Road Traffic and Stationary Noise Impact Study

151 Harmony Living Project - 439 Peel Street, Collingwood

JJ-00723-NIS1

August 7, 2025, Reference No. JJ-00723-NIS1

Harjinder Kang
Mamta Developments Inc.
54 Howell Street,
Brampton, ON-L6Y 3H7

Dear Mr. Kang:

Re: Road Traffic and Stationary Noise Impact Study
439 Peel Street South, Collingwood, Ontario

1. Introduction

JJ Acoustic Engineering Ltd. (JJAE) was retained to complete a Road Traffic and Stationary Noise Impact Study (Study) for the residential development located at 439 Peel Street in Collingwood, Ontario (Site). The Site will be developed into three 4-storey residential buildings (A,B,C,) and one 5-storey residential building (D). JJAE has provided a copy of the most up-to-date Site Plan in Attachment A.

The Study was prepared consistent with Ontario Ministry of the Environment, Conservation and Park (MOECP) NPC 300, "Environmental Noise Guideline, Stationary and Transportation Sources–Approval and Planning" dated August 2013.

This Study has determined that the potential environmental noise impact from road traffic is significant. The proposed development will need the following: a requirement for central air-conditioning and noise warning clauses. Road traffic noise control requirements for the Site were determined based on road traffic volumes provided by the Town of Collingwood (Town) and forecasted to 10 years from the date of this study. A copy of the traffic data has been supplied in Attachment B.

The following attachments were included with this Study:

- Attachment A – Site Plan
- Attachment B – Traffic Data Summary Table & Sample Stamson Traffic Model Outputs
- Attachment C – Stationary Noise Impact Figures
- Attachment D – Stationary Noise Impact Source Table

2. Road Traffic Analysis

2.1 Road Traffic Noise Modeling Methodology

The road traffic noise impact was conducted using STAMSON, the MOECP's computerized model of ORNAMENT. The Application of the model for the site was consistent with the ORNAMENT technical documents. The computer model input parameters include, among other data, the number of road segments, number of house rows, the positional relationship of the receptor to a noise source or barrier in terms of distance, elevation and angle of exposure to the source, the basic site topography, the ground surface type, traffic volumes, traffic composition and speed limit.

The predicted sound level is based on the 1-hour equivalent sound level, designated as Leq, and is adjusted by the STAMSON program to the 16-hour daytime and the 8-hour nighttime equivalent sound level. The applicable noise criteria for noise sensitive spaces are specified in terms of the 16-hour daytime period (7:00 a.m. to 11:00 p.m.) and 8-hour nighttime period (11:00 p.m. to 7:00 a.m.) enabling a direct comparison between the STAMSON model output and the noise limits.

Where there are multiple sources of noise, such as road and rail, JJAE evaluated noise control measures by combining both road and rail sources and applying measures as described in Section C7.3 of NPC 300.

2.2 Road Traffic Model Input Parameters

This section describes the STAMSON model input parameters used to predict road traffic noise impact for the Site.

The Site has three significant roadways in the vicinity of the development: Peel Street approximately 22 meters from the West façade of Building A, Collins Street approximately 100 meters from the North Façade of Building A, and Raglan Street approximately 200 meters from the East façade of Building A. Where there are intervening and off-site structures that provide line-of-sight obstruction to the roads, JJAE did not include line-of-sight obstruction in our analysis as to calculate worst-case noise impact.

JJAE reviewed other surrounding roadways in the vicinity of the Site and only significant roadways were used in our modeling, other roadways were considered to be insignificant or beyond our red flag zone.

2.2.1 Road Traffic Parameters

The traffic data provided by the Town has been summarized below:

Peel Street:

- Current AADT (2024): 5,000
- Forecast AADT (2030): 6,363
- Commercial Vehicle Rates: 1% medium trucks and 2% heavy trucks
- Posted Speed Limit: 50 km/h
- Day Night Splits: 90% day and 10% night

Collin Street:

- Current AADT (2024): 5,000
- Forecast AADT (2035): 6,363
- Commercial Vehicle Rates: 1% medium trucks and 2% heavy trucks
- Posted Speed Limit: 50 km/h
- Day Night Splits: 90% day and 10% night

Raglan Street:

- Current AADT (2024): 5,000
- Forecast AADT (2035): 6,363
- Commercial Vehicle Rates: 3% medium trucks and 2% heavy trucks
- Posted Speed Limit: 50 km/h
- Day Night Splits: 90% day and 10% night

The traffic data is the foundation of this analysis and the Study will be updated if the values change. JJAE assumed 2.5% annual growth to forecast AADT. JJAE has assumed 1% medium trucks and 2% heavy trucks for both Peel Street and Collin Street and 3% medium trucks and 2% heavy trucks for Raglan Street as these are small rural roadways which don't typically have a significant amount of truck traffic. Traffic data was supplied by the Town. The Town's AADT report for this Noise Studies report has been supplied in Attachment B.

2.3 Road Traffic Noise Modeling Results

JJAE calculated the Plane of Window (POW) noise exposure for each floor at the Site for the separate daytime and nighttime periods.

The STAMSON road traffic model outputs are provided in Attachment B.

2.4 Road Traffic Modeling Discussion

Noise control requirements will be defined based on NPC 300.

Daytime Outdoor Living Area Assessment (NPC 300, Section C7.1.1)

NPC 300 section A5 (pages 13-14) defines an Outdoor Living Area (OLA). As part of this definition, a balcony or terrace is considered an OLA if it has a minimum depth of 4 meters. All balconies are less than 4 m in depth and therefore will not be considered as OLAs.

JJAE has identified three locations for the OLA's. OLA #1 is located approximately 5 meters from building A West façade, OLA #2 is located between building B South façade and building C North façade OLA #3 is located approximately 5 meters from building D West façade. Table below shows the results of our calculations.

Points of Reception	Worst Case Daytime Sound Level (dBA)	Daytime Noise Limit (dBA)
OLA #1	60	55
OLA #2	54	55
OLA #3	60	55

Warning Clause Type A will be required for all units. OLA locations have been indicated in Attachment A – Site Plan.

Plane of a Window – Ventilation Requirements (NPC 300, Section C7.1.2)

The predicted daytime and nighttime Plane of Window (POW) noise impact assumes a worst-case and direct line of sight noise exposure to both roads, unless the building itself blocks line-of-sight (full or partial).

JJAE has used the following criteria, which is a summary of NPC 300 requirements, to evaluate the Site noise impacts from road traffic noise:

Daytime Level (dBA)	Nighttime Level (dBA)	Ventilation Requirements and Warning Clauses	Special Building Components
55	50	Not Required	Not Required
55 – 65	50 – 60	Yes, with Type C Warning Clause	Not Required
66 or more	61 or more	Yes, with Type D Warning Clause	Yes

Table B.1 summarizes the predicted worst-case sound levels and the requirements for the units. The following warning clause is required:

Warning Clause A: "Purchasers/tenants are advised that sound levels due to increasing road 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, Conservation and Parks."

Warning Clause C: "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, Conservation and Parks."

Indoor Living Areas – Building Components (NPC 300, Section C7.1.3)

At minimum, the building must be constructed to standard Ontario Building Code requirements.

3. Stationary Noise Impact Analysis

3.1 Stationary Noise Impact Sound Level Criteria

The general criteria for stationary noise sources are defined by NPC 300. The criteria defined in Table C-5 and C-6, "Exclusion Limit Values of One-Hour Equivalent Sound Level (Leq, dBA) Outdoor Points of Reception" and "Exclusion Limit Values of One-Hour Equivalent Sound Level (Leq, dBA) Plane of Window of Noise Sensitive Spaces" are used to evaluate the noise impact at the proposed development.

The criteria for a Class 1 area have been summarized below:

Receiver Category	**Time Period**	**Stationary Noise Criteria**
Outdoor Living Area (OLA)	Day = 7:00 to 23:00	Leq = 50 dBA
Plane of Window (POW)	Day = 7:00 to 23:00	Leq = 50 dBA
	Night = 23:00 to 7:00	Leq = 45 dBA

3.2 Modelling Methodology

The stationary noise impact was evaluated using the CADNA A acoustic modelling software that is based on the ISO 9613-2 standard. The data for all potential stationary noise sources was summarized in Attachment D.

JJAE used the following assumptions in our Cadna A model:

- **Ground Absorption**: Default ground absorption coefficient of 0.7 was used.
- **Temperature**: 10°C
- **Humidity**: 70%
- **Building Reflection Coefficient**: Absorption Coefficient Alpha of 0.37 (Reflection Loss of 2dB, Structured Façade) was used.
- **Time-Weighted Adjustment:** where sources operate non-continuously JJAE has provided operating times and as shown in Sections 4 and 5.
- **Tonality**: A 5 dbA tonal penalty was applied to all tonal sources, where applicable. JJAE has provided a (T) for sources identified as tonal in Sections 4 and 5.
- **Reflection Order**: A maximum reflection order of 1 was used to evaluate indirect noise impact.

4. Noise Impact Summary – From Site to Environment

The noise from the Site to the neighboring buildings could not be accounted for because the site has not undergone mechanical design yet. An addendum to this report should be completed once a mechanical design is done to account for noise from the Site to the neighboring building.

5. Noise Impact Summary – From Environment to Site

There are several buildings near the site. JJAE has identified several potential stationary noise sources including:

- 2 Fan HVAC Units (60 minutes daytime, 30 minutes nighttime)
- Sheet Metal Forming (Grinding, Hammering) (30 minutes daytime, 0 minutes nighttime)

A summary of the noise sources used in our modelling is provided in Attachment D.

JJAE modelled the noise impact from all significant noise sources to the Site. The results are summarized in the table below and illustrated on Figure 1.

Building A	Worst Case Daytime Sound Level (dBA)	Daytime Noise Limit (dBA)	Worst Case Nighttime Sound Level (dBA)	Nighttime Noise Limit (dBA)	Limits met
North	50	50	42	45	Yes
East	49	50	32	45	Yes
South	33	50	<30	45	Yes
West	32	50	<30	45	Yes
OLA #1	<30	50	N/A	N/A	Yes

From the table above it can be seen that all façades for Building A are below the noise limits.

Building B	Worst Case Daytime Sound Level (dBA)	Daytime Noise Limit (dBA)	Worst Case Nighttime Sound Level (dBA)	Nighttime Noise Limit (dBA)	Limits met
North	47	50	31	45	Yes
East	47	50	<30	45	Yes
South	<30	50	<30	45	Yes
West	36	50	33	45	Yes
OLA #2	<30	50	N/A	N/A	Yes

From the table above it can be seen that all façades for Building B are below the noise limits.

Building C	Worst Case Daytime Sound Level (dBA)	Daytime Noise Limit (dBA)	Worst Case Nighttime Sound Level (dBA)	Nighttime Noise Limit (dBA)	Limits met
North	44	50	<30	45	Yes
East	43	50	<30	45	Yes
South	<30	50	<30	45	Yes
West	33	50	30	45	Yes

From the table above it can be seen that all façades for Building C are below the noise limits.

Building D	Worst Case Daytime Sound Level (dBA)	Daytime Noise Limit (dBA)	Worst Case Nighttime Sound Level (dBA)	Nighttime Noise Limit (dBA)	Limits met
North	35	50	<30	45	Yes
East	36	50	<30	45	Yes
South	<30	50	<30	45	Yes
West	<30	50	<30	45	Yes
OLA #3	<30	50	N/A	N/A	Yes

From the table above it can be seen that all façades for Building D are below the noise limits.

6. Recommendations

The road traffic noise impacts were above the NPC 300 requirements. Noise mitigation measures include:

Building A:

- Warning Clause Type C to be registered on Title and/or included in all agreements of purchase and sale and/or leases and/or disclosure statements and declarations for the development for all units.
- Mandatory Requirement for Air Conditioning for the entire building.

Building B:

- Warning Clause Type C to be registered on Title and/or included in all agreements of purchase and sale and/or leases and/or disclosure statements and declarations for the development for all units.
- Mandatory Requirement for Air Conditioning for the entire building.

Building C:

- Warning Clause Type C to be registered on Title and/or included in all agreements of purchase and sale and/or leases and/or disclosure statements and declarations for the development for all units.
- Mandatory Requirement for Air Conditioning for the entire building.

Building D:

- Warning Clause Type C to be registered on Title and/or included in all agreements of purchase and sale and/or leases and/or disclosure statements and declarations for the development for all units.
- Mandatory Requirement for Air Conditioning for the entire building.

Outdoor Living Area (OLA)

- Warning Clause Type A to be registered on Title and/or included in all agreements of purchase and sale and/or leases and/or disclosure statements and declarations for the development for all units.

These have been summarized in Attachment B under Table B1.

The stationary noise impacts from neighboring buildings to the Site were evaluated and the sound level predictions were determined to be below the noise limits for all façades for each building.

The noise from the Site to the neighboring buildings could not be accounted for because the site has not undergone mechanical design yet. An addendum to this report should be completed once a mechanical design is done to account for noise from the Site to the neighboring building.

7. Conclusions

The results of this Study indicate that the potential environmental impact from road traffic noise sources are significant. Mitigation measures will be required including ventilation requirements and noise warning clauses for each unit. With the mitigation measure mentioned in Section 6, there will be minimal noise impact from the neighboring buildings to the Site.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

Written by: Reviewed by:

Aug. 7, 2025

Emmanuel Ghiorghis,
Acoustic Technician

Joey Jraige, P.Eng., B.A.Sc.
President

JJ Acoustic Engineering Ltd.
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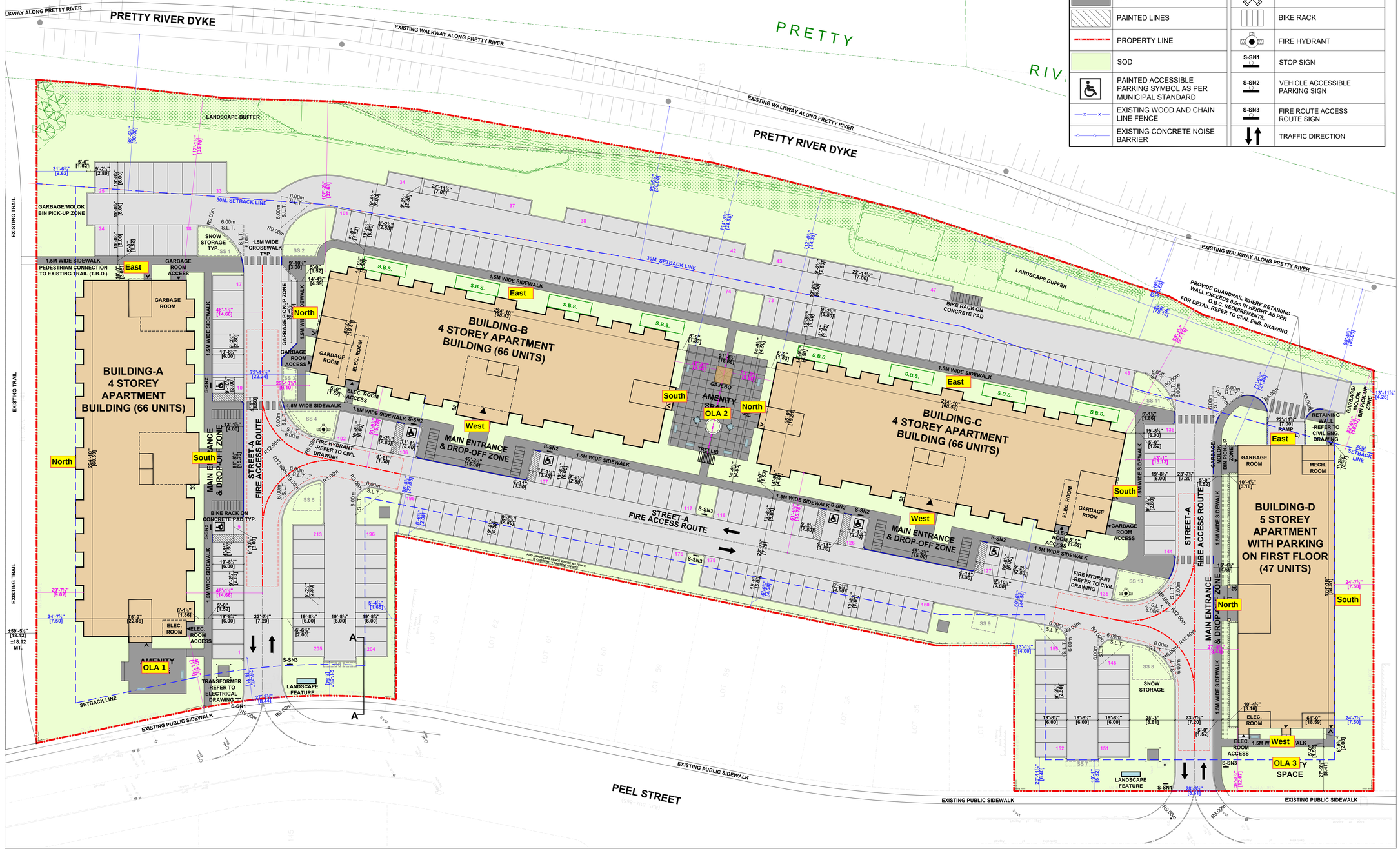
226-346-6473

ATTACHMENT A

LEGEND :

	APARTMENT PRINCIPAL ENTRY		PROPOSED PRIVACY FENCE
	APARTMENT EXIT DOOR		CURB CUT/ DEPRESSED SIDE WALK
	PARKING GARAGE ENTRY		HYDRO TRANSFORMER PER ELEC. DWGS
	DOWNSPOUT		LIGHTING STANDARD PER ELEC. DWGS
S.S.	SNOW STORAGE		LIMITING DISTANCE
S.L.T.	SIGHT LIGHT TRIANGLE		RETAINING WALL
	CROSS WALK		LIGHTING BOLLARD
	CONCRETE SIDEWALK		SIAMESE CONNECTION
	PAINTED LINES		BIKE RACK
	PROPERTY LINE		FIRE HYDRANT
	SOD	S-SN1	STOP SIGN
	PAINTED ACCESSIBLE PARKING SYMBOL AS PER MUNICIPAL STANDARD	S-SN2	VEHICLE ACCESSIBLE PARKING SIGN
x x	EXISTING WOOD AND CHAIN LINE FENCE	S-SN3	FIRE ROUTE ACCESS ROUTE SIGN
	EXISTING CONCRETE NOISE BARRIER		TRAFFIC DIRECTION



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No.	Date	Version	Dwn.
1.	05/08/2025	ISSUED FOR REVIEW	

PROJECT:

APARTMENT BUILDING

BLOCK-151, HARMONY LIVING,
PEEL STREET, ON
(TOWN OF COLLINGWOOD)

DRAWING TITLE:

SITE PLAN

DRAWN BY:	DATE:
CHECKED BY:	SCALE: 1:350
PROJECT NO.:	DRAWING NO.: A-2.0

ATTACHMENT B

Table B1
439 Peel Street, Collingwood, Ontario
Road Traffic Noise Levels and Mitigation Measures Summary
Building A

Point of Reception	Road Sound Level Daytime (dBA)	Road Sound Level Nighttime (dBA)	Ventilation Requirements NPC 300	Warning Clauses From NPC 300	Special Building Components
North Façade					
Plane of Window Level 1	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 4	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
East Façade					
Plane of Window Level 1	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
South Façade					
Plane of Window Level 1	54 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	54 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	54 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	54 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
West Façade					
Plane of Window Level 1	60 (dBA)	54 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	60 (dBA)	54 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	60 (dBA)	54 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 4	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Outdoor Living Area					
OLA 1	60 (dBA)	N/A	N/A	Type A	N/A

Table B1
439 Peel Street, Collingwood, Ontario
Road Traffic Noise Levels and Mitigation Measures Summary
Building B

Point of Reception	Road Sound Level Daytime (dBA)	Road Sound Level Nighttime (dBA)	Ventilation Requirements NPC 300	Warning Clauses From NPC 300	Special Building Components
North Façade					
Plane of Window Level 1	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
East Façade					
Plane of Window Level 1	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	51 (dBA)	44 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
South Façade					
Plane of Window Level 1	53 (dBA)	46 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	53 (dBA)	46 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	53 (dBA)	46 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	53 (dBA)	46 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
West Façade					
Plane of Window Level 1	56 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	56 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	56 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 4	56 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code

Table B1
439 Peel Street, Collingwood, Ontario
Road Traffic Noise Levels and Mitigation Measures Summary
Building C

Point of Reception	Road Sound Level Daytime (dBA)	Road Sound Level Nighttime (dBA)	Ventilation Requirements NPC 300	Warning Clauses From NPC 300	Special Building Components
North Façade					
Plane of Window Level 1	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	54 (dBA)	48 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
East Façade					
Plane of Window Level 1	50 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	50 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	50 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	50 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
South Façade					
Plane of Window Level 1	53 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	53 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	53 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	53 (dBA)	47 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
West Façade					
Plane of Window Level 1	56 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	56 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	56 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 4	56 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Outdoor Living Area					
OLA 2	54 (dBA)	N/A	N/A	Not Required	N/A

Table B1
439 Peel Street, Collingwood, Ontario
Road Traffic Noise Levels and Mitigation Measures Summary
Building D

Point of Reception	Road Sound Level Daytime (dBA)	Road Sound Level Nighttime (dBA)	Ventilation Requirements NPC 300	Warning Clauses From NPC 300	Special Building Components
North Façade					
Plane of Window Level 1	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 4	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 5	55 (dBA)	49 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
East Façade					
Plane of Window Level 1	49 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	49 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	49 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	49 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 5	49 (dBA)	43 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
South Façade					
Plane of Window Level 1	48 (dBA)	42 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 2	48 (dBA)	42 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 3	48 (dBA)	42 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 4	48 (dBA)	42 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
Plane of Window Level 5	48 (dBA)	42 (dBA)	Not Required	Not Required	Compliance with Ontario Building Code
West Façade					
Plane of Window Level 1	60 (dBA)	54 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	60 (dBA)	54 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	60 (dBA)	54 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 4	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 5	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Outdoor Living Area					
OLA 3	60 (dBA)	N/A	N/A	Type A	N/A

Note:
First floor for building D is for parking.

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:08:22
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b1north.te Time Period: Day/Night 16/8 hours
Description: Building A North Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 55.00 / 55.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 100.00 / 100.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Road data, segment # 3: Raglan St (day/night)
-------------------------------------------
Car traffic volume  :  5609/623   veh/TimePeriod  *
Medium truck volume :   177/20    veh/TimePeriod  *
Heavy truck volume  :   118/13    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):   5000
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Raglan St (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 235.00 / 235.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 52.86 + 0.00) = 52.86 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	- 5.64	- 3.01	0.00	0.00	0.00	52.86

Segment Leq : 52.86 dBA

Results segment # 2: Collins St (day)

Source height = 1.19 m

ROAD (0.00 + 50.27 + 0.00) = 50.27 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	- 8.24	- 3.01	0.00	0.00	0.00	50.27

Segment Leq : 50.27 dBA

Results segment # 3: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 47.03 + 0.00) = 47.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.99	0.00	-11.95	- 3.01	0.00	0.00	0.00	47.03

Segment Leq : 47.03 dBA

Total Leq All Segments: 55.44 dBA

Results segment # 1: Peel St (night)

Source height = 1.19 m

ROAD (0.00 + 46.33 + 0.00) = 46.33 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	54.98	0.00	- 5.64	- 3.01	0.00	0.00	0.00	46.33

```
--------------------------------------------------------------------------------

Segment Leq : 46.33 dBA


Results segment # 2: Collins St (night)
---------------------------------------

Source height = 1.19 m

ROAD (0.00 + 43.73 + 0.00) = 43.73 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
  - 90      0   0.00  54.98   0.00 - 8.24 - 3.01   0.00   0.00   0.00  43.73
--------------------------------------------------------------------------------

Segment Leq : 43.73 dBA


Results segment # 3: Raglan St (night)
--------------------------------------

Source height = 1.19 m

ROAD (0.00 + 40.49 + 0.00) = 40.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
     0     90   0.00  55.45   0.00 -11.95 - 3.01   0.00   0.00   0.00  40.49
--------------------------------------------------------------------------------

Segment Leq : 40.49 dBA

Total Leq All Segments: 48.91 dBA




TOTAL Leq FROM ALL SOURCES (DAY): 55.44
                           (NIGHT): 48.91
```

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 17:44:33
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b1east.te Time Period: Day/Night 16/8 hours
Description: Building A East Facade Floor 1

Road data, segment # 1: Raglan St (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Raglan St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 200.00 / 200.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 50.74 + 0.00) = 50.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	61.99	0.00	-11.25	0.00	0.00	0.00	0.00	50.74

Segment Leq : 50.74 dBA

Total Leq All Segments: 50.74 dBA

Results segment # 1: Raglan St (night)

Source height = 1.19 m

ROAD (0.00 + 44.20 + 0.00) = 44.20 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	55.45	0.00	-11.25	0.00	0.00	0.00	0.00	44.20

Segment Leq : 44.20 dBA

Total Leq All Segments: 44.20 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 50.74
(NIGHT): 44.20

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:09:11
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b1south.te Time Period: Day/Night 16/8 hours
Description: Building A South Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 55.00 / 55.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Raglan (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Raglan (day/night)
----------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 235.00 / 235.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 52.86 + 0.00) = 52.86 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00  - 5.64  - 3.01   0.00   0.00   0.00  52.86
-------------------------------------------------------------------------------

Segment Leq : 52.86 dBA


Results segment # 2: Raglan (day)
---------------------------------

Source height = 1.19 m

ROAD (0.00 + 47.03 + 0.00) = 47.03 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.99   0.00 -11.95  - 3.01   0.00   0.00   0.00  47.03
-------------------------------------------------------------------------------

Segment Leq : 47.03 dBA

Total Leq All Segments: 53.87 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 46.33 + 0.00) = 46.33 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	- 5.64	- 3.01	0.00	0.00	0.00	46.33

Segment Leq : 46.33 dBA

Results segment # 2: Raglan (night)

Source height = 1.19 m

ROAD (0.00 + 40.49 + 0.00) = 40.49 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	55.45	0.00	-11.95	- 3.01	0.00	0.00	0.00	40.49

Segment Leq : 40.49 dBA

Total Leq All Segments: 47.34 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 53.87
(NIGHT): 47.34

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:54:37
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b1west.te Time Period: Day/Night 16/8 hours
Description: Building 1 West Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 22.00 / 20.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  95.00 / 95.00  m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 59.85 + 0.00) = 59.85 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
  - 90     90   0.00  61.51   0.00 - 1.66   0.00   0.00   0.00   0.00  59.85
-------------------------------------------------------------------------------

Segment Leq : 59.85 dBA


Results segment # 2: Collins St (day)
-------------------------------------

Source height = 1.19 m

ROAD (0.00 + 50.49 + 0.00) = 50.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00 - 8.02 - 3.01   0.00   0.00   0.00  50.49
-------------------------------------------------------------------------------

Segment Leq : 50.49 dBA

Total Leq All Segments: 60.33 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 53.73 + 0.00) = 53.73 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	54.98	0.00	- 1.25	0.00	0.00	0.00	0.00	53.73

Segment Leq : 53.73 dBA

Results segment # 2: Collins St (night)

Source height = 1.19 m

ROAD (0.00 + 43.95 + 0.00) = 43.95 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	- 8.02	- 3.01	0.00	0.00	0.00	43.95

Segment Leq : 43.95 dBA

Total Leq All Segments: 54.16 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.33
(NIGHT): 54.16

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:08:33
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b2north.te Time Period: Day/Night 16/8 hours
Description: Building B North Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 75.00 / 75.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 160.00 / 160.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Road data, segment # 3: Raglan St (day/night)
-------------------------------------------
Car traffic volume  :  5609/623   veh/TimePeriod  *
Medium truck volume :   177/20    veh/TimePeriod  *
Heavy truck volume  :   118/13    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):   5000
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Raglan St (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 220.00 / 220.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 51.51 + 0.00) = 51.51 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	- 6.99	- 3.01	0.00	0.00	0.00	51.51

Segment Leq : 51.51 dBA

Results segment # 2: Collins St (day)

Source height = 1.19 m

ROAD (0.00 + 48.22 + 0.00) = 48.22 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	-10.28	- 3.01	0.00	0.00	0.00	48.22

Segment Leq : 48.22 dBA

Results segment # 3: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 47.32 + 0.00) = 47.32 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.99	0.00	-11.66	- 3.01	0.00	0.00	0.00	47.32

Segment Leq : 47.32 dBA

Total Leq All Segments: 54.18 dBA

Results segment # 1: Peel St (night)

Source height = 1.19 m

ROAD (0.00 + 44.98 + 0.00) = 44.98 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	54.98	0.00	- 6.99	- 3.01	0.00	0.00	0.00	44.98

Segment Leq : 44.98 dBA

Results segment # 2: Collins St (night)

Source height = 1.19 m

ROAD (0.00 + 41.69 + 0.00) = 41.69 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	54.98	0.00	-10.28	- 3.01	0.00	0.00	0.00	41.69

Segment Leq : 41.69 dBA

Results segment # 3: Raglan St (night)

Source height = 1.19 m

ROAD (0.00 + 40.78 + 0.00) = 40.78 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	55.45	0.00	-11.66	- 3.01	0.00	0.00	0.00	40.78

Segment Leq : 40.78 dBA

Total Leq All Segments: 47.65 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 54.18
(NIGHT): 47.65

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 17:45:52
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b2east.te Time Period: Day/Night 16/8 hours
Description: Building B East Facade Floor 1

Road data, segment # 1: Raglan St (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Raglan St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 210.00 / 210.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 50.53 + 0.00) = 50.53 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	61.99	0.00	-11.46	0.00	0.00	0.00	0.00	50.53

Segment Leq : 50.53 dBA

Total Leq All Segments: 50.53 dBA

Results segment # 1: Raglan St (night)

Source height = 1.19 m

ROAD (0.00 + 43.99 + 0.00) = 43.99 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	55.45	0.00	-11.46	0.00	0.00	0.00	0.00	43.99

Segment Leq : 43.99 dBA

Total Leq All Segments: 43.99 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 50.53
(NIGHT): 43.99

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:09:20
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b2south.te Time Period: Day/Night 16/8 hours
Description: Building B South Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 70.00 / 70.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Raglan (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Raglan (day/night)
----------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 260.00 / 260.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 51.81 + 0.00) = 51.81 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00  - 6.69  - 3.01   0.00   0.00   0.00  51.81
-------------------------------------------------------------------------------

Segment Leq : 51.81 dBA


Results segment # 2: Raglan (day)
---------------------------------

Source height = 1.19 m

ROAD (0.00 + 46.59 + 0.00) = 46.59 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.99   0.00 -12.39  - 3.01   0.00   0.00   0.00  46.59
-------------------------------------------------------------------------------

Segment Leq : 46.59 dBA

Total Leq All Segments: 52.95 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 45.28 + 0.00) = 45.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	- 6.69	- 3.01	0.00	0.00	0.00	45.28

Segment Leq : 45.28 dBA

Results segment # 2: Raglan (night)

Source height = 1.19 m

ROAD (0.00 + 40.05 + 0.00) = 40.05 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	55.45	0.00	-12.39	- 3.01	0.00	0.00	0.00	40.05

Segment Leq : 40.05 dBA

Total Leq All Segments: 46.42 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 52.95
(NIGHT): 46.42

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:10:16
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b2west.te Time Period: Day/Night 16/8 hours
Description: Building B West Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 60.00 / 60.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
--------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 180.00 / 180.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 55.49 + 0.00) = 55.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
  - 90     90   0.00  61.51   0.00 - 6.02   0.00   0.00   0.00   0.00  55.49
-------------------------------------------------------------------------------

Segment Leq : 55.49 dBA


Results segment # 2: Collins St (day)
-------------------------------------

Source height = 1.19 m

ROAD (0.00 + 47.71 + 0.00) = 47.71 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00 -10.79 - 3.01   0.00   0.00   0.00  47.71
-------------------------------------------------------------------------------

Segment Leq : 47.71 dBA

Total Leq All Segments: 56.16 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 48.96 + 0.00) = 48.96 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	54.98	0.00	- 6.02	0.00	0.00	0.00	0.00	48.96

Segment Leq : 48.96 dBA

Results segment # 2: Collins St (night)

Source height = 1.19 m

ROAD (0.00 + 41.18 + 0.00) = 41.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	-10.79	- 3.01	0.00	0.00	0.00	41.18

Segment Leq : 41.18 dBA

Total Leq All Segments: 49.63 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 56.16
(NIGHT): 49.63

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:08:41
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b3north.te Time Period: Day/Night 16/8 hours
Description: Building C North Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 65.00 / 65.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
---------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 220.00 / 220.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Road data, segment # 3: Raglan St (day/night)
---------------------------------------------
Car traffic volume  :  5609/623   veh/TimePeriod  *
Medium truck volume :   177/20    veh/TimePeriod  *
Heavy truck volume  :   118/13    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):   5000
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Raglan St (day/night)
---------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 235.00 / 235.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 52.14 + 0.00) = 52.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	- 6.37	- 3.01	0.00	0.00	0.00	52.14

Segment Leq : 52.14 dBA

Results segment # 2: Collins St (day)

Source height = 1.19 m

ROAD (0.00 + 46.84 + 0.00) = 46.84 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	-11.66	- 3.01	0.00	0.00	0.00	46.84

Segment Leq : 46.84 dBA

Results segment # 3: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 47.03 + 0.00) = 47.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.99	0.00	-11.95	- 3.01	0.00	0.00	0.00	47.03

Segment Leq : 47.03 dBA

Total Leq All Segments: 54.19 dBA

Results segment # 1: Peel St (night)

Source height = 1.19 m

ROAD (0.00 + 45.60 + 0.00) = 45.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	54.98	0.00	- 6.37	- 3.01	0.00	0.00	0.00	45.60

```
--------------------------------------------------------------------------------

Segment Leq : 45.60 dBA


Results segment # 2: Collins St (night)
---------------------------------------

Source height = 1.19 m

ROAD (0.00 + 40.31 + 0.00) = 40.31 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
  - 90      0   0.00  54.98   0.00 -11.66  - 3.01   0.00   0.00   0.00  40.31
--------------------------------------------------------------------------------

Segment Leq : 40.31 dBA


Results segment # 3: Raglan St (night)
--------------------------------------

Source height = 1.19 m

ROAD (0.00 + 40.49 + 0.00) = 40.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
     0     90   0.00  55.45   0.00 -11.95  - 3.01   0.00   0.00   0.00  40.49
--------------------------------------------------------------------------------

Segment Leq : 40.49 dBA

Total Leq All Segments: 47.65 dBA




TOTAL Leq FROM ALL SOURCES (DAY): 54.19
                           (NIGHT): 47.65
```

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:13:44
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b3east.te Time Period: Day/Night 16/8 hours
Description: Building C East Facade Floor 1

Road data, segment # 1: Raglan St (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Raglan St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 240.00 / 240.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 49.95 + 0.00) = 49.95 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	61.99	0.00	-12.04	0.00	0.00	0.00	0.00	49.95

Segment Leq : 49.95 dBA

Total Leq All Segments: 49.95 dBA

Results segment # 1: Raglan St (night)

Source height = 1.19 m

ROAD (0.00 + 43.41 + 0.00) = 43.41 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	55.45	0.00	-12.04	0.00	0.00	0.00	0.00	43.41

Segment Leq : 43.41 dBA

Total Leq All Segments: 43.41 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 49.95
(NIGHT): 43.41

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:09:32
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b3south.te Time Period: Day/Night 16/8 hours
Description: Building C South Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 65.00 / 65.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Raglan (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Raglan (day/night)
----------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 290.00 / 290.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 52.14 + 0.00) = 52.14 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00  - 6.37  - 3.01   0.00   0.00   0.00  52.14
-------------------------------------------------------------------------------

Segment Leq : 52.14 dBA


Results segment # 2: Raglan (day)
---------------------------------

Source height = 1.19 m

ROAD (0.00 + 46.12 + 0.00) = 46.12 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.99   0.00 -12.86  - 3.01   0.00   0.00   0.00  46.12
-------------------------------------------------------------------------------

Segment Leq : 46.12 dBA

Total Leq All Segments: 53.11 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 45.60 + 0.00) = 45.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	- 6.37	- 3.01	0.00	0.00	0.00	45.60

Segment Leq : 45.60 dBA

Results segment # 2: Raglan (night)

Source height = 1.19 m

ROAD (0.00 + 39.58 + 0.00) = 39.58 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	55.45	0.00	-12.86	- 3.01	0.00	0.00	0.00	39.58

Segment Leq : 39.58 dBA

Total Leq All Segments: 46.57 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 53.11
(NIGHT): 46.57

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:10:26
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b3west.te Time Period: Day/Night 16/8 hours
Description: Building C West Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 60.00 / 60.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 245.00 / 245.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 55.49 + 0.00) = 55.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
  - 90     90   0.00  61.51   0.00 - 6.02   0.00   0.00   0.00   0.00  55.49
-------------------------------------------------------------------------------

Segment Leq : 55.49 dBA


Results segment # 2: Collins St (day)
-------------------------------------

Source height = 1.19 m

ROAD (0.00 + 46.37 + 0.00) = 46.37 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00 -12.13 - 3.01   0.00   0.00   0.00  46.37
-------------------------------------------------------------------------------

Segment Leq : 46.37 dBA

Total Leq All Segments: 55.99 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 48.96 + 0.00) = 48.96 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	54.98	0.00	- 6.02	0.00	0.00	0.00	0.00	48.96

Segment Leq : 48.96 dBA

Results segment # 2: Collins St (night)

Source height = 1.19 m

ROAD (0.00 + 39.84 + 0.00) = 39.84 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	-12.13	- 3.01	0.00	0.00	0.00	39.84

Segment Leq : 39.84 dBA

Total Leq All Segments: 49.46 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.99
(NIGHT): 49.46

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:08:53
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b4north.te Time Period: Day/Night 16/8 hours
Description: Building D North Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 40.00 / 40.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
--------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 300.00 / 300.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Road data, segment # 3: Raglan St (day/night)
---------------------------------------------
Car traffic volume  :  5609/623   veh/TimePeriod  *
Medium truck volume :   177/20    veh/TimePeriod  *
Heavy truck volume  :   118/13    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):   5000
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Raglan St (day/night)
--------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 300.00 / 300.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 54.24 + 0.00) = 54.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	- 4.26	- 3.01	0.00	0.00	0.00	54.24

Segment Leq : 54.24 dBA

Results segment # 2: Collins St (day)

Source height = 1.19 m

ROAD (0.00 + 45.49 + 0.00) = 45.49 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	-13.01	- 3.01	0.00	0.00	0.00	45.49

Segment Leq : 45.49 dBA

Results segment # 3: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 45.97 + 0.00) = 45.97 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.99	0.00	-13.01	- 3.01	0.00	0.00	0.00	45.97

Segment Leq : 45.97 dBA

Total Leq All Segments: 55.32 dBA

Results segment # 1: Peel St (night)

Source height = 1.19 m

ROAD (0.00 + 47.71 + 0.00) = 47.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	54.98	0.00	- 4.26	- 3.01	0.00	0.00	0.00	47.71

```
--------------------------------------------------------------------------------

Segment Leq : 47.71 dBA


Results segment # 2: Collins St (night)
---------------------------------------

Source height = 1.19 m

ROAD (0.00 + 38.96 + 0.00) = 38.96 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
  - 90      0   0.00  54.98   0.00 -13.01  - 3.01   0.00   0.00   0.00  38.96
--------------------------------------------------------------------------------

Segment Leq : 38.96 dBA


Results segment # 3: Raglan St (night)
--------------------------------------

Source height = 1.19 m

ROAD (0.00 + 39.43 + 0.00) = 39.43 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
     0     90   0.00  55.45   0.00 -13.01  - 3.01   0.00   0.00   0.00  39.43
--------------------------------------------------------------------------------

Segment Leq : 39.43 dBA

Total Leq All Segments: 48.79 dBA




TOTAL Leq FROM ALL SOURCES (DAY): 55.32
                           (NIGHT): 48.79
```

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:07:45
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b4east.te Time Period: Day/Night 16/8 hours
Description: Building D East Facade Floor 1

Road data, segment # 1: Raglan St (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Raglan St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 275.00 / 275.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 49.36 + 0.00) = 49.36 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	61.99	0.00	-12.63	0.00	0.00	0.00	0.00	49.36

Segment Leq : 49.36 dBA

Total Leq All Segments: 49.36 dBA

Results segment # 1: Raglan St (night)

Source height = 1.19 m

ROAD (0.00 + 42.82 + 0.00) = 42.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	55.45	0.00	-12.63	0.00	0.00	0.00	0.00	42.82

Segment Leq : 42.82 dBA

Total Leq All Segments: 42.82 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 49.36
(NIGHT): 42.82

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:09:49
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b4south.te Time Period: Day/Night 16/8 hours
Description: Building D South Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 400.00 / 400.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Raglan (day/night)

Car traffic volume : 5609/623 veh/TimePeriod *
Medium truck volume : 177/20 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Raglan (day/night)
----------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 300.00 / 300.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 44.24 + 0.00) = 44.24 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00 -14.26  - 3.01   0.00   0.00   0.00  44.24
-------------------------------------------------------------------------------

Segment Leq : 44.24 dBA


Results segment # 2: Raglan (day)
---------------------------------

Source height = 1.19 m

ROAD (0.00 + 45.97 + 0.00) = 45.97 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.99   0.00 -13.01  - 3.01   0.00   0.00   0.00  45.97
-------------------------------------------------------------------------------

Segment Leq : 45.97 dBA

Total Leq All Segments: 48.20 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 37.71 + 0.00) = 37.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	-14.26	- 3.01	0.00	0.00	0.00	37.71

Segment Leq : 37.71 dBA

Results segment # 2: Raglan (night)

Source height = 1.19 m

ROAD (0.00 + 39.43 + 0.00) = 39.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	55.45	0.00	-13.01	- 3.01	0.00	0.00	0.00	39.43

Segment Leq : 39.43 dBA

Total Leq All Segments: 41.66 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 48.20
(NIGHT): 41.66

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:10:33
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b4west.te Time Period: Day/Night 16/8 hours
Description: Building D West Facade Floor 1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 300.00 / 300.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 60.27 + 0.00) = 60.27 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
  - 90     90   0.00  61.51   0.00 - 1.25   0.00   0.00   0.00   0.00  60.27
-------------------------------------------------------------------------------

Segment Leq : 60.27 dBA


Results segment # 2: Collins St (day)
-------------------------------------

Source height = 1.19 m

ROAD (0.00 + 45.49 + 0.00) = 45.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00 -13.01 - 3.01   0.00   0.00   0.00  45.49
-------------------------------------------------------------------------------

Segment Leq : 45.49 dBA

Total Leq All Segments: 60.41 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 53.73 + 0.00) = 53.73 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	54.98	0.00	- 1.25	0.00	0.00	0.00	0.00	53.73

Segment Leq : 53.73 dBA

Results segment # 2: Collins St (night)

Source height = 1.19 m

ROAD (0.00 + 38.96 + 0.00) = 38.96 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	-13.01	- 3.01	0.00	0.00	0.00	38.96

Segment Leq : 38.96 dBA

Total Leq All Segments: 53.87 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.41
(NIGHT): 53.87

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:53:36
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: ola1.te Time Period: Day/Night 16/8 hours
Description: Outdoor Living Area #1

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 22.00 / 20.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  95.00 / 95.00  m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 59.85 + 0.00) = 59.85 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
  - 90     90   0.00  61.51   0.00 - 1.66   0.00   0.00   0.00   0.00  59.85
-------------------------------------------------------------------------------

Segment Leq : 59.85 dBA


Results segment # 2: Collins St (day)
-------------------------------------

Source height = 1.19 m

ROAD (0.00 + 50.49 + 0.00) = 50.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00 - 8.02 - 3.01   0.00   0.00   0.00  50.49
-------------------------------------------------------------------------------

Segment Leq : 50.49 dBA

Total Leq All Segments: 60.33 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 53.73 + 0.00) = 53.73 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	54.98	0.00	- 1.25	0.00	0.00	0.00	0.00	53.73

Segment Leq : 53.73 dBA

Results segment # 2: Collins St (night)

Source height = 1.19 m

ROAD (0.00 + 43.95 + 0.00) = 43.95 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	- 8.02	- 3.01	0.00	0.00	0.00	43.95

Segment Leq : 43.95 dBA

Total Leq All Segments: 54.16 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.33
(NIGHT): 54.16

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:41:45
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: OLA2.te Time Period: Day/Night 16/8 hours
Description: Outdoor Living Area #2

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 65.00 / 65.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
---------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 220.00 / 220.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Road data, segment # 3: Raglan St (day/night)
---------------------------------------------
Car traffic volume  :  5609/623   veh/TimePeriod  *
Medium truck volume :   177/20    veh/TimePeriod  *
Heavy truck volume  :   118/13    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):   5000
    Percentage of Annual Growth        :   2.50
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   3.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Raglan St (day/night)
---------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 235.00 / 235.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 52.14 + 0.00) = 52.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	- 6.37	- 3.01	0.00	0.00	0.00	52.14

Segment Leq : 52.14 dBA

Results segment # 2: Collins St (day)

Source height = 1.19 m

ROAD (0.00 + 46.84 + 0.00) = 46.84 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.51	0.00	-11.66	- 3.01	0.00	0.00	0.00	46.84

Segment Leq : 46.84 dBA

Results segment # 3: Raglan St (day)

Source height = 1.19 m

ROAD (0.00 + 47.03 + 0.00) = 47.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.99	0.00	-11.95	- 3.01	0.00	0.00	0.00	47.03

Segment Leq : 47.03 dBA

Total Leq All Segments: 54.19 dBA

Results segment # 1: Peel St (night)

Source height = 1.19 m

ROAD (0.00 + 45.60 + 0.00) = 45.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	54.98	0.00	- 6.37	- 3.01	0.00	0.00	0.00	45.60

```
--------------------------------------------------------------------------------

Segment Leq : 45.60 dBA


Results segment # 2: Collins St (night)
---------------------------------------

Source height = 1.19 m

ROAD (0.00 + 40.31 + 0.00) = 40.31 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
  - 90      0   0.00  54.98   0.00 -11.66  - 3.01   0.00   0.00   0.00  40.31
--------------------------------------------------------------------------------

Segment Leq : 40.31 dBA


Results segment # 3: Raglan St (night)
--------------------------------------

Source height = 1.19 m

ROAD (0.00 + 40.49 + 0.00) = 40.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
     0     90   0.00  55.45   0.00 -11.95  - 3.01   0.00   0.00   0.00  40.49
--------------------------------------------------------------------------------

Segment Leq : 40.49 dBA

Total Leq All Segments: 47.65 dBA




TOTAL Leq FROM ALL SOURCES (DAY): 54.19
                           (NIGHT): 47.65
```

STAMSON 5.0 NORMAL REPORT Date: 22-05-2025 18:42:11
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: OLA3.te Time Period: Day/Night 16/8 hours
Description: Outdoor Living Area #3

Road data, segment # 1: Peel St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50
Number of Years of Growth : 11.00
Medium Truck % of Total Volume : 1.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Peel St (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Collins St (day/night)

Car traffic volume : 5727/636 veh/TimePeriod *
Medium truck volume : 59/7 veh/TimePeriod *
Heavy truck volume : 118/13 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 5000
Percentage of Annual Growth : 2.50

```
    Number of Years of Growth          :  11.00
    Medium Truck % of Total Volume     :   1.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Collins St (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 300.00 / 300.00 m
Receiver height           :   2.00 / 2.00   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00


Results segment # 1: Peel St (day)
----------------------------------

Source height = 1.19 m

ROAD (0.00 + 60.27 + 0.00) = 60.27 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
  - 90     90   0.00  61.51   0.00 - 1.25   0.00   0.00   0.00   0.00  60.27
-------------------------------------------------------------------------------

Segment Leq : 60.27 dBA


Results segment # 2: Collins St (day)
-------------------------------------

Source height = 1.19 m

ROAD (0.00 + 45.49 + 0.00) = 45.49 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  61.51   0.00 -13.01 - 3.01   0.00   0.00   0.00  45.49
-------------------------------------------------------------------------------

Segment Leq : 45.49 dBA

Total Leq All Segments: 60.41 dBA


Results segment # 1: Peel St (night)
------------------------------------
```

Source height = 1.19 m

ROAD (0.00 + 53.73 + 0.00) = 53.73 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	54.98	0.00	- 1.25	0.00	0.00	0.00	0.00	53.73

Segment Leq : 53.73 dBA

Results segment # 2: Collins St (night)

Source height = 1.19 m

ROAD (0.00 + 38.96 + 0.00) = 38.96 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	54.98	0.00	-13.01	- 3.01	0.00	0.00	0.00	38.96

Segment Leq : 38.96 dBA

Total Leq All Segments: 53.87 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.41
(NIGHT): 53.87

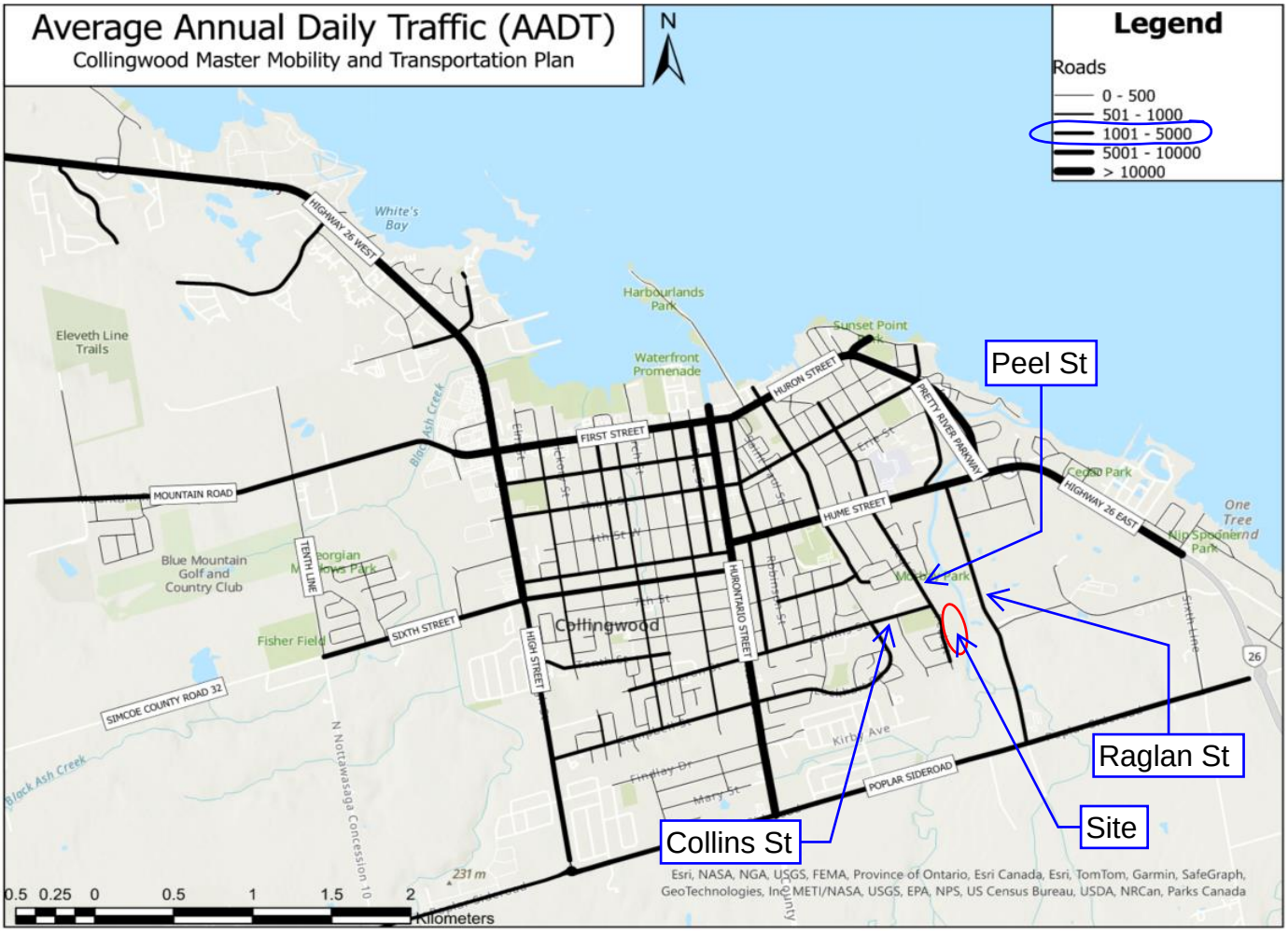

Figure 11: Existing PM peak traffic volumes (AADT)

3.5.1. Base Year Travel Demand Modelling

PTV VISUM is a comprehensive transportation planning software used for modeling and analyzing transportation systems at a strategic level. It allows for the development of multimodal transportation networks, incorporating roadways, public transit, and non-motorized modes like walking and cycling. The VISUM software also supports demand modeling by simulating future scenarios under varying conditions to predict and analyze the effects of traffic volumes traveling within the Town, neighboring municipalities, and Highway 26.

A summary of the calibration of the base year model is presented in below.

ATTACHMENT C

40.0
45.0
50.0
55.0
60.0
65.0
70.0
75.0

ACOUSTIC ENGINEERING Ltd.

Point Source
vert. Area Source
Building
Receiver
Building Evaluation

STATIONARY NOISE IMPACT
151 HARMONY LIVING - 439 PEEL STREET, COLLINGWOOD, ONTARIO

FIGURE 1
NOISE IMPACT FROM NEIGHBORING BUILDINGS TO THE SITE

ATTACHMENT D

Table C1
Stationary Noise Impact Source Data
151 Harmony Living Project - 439 Peel Street, Collingwood, Ontario

Noise Source Description	Cadna ID	Total SWL (dBA)	Data Source or Representative Data	Height Absolute (m)	Above Roof (m)	x	y
S1	HVAC_2FAN	82.8	HVAC_2FAN	13.5	1.5	17563692	4926760
S2	HVAC_2FAN	82.8	HVAC_2FAN	13.5	1.5	17563717	4926769
S3	HVAC_2FAN	82.8	HVAC_2FAN	13.5	1.5	17563631	4926826
S4	HVAC_2FAN	82.8	HVAC_2FAN	13.5	1.5	17563617	4926852
S5	HVAC_2FAN	82.8	HVAC_2FAN	13.5	1.5	17563706	4926879
S6	HVAC_2FAN	82.8	HVAC_2FAN	13.5	1.5	17563722	4926849
V1	L01	105.1	L01	3	3	17563852	4926870