

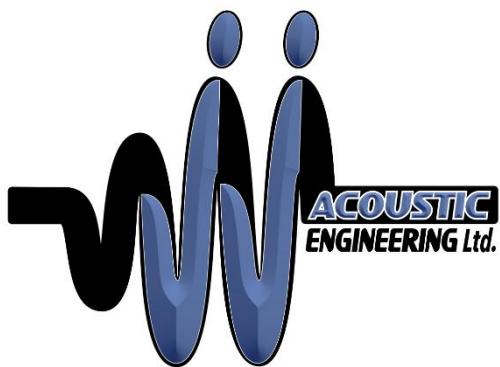


Road/Rail Traffic and Stationary Noise Impact Study

1356 Drouillard Rd, Windsor, Ontario

JJ-00661 NIS1





February 23, 2026,

Reference No. JJ-00661-NIS1

Saksham Sharma

Dear Mr. Sharma:

**Re: Road/Rail Traffic and Stationary Noise Impact Study
1356 Drouillard Rd, Windsor, Ontario**

1. Introduction

JJ Acoustic Engineering Ltd. (JJAЕ) was retained to complete a Road/Rail Traffic and Stationary Noise Impact Study (Study) for the development located at 1356 Drouillard Road in Windsor, Ontario (Site). The Site will be developed into a 2-storey semi-detached building. JJAЕ 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/rail traffic noise is significant. The proposed development will need the following: a requirement for central air-conditioning, noise warning clauses and special building components. Road traffic noise control requirements for the Site were determined based on road traffic volumes provided by the City of Windsor (City) and forecasted to 10 years from the date of this study.

JJ Acoustic Engineering Ltd.

joey@jjae.ca

226-346-6473

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/Rail 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, JJAЕ 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 and Rail 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 one significant roadway in the vicinity of the development: Drouillard Road approximately 15 meters to the West facade. Where there are intervening and off-site structures that provide line-of-sight obstruction to the roads, JJAЕ did not include line-of-sight obstruction in our analysis as to calculate worst-case noise impact.

JJAЕ reviewed other surrounding roadways in the vicinity of the Site and only the 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 City has been summarized below:

Drouillard Road:

- Current AADT (2017): 7,100
- Forecast AADT (2036): 11,350
- Commercial Vehicle Rates: 5% medium trucks and 15% heavy trucks
- Posted Speed Limit: 50 km/h
- Day Night Splits: 90% day and 10% night

JJAE was provided with the AADT for Drouillard Road for a previous project made on 2025. JJAE assumed a conservative 5% and 15% for the medium trucks and heavy trucks, respectively. This percentage assumption more than quadruples the number of trucks counted in a study written by Arcadis titled “*Draft Report Phase 2: Truck Route Network Development City of Windsor Truck Route Study*” dated April 12, 2024 on page 25. A copy of this study has been supplied in Attachment B.

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. Traffic data was supplied by the City. The City’s AADT report for this Noise Studies report has been supplied in Attachment B.

2.2.2 Rail Traffic Parameters

The Rail data provided by ETR has been summarized below. Future values were determined using an assumed Percentage Annual Growth of 2.5% over 10 years and based on the existing combined two-way rail traffic volume parameters as summarized below:

ETR
4 Daytime Trains
0 Nighttime Trains
4 Locomotives
50 Cars
Speed of 17km/h

2.3 Road Traffic and Rail 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.

The OLA is located approximately 5 meters from the East façade. JJAЕ has calculated the noise impact to the OLA to be 60 dBA. A warning clause type A is required for all units. The location of the OLA has been indicated on 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).

JJAЕ 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 (rail) 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.”

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

Rail Company Warning Clause: The Essex Terminal Railway or its assigns or successors in interest has or have a right-of-way within 1,000 meters from the land the subject hereof. There may be alterations to or expansions of the rail facilities on such right-of-way in the future including the possibility that the railway or its assigns or successors as aforesaid may expand its operations, which expansion may affect the living environment of the residents in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating measures in the design of the development and individual dwellings(s). The Essex Terminal Railway will not be responsible for any complaints or

claims arising from use of such facilities and/or operations on, over or under the aforesaid right-of-way.

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

At minimum, the building must be constructed to standard Ontario Building Code requirements. Improved building components are required and summarized in Table B.1. JJAЕ has assumed 35% window to floor area coverage and that windows are thick and operable. In addition, exterior wall compositions must be a minimum of STC 46, with brick veneer or masonry equivalent.

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 = 07:00 to 19:00	Leq = 50 dBA
	Evening = 19:00 to 23:00	Leq = 45 dBA
Plane of Window (POW)	Day = 07:00 to 23:00	Leq = 50 dBA
	Night = 23:00 to 07:00	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.

- **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 JJAЕ 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. JJAЕ has provided a (T) for sources identified as tonal in Sections 4 and 5.

- **Quasi-steady Impulse:** A 10 dbA tonal penalty was applied to all tonal sources, where applicable. JJAЕ has provided a (Q) for sources identified as impulsive 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 mechanical equipment for these buildings is similar to that of a single-family home and considered to be environmentally insignificant. Therefore, the noise impact from the Site to the neighboring buildings is considered to be environmentally insignificant.

5. Noise Impact Summary – From Environment to Site

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

- HVAC 4 Fan Units (Steady-State)
- Air Handling Unit (AHU) (Steady-State)
- Representative MUA (Steady-State)
- Representative Chiller (Steady-State)
- Heavy Trucks (2 movements/per hour, Speed of 10 km/hr.)
- Heavy Truck Idling (30 minutes per hour during the daytime)
- Forklift (10 movements/per hour, Speed of 10 km/hr.)
- Metal dropping from excavator (60 minutes daytime, 0 minutes nighttime)(Q)

A summary of the noise sources used in our modelling is provided in Attachment D. JJAЕ has used historical data for sound levels of the metal dropping.

JJAЕ 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.

1356 Drouillard Rd	Worst Case Daytime Sound Level (dBA)	Daytime Noise Limit (dBA)	Worst Case Nighttime Sound Level (dBA)	Nighttime Noise Limit (dBA)	Limits met
North	46	50	33	45	Yes
East	50	50	35	45	Yes
South	37	50	30	45	Yes
West	45	50	<30	45	Yes
OLA	44	50	N/A	N/A	Yes

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

6. Recommendations

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

- Warning Clause Type D 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 all the units.
- West Façade requires a minimum of STC 30 glazing installed with a maximum window to floor area ratio of 35% and thick operable windows. In addition, exterior wall compositions must be a minimum of STC 46.
- North and South Façades requires a minimum of STC 28 glazing installed with a maximum window to floor area ratio of 35% and thick operable windows. In addition, exterior wall compositions must be a minimum of STC 46.
- JJAЕ and the client require air conditioning for all units.
- Essex Terminal Railway Company Warning Clause 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 all the units.
- Within 100 meters of a rail line exterior façades are to be brick veneer or masonry equivalent

Outdoor Living Area:

- Warning Clause Type A

These have been summarized in Attachment B under Table B1. Where there are discrepancies between this section and the results in Table B1, the recommendations in this section supersede Table B1, as this section provides worst-case solutions for the noise impact.

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

The mechanical equipment for these buildings is similar to that of a single-family home and considered to be environmentally insignificant. Therefore, the noise impact from the Site to the neighboring buildings is considered to be environmentally insignificant.

7. Conclusions

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

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

Written By:

Reviewed by:

A handwritten signature in dark ink, reading "Joseph Sleiman". The signature is written in a cursive style with a large initial 'J'.

Feb. 23, 2026

Joseph Sleiman
Acoustic Technician

Joey Jraige, P.Eng., B.A.Sc.
President (Owner)

ATTACHMENT A



PROJECT ID : 1046_2025

ATTACHMENT B

Table B1.A

Road Traffic Noise Levels and Mitigation Measures Summary
1356 Drouilard Rd, Windsor, Ontario

Point of Reception	Road Sound Level Daytime (dBA)	Road Sound Level Nighttime (dBA)	Rail Sound Level Daytime (dBA)	Rail Sound Level Nighttime (dBA)	Combined Daytime (dBA)	Combined Nighttime (dBA)	Ventilation Requirements NPC 300	Warning Clauses From NPC 300	Special Building Components
North Façade									
Plane of Window Level 1	66 (dBA)	60 (dBA)	58 (dBA)	00 (dBA)	67 (dBA)	60 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 26
Plane of Window Level 2	66 (dBA)	60 (dBA)	58 (dBA)	00 (dBA)	67 (dBA)	60 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 26
East Façade (1)									
Plane of Window Level 1	60 (dBA)	53 (dBA)	48 (dBA)	00 (dBA)	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	59 (dBA)	53 (dBA)	48 (dBA)	00 (dBA)	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
South Façade									
Plane of Window Level 1	66 (dBA)	60 (dBA)	52 (dBA)	00 (dBA)	66 (dBA)	60 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 25
Plane of Window Level 2	66 (dBA)	60 (dBA)	52 (dBA)	00 (dBA)	66 (dBA)	60 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 25
West Façade									
Plane of Window Level 1	71 (dBA)	64 (dBA)	58 (dBA)	00 (dBA)	71 (dBA)	64 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 30
Plane of Window Level 2	70 (dBA)	64 (dBA)	58 (dBA)	00 (dBA)	71 (dBA)	64 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 30
Outdoor Living Area (2)									
OLA 1	60 (dBA)	N/A	48 (dBA)	N/A	60 (dBA)	N/A	N/A	Type A	N/A

Notes

^(1) The East Façade is shielded by the building from the road. JJAEE has assumed a conservative 11 dBA reduction in sound level from the West Façade for the East Façade

^(2) The OLA is shielded by the building from the road. JJAEE has assumed a conservative 11 dBA reduction in sound level from the West Façade for the OLA Façade

Outdoor Sound Level

Indoor Sound Level

Noise Reduction

Day/Night

Road/Rail

Angle of Sound

Angle Correction

Sum

Component

Sum

Sound Energy Transmitted %

Table 3

Component Area m²

Room Floor Area m²

% Floor Area %

Room Absorption Category

Table 4

Noise Spectrum Type

Component Category

Table 5

REQUIRED STC FOR COMPONENT

Component

Sum

Sound Energy Transmitted %

Table 3

Component Area % Floor Area

Room Floor Area

Room Absorption Category

Table 4

Noise Spectrum Type

Component Category

Table 5

REQUIRED STC FOR COMPONENT

STAMSON 5.0 NORMAL REPORT Date: 04-02-2026 17:10:32
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b1north.te Time Period: Day/Night 16/8 hours
 Description: North facade floor 1

Rail data, segment # 1: ETR (day/night)

Train Type	! Trains (Left)	! Trains (Right)	! Speed (km/h)	!# loc /Train	!# Cars /Train	! Eng type	!Cont weld
* 1. ETR	! 2.6/0.0	! 2.6/0.0	! 17.0	! 4.0	! 50.0	!Diesel	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	Train Name	! Unadj. Trains Left	! Trains Right	! Annual % Increase	! Years of Growth
1.	ETR	! 2.0/0.0	! 2.0/0.0	! 2.50	! 10.00

Data for Segment # 1: ETR (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 : 190.00 / 190.00 m
 Receiver height : 2.00 / 2.00 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Whistle Angle : 71 deg Track 1
 Reference angle : 0.00

Results segment # 1: ETR (day)

LOCOMOTIVE (0.00 + 52.39 + 0.00) = 52.39 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	63.41	-11.03	0.00	0.00	0.00	0.00	52.39

WHEEL (0.00 + 37.64 + 0.00) = 37.64 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	48.66	-11.03	0.00	0.00	0.00	0.00	37.64

LEFT WHISTLE (0.00 + 55.03 + 0.00) = 55.03 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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39	71	0.00	73.51	-11.03	- 7.45	0.00	0.00	0.00	55.03
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RIGHT WHISTLE (0.00 + 48.80 + 0.00) = 48.80 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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71	79	0.00	73.51	-11.03	-13.68	0.00	0.00	0.00	48.80
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Segment Leq : 57.59 dBA

Total Leq All Segments: 57.59 dBA

Results segment # 1: ETR (night)

LOCOMOTIVE (0.00 + -11.03 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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- 90	90	0.00	0.00	-11.03	0.00	0.00	0.00	0.00	-11.03
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WHEEL (0.00 + -11.03 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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- 90	90	0.00	0.00	-11.03	0.00	0.00	0.00	0.00	-11.03
------	----	------	------	--------	------	------	------	------	--------

LEFT WHISTLE (0.00 + 55.03 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

39	71	0.00	0.00	-11.03	- 7.45	0.00	0.00	0.00	55.03
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Segment Leq : 0.00 dBA

Total Leq All Segments: 0.00 dBA

Road data, segment # 1: Drouillard R (day/night)

Car traffic volume	:	8172/908	veh/TimePeriod	*
Medium truck volume	:	511/57	veh/TimePeriod	*
Heavy truck volume	:	1532/170	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): 7100
Percentage of Annual Growth : 2.50
Number of Years of Growth : 19.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 15.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Drouillard R (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 : 20.00 / 20.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Drouillard R (day)

Source height = 1.97 m

ROAD (0.00 + 66.28 + 0.00) = 66.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	70.53	0.00	- 1.25	- 3.01	0.00	0.00	0.00	66.28

Segment Leq : 66.28 dBA

Total Leq All Segments: 66.28 dBA

Results segment # 1: Drouillard R (night)

Source height = 1.97 m

ROAD (0.00 + 59.74 + 0.00) = 59.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	64.00	0.00	- 1.25	- 3.01	0.00	0.00	0.00	59.74

Segment Leq : 59.74 dBA

Total Leq All Segments: 59.74 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.83
(NIGHT): 59.74

STAMSON 5.0 NORMAL REPORT Date: 04-02-2026 17:10:25
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: bleast.te Time Period: Day/Night 16/8 hours
 Description: East facade floor 1

Rail data, segment # 1: ETR (day/night)

Train Type	! Trains ! (Left)	! Trains ! (Right)	! Speed !(km/h)	!# loc !/Train	!# Cars !/Train	! Eng ! type	!Cont !weld
* 1. ETR	! 2.6/0.0	! 2.6/0.0	! 17.0	! 4.0	! 50.0	!Diesel	! Yes

* The identified number of trains have been adjusted for
 future growth using the following parameters:

Train type: No Name	! Unadj. Trains ! Left	! Trains ! Right	! Annual % ! Increase	! Years of ! Growth
1. ETR	! 2.0/0.0	! 2.0/0.0	! 2.50	! 10.00

Data for Segment # 1: ETR (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 : 245.00 / 245.00 m
 Receiver height : 2.00 / 2.00 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Whistle Angle : 71 deg Track 1
 Reference angle : 0.00

Results segment # 1: ETR (day)

LOCOMOTIVE (0.00 + 48.27 + 0.00) = 48.27 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	63.41	-12.13	- 3.01	0.00	0.00	0.00	48.27

WHEEL (0.00 + 33.52 + 0.00) = 33.52 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	48.66	-12.13	- 3.01	0.00	0.00	0.00	33.52

LEFT WHISTLE (0.00 + 0.00 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
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Segment Leq : 48.41 dBA

Total Leq All Segments: 48.41 dBA

Results segment # 1: ETR (night)

LOCOMOTIVE (0.00 + -15.14 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

- 90	0	0.00	0.00	-12.13	- 3.01	0.00	0.00	0.00	-15.14
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WHEEL (0.00 + -15.14 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

- 90	0	0.00	0.00	-12.13	- 3.01	0.00	0.00	0.00	-15.14
------	---	------	------	--------	--------	------	------	------	--------

LEFT WHISTLE (0.00 + 0.00 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

Segment Leq : 0.00 dBA

Total Leq All Segments: 0.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 48.41

(NIGHT): 0.00

STAMSON 5.0 NORMAL REPORT Date: 04-02-2026 17:10:39
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: b1south.te Time Period: Day/Night 16/8 hours
 Description: South facade floor 1

Rail data, segment # 1: ETR (day/night)

Train Type	! Trains ! (Left)	! Trains ! (Right)	! Speed !(km/h)	!# loc !/Train	!# Cars !/Train	! Eng ! type	!Cont !weld
* 1. ETR	! 2.6/0.0	! 2.6/0.0	! 17.0	! 4.0	! 50.0	!Diesel	! Yes

* The identified number of trains have been adjusted for
 future growth using the following parameters:

Train No	Train Name	! Unadj. ! Left	! Trains ! Right	! Annual % ! Increase	! Years of ! Growth
1.	ETR	! 2.0/0.0	! 2.0/0.0	! 2.50	! 10.00

Data for Segment # 1: ETR (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	:	325.00 / 325.00 m		
Receiver height	:	2.00 / 2.00 m		
Topography	:	1	(Flat/gentle slope; no barrier)	
Whistle Angle	:	71 deg	Track 1	
Reference angle	:	0.00		

Results segment # 1: ETR (day)

LOCOMOTIVE (0.00 + 47.04 + 0.00) = 47.04 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	63.41	-13.36	- 3.01	0.00	0.00	0.00	47.04

WHEEL (0.00 + 32.29 + 0.00) = 32.29 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	48.66	-13.36	- 3.01	0.00	0.00	0.00	32.29

LEFT WHISTLE (0.00 + 48.34 + 0.00) = 48.34 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

59	71	0.00	73.51	-13.36	-11.81	0.00	0.00	0.00	48.34
----	----	------	-------	--------	--------	------	------	------	-------

RIGHT WHISTLE (0.00 + 44.92 + 0.00) = 44.92 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

71	76	0.00	73.51	-13.36	-15.23	0.00	0.00	0.00	44.92
----	----	------	-------	--------	--------	------	------	------	-------

Segment Leq : 51.81 dBA

Total Leq All Segments: 51.81 dBA

Results segment # 1: ETR (night)

LOCOMOTIVE (0.00 + -16.37 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

0	90	0.00	0.00	-13.36	- 3.01	0.00	0.00	0.00	-16.37
---	----	------	------	--------	--------	------	------	------	--------

WHEEL (0.00 + -16.37 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

0	90	0.00	0.00	-13.36	- 3.01	0.00	0.00	0.00	-16.37
---	----	------	------	--------	--------	------	------	------	--------

LEFT WHISTLE (0.00 + 48.34 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

59	71	0.00	0.00	-13.36	-11.81	0.00	0.00	0.00	48.34
----	----	------	------	--------	--------	------	------	------	-------

Segment Leq : 0.00 dBA

Total Leq All Segments: 0.00 dBA

Road data, segment # 1: Drouillard R (day/night)

Car traffic volume	:	8172/908	veh/TimePeriod	*
Medium truck volume	:	511/57	veh/TimePeriod	*
Heavy truck volume	:	1532/170	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): 7100
Percentage of Annual Growth : 2.50
Number of Years of Growth : 19.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 15.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Drouillard R (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 : 20.00 / 20.00 m
Receiver height : 2.00 / 2.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Drouillard R (day)

Source height = 1.97 m

ROAD (0.00 + 66.28 + 0.00) = 66.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	70.53	0.00	- 1.25	- 3.01	0.00	0.00	0.00	66.28

Segment Leq : 66.28 dBA

Total Leq All Segments: 66.28 dBA

Results segment # 1: Drouillard R (night)

Source height = 1.97 m

ROAD (0.00 + 59.74 + 0.00) = 59.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	64.00	0.00	- 1.25	- 3.01	0.00	0.00	0.00	59.74

Segment Leq : 59.74 dBA

Total Leq All Segments: 59.74 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.43
(NIGHT): 59.74

STAMSON 5.0 NORMAL REPORT Date: 04-02-2026 18:29:32
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Rail data, segment # 1: ETR (day/night)

Train Type	! Trains (Left)	! Trains (Right)	! Speed (km/h)	!# loc /Train	!# Cars /Train	! Eng type	!Cont weld
* 1. ETR	! 2.6/0.0	! 2.6/0.0	! 17.0	! 4.0	! 50.0	!Diesel	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	Train Name	! Unadj. Trains Left	! Annual % Increase	! Years of Growth
1.	ETR	! 2.0/0.0	! 2.0/0.0	! 2.50 / 10.00

Data for Segment # 1: ETR (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 : 190.00 / 190.00 m
 Receiver height : 2.00 / 2.00 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Whistle Angle : 71 deg Track 1
 Reference angle : 0.00

Results segment # 1: ETR (day)

LOCOMOTIVE (0.00 + 52.39 + 0.00) = 52.39 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	63.41	-11.03	0.00	0.00	0.00	0.00	52.39

WHEEL (0.00 + 37.64 + 0.00) = 37.64 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	48.66	-11.03	0.00	0.00	0.00	0.00	37.64

LEFT WHISTLE (0.00 + 55.03 + 0.00) = 55.03 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

39	71	0.00	73.51	-11.03	- 7.45	0.00	0.00	0.00	55.03
----	----	------	-------	--------	--------	------	------	------	-------

RIGHT WHISTLE (0.00 + 48.80 + 0.00) = 48.80 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

71	79	0.00	73.51	-11.03	-13.68	0.00	0.00	0.00	48.80
----	----	------	-------	--------	--------	------	------	------	-------

Segment Leq : 57.59 dBA

Total Leq All Segments: 57.59 dBA

Results segment # 1: ETR (night)

LOCOMOTIVE (0.00 + -11.03 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

- 90	90	0.00	0.00	-11.03	0.00	0.00	0.00	0.00	-11.03
------	----	------	------	--------	------	------	------	------	--------

WHEEL (0.00 + -11.03 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

- 90	90	0.00	0.00	-11.03	0.00	0.00	0.00	0.00	-11.03
------	----	------	------	--------	------	------	------	------	--------

LEFT WHISTLE (0.00 + 55.03 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

39	71	0.00	0.00	-11.03	- 7.45	0.00	0.00	0.00	55.03
----	----	------	------	--------	--------	------	------	------	-------

Segment Leq : 0.00 dBA

Total Leq All Segments: 0.00 dBA

Road data, segment # 1: Drouillard R (day/night)

Car traffic volume	:	8172/908	veh/TimePeriod	*
Medium truck volume	:	511/57	veh/TimePeriod	*
Heavy truck volume	:	1532/170	veh/TimePeriod	*
Posted speed limit	:	50 km/h		
Road gradient	:	0 %		

[illegible]

Segment Leq : 64.00 dBA

Total Leq All Segments: 64.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 70.75
(NIGHT): 64.00

STAMSON 5.0 NORMAL REPORT Date: 04-02-2026 17:22:33
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

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

Rail data, segment # 1: ETR (day/night)

Train Type	! Trains ! (Left)	! Trains ! (Right)	! Speed !(km/h)	!# loc !/Train	!# Cars !/Train	! Eng ! type	!Cont !weld
* 1. ETR	! 2.6/0.0	! 2.6/0.0	! 17.0	! 4.0	! 50.0	!Diesel	! Yes

* The identified number of trains have been adjusted for
 future growth using the following parameters:

Train No	Train Name	! Unadj. ! Left	! Trains ! Right	! Annual % ! Increase	! Years of ! Growth
1.	ETR	! 2.0/0.0	! 2.0/0.0	! 2.50	! 10.00

Data for Segment # 1: ETR (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		: 245.00 / 245.00 m	
Receiver height		: 2.00 / 2.00 m	
Topography		: 1	(Flat/gentle slope; no barrier)
Whistle Angle		: 71 deg	Track 1
Reference angle		: 0.00	

Results segment # 1: ETR (day)

LOCOMOTIVE (0.00 + 48.27 + 0.00) = 48.27 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	63.41	-12.13	- 3.01	0.00	0.00	0.00	48.27

WHEEL (0.00 + 33.52 + 0.00) = 33.52 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	48.66	-12.13	- 3.01	0.00	0.00	0.00	33.52

LEFT WHISTLE (0.00 + 0.00 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

Segment Leq : 48.41 dBA

Total Leq All Segments: 48.41 dBA

Results segment # 1: ETR (night)

LOCOMOTIVE (0.00 + -15.14 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

- 90	0	0.00	0.00	-12.13	- 3.01	0.00	0.00	0.00	-15.14
------	---	------	------	--------	--------	------	------	------	--------

WHEEL (0.00 + -15.14 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

- 90	0	0.00	0.00	-12.13	- 3.01	0.00	0.00	0.00	-15.14
------	---	------	------	--------	--------	------	------	------	--------

LEFT WHISTLE (0.00 + 0.00 + 0.00) = 0.00 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

Segment Leq : 0.00 dBA

Total Leq All Segments: 0.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 48.41

(NIGHT): 0.00

Joseph Sleiman

From: Mehrilou, Elara <EMehrilou@citywindsor.ca>
Sent: Wednesday, July 2, 2025 2:13 PM
To: Joseph Sleiman
Cc: Joey Jraige; Emmanuel
Subject: RE: Traffic Data for surrounding roadways 2650 Metcalfe Street, Windsor
Attachments: TTR_WindsorTRS-Phase2_2024-04-12.pdf; TTR_WindsorTRS-Phase1_2024-04-04.pdf

Hi Joseph,

The attached report was conducting by Arcadis to study the truck route.

Please make sure that your estimates agree with the findings on page 24 and 25.

Sincerely,

Elara Mehr. R

Ellie MehriLou MEng. | Transportation Planner I



OFFICE OF COMMISSIONER OF INFRASTRUCTURE SERVICES

Public Work Operation - Transportation

1266 McDougall Ave | Windsor, ON | N8X 3M7

519-255-6100 ext. 6037

EMehrilou@citywindsor.ca

www.citywindsor.ca

From: Joseph Sleiman <Joseph@jjae.ca>
Sent: Wednesday, July 2, 2025 1:28 PM
To: Mehrilou, Elara <EMehrilou@citywindsor.ca>
Cc: Joey Jraige <joe@jjae.ca>; Emmanuel <emmanuel@jjae.ca>
Subject: FW: Traffic Data for surrounding roadways 2650 Metcalfe Street, Windsor

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

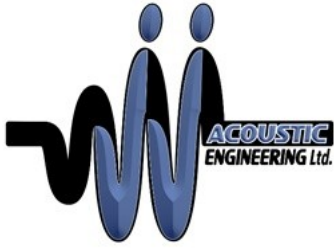
Hello, Elara. Please can you help me with the yearly percentage growth rates and the truck percentages for the roads below?

Thank you!

Regards,

Joseph C. Sleiman
JJ Acoustic Engineering Ltd.
Tel: (226)344-8911

Available 24 hrs/day - 7 days/week
joseph@jjae.ca



From: Spagnuolo, Mike <mospagnuolo@citywindsor.ca>
Sent: Wednesday, July 2, 2025 9:26 AM
To: Joseph Sleiman <Joseph@jjae.ca>; Mehrilou, Elara <EMehrilou@citywindsor.ca>
Cc: Joey Jraige <joey@jjae.ca>; Emmanuel <emmanuel@jjae.ca>
Subject: RE: Traffic Data for surrounding roadways 2650 Metcalfe Street, Windsor

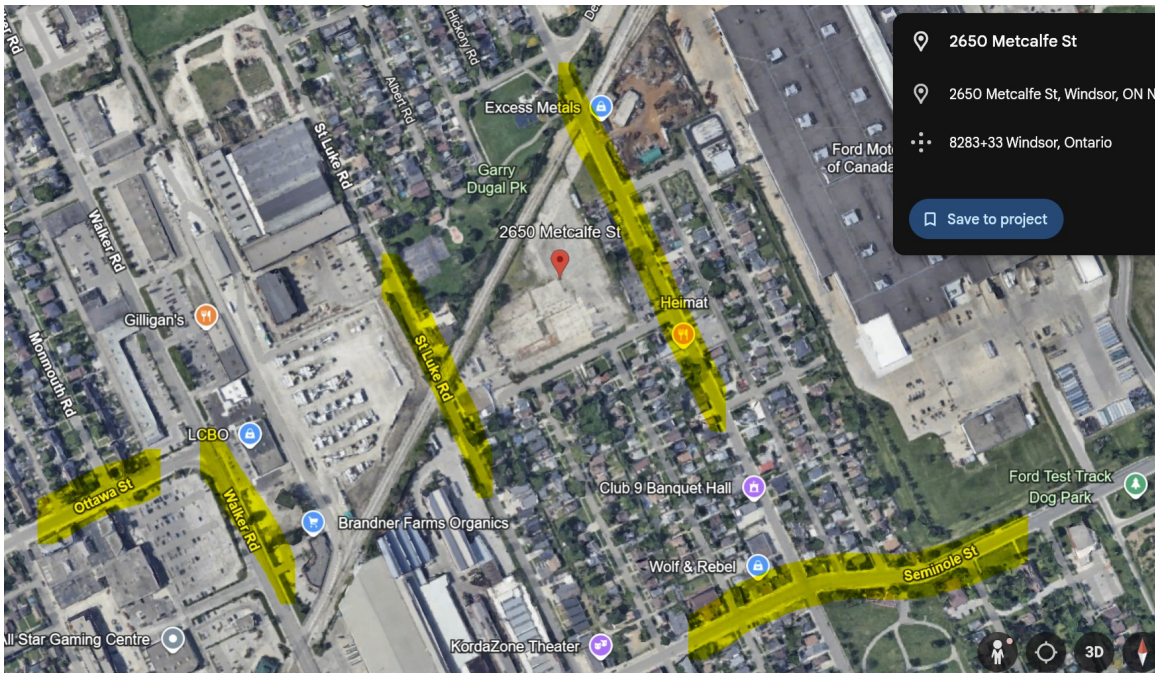
Good morning Joseph!
I have the following ADT's;
Ottawa W Walker 10,300 (2013)
Walker S Ottawa 26,000 (2015)
Seminole E Walker 11,000 (2019)
Seminole E Drouillard 10,600 (2011)
Drouillard N Seminole 7,100 (2017)
All roads are 50km/h. Data was collected with tubes so no vehicle classifications, so direction about truck % and growth rates should come from Transportation Planning

From: Joseph Sleiman <Joseph@jjae.ca>
Sent: July 1, 2025 3:28 PM
To: Spagnuolo, Mike <mospagnuolo@citywindsor.ca>; Mehrilou, Elara <EMehrilou@citywindsor.ca>
Cc: Joey Jraige <joey@jjae.ca>; Emmanuel <emmanuel@jjae.ca>
Subject: Traffic Data for surrounding roadways 2650 Metcalfe Street, Windsor

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Mike, I hope all is good, Happy Canada Day!

I am working on a proposed development located on 2650 Metcalfe Street, Windsor, and we need information about the traffic data for the surrounding roadways. Namely: St Luke Road, Drouillard Road, Seminole St, Walker Rd, and Ottawa St. Please see a Google Earth Snip below for reference.



Please provide:

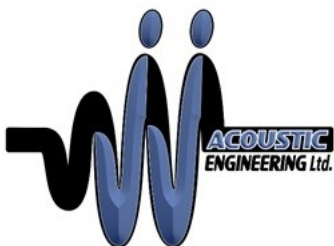
1. "Future AADT 10 years or Current AADT with a growth % most commonly used by the City of Windsor.
2. % Medium Trucks (or estimations as deemed acceptable by the City of Windsor)?
3. % Heavy trucks (or estimations as deemed acceptable by the City of Windsor)?
4. Speed limits for roadways."

Any information you have helps.

Thank you very much for your time.

Regards,

Joseph C. Sleiman
 JJ Acoustic Engineering Ltd.
 Tel: (226)344-8911
 Available 24 hrs/day - 7 days/week
joseph@jjae.ca



Joseph Sleiman

From: Drag Cvetkovski <dcvetkovski@etr.ca>
Sent: Monday, February 2, 2026 10:47 AM
To: Joseph Sleiman
Cc: Joey Jraige; Jack Weston
Subject: RE: Rail Noise Impact Study - Drouillard Rd, Windsor

Hi Joseph,

Good morning. I apologize for the late reply. See my answers below. As communicated before, our frequencies and volumes can change at anytime as we are a 24hr 7 days a week operation.

Regards,

Drag Cvetkovski

Superintendent

1600 Tecumseh Road East | Windsor, ON | N8W 1C5

P: (519) 973-8222 ext. 2270 | **C:** (519) 890-1497

E: dcvetkovski@etr.ca | www.etr.ca



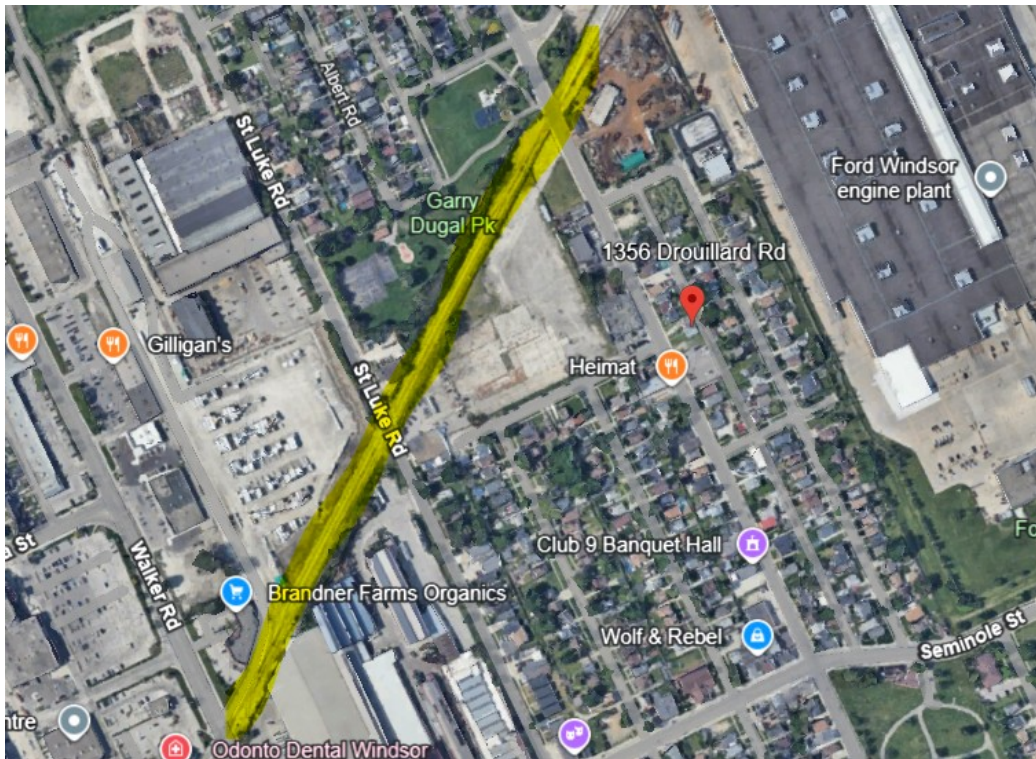
IN PORT WINDSOR 

CONNECTING WITH:   

From: Joseph Sleiman <Joseph@jjae.ca>
Sent: January 26, 2026 2:31 PM
To: Drag Cvetkovski <dcvetkovski@etr.ca>
Cc: Joey Jraige <joej@jjae.ca>; Jack Weston <jweston@etr.ca>
Subject: Rail Noise Impact Study - Drouillard Rd, Windsor

Hello, Drag, I hope all is good.

I am completing a road & rail noise impact study for a site located at 1356 Drouillard Rd, Windsor, Ontario. I would need the following information for the rail line Essex Terminal Railway that goes through the St Luke Road in Windsor. Please refer to attached image for your reference:



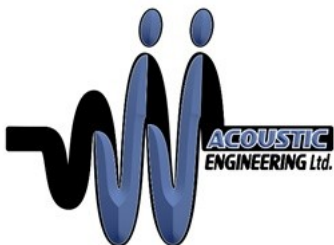
1. Maximum number of Locomotives? 4
2. Maximum number of Cars? 50
3. Is this area a whistle zone? Yes
4. Is the rail line welded? No, jointed rail
5. Speed in km/hr of the train? 10 mph
6. How many trains pass by in a day (7am-11pm)? 2-4
7. Are there any trains that pass by in the nighttime (11pm-7am)? No, not currently, but that's subject to customer needs and traffic volume changes.

Thank you for your time. Please let me know if there is anything you can't provide. And feel free to give me a call to discuss any.

We accept any fee please bill to JJ ACOUSTIC ENGINEERING LTD.

Regards,

Joseph C. Sleiman
 JJ Acoustic Engineering Ltd.
 Tel: (226)344-8911
 Available 24 hrs/day - 7 days/week
joseph@jjae.ca



Draft Report

Phase 1: Needs and Opportunities

City of Windsor
Truck Route Study

Date

April 4, 2024

Prepared for

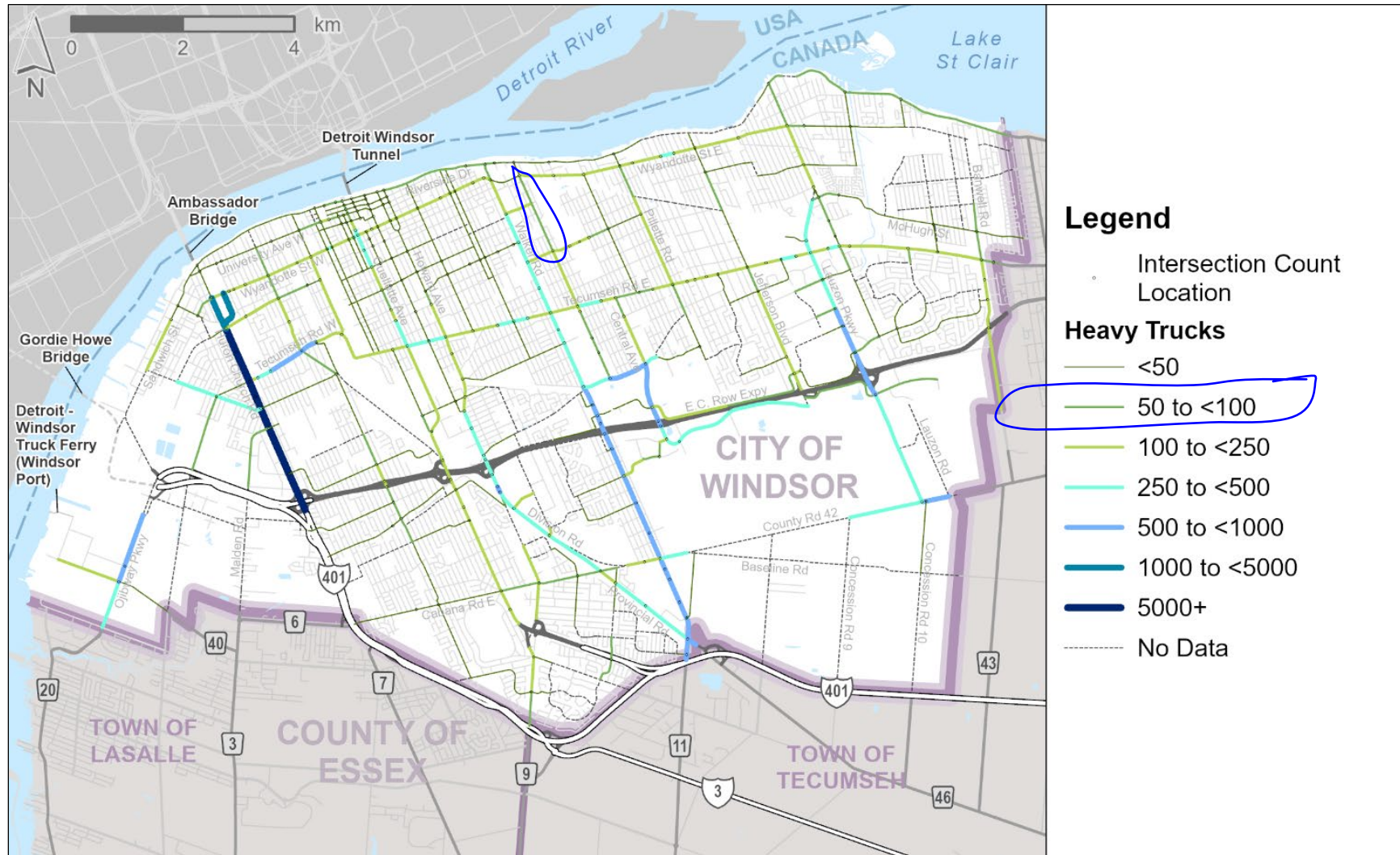
The City of Windsor

Prepared by

Arcadis
in association with
David Kriger Consultants Inc.
and GLPi



Exhibit 4.2: Current Weekday (11-hour) Heavy Truck Volumes in the City of Windsor



Note: Figures are 7 a.m.–6 p.m. weekday totals based on the most recent weekday counts per site (2020 to 2023).

ATTACHMENT C



ATTACHMENT D

Table C1
Stationary Noise Impact Source Data
Point Sources
1356 Drouilard Rd, Windsor, Ontario

Noise Source Description	Cadna ID	Total SWL (dBA)	Data Source or Representative Data	Height Absolute (m)	Above Roof (m)	Operating Time		x	y
						Day (min)	Night (min)		
C1	OS_Rep_Chiller	97.8	Rep_Chiller	10	2	Steady		17335782	4687011
H1	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335753	4686968
H2	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335797	4686992
H3	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335805	4686969
H4	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335829	4686932
H5	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335842	4686904
H6	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335842	4686852
H7	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335851	4686829
H8	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335885	4686766
H9	OS_HVAC_4_Fan	91.1	HVAC_4_Fan	10	2	Steady		17335900	4686743
IM1	Impulse_Excavator_Metal_Dropping	105.7	Metal_Dropping	2	2	Steady		17335516	4686902
RT01	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335628	4686930
RT02	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335686	4686956
RT03	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335646	4686897
RT04	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335663	4686866
RT05	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335720	4686891
RT06	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335738	4686857
RT07	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335681	4686832
RT08	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335712	4686766
RT09	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335727	4686736
RT10	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335741	4686701
RT11	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335797	4686727
RT12	OS_Rooftop_Unit	86.7	Rooftop_Unit	10	2	Steady		17335765	4686791
T1	OS_Heavy_Truck_Idling	105	Heavy_Truck_Idling	2	2	30		17335486	4686904

Stationary Noise Impact Source Data
Line Sources

Noise Source Description	Cadna ID	Total SWL (dBA)	Data Source or Representative Data	Height Absolute (m)	Moving Pt. Src		
					Number		Speed
					Day	Night	(km/h)
F1	OS_Fork_lift	93	Fork_lift	1.5	10	0	10
T2	OS_Heavy_truck_10kph	87.6	Heavy_truck_10kph	1.5	2	0	10
T3	OS_Heavy_truck_10kph	97.5	Heavy_truck_10kph	2.2	5	5	10