	0	0	2	0		2	0	16	14	0		30	73
Articulated Trucks %	5.7%	0%	0%	0%		3.5%	0.6%	1.7%	0%	0%		1.5%	0%	0%	1.2%	0%		0.6%	0%	1.5%	7%	0%		2.3%	2.1%
Pedestrians	-	-	-	-	18	-	-	-	-	-	248	-	-	-	-	-	61	-	-	-	-	-	17	-	**-**
Pedestrians%	-	-	-	-	5.2%		-	-	-	-	71.7%		-	-	-	-	17.6%		-	-	-	-	4.9%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0.3%		-	-	-	-	0.3%		**-**
Bicycles on Road	0	0	1	0		-	0	0	0	0		-	1	0	0	0		-	2	0	0	0		-	**-**
Bicycles on Road%	0%	0%	100%	0%			0%	0%	0%	0%			100%	0%	0%	0%			100%	0%	0%	0%			**-**

Caelan Weber-Martin

From: Rail Data Requests <RailDataRequests@metrolinx.com>
Sent: Monday, December 1, 2025 10:47 AM
To: Amy O'Neill
Cc: Adam Cho; Caelan Weber-Martin
Subject: RE: 5500 Dundas St W: Rail Traffic Data Request - RWDI #2600994

Good morning,

Further to your request dated November 28, 2025, the subject lands (5500 Dundas Street West, Toronto) are located within 300 metres of the Canadian Pacific (CP) Galt Subdivision (which carries Milton GO rail service).

It's anticipated that GO rail service on this Subdivision will be comprised of diesel trains only. The GO rail fleet combination on this Subdivision will consist of up to 1 locomotive and 10 passenger cars. The typical GO rail weekday train volume forecast near the subject lands, including both revenue and equipment trips is in the order of 22 trains. The planned detailed trip breakdown is listed below:

	1 Diesel Locomotive		1 Diesel Locomotive
Day (0700-2300)	20	Night (2300-0700)	2

The current track design speed near the subject lands is 70 mph (113 km/h).

There are no *anti-whistling by-laws* in affect near the subject lands.

Operational information is subject to change and may be influenced by, among other factors, service planning priorities, operational considerations, funding availability and passenger demand.

It should be noted that this information only pertains to Metrolinx rail service. It would be prudent to contact other rail operators in the area directly for rail traffic information pertaining to non-Metrolinx rail service.

I trust this information is useful. Should you have any questions or concerns, please do not hesitate to contact me.

Best Regards,

Jenna Auger (She/Her)
Project Analyst, Adjacent Construction Review (ACR)
Development & Real Estate Management
T: (416)-881-0579
20 Bay Street | Toronto | Ontario | M5J 2W3

METROLINX

1290 Central Parkway West
Mississauga, Ontario
Canada L5C 4R3

T 905 803 3429
E josie_tomei@cpr.ca

January 11, 2018

Via email: mikk.toome@rwdi.com

Mikk Toome
RWDI Engineers and Consulting Scientists
901 King Street West, Suite 400
Toronto, ON M5V 3H5

Dear Sir/Madam:

Re: Rail Traffic Volumes, CP Mileage 10.13, Galt Subdivision, 5509 Dundas Street West, P.O. 1801700-1000-100

This is in reference to your request for rail traffic data in the vicinity of 5509 Dundas Street West in the City of Toronto. The study area is located at mile 10.13 of our Galt Subdivision, classified as a Principal Main line.

The information requested is as follows:

1. Number of freight trains between 0700 & 2300: 8
   Number of freight trains between 2300 & 0700: 7
   Number of passenger trains (GO Transit): 20
   (GO Trains run weekdays between 0640 & 1925)

2. Average number of cars per train: 53 (freight only)
   Maximum cars per train freight: 156 (freight only)

3. Number of locomotives per train: 2 (4 Maximum)

4. Maximum permissible train speed is 60 miles per hour – freight, 70 miles per hour - passenger

5. Whistle signal is prohibited approaching public grade crossings through the study area. However, the whistle may be sounded if deemed necessary by the train crew for safety reasons.

6. There are 3 main tracks at this location along with a lead track, all continuously welded. The lead track, located south of the main lines, is an assigned train serving customers on demand via the spur lines in the area. Additional idling may occur with trains travelling through switches.

The information provided is based on recent rail traffic. Variations of the above may exist on a day-to-day basis. Specific measurements may also vary significantly depending on customer needs.

Yours truly,

Josie Tomei SR/WA
Specialist Real Estate Sales & Acquisitions – Ontario

APPENDIX D

NOISE MITIGATION GUIDANCE

Acoustic/Noise Barrier

Transportation Noise

Generally, noise controls to attenuate transportation sound levels at Outdoor Living Areas (OLAs) would consist of the implementation of acoustic/noise barriers with materials that would meet the guidance included in NPC-300, for example:

- A wall, berm, wall/berm combination or similar structure, used as a noise control measure, and high enough to break the line-of-sight between the source and the receptor.
- The minimum surface density (face weight) is 20 kg/m^2
    - Many materials could satisfy the surface density requirement, e.g. wood, glass, concrete, Plexiglas, Acrylite.
    - The required thickness can be determined by dividing the 20 kg/m^2 face weight by the material density (kg/m^3). Typically, this would imply:
        - 50 mm (2”) thickness of wood
        - 13 mm (0.5") thickness of lighter plastic (like Plexiglas or PVC)
        - 10 mm (0.4") thickness of heavier material (like aluminum, glass, concrete)
- The barrier should be structurally sound, appropriately designed to withstand wind and snow load, and constructed without cracks or surface gaps. Joints between panels may need to be overlapped to ensure surfaces are free of gaps, particularly for wood construction.
- Any gaps under the barrier that are necessary for drainage purposes should be minimized and localized, so that the acoustical performance of the barrier is maintained.
- If a sound absorptive face is to be included in the barrier design, the minimum noise reduction coefficient is recommended to be NRC 0.7.

Mechanical Equipment

Noise controls to attenuate mechanical equipment sound levels at Outdoor Points of Reception (OPOR) would consistent with the of the implementation of acoustic/noise barriers for Transportation sources, with the exception of the following:

- The minimum surface density (face weight) is **10** kg/m^2.

All other barrier quality and characteristics would be consistent with the details provided above.

Building Ventilation and Air Conditioning

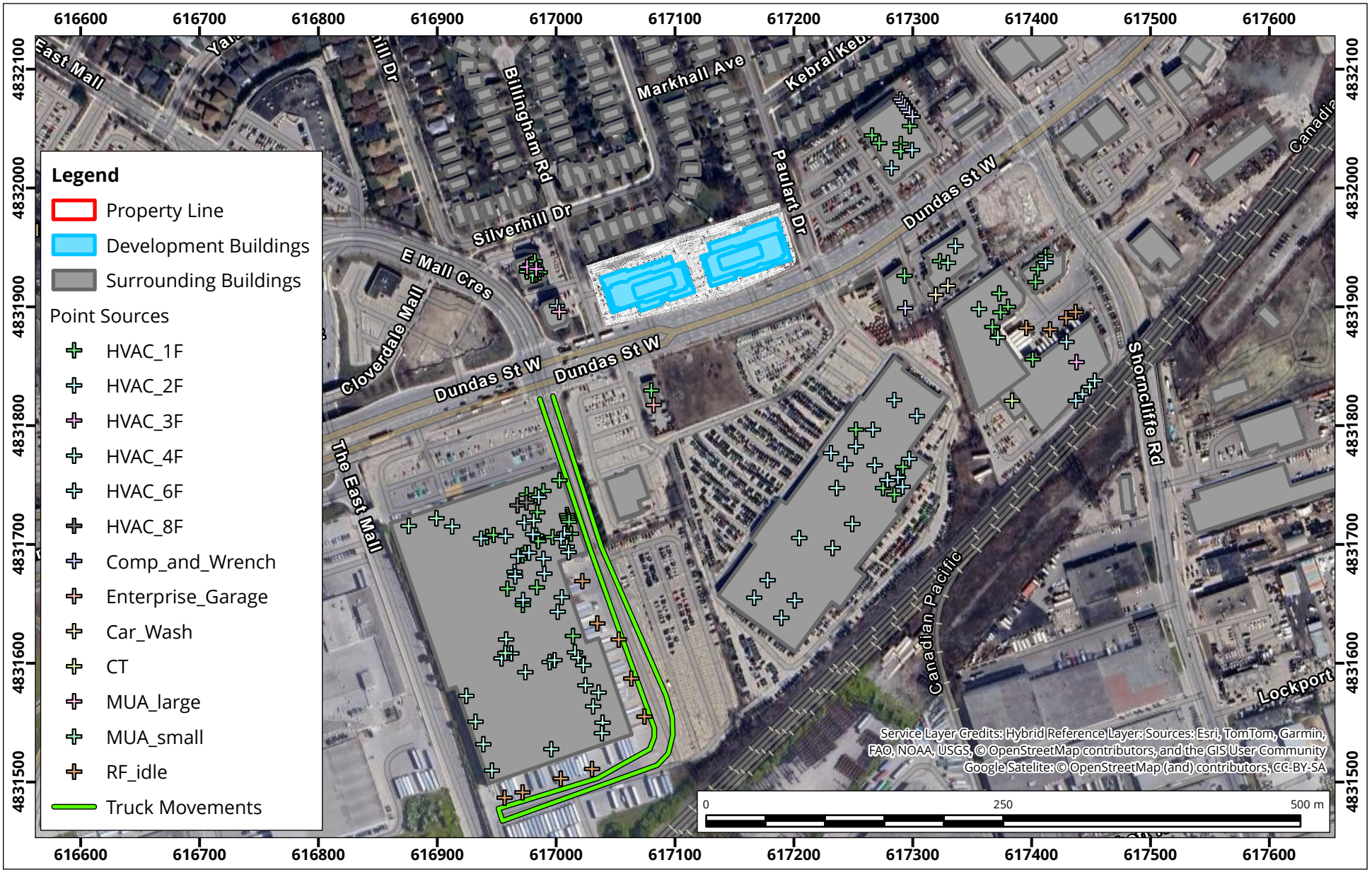
The use of air conditioning itself is not a noise control measure; however, it allows for windows and doors to remain closed, thereby reducing the indoor sound levels.

NPC-300 provides the following guidance with respect to implementation of building ventilation and air conditioning:

a. the noise produced by the proposed ventilation system in the space served does not exceed 40 dBA. In practice, this condition usually implies that window air conditioning units are not acceptable;
b. the ventilation system complies with all national, provincial and municipal standards and codes;
c. the ventilation system is designed by a heating and ventilation professional; and
d. the ventilation system enables the windows and exterior doors to remain closed.

Air conditioning systems also need to comply with Publication NPC-216, and/or any local municipal noise by-law that has provisions relating to air conditioning equipment.

APPENDIX E



Stationary Sources

Location of Stationary Sources in Relation to the Proposed Development

Map Projection: NAD 1983 UTM Zone 17N

5500 Dundas St W

True North

Project #: 2600994

Drawn by:CWM	Figure: E.1
Approx. Scale:	1:4,500
Date Revised:	Dec 17, 2025

Map Document: \\rwdgroup.net\rwd\VM_Jobs\2026\2600994\03\Work Items\20Environmental Noise\Analysis\04 ArcGIS - 5500 Dundas St W\5500 Dundas St W.aprx

APPENDIX G

WARNING CLAUSES

All NPC-300 warning clauses are presented as general guidance for context. However, not all warning clauses may apply to this proposed development. See the report body text for which warning clauses are recommended.

Warning clauses are recommended to be included on all development agreements, offers of purchase and agreements of purchase and sale or lease. Warning clauses may be used individually or in combination. The following warning clauses are recommended based on the applicable guidelines; however, wording may be modified/customized during consultation with the planning authority to best suit the proposed development.

Transportation Sources

NPC-300 Type A: Recommended to address surface transportation sound levels in OLAs if sound level is in the range of >55 dBA but ≤ 60 dBA, and noise controls have not been provided.

"Purchasers/tenants are advised that sound levels due to increasing road traffic (rail traffic) (air traffic) may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."

NPC-300 Type B: Recommended to address surface transportation sound levels in OLAs if the sound level is in the range of >55 dBA but ≤ 60 dBA, and noise controls have been provided. Recommended to address outdoor aircraft sound levels ≥NEF 30.

"Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic (rail traffic) (air traffic) may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."

NPC-300 Type C: Applicable for low and medium density developments only, recommended to address transportation sound levels at the plane of window.

"This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."

NPC-300 Type D: Recommended to address transportation sound levels at the plane of window.

"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."

Proximity to Railway Line: Metrolinx/CN/CP/VIA Warning Clause for developments that are within 300 metres of the right-of-way

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

Stationary Sources

NPC-300 Type E: Recommended to address proximity to commercial/industrial land-use

"Purchasers/tenants are advised that due to the proximity of the adjacent industrial/commercial land-uses, noise from the industrial/commercial land-uses may at times be audible."

NPC-300 Type F: Recommended to for Class 4 Area Notification

"Purchasers/tenants are advised that sound levels due to the adjacent industry (facility) (utility) are required to comply with sound level limits that are protective of indoor areas and are based on the assumption that windows and exterior doors are closed. This dwelling unit has been supplied with a ventilation/air conditioning system which will allow windows and exterior doors to remain closed."