

# Noise Feasibility Study - FINAL

2504228 Ontario Inc.

3033 Dundas Street West,  
Mississauga, ON

**Prepared for:**

Iram Zando

**Prepared by:**

Srinivasa-Rao Ippili, *Ph.D.*

Ryan Matheson, *MSc. Applied Physics, P.Eng.*



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## Revision Log

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FINAL

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## 1 Introduction

2504228 Ontario Inc. (Client) retained Soft dB to conduct a noise feasibility study to support their application for site plan approval of the proposed condominium building located at 3033 Dundas Street West, Mississauga, ON - adjacent to the intersection of Dundas Street and Winston Churchill Blvd roads (See Figure 1). The proposed development is twelve (12)-storey mixed-use residential building. The municipality requested the client complete a Noise Feasibility Study (NFS) for the purpose of official plan and zoning by-law amendment.

This NFS was conducted by following the best practices according to the Noise Pollution Control guidelines, specifically NPC-300, from the Ontario Ministry of Environment, Conservation and Parks (MECP), as well as Soft dB's past project experience on similar projects.

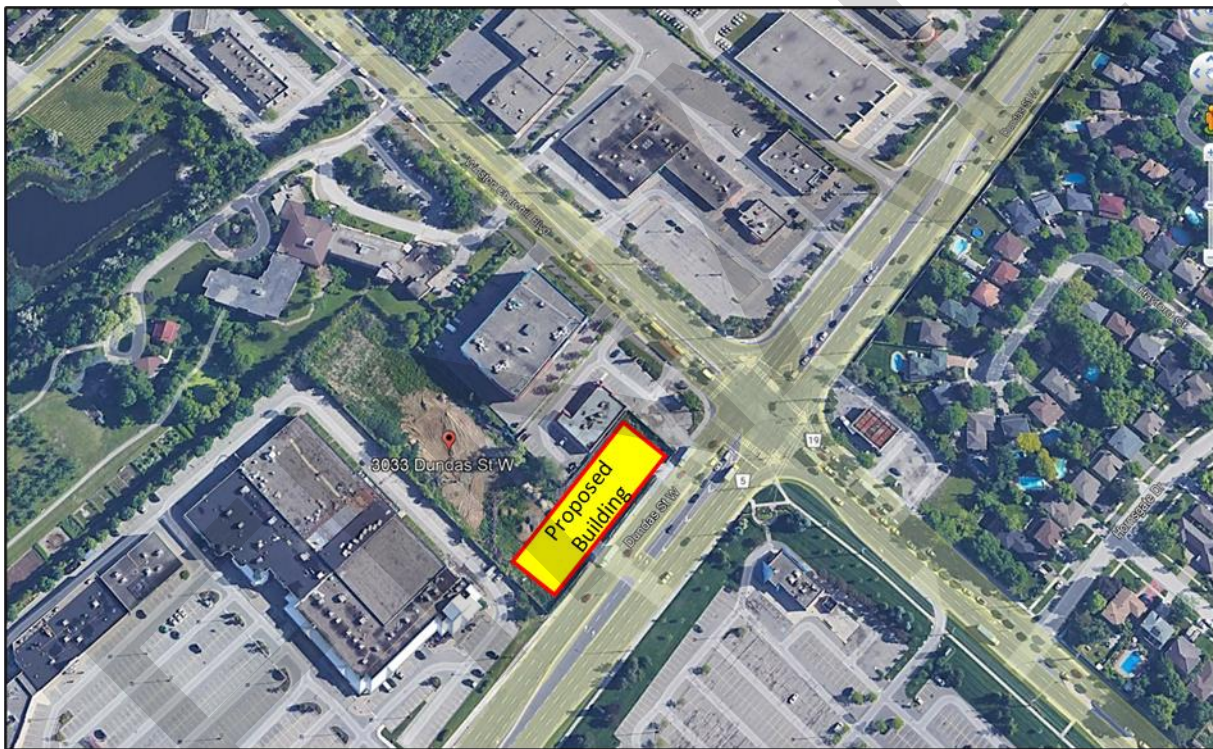


Figure 1: General site location (Source: Google Maps)

The principal objectives of this study are to:

- Assess the noise impact from the surrounding environment on the proposed development;
- Assess the noise impact of the proposed development on the surrounding environment;
- Assess the noise impact of the proposed development on itself.

## 2 Project Description

The proposed mixed-use residential building will be constructed at 3033 Dundas Street West, Mississauga, ON. The building is designed to be approximately 48 metres above grade and is expected to consist of

multiple types of spaces within the building, such as, residential, medical, retail, amenity, restaurant, mechanical penthouse, etc.

Given the early stage of development, façade construction has not been finalized and only the site plan showing the building footprints has been made available for review. The elevated outdoor amenity areas are located on the 7th floor (south side), 9th floor (south and northwest sides), and 11th floor (south side). Each of these elevated outdoor amenity areas will feature 1.1-metre-high railings and a setback distance of 1 metre from the building's edge.

Precise locations and operating conditions of applicable mechanical equipment related to HVAC and any other stationary noise sources within the building and site premises is not yet known. Traffic data indicating the Ultimate Average Daily Traffic (UADT) of Dundas Street and Winston Churchill Boulevard has been provided by the City of Mississauga and the Region of Peel. Based on the volume of traffic in the area and observations made during an initial site visit to the project site it has been determined that the area is classified as a Class 1 – Urban as per MECP Noise Pollution Control Guideline NPC-300 “Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning”[1]. Traffic data is included in Appendix B.

### 3 Noise Sources

The following subsections describe the types of noise sources in the environment that may impact the project. These are broken up into two types, 1. Transportation Noise Sources, and 2. Stationary Noise Sources as defined in NPC-300 [1].

#### 3.1 Transportation Noise Sources

The transportation noise sources, as defined by NPC-300, comprise of the noise generated by road, railway and/or air traffic near the location of the site. Based on the observations made during the site visit, conducted by Soft dB personnel, the acoustical environment at the subject land was found to be dominated by the road traffic noise from the Dundas St. and Winston Churchill Blvd., located to the south and east side of the site, respectively.

As per NPC-300, all the sound level predictions and recommendations provided should account for future increase in traffic (10 years for this project, *i.e.*, until 2034), unless ultimate traffic data for the respective roads is available for making such calculations. This road traffic data was then entered into the acoustic model to predict the noise levels at the sensitive points of reception.

The latest ultimate road traffic data (including AADT and other available details) for Dundas Street (East and West) and Winston Churchill Boulevard was sourced from the City of Mississauga. Additionally, the Region of Peel provided forecasted ultimate traffic data specifically for Winston Churchill Boulevard. The speed limit for both Dundas St. and Winston Churchill Blvd. is 60 km/h. It is important to note that while both the City of Mississauga and the Region of Peel supplied ultimate traffic data for Winston Churchill Boulevard, discrepancies were observed between the data from the two authorities. **Error! Reference**

**source not found.** summarizes the forecasted ultimate road traffic data for these roads as provided by each authority. For the NFS related calculations, Soft dB used data from both sources and reported the worst-case scenario in this report. Appendix B contains detailed information provided by the City of Mississauga and the Region of Peel.

Table 1: Road traffic data

Road	AADT	Trucks (%) [Day and Night]	Medium/Heavy Truck Ratio (%) [Day and Night]	Speed Limit (km/h)	Day:Night Traffic Ratio
	From ultimate traffic data				
Dundas St. (East and West combined)	80,500	3 and 3	55/45 and 55/45	60	90/10
Winston Churchill Blvd. (from City of Mississauga)	55,600	3 and 3	55/45 and 55/45	60	90/10
Winston Churchill Blvd. (from Region of Peel)	48,600	4.8 and 3.1	33.3/66.7 and 45/55	60	91/9

After conducting the initial calculations using the UADT data provided by both the City of Mississauga and the Region of Peel for Winston Churchill Blvd, results based on the data from the City of Mississauga have been reported in this assessment, as the predicted values are higher for that scenario.

### 3.2 Stationary Noise Sources

The buildings to the west and north of the site are commercial, equipped with rooftop mechanical units typically used for central air conditioning in commercial buildings. The emission levels of the rooftop units are currently unknown. Further assessment and discussion of these sources are included in Section 6.

## 4 Applicable Criteria

As noted in Section 3.0 the most significant noise sources to be considered in this study are transportation noise sources. The applicable guideline limits for sound from transportation noise sources on residential developments is given in Part C of the MECP publication NPC-300 "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning" [1]. The following sub-sections describe the noise level limits for indoor and outdoor spaces, as well as whether warning clauses and provisions for central air conditioning are required.

The assessment is completed at the most significant noise sensitive points of reception associated with the new development. Points of reception (POR) that are applicable for these types of assessments can be either of the following:

- **Plane of Window (POW):** Represents the point on the façade corresponding with the location of the centre of a window in a noise sensitive space. For transportation noise sources, the sound level at POW determines the requirements for ventilation and air-conditioning. Additionally, the POW

sound levels are used to estimate the indoor noise levels, which may dictate the requirements for any building element upgrades.

- **Outdoor Living Area (OLA):** Corresponds to the part of a noise sensitive land use that is intended and designed for the quiet enjoyment of the outdoor environment and readily accessible from the building environment, such as backyards, balconies, parks, etc. To qualify as an OLA,
  - The point of assessment must be at least 3 metres from the building façade;
  - 1.5 metres above grade aligned with midpoint of subject façade.

Others that may be considered OLA's are balconies and elevated terraces (e.g., rooftop, etc.), provided they are not enclosed and have a minimum depth of 4 metres.

The proposed development is currently in the pre-design stage, and the receptor points have been chosen based on the provided plans. Interior layouts and façade construction is not currently known and the assessment only considers applicable criteria outside the building at POW and in the OLAs. Five (5) OLAs that are to be assessed are observed in the current design of the proposed building.

## 4.1 Indoor Sound Level Limits

The indoor sound level limits developed by the MECP for transportation noise sources are summarized in Table 2. Day Time refers to the hours between 07:00 – 23:00. Nighttime refers to the hours between 23:00 – 07:00.

Table 2: MECP Indoor Sound Level Limits

Room	Time Period	Road Sound Level (dBA)	Rail Sound Level (dBA)
Living / Dining / Den	Day Time (07:00 – 23:00)	45	40
	Nighttime (23:00 – 07:00)	45	40
Sleeping Quarters	Day Time (07:00 – 23:00)	45	40
	Nighttime (23:00 – 07:00)	40	35
General offices, reception areas, retail stores, etc.	Day Time (07:00 – 23:00)	50	45
Living/dining areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, theatres, places of worship, libraries, individual or semi- private	Day Time (07:00 – 23:00)	45	40

Room	Time Period	Road Sound Level (dBA)	Rail Sound Level (dBA)
offices, conference rooms, reading rooms, etc.			
Sleeping quarters of hotels/motels	Nighttime (23:00 – 07:00)	45	40
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	Nighttime (23:00 – 07:00)	40	35

For road noise sources, building components including windows, walls, and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limits in Table 2. The acoustical performance of the building components (windows, doors, and walls) should be specified.

## 4.2 Outdoor Sound Level Limits, Ventilation, and Warning Clause Requirements

This sub-section specifically applies to the POW and OLA of residential units in the building. Table 3 below outlines the sound level limits for noise in outdoor living areas (OLA) and at the plane of an outside window (POW). Day Time refers to the hours between 07:00 – 23:00. Nighttime refers to the hours between 23:00 – 07:00.

Table 3: MECP Outdoor Sound Level Limits with Ventilation and Warning Clause Recommendations (Road)

Assessment Location	Time	Sound Level (dBA)	Ventilation Requirement	Warning Clause
Bedroom or Living / Dining Room	Day	$\leq 55$	None	None
		$> 55 \leq 65$	Provision for central air	Yes – Type C
		$> 65$	Central air required	Yes – Type D
	Night	$\leq 50$	None	None
		$> 50 \leq 60$	Provision for central air	Yes – Type C
		$> 60$	Central air required	Yes – Type D

In addition to the limits in Table 3, the sound level limits for an OLA are as follows:

- < 55 dBA – No noise control;
- > 55 dBA but  $\leq 60$  dBA – noise control measures may be applied to reduce the sound level to 55 dBA. If measures are not provided use warning clause Type A;
- > 60 dBA – noise control measures should be implemented to reduce the level to 55 dBA. Only in cases where the required noise control measures are not feasible for technical, economic or administrative reasons would an excess above the limit (55 dBA) be acceptable with warning clause Type B. In the above situations, any excess above the limit (60 dBA) will not be acceptable if it exceeds 5 dBA.

### 4.3 Warning Clauses

The MECP guidelines NPC-300 [1] recommend that warning clauses be included in property and tenancy agreements for units with anticipated traffic sound level excesses. Warning clauses are included in Appendix C. It should be noted that these warning clauses only apply to the residential unit and not the other commercial spaces that make up the project space.

## 5 Assessment Methodology

The following general methodology was followed to conduct the NFS for the proposed development:

- An initial site visit was completed on October 30, 2024 and the potential transportation (major roadways) and/or stationary (industries, commercial properties, etc.) noise sources with the potential to impact the proposed mixed-use residential development at the noise sensitive receptors were identified;
- Analyzing the road traffic data and incorporating their forecasted traffic volumes using TNM (based on Ultimate Traffic Data received from Region of Peel and City of Mississauga) in an acoustic model prepared in CadnaA 2024 to predict the expected sound levels due to transportation noise sources at the POWs and OLAs of the proposed building;
- Identify all nearby significant stationary noise sources, if any, and estimate their impact on the proposed development.
- Assess the compliance of the calculated sound levels with the sound level limits provided in NPC-300[1];
- If required, provide general noise control recommendations to achieve compliance with the sound level limits provided in the NPC-300[1] at the POR.

## 6 Results & Recommendations

Based on a site layout reviewed at the time of issuance of this report (see Appendix A) only the proposed mixed-use residential building adjacent to Dundas Street West was identified as a noise sensitive space. As previously discussed, for this development, the sound levels on the exterior façades of this development will be used for this assessment to determine compliance with the NPC-300 limits.





Figure 3: Nomenclature of the evaluated OLAs of the proposed development

As per the NPC-300, the applicable methodology for the prediction of road traffic noise is ORNAMENT (Ontario Road Noise Analysis Method for Environment and Transportation) and STEAM (Sound from Trains Environmental Analysis Method) for railway noise prediction. STAMSON is a computerized road and railway noise prediction software developed by MECP based on noise prediction methodologies described in ORNAMENT and STEAM.

The TNM (Traffic Noise Model) is a computerized traffic noise prediction modelling software developed by the United States Federal Highway Administration (FHWA) to be used on all U.S. Federal Highway projects. It is considered one of the most robust traffic noise prediction software due to its capabilities to implement several modelling algorithms for different source type and its ability to incorporate complex topography.

Even though both STAMSON and TNM are acceptable computerized noise prediction software in the province of Ontario, for this project, TNM 2.5 (for road) modules within the acoustical modelling software, CadnaA (developed by *DataKustik GmbH*) was chosen in order to simulate and predict the forecasted noise levels at the relevant receptor points. This module within CadnaA was selected to simulate the acoustic model due to its versatility in incorporating complex topography, GIS data integration and ability to generate noise contour maps (where applicable) for better visual representation of the acoustic environment near the site.

The acoustic models prepared in CadnaA considers two (2) order of reflection from the prominent surfaces such as buildings (except from the proposed development) and ground factor of 0 was considered. All the applicable data for the transportation (i.e., road traffic data) noise sources were entered into the acoustic model to predict the sound level at the façades and OLAs of the proposed development.

The proposed development was modelled based on the information provided in the site plan drawing set provided by the client dated January 17, 2025. Figure 4 presents a snapshot of the acoustical model prepared in CadnaA.

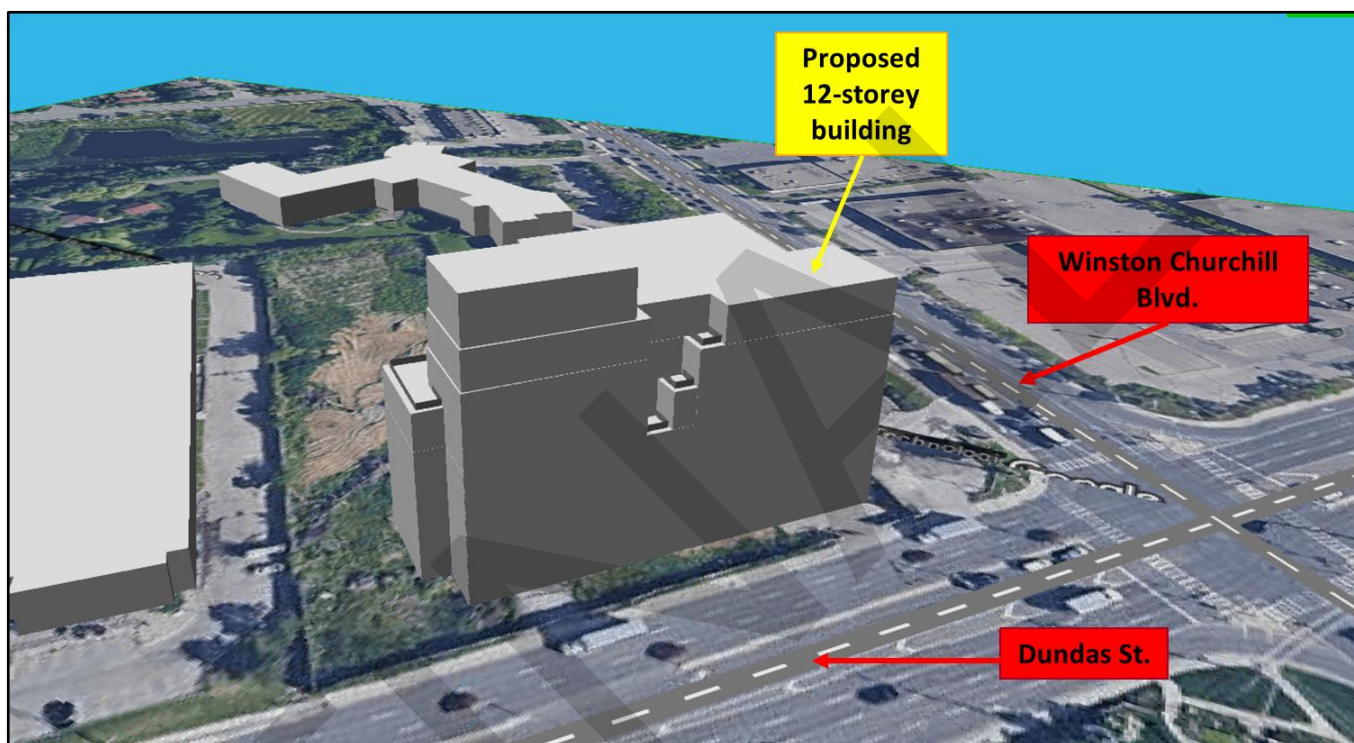


Figure 4: Snapshot of the acoustical model prepared in CadnaA

The sound pressure levels across all façades of the proposed development were predicted using the forecasted ultimate road traffic data. Table 4 presents the compliance assessment for the maximum predicted sound levels at the façade of the proposed development due to road traffic during daytime and nighttime periods.

Table 4: Compliance assessment at POR-POW for the predicted road traffic noise

POR	Daytime (07:00–23:00) LA <sub>eq,16h</sub> (dBA)			Nighttime (23:00–07:00) LA <sub>eq,8h</sub> (dBA)		
	Calculated	Limit*	Compliant	Calculated	Limit*	Compliant
North Façade (POW)	59	55	<b>No</b> See Note 1	50	50	<b>Yes</b>
East Façade (POW)	66	55	<b>No</b> See Note 2	56	50	<b>No</b> See Note 1

POR	Daytime (07:00–23:00) LA <sub>eq</sub> ,16h (dBA)			Nighttime (23:00–07:00) LA <sub>eq</sub> ,8h (dBA)		
	Calculated	Limit*	Compliant	Calculated	Limit*	Compliant
South Façade (POW)	69	55	<b>No</b> <b>See Note 2</b>	59	50	<b>No</b> <b>See Note 1</b>
West Façade (POW)	64	55	<b>No</b> <b>See Note 1</b>	55	50	<b>No</b> <b>See Note 1</b>

**Notes:**

1. The maximum predicted sound levels at the façade of the 12-storey building exceeds 55 dBA but not 65 dBA during daytime and exceeds 50 dBA but not 60 dBA during nighttime. Hence, the building components including windows, walls and doors, air conditioning where applicable, should be designed so that the indoor sound levels comply with the sound level limits specified in Table 3, with the inclusion of warning clause Type C (see Appendix C) in the offers of purchase/sale/lease/rental agreements is required.
2. The maximum predicted sound levels at the façade of the 12-storey building exceeds 65 dBA during daytime and exceeds 60 dBA during nighttime. Hence, the building components including windows, walls and doors, air conditioning where applicable, should be designed so that the indoor sound levels comply with the sound level limits specified in Table 3, with the inclusion of warning clause Type D (see Appendix C) in the offers of purchase/sale/lease/rental agreements is required.

As observed from the values presented in Table 4, the predicted sound levels on the exterior facades of the development exceed 60 and 65 dBA during daytime, 50 and 55 dBA during nighttime. Hence, an Ontario Building Code (OBC) compliant wall and window construction will result in an interior sound level that will comply with the NPC-300[1] guidelines.

Table 5 presents the compliance assessment for the maximum predicted sound levels at the OLAs of the proposed development due to road traffic during daytime periods.

Table 5: Compliance assessment at POR-OLA for the predicted road traffic noise

POR	Daytime (07:00–23:00) LA <sub>eq</sub> ,16h (dBA)		
	Calculated	Limit*	Compliant
7 <sup>th</sup> Floor South (OLA)	52	55	<b>Yes</b>
9 <sup>th</sup> Floor South (OLA)	53	55	<b>Yes</b>
9 <sup>th</sup> Floor North West 1 (OLA)	53	55	<b>Yes</b>
9 <sup>th</sup> Floor North West 2 (OLA)	52	55	<b>Yes</b>
11 <sup>th</sup> Floor South (OLA)	54	55	<b>Yes</b>

The sound levels at all the OLA locations are predicted to be less than 55 dBA. Therefore, no mitigation measures are necessary. It is recommended that construction of the railing/barriers along the perimeter of the OLAs meet the requirements for a noise barrier as per NPC-300[1] guidelines. A summary of these details is as follows:

- The noise barrier should have a minimum surface area density of 20 kg/m<sup>2</sup>.
- The noise barrier should be structurally sound and shall be designed to withstand wind and snow loads.
- It must be constructed without any surface cracks or gaps. Any drainage gaps at the base of the barrier should be minimized and localized to preserve its acoustic performance.

Final composition of the exterior wall and windows, railing heights and setback distances for the OLAs shall be reviewed by a qualified acoustical consultant to verify that they meet the requirements set in this report at a later stage of permitting.

Sample calculations are presented in Appendix D.

## 7 Discussion

### 7.1 Impact of surrounding environment on project

The following subsections describe the types of noise sources in the surrounding environment that may impact the project based on the prediction results obtained.

#### 7.1.1 Transportation noise sources (Road)

The noise impact from transportation sources were predicted and are included in Section 6. Both the POW and OLAs were evaluated and recommendations are to be implemented as described in the previous Section.

#### 7.1.2 Stationary noise sources

Based on a survey of the publicly available aerial image data, it was observed that there are nearby stationary noise sources associated with adjacent buildings. Based on observations on site the background noise was dominated by road traffic and the stationary sources were inaudible. Thus, it is expected that at this stage of development the stationary noise sources may not have an impact on the subject site, and the project is considered feasible in regard to the presence of the stationary sources identified in the aerial image of the site and surrounding areas. A more detailed assessment to confirm compliance is recommended as part of a noise impact study at a later stage of permitting, if a noise impact study is required by the municipality.

Furthermore, any future stationary sources on neighboring lands, approved after the proposed development, must comply with MECP guideline NPC-300[1], to ensure compliance.

## 7.2 Impact of project on surrounding environment

Due to the lack of information regarding truck operations, the type, and the installation location of any mechanical equipment (e.g., HVAC) on the development site, this assessment does not address the potential noise impact of the proposed development on its surroundings. According to the site plan drawings provided to Soft dB, a new road will be constructed to the west of the proposed building, connecting to Dundas St. West. However, the traffic on this new road is expected to be low, and have an insignificant impact compared to the traffic from Dundas St. West. It is important to note that noise levels from mechanical equipment on the site, both at the development and at nearby noise-sensitive receptors, must comply with NPC-300 standards for stationary sources. Detailed information regarding Stationary noise sources associated with the project were not available and should be reviewed at a later stage of the permitting process.

## 7.3 Impact of project on itself

Due to the lack of information regarding truck operations, the type, and the installation location of any mechanical equipment (e.g., HVAC) on the development site, this assessment does not address the potential noise impact of the proposed development on itself. According to the site plan drawings provided to Soft dB, a new road will be constructed to the west of the proposed building, connecting to Dundas St. West. However, the traffic on this new road is expected to be low, and have an insignificant impact compared to the traffic from Dundas St. West. It is important to note that noise levels from mechanical equipment on the site, both at the development and at nearby noise-sensitive receptors, must comply with NPC-300 standards for stationary sources. Detailed information regarding Stationary noise sources associated with the project were not available and should be reviewed at a later stage of the permitting process.

# 8 Conclusions

2504228 Ontario Inc. retained Soft dB to conduct a noise feasibility study to support the site plan application for the development of the proposed mixed-use residential building at 3033 Dundas St. West, Mississauga, ON (see Figure 1). This assessment is required by the municipal land-use planning authority due to the proximity of the proposed development to the transportation noise sources from Dundas St. and Winston Churchill Blvd.

This report assesses the impact of the future noise levels based on ultimate traffic data due to the transportation noise sources (Dundas St. and Winston Churchill Blvd.) on the proposed development.

It was found that the predicted noise levels at all the façades exceed the applicable criteria during daytime and all the façades except the north façade exceed the applicable criteria during nighttime. **Error! Reference source not found.** summarizes the results and recommendations to achieve compliance. It should be noted that it is also recommended that a Noise Impact Study should be conducted at a later stage of the permitting process when detailed information regarding façade compositions and

specifications, railing heights and setback distances for the OLAs, truck operations, the type and the installation location of any mechanical equipment (e.g., HVAC) on the development site is made available.

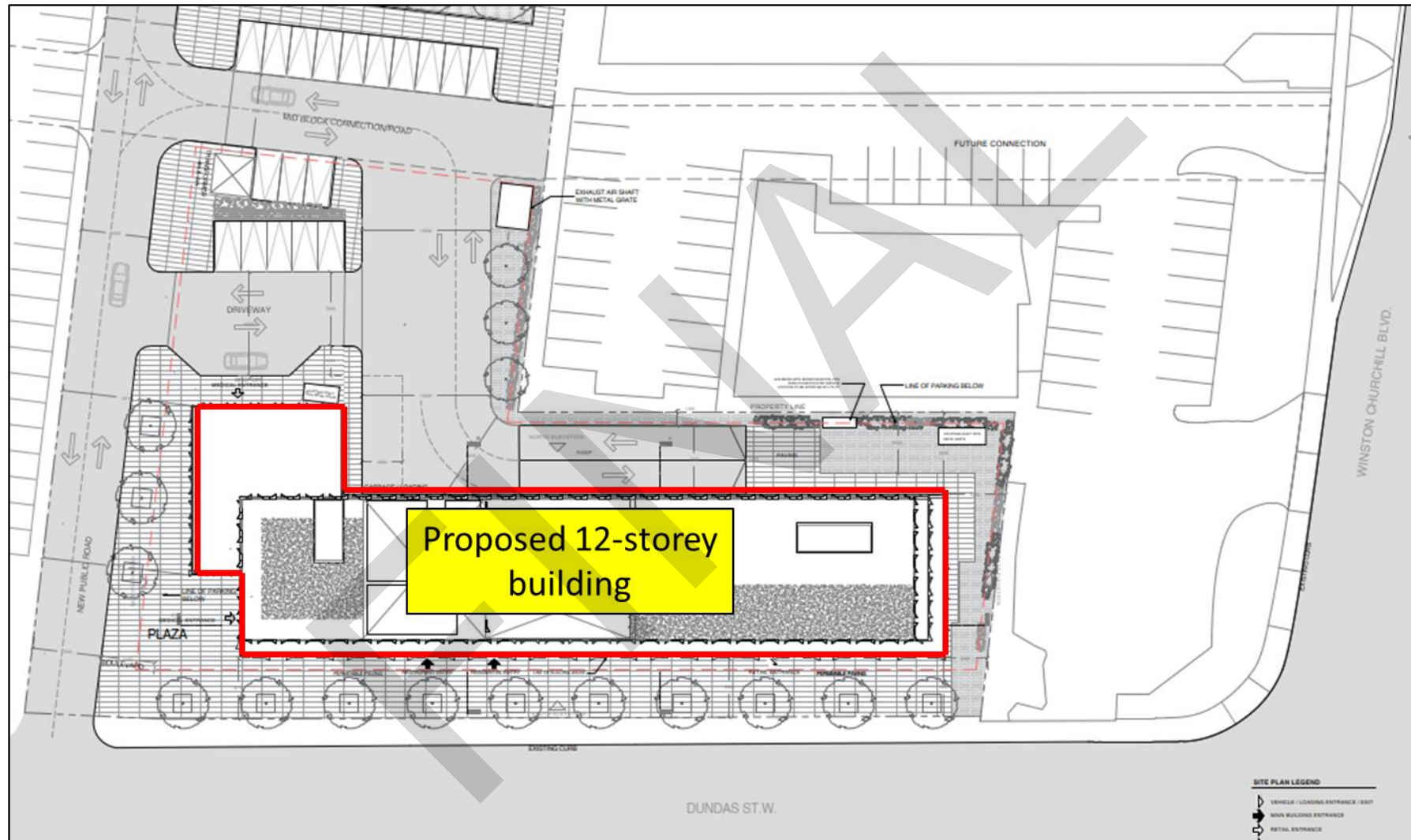
In general, with the implementation of the recommendations made, the project is considered to be feasible.

## 9 References

- [1] "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning (NPC-300)," Ontario Ministry of Transportation, Ontario, 2013.


ENVIRONMENTAL

## Appendix A Site layout



## Appendix B Road Traffic Volumes and Sample Calculations

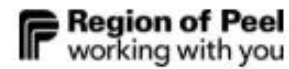
Dundas St. and Winston Churchill Blvd (City of Mississauga)

	Date:	25/Oct/24	<b>NOISE REPORT FOR PROPOSED DEVELOPMENT</b>			
	<b>REQUESTED BY:</b> Name: Srinivasa-Rao Ippili, Ph.D. Company: Soft db Fax#: 866-686-0993 ext.406					
	<b>PREPARED BY:</b> Name: Naveda Dukhan C.E.T Tel#: 905-615-3200 X 8948		ID#		636	
	<b>ON SITE TRAFFIC DATA</b>					

Specific	Street Names		
	1. Winston Churchill	2. Dundas St W	3. Dundas St W
AADT:	55600	44100	36400
# of Lanes:	6	6	4
% Trucks:	3%	2%	3%
Medium/Heavy Truck Ratio:	55/45	55/45	55/45
Day/Night Split:	90/10	90/10	90/10
Posted Speed Limit:	60 km/hr	60 km/hr	60 km/hr
Gradient of Road:	2%	2%	2%
Ultimate R.O.W.:	35m	30m	40m

Comments: Ultimate Traffic Data only (2041)

## Winston Churchill Blvd. (Region of Peel)



**Date:** October 24, 2024  
**Requestor:** Srinivasa-Rao Ippili, Acoustic & Vibration Consulting  
**Request Type:** Noise Traffic Data Request  
**Location:** Winston Churchill Blvd - 350m South of Dundas Street

Srinivasa-Rao Ippili,

As per your request, please see below traffic data from 2023:

	Existing	Ultimate
24 Hour Traffic Volume	31586	48600
# of Lanes	4	6
Day/Night Split	91/9	91/9
Day Trucks (% of Total Volume)	1.6% Medium 3.2% Heavy	1.6% Medium 3.2% Heavy
Night Trucks (% of Total Volume)	1.4% Medium 1.7% Heavy	1.4% Medium 1.7% Heavy
Right-of-Way Width	45 meters	
Posted Speed Limit	60 km/h	

**Note:**

1. The current volume is not the Annual Average Daily Traffic, but the averaged raw volumes over three data collection days. For Annual Average Traffic Volume, visit the Peel Open Data website below: <http://opendata.peelregion.ca/data-categories/transportation/traffic-count-stations.aspx>2. The ultimate volume is the planned volume during a level of service 'D' where a 2 second vehicle headway and a volume to capacity ratio of 0.9 is assumed. Traffic signals and hourly variations in traffic are also incorporated into the ultimate volume.

If you require further assistance, please contact me at [transportationplanningdata@peelregion.ca](mailto:transportationplanningdata@peelregion.ca)

Regards,

**Shuvangkor Shusmoy Roy**  
 Intermediate Planner, Transportation Planning  
 Transportation Division | Public Works | Region of Peel  
 10 Peel Centre Drive, Suite B, 4th Floor  
 Brampton, ON L6T 4B9

## Appendix C NPC-300 Warning Clauses

### Type A

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

### Type B

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

### Type C

This facility 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.

### Type D

This facility 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.

## Appendix D Sample Calculations

FINAL

Receiver  
Name: NW OLA 1  
ID:  
X: 17606440.82 m  
Y: 4819645.95 m  
Z: 29.10 m

Road, TNM, Name: "Dundas Street", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
243	17606476.26	4819627.70	1.10	0	D	A	64.4	-25.1	0.0	26.3	0.0	0.0	13.0
244	17606471.27	4819621.18	1.10	0	D	A	64.4	-13.2	0.0	7.7	0.0	0.0	43.5
244	17606471.27	4819621.18	1.10	0	N	A	54.9	-13.2	0.0	7.7	0.0	0.0	34.0
245	17606461.89	4819608.93	1.10	0	D	A	64.4	-13.9	0.0	8.6	0.0	0.0	42.0
245	17606461.89	4819608.93	1.10	0	N	A	54.9	-13.9	0.0	8.6	0.0	0.0	32.4
246	17606447.82	4819590.57	1.10	0	D	A	64.4	-13.1	0.0	7.8	0.0	0.0	43.5
246	17606447.82	4819590.57	1.10	0	N	A	54.9	-13.1	0.0	7.8	0.0	0.0	34.0
247	17606436.77	4819576.12	1.10	0	D	A	64.4	-22.6	0.0	7.3	0.0	0.0	34.6
247	17606436.77	4819576.12	1.10	0	N	A	54.9	-22.6	0.0	7.3	0.0	0.0	25.0
248	17606424.36	4819559.92	1.10	0	D	A	64.4	-16.4	0.0	6.0	0.0	0.0	42.1
248	17606424.36	4819559.92	1.10	0	N	A	54.9	-16.4	0.0	6.0	0.0	0.0	32.5
250	17606402.90	4819531.90	1.10	0	D	A	64.4	-19.2	0.0	3.6	0.0	0.0	41.6
250	17606402.90	4819531.90	1.10	0	N	A	54.9	-19.2	0.0	3.6	0.0	0.0	32.1
252	17606387.64	4819511.97	1.10	0	D	A	64.4	-24.6	0.0	-1.8	0.0	0.0	41.6
252	17606387.64	4819511.97	1.10	0	N	A	54.9	-24.6	0.0	-1.8	0.0	0.0	32.1
436	17606471.27	4819621.18	2.52	0	D	A	62.0	-13.2	0.0	9.5	0.0	0.0	39.2
436	17606471.27	4819621.18	2.52	0	N	A	52.4	-13.2	0.0	9.5	0.0	0.0	29.7
437	17606461.89	4819608.93	2.52	0	D	A	62.0	-13.9	0.0	8.5	0.0	0.0	39.6
437	17606461.89	4819608.93	2.52	0	N	A	52.4	-13.9	0.0	8.5	0.0	0.0	30.0
438	17606447.82	4819590.57	2.52	0	D	A	62.0	-13.1	0.0	9.1	0.0	0.0	39.8
438	17606447.82	4819590.57	2.52	0	N	A	52.4	-13.1	0.0	9.1	0.0	0.0	30.2
440	17606436.77	4819576.12	2.52	0	D	A	62.0	-22.6	0.0	8.2	0.0	0.0	31.2
440	17606436.77	4819576.12	2.52	0	N	A	52.4	-22.6	0.0	8.2	0.0	0.0	21.6
441	17606425.37	4819561.24	2.52	0	D	A	62.0	-16.7	0.0	4.3	0.0	0.0	41.0
441	17606425.37	4819561.24	2.52	0	N	A	52.4	-16.7	0.0	4.3	0.0	0.0	31.4
442	17606405.93	4819535.85	2.52	0	D	A	62.0	-19.3	0.0	3.3	0.0	0.0	39.4
442	17606405.93	4819535.85	2.52	0	N	A	52.4	-19.3	0.0	3.3	0.0	0.0	29.9
443	17606389.65	4819514.60	2.52	0	D	A	62.0	-22.8	0.0	-3.1	0.0	0.0	42.3
443	17606389.65	4819514.60	2.52	0	N	A	52.4	-22.8	0.0	-3.1	0.0	0.0	32.8
565	17606476.26	4819627.70	4.66	0	D	A	57.5	-25.1	0.0	20.6	0.0	0.0	11.8
566	17606471.27	4819621.18	4.66	0	D	A	57.5	-13.2	0.0	6.0	0.0	0.0	38.3
566	17606471.27	4819621.18	4.66	0	N	A	47.9	-13.2	0.0	6.0	0.0	0.0	28.7
567	17606461.89	4819608.93	4.66	0	D	A	57.5	-13.9	0.0	6.9	0.0	0.0	36.7
567	17606461.89	4819608.93	4.66	0	N	A	47.9	-13.9	0.0	6.9	0.0	0.0	27.2
568	17606452.51	4819596.69	4.66	0	D	A	57.5	-15.3	0.0	8.9	0.0	0.0	33.3
568	17606452.51	4819596.69	4.66	0	N	A	47.9	-15.3	0.0	8.9	0.0	0.0	23.7
569	17606443.14	4819584.44	4.66	0	D	A	57.5	-17.0	0.0	7.1	0.0	0.0	33.3
569	17606443.14	4819584.44	4.66	0	N	A	47.9	-17.0	0.0	7.1	0.0	0.0	23.8
571	17606436.77	4819576.12	4.66	0	D	A	57.5	-22.6	0.0	9.4	0.0	0.0	25.5
571	17606436.77	4819576.12	4.66	0	N	A	47.9	-22.6	0.0	9.4	0.0	0.0	15.9
572	17606426.88	4819563.21	4.66	0	D	A	57.5	-17.2	0.0	6.2	0.0	0.0	34.1
572	17606426.88	4819563.21	4.66	0	N	A	47.9	-17.2	0.0	6.2	0.0	0.0	24.5
573	17606410.46	4819541.77	4.66	0	D	A	57.5	-19.5	0.0	4.2	0.0	0.0	33.8
573	17606410.46	4819541.77	4.66	0	N	A	47.9	-19.5	0.0	4.2	0.0	0.0	24.2
574	17606392.67	4819518.54	4.66	0	D	A	57.5	-20.8	0.0	-0.9	0.0	0.0	37.6
574	17606392.67	4819518.54	4.66	0	N	A	47.9	-20.8	0.0	-0.9	0.0	0.0	28.1

Road, TNM, Name: "Winston Churchill Blvd", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
658	17606486.38	4819769.51	1.10	1	D	A	62.8	-25.1	0.0	14.5	0.0	1.0	22.2
658	17606486.38	4819769.51	1.10	1	N	A	53.3	-25.1	0.0	14.5	0.0	1.0	12.7

Road, TNM, Name: "Winston Churchill Blvd", ID: ""													
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	Ad	Aair	Agr	Afol	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	dB	dB	dB	dB(A)
728	17606486.38	4819769.51	2.52	1	D	A	60.4	-25.1	0.0	15.3	0.0	1.0	19.0

FINAL

## Receiver

Name: NW OLA 2

ID:

X: 17606437.54 m

Y: 4819659.88 m

Z: 29.10 m

Road, TNM, Name: "Dundas Street", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
6	17606661.57	4819869.69	1.10	0	D	A	64.4	-21.0	0.0	29.4	0.0	0.0	14.0
291	17606423.90	4819559.33	1.10	0	D	A	64.4	-16.6	0.0	14.1	0.0	0.0	33.7
291	17606423.90	4819559.33	1.10	0	N	A	54.9	-16.6	0.0	14.1	0.0	0.0	24.2
292	17606396.70	4819523.80	1.10	0	D	A	64.4	-19.6	0.0	11.7	0.0	0.0	33.1
292	17606396.70	4819523.80	1.10	0	N	A	54.9	-19.6	0.0	11.7	0.0	0.0	23.6
515	17606423.90	4819559.33	2.52	0	D	A	62.0	-16.6	0.0	13.1	0.0	0.0	32.3
515	17606423.90	4819559.33	2.52	0	N	A	52.4	-16.6	0.0	13.1	0.0	0.0	22.7
516	17606396.70	4819523.80	2.52	0	D	A	62.0	-19.6	0.0	9.5	0.0	0.0	32.9
516	17606396.70	4819523.80	2.52	0	N	A	52.4	-19.6	0.0	9.5	0.0	0.0	23.4
625	17606423.90	4819559.33	4.66	0	D	A	57.5	-16.6	0.0	12.9	0.0	0.0	28.0
625	17606423.90	4819559.33	4.66	0	N	A	47.9	-16.6	0.0	12.9	0.0	0.0	18.4
626	17606396.70	4819523.80	4.66	0	D	A	57.5	-19.6	0.0	11.2	0.0	0.0	26.7
626	17606396.70	4819523.80	4.66	0	N	A	47.9	-19.6	0.0	11.2	0.0	0.0	17.1

Road, TNM, Name: "Winston Churchill Blvd", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
627	17606327.42	4819923.45	1.10	0	D	A	62.8	-28.6	0.0	-6.0	0.0	0.0	40.2
627	17606327.42	4819923.45	1.10	0	N	A	53.3	-28.6	0.0	-6.0	0.0	0.0	30.7
628	17606359.43	4819892.45	1.10	0	D	A	62.8	-22.7	0.0	-5.7	0.0	0.0	45.8
628	17606359.43	4819892.45	1.10	0	N	A	53.3	-22.7	0.0	-5.7	0.0	0.0	36.3
629	17606385.48	4819867.22	1.10	0	D	A	62.8	-31.7	0.0	4.7	0.0	0.0	26.5
629	17606385.48	4819867.22	1.10	0	N	A	53.3	-31.7	0.0	4.7	0.0	0.0	16.9
631	17606400.09	4819853.07	1.10	0	D	A	62.8	-23.7	0.0	8.7	0.0	0.0	30.4
631	17606400.09	4819853.07	1.10	0	N	A	53.3	-23.7	0.0	8.7	0.0	0.0	20.9
632	17606426.09	4819827.90	1.10	0	D	A	62.8	-21.8	0.0	14.5	0.0	0.0	26.5
632	17606426.09	4819827.90	1.10	0	N	A	53.3	-21.8	0.0	14.5	0.0	0.0	17.0
633	17606447.23	4819807.42	1.10	0	D	A	62.8	-23.4	0.0	15.6	0.0	0.0	23.9
633	17606447.23	4819807.42	1.10	0	N	A	53.3	-23.4	0.0	15.6	0.0	0.0	14.3
634	17606459.47	4819795.57	1.10	0	D	A	62.8	-24.7	0.0	9.0	0.0	0.0	29.2
634	17606459.47	4819795.57	1.10	0	N	A	53.3	-24.7	0.0	9.0	0.0	0.0	19.6
635	17606483.69	4819772.11	1.10	0	D	A	62.8	-17.5	0.0	0.5	0.0	0.0	44.7
635	17606483.69	4819772.11	1.10	0	N	A	53.3	-17.5	0.0	0.5	0.0	0.0	35.2
636	17606508.71	4819747.88	1.10	0	D	A	62.8	-22.3	0.0	4.8	0.0	0.0	35.7
636	17606508.71	4819747.88	1.10	0	N	A	53.3	-22.3	0.0	4.8	0.0	0.0	26.1
686	17606484.02	4819771.79	1.10	1	D	A	62.8	-25.7	0.0	16.1	0.0	1.0	20.0
686	17606484.02	4819771.79	1.10	1	N	A	53.3	-25.7	0.0	16.1	0.0	1.0	10.5
687	17606488.10	4819767.84	1.10	1	D	A	62.8	-34.0	0.0	14.5	0.0	1.0	13.3
689	17606504.33	4819752.12	1.10	1	D	A	62.8	-20.0	0.0	5.3	0.0	1.0	36.6
689	17606504.33	4819752.12	1.10	1	N	A	53.3	-20.0	0.0	5.3	0.0	1.0	27.0
690	17606373.88	4819878.46	1.10	1	D	A	62.8	-32.5	0.0	5.5	0.0	1.0	23.9
690	17606373.88	4819878.46	1.10	1	N	A	53.3	-32.5	0.0	5.5	0.0	1.0	14.3
691	17606327.42	4819923.45	2.52	0	D	A	60.4	-28.6	0.0	-6.0	0.0	0.0	37.7
691	17606327.42	4819923.45	2.52	0	N	A	50.8	-28.6	0.0	-6.0	0.0	0.0	28.2
692	17606362.60	4819889.38	2.52	0	D	A	60.4	-22.0	0.0	-6.0	0.0	0.0	44.3
692	17606362.60	4819889.38	2.52	0	N	A	50.8	-22.0	0.0	-6.0	0.0	0.0	34.8
694	17606391.72	4819861.18	2.52	0	D	A	60.4	-31.5	0.0	4.8	0.0	0.0	24.0
694	17606391.72	4819861.18	2.52	0	N	A	50.8	-31.5	0.0	4.8	0.0	0.0	14.5
695	17606403.17	4819850.09	2.52	0	D	A	60.4	-24.8	0.0	7.7	0.0	0.0	27.9
695	17606403.17	4819850.09	2.52	0	N	A	50.8	-24.8	0.0	7.7	0.0	0.0	18.4
697	17606427.78	4819826.26	2.52	0	D	A	60.4	-21.2	0.0	17.2	0.0	0.0	21.9
697	17606427.78	4819826.26	2.52	0	N	A	50.8	-21.2	0.0	17.2	0.0	0.0	12.4

Road, TNM, Name: "Winston Churchill Blvd", ID: ""													
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	Ad	Aair	Agr	Afol	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
698	17606448.92	4819805.78	2.52	0	D	A	60.4	-24.4	0.0	16.3	0.0	0.0	19.6
698	17606448.92	4819805.78	2.52	0	N	A	50.8	-24.4	0.0	16.3	0.0	0.0	10.1
699	17606459.47	4819795.57	2.52	0	D	A	60.4	-24.7	0.0	12.2	0.0	0.0	23.6
699	17606459.47	4819795.57	2.52	0	N	A	50.8	-24.7	0.0	12.2	0.0	0.0	14.0
700	17606483.69	4819772.11	2.52	0	D	A	60.4	-17.5	0.0	2.6	0.0	0.0	40.2
700	17606483.69	4819772.11	2.52	0	N	A	50.8	-17.5	0.0	2.6	0.0	0.0	30.7
701	17606508.71	4819747.88	2.52	0	D	A	60.4	-22.3	0.0	4.0	0.0	0.0	34.0
701	17606508.71	4819747.88	2.52	0	N	A	50.8	-22.3	0.0	4.0	0.0	0.0	24.5
748	17606484.02	4819771.79	2.52	1	D	A	60.4	-25.7	0.0	14.2	0.0	1.0	19.5
749	17606488.10	4819767.84	2.52	1	D	A	60.4	-34.0	0.0	12.7	0.0	1.0	12.7
750	17606327.42	4819923.45	4.66	0	D	A	55.9	-28.6	0.0	-6.0	0.0	0.0	33.3
750	17606327.42	4819923.45	4.66	0	N	A	46.3	-28.6	0.0	-6.0	0.0	0.0	23.7
751	17606367.34	4819884.79	4.66	0	D	A	55.9	-21.0	0.0	-6.0	0.0	0.0	40.9
751	17606367.34	4819884.79	4.66	0	N	A	46.3	-21.0	0.0	-6.0	0.0	0.0	31.3
752	17606401.06	4819852.13	4.66	0	D	A	55.9	-31.4	0.0	6.1	0.0	0.0	18.4
753	17606407.77	4819845.64	4.66	0	D	A	55.9	-27.5	0.0	8.9	0.0	0.0	19.5
754	17606430.32	4819823.80	4.66	0	D	A	55.9	-20.4	0.0	16.6	0.0	0.0	18.9
755	17606451.46	4819803.32	4.66	0	D	A	55.9	-26.8	0.0	14.7	0.0	0.0	14.4
756	17606459.47	4819795.57	4.66	0	D	A	55.9	-24.7	0.0	9.3	0.0	0.0	21.9
756	17606459.47	4819795.57	4.66	0	N	A	46.3	-24.7	0.0	9.3	0.0	0.0	12.4
757	17606483.69	4819772.11	4.66	0	D	A	55.9	-17.5	0.0	-1.0	0.0	0.0	39.3
757	17606483.69	4819772.11	4.66	0	N	A	46.3	-17.5	0.0	-1.0	0.0	0.0	29.8
758	17606508.71	4819747.88	4.66	0	D	A	55.9	-22.3	0.0	5.2	0.0	0.0	28.3
758	17606508.71	4819747.88	4.66	0	N	A	46.3	-22.3	0.0	5.2	0.0	0.0	18.8
806	17606484.02	4819771.79	4.66	1	D	A	55.9	-25.7	0.0	13.5	0.0	1.0	15.8

## Receiver

Name: South 7th floor OLA

ID:

X: 17606465.79 m

Y: 4819666.22 m

Z: 23.10 m

Road, TNM, Name: "Dundas Street", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
94	17606509.92	4819671.65	1.10	0	D	A	64.4	-14.5	0.0	34.3	0.0	0.0	15.6
96	17606504.48	4819664.56	1.10	0	D	A	64.4	-19.6	0.0	33.8	0.0	0.0	11.0
97	17606502.60	4819662.09	1.10	0	D	A	64.4	-20.0	0.0	12.3	0.0	0.0	32.1
97	17606502.60	4819662.09	1.10	0	N	A	54.9	-20.0	0.0	12.3	0.0	0.0	22.5
99	17606498.60	4819656.87	1.10	0	D	A	64.4	-13.7	0.0	11.9	0.0	0.0	38.9
99	17606498.60	4819656.87	1.10	0	N	A	54.9	-13.7	0.0	11.9	0.0	0.0	29.3
100	17606492.32	4819648.67	1.10	0	D	A	64.4	-13.1	0.0	11.4	0.0	0.0	39.9
100	17606492.32	4819648.67	1.10	0	N	A	54.9	-13.1	0.0	11.4	0.0	0.0	30.3
101	17606486.04	4819640.47	1.10	0	D	A	64.4	-13.3	0.0	11.5	0.0	0.0	39.6
101	17606486.04	4819640.47	1.10	0	N	A	54.9	-13.3	0.0	11.5	0.0	0.0	30.1
102	17606479.76	4819632.27	1.10	0	D	A	64.4	-14.3	0.0	12.2	0.0	0.0	37.9
102	17606479.76	4819632.27	1.10	0	N	A	54.9	-14.3	0.0	12.2	0.0	0.0	28.3
109	17606465.09	4819613.12	1.10	0	D	A	64.4	-14.3	0.0	37.9	0.0	0.0	12.2
209	17606502.60	4819662.09	2.52	0	D	A	62.0	-20.0	0.0	9.4	0.0	0.0	32.6
209	17606502.60	4819662.09	2.52	0	N	A	52.4	-20.0	0.0	9.4	0.0	0.0	23.1
210	17606498.60	4819656.87	2.52	0	D	A	62.0	-13.7	0.0	13.4	0.0	0.0	34.9
210	17606498.60	4819656.87	2.52	0	N	A	52.4	-13.7	0.0	13.4	0.0	0.0	25.3
211	17606492.32	4819648.67	2.52	0	D	A	62.0	-13.1	0.0	13.3	0.0	0.0	35.6
211	17606492.32	4819648.67	2.52	0	N	A	52.4	-13.1	0.0	13.3	0.0	0.0	26.0
212	17606486.04	4819640.47	2.52	0	D	A	62.0	-13.3	0.0	13.6	0.0	0.0	35.0
212	17606486.04	4819640.47	2.52	0	N	A	52.4	-13.3	0.0	13.6	0.0	0.0	25.5
213	17606479.76	4819632.27	2.52	0	D	A	62.0	-14.3	0.0	9.5	0.0	0.0	38.2
213	17606479.76	4819632.27	2.52	0	N	A	52.4	-14.3	0.0	9.5	0.0	0.0	28.7
319	17606502.60	4819662.09	4.66	0	D	A	57.5	-20.0	0.0	11.3	0.0	0.0	26.2
319	17606502.60	4819662.09	4.66	0	N	A	47.9	-20.0	0.0	11.3	0.0	0.0	16.6
320	17606498.60	4819656.87	4.66	0	D	A	57.5	-13.7	0.0	9.3	0.0	0.0	34.5
320	17606498.60	4819656.87	4.66	0	N	A	47.9	-13.7	0.0	9.3	0.0	0.0	25.0
321	17606492.32	4819648.67	4.66	0	D	A	57.5	-13.1	0.0	9.6	0.0	0.0	34.8
321	17606492.32	4819648.67	4.66	0	N	A	47.9	-13.1	0.0	9.6	0.0	0.0	25.2
322	17606486.04	4819640.47	4.66	0	D	A	57.5	-13.3	0.0	8.6	0.0	0.0	35.5
322	17606486.04	4819640.47	4.66	0	N	A	47.9	-13.3	0.0	8.6	0.0	0.0	26.0
324	17606479.76	4819632.27	4.66	0	D	A	57.5	-14.3	0.0	10.9	0.0	0.0	32.3
324	17606479.76	4819632.27	4.66	0	N	A	47.9	-14.3	0.0	10.9	0.0	0.0	22.8

Road, TNM, Name: "Winston Churchill Blvd", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
445	17606581.33	4819677.55	1.10	0	D	A	62.8	-18.9	0.0	30.5	0.0	0.0	13.4
447	17606605.45	4819654.19	1.10	0	D	A	62.8	-31.6	0.0	3.0	0.0	0.0	28.2
447	17606605.45	4819654.19	1.10	0	N	A	53.3	-31.6	0.0	3.0	0.0	0.0	18.7
448	17606611.05	4819648.77	1.10	0	D	A	62.8	-25.4	0.0	-1.9	0.0	0.0	39.3
448	17606611.05	4819648.77	1.10	0	N	A	53.3	-25.4	0.0	-1.9	0.0	0.0	29.8
449	17606633.74	4819626.80	1.10	0	D	A	62.8	-20.8	0.0	-1.3	0.0	0.0	43.3
449	17606633.74	4819626.80	1.10	0	N	A	53.3	-20.8	0.0	-1.3	0.0	0.0	33.8
451	17606669.93	4819591.75	1.10	0	D	A	62.8	-22.8	0.0	-0.6	0.0	0.0	40.6
451	17606669.93	4819591.75	1.10	0	N	A	53.3	-22.8	0.0	-0.6	0.0	0.0	31.1
452	17606724.21	4819539.19	1.10	0	D	A	62.8	-22.2	0.0	0.1	0.0	0.0	40.5
452	17606724.21	4819539.19	1.10	0	N	A	53.3	-22.2	0.0	0.1	0.0	0.0	31.0
454	17606488.83	4819767.14	1.10	1	D	A	62.8	-26.7	0.0	15.0	0.0	1.0	20.1
454	17606488.83	4819767.14	1.10	1	N	A	53.3	-26.7	0.0	15.0	0.0	1.0	10.6
524	17606581.33	4819677.55	2.52	0	D	A	60.4	-18.9	0.0	30.5	0.0	0.0	11.0
528	17606610.05	4819649.75	2.52	0	D	A	60.4	-24.4	0.0	-1.7	0.0	0.0	37.6

Road, TNM, Name: "Winston Churchill Blvd", ID: ""													
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	Ad	Aair	Agr	Afol	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
528	17606610.05	4819649.75	2.52	0	N	A	50.8	-24.4	0.0	-1.7	0.0	0.0	28.0
529	17606633.74	4819626.80	2.52	0	D	A	60.4	-20.8	0.0	-3.0	0.0	0.0	42.6
529	17606633.74	4819626.80	2.52	0	N	A	50.8	-20.8	0.0	-3.0	0.0	0.0	33.1
530	17606669.93	4819591.75	2.52	0	D	A	60.4	-22.8	0.0	-2.7	0.0	0.0	40.2
530	17606669.93	4819591.75	2.52	0	N	A	50.8	-22.8	0.0	-2.7	0.0	0.0	30.7
531	17606724.21	4819539.19	2.52	0	D	A	60.4	-22.2	0.0	-1.3	0.0	0.0	39.5
531	17606724.21	4819539.19	2.52	0	N	A	50.8	-22.2	0.0	-1.3	0.0	0.0	30.0
532	17606488.83	4819767.14	2.52	1	D	A	60.4	-26.7	0.0	14.7	0.0	1.0	18.0
588	17606610.05	4819649.75	4.66	0	D	A	55.9	-24.4	0.0	-1.8	0.0	0.0	33.3
588	17606610.05	4819649.75	4.66	0	N	A	46.3	-24.4	0.0	-1.8	0.0	0.0	23.7
589	17606633.74	4819626.80	4.66	0	D	A	55.9	-20.8	0.0	-2.5	0.0	0.0	37.6
589	17606633.74	4819626.80	4.66	0	N	A	46.3	-20.8	0.0	-2.5	0.0	0.0	28.1
590	17606669.93	4819591.75	4.66	0	D	A	55.9	-22.8	0.0	-1.7	0.0	0.0	34.7
590	17606669.93	4819591.75	4.66	0	N	A	46.3	-22.8	0.0	-1.7	0.0	0.0	25.2
591	17606724.21	4819539.19	4.66	0	D	A	55.9	-22.2	0.0	-0.3	0.0	0.0	34.1
591	17606724.21	4819539.19	4.66	0	N	A	46.3	-22.2	0.0	-0.3	0.0	0.0	24.5

## Receiver

Name: South 9th floor OLA

ID:

X: 17606468.59 m

Y: 4819669.46 m

Z: 29.10 m

Road, TNM, Name: "Dundas Street", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
47	17606511.83	4819674.15	1.10	0	D	A	64.4	-13.5	0.0	25.7	0.0	0.0	25.3
47	17606511.83	4819674.15	1.10	0	N	A	54.9	-13.5	0.0	25.7	0.0	0.0	15.7
48	17606504.79	4819664.95	1.10	0	D	A	64.4	-16.7	0.0	25.4	0.0	0.0	22.3
48	17606504.79	4819664.95	1.10	0	N	A	54.9	-16.7	0.0	25.4	0.0	0.0	12.8
49	17606499.77	4819658.40	1.10	0	D	A	64.4	-13.3	0.0	13.6	0.0	0.0	37.5
49	17606499.77	4819658.40	1.10	0	N	A	54.9	-13.3	0.0	13.6	0.0	0.0	28.0
50	17606493.28	4819649.92	1.10	0	D	A	64.4	-12.9	0.0	13.5	0.0	0.0	38.1
50	17606493.28	4819649.92	1.10	0	N	A	54.9	-12.9	0.0	13.5	0.0	0.0	28.5
51	17606483.53	4819637.20	1.10	0	D	A	64.4	-10.9	0.0	12.7	0.0	0.0	40.8
51	17606483.53	4819637.20	1.10	0	N	A	54.9	-10.9	0.0	12.7	0.0	0.0	31.2
52	17606476.48	4819627.99	1.10	0	D	A	64.4	-23.1	0.0	12.1	0.0	0.0	29.3
52	17606476.48	4819627.99	1.10	0	N	A	54.9	-23.1	0.0	12.1	0.0	0.0	19.7
53	17606475.50	4819626.71	1.10	0	D	A	64.4	-24.3	0.0	12.2	0.0	0.0	27.9
53	17606475.50	4819626.71	1.10	0	N	A	54.9	-24.3	0.0	12.2	0.0	0.0	18.3
55	17606471.26	4819621.17	1.10	0	D	A	64.4	-15.8	0.0	11.5	0.0	0.0	37.0
55	17606471.26	4819621.17	1.10	0	N	A	54.9	-15.8	0.0	11.5	0.0	0.0	27.5
56	17606467.03	4819615.65	1.10	0	D	A	64.4	-26.3	0.0	9.3	0.0	0.0	28.9
56	17606467.03	4819615.65	1.10	0	N	A	54.9	-26.3	0.0	9.3	0.0	0.0	19.3
57	17606457.89	4819603.71	1.10	0	D	A	64.4	-14.9	0.0	7.7	0.0	0.0	41.9
57	17606457.89	4819603.71	1.10	0	N	A	54.9	-14.9	0.0	7.7	0.0	0.0	32.3
59	17606448.54	4819591.50	1.10	0	D	A	64.4	-28.1	0.0	24.9	0.0	0.0	11.5
62	17606437.88	4819577.59	1.10	0	D	A	64.4	-17.6	0.0	31.5	0.0	0.0	15.3
78	17606401.10	4819529.55	1.10	0	D	A	64.4	-19.1	0.0	34.8	0.0	0.0	10.6
124	17606511.83	4819674.15	2.52	0	D	A	62.0	-13.5	0.0	32.3	0.0	0.0	16.2
125	17606504.79	4819664.95	2.52	0	D	A	62.0	-16.7	0.0	30.8	0.0	0.0	14.5
126	17606499.77	4819658.40	2.52	0	D	A	62.0	-13.3	0.0	10.8	0.0	0.0	37.9
126	17606499.77	4819658.40	2.52	0	N	A	52.4	-13.3	0.0	10.8	0.0	0.0	28.3
127	17606493.28	4819649.92	2.52	0	D	A	62.0	-12.9	0.0	12.3	0.0	0.0	36.8
127	17606493.28	4819649.92	2.52	0	N	A	52.4	-12.9	0.0	12.3	0.0	0.0	27.3
129	17606483.53	4819637.20	2.52	0	D	A	62.0	-10.9	0.0	11.1	0.0	0.0	39.9
129	17606483.53	4819637.20	2.52	0	N	A	52.4	-10.9	0.0	11.1	0.0	0.0	30.4
130	17606476.48	4819627.99	2.52	0	D	A	62.0	-23.1	0.0	14.2	0.0	0.0	24.7
130	17606476.48	4819627.99	2.52	0	N	A	52.4	-23.1	0.0	14.2	0.0	0.0	15.2
131	17606475.50	4819626.71	2.52	0	D	A	62.0	-24.3	0.0	13.0	0.0	0.0	24.6
131	17606475.50	4819626.71	2.52	0	N	A	52.4	-24.3	0.0	13.0	0.0	0.0	15.1
132	17606471.53	4819621.53	2.52	0	D	A	62.0	-16.1	0.0	8.9	0.0	0.0	36.9
132	17606471.53	4819621.53	2.52	0	N	A	52.4	-16.1	0.0	8.9	0.0	0.0	27.4
133	17606458.59	4819604.62	2.52	0	D	A	62.0	-14.4	0.0	5.7	0.0	0.0	41.9
133	17606458.59	4819604.62	2.52	0	N	A	52.4	-14.4	0.0	5.7	0.0	0.0	32.3
136	17606437.88	4819577.59	2.52	0	D	A	62.0	-17.6	0.0	33.6	0.0	0.0	10.8
186	17606511.83	4819674.15	4.66	0	D	A	57.5	-13.5	0.0	23.6	0.0	0.0	20.4
186	17606511.83	4819674.15	4.66	0	N	A	47.9	-13.5	0.0	23.6	0.0	0.0	10.9
189	17606504.79	4819664.95	4.66	0	D	A	57.5	-16.7	0.0	23.3	0.0	0.0	17.5
190	17606499.77	4819658.40	4.66	0	D	A	57.5	-13.3	0.0	11.9	0.0	0.0	32.4
190	17606499.77	4819658.40	4.66	0	N	A	47.9	-13.3	0.0	11.9	0.0	0.0	22.8
191	17606493.28	4819649.92	4.66	0	D	A	57.5	-12.9	0.0	10.7	0.0	0.0	33.9
191	17606493.28	4819649.92	4.66	0	N	A	47.9	-12.9	0.0	10.7	0.0	0.0	24.3
193	17606483.53	4819637.20	4.66	0	D	A	57.5	-10.9	0.0	11.3	0.0	0.0	35.3
193	17606483.53	4819637.20	4.66	0	N	A	47.9	-10.9	0.0	11.3	0.0	0.0	25.8
194	17606476.48	4819627.99	4.66	0	D	A	57.5	-23.1	0.0	9.2	0.0	0.0	25.2
194	17606476.48	4819627.99	4.66	0	N	A	47.9	-23.1	0.0	9.2	0.0	0.0	15.7
196	17606475.50	4819626.71	4.66	0	D	A	57.5	-24.3	0.0	9.7	0.0	0.0	23.5

Road, TNM, Name: "Dundas Street", ID: ""													
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	Ad	Aair	Agr	Afol	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
196	17606475.50	4819626.71	4.66	0	N	A	47.9	-24.3	0.0	9.7	0.0	0.0	13.9
197	17606472.58	4819622.89	4.66	0	D	A	57.5	-17.4	0.0	11.6	0.0	0.0	28.5
197	17606472.58	4819622.89	4.66	0	N	A	47.9	-17.4	0.0	11.6	0.0	0.0	19.0
198	17606468.77	4819617.92	4.66	0	D	A	57.5	-21.0	0.0	10.9	0.0	0.0	25.5
198	17606468.77	4819617.92	4.66	0	N	A	47.9	-21.0	0.0	10.9	0.0	0.0	16.0
199	17606458.31	4819604.27	4.66	0	D	A	57.5	-14.6	0.0	7.7	0.0	0.0	35.2
199	17606458.31	4819604.27	4.66	0	N	A	47.9	-14.6	0.0	7.7	0.0	0.0	25.7

Road, TNM, Name: "Winston Churchill Blvd", ID: ""													
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	Ad	Aair	Agr	Afol	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
239	17606356.53	4819895.26	1.10	0	D	A	62.8	-25.4	0.0	26.6	0.0	0.0	10.8
333	17606581.56	4819677.33	1.10	0	D	A	62.8	-17.7	0.0	22.0	0.0	0.0	23.1
333	17606581.56	4819677.33	1.10	0	N	A	53.3	-17.7	0.0	22.0	0.0	0.0	13.5
334	17606606.69	4819652.99	1.10	0	D	A	62.8	-21.8	0.0	19.4	0.0	0.0	21.6
334	17606606.69	4819652.99	1.10	0	N	A	53.3	-21.8	0.0	19.4	0.0	0.0	12.0
336	17606618.42	4819641.64	1.10	0	D	A	62.8	-28.5	0.0	18.4	0.0	0.0	15.9
337	17606655.72	4819605.51	1.10	0	D	A	62.8	-19.0	0.0	-1.5	0.0	0.0	45.3
337	17606655.72	4819605.51	1.10	0	N	A	53.3	-19.0	0.0	-1.5	0.0	0.0	35.7
338	17606725.50	4819537.93	1.10	0	D	A	62.8	-22.4	0.0	-0.1	0.0	0.0	40.6
338	17606725.50	4819537.93	1.10	0	N	A	53.3	-22.4	0.0	-0.1	0.0	0.0	31.1
416	17606581.56	4819677.33	2.52	0	D	A	60.4	-17.7	0.0	22.5	0.0	0.0	20.1
416	17606581.56	4819677.33	2.52	0	N	A	50.8	-17.7	0.0	22.5	0.0	0.0	10.6
417	17606604.29	4819655.32	2.52	0	D	A	60.4	-23.0	0.0	19.6	0.0	0.0	17.7
420	17606616.02	4819643.96	2.52	0	D	A	60.4	-25.4	0.0	19.9	0.0	0.0	15.1
421	17606655.72	4819605.51	2.52	0	D	A	60.4	-19.0	0.0	-1.9	0.0	0.0	43.3
421	17606655.72	4819605.51	2.52	0	N	A	50.8	-19.0	0.0	-1.9	0.0	0.0	33.8
422	17606725.50	4819537.93	2.52	0	D	A	60.4	-22.4	0.0	-2.3	0.0	0.0	40.3
422	17606725.50	4819537.93	2.52	0	N	A	50.8	-22.4	0.0	-2.3	0.0	0.0	30.7
480	17606581.56	4819677.33	4.66	0	D	A	55.9	-17.7	0.0	21.8	0.0	0.0	16.3
481	17606600.69	4819658.80	4.66	0	D	A	55.9	-25.9	0.0	19.9	0.0	0.0	10.1
483	17606612.42	4819647.45	4.66	0	D	A	55.9	-22.7	0.0	19.3	0.0	0.0	13.9
484	17606655.72	4819605.51	4.66	0	D	A	55.9	-19.0	0.0	-3.0	0.0	0.0	39.9
484	17606655.72	4819605.51	4.66	0	N	A	46.3	-19.0	0.0	-3.0	0.0	0.0	30.3
485	17606725.50	4819537.93	4.66	0	D	A	55.9	-22.4	0.0	-0.9	0.0	0.0	34.5
485	17606725.50	4819537.93	4.66	0	N	A	46.3	-22.4	0.0	-0.9	0.0	0.0	24.9

## Receiver

Name: South 11th floor OLA

ID:

X: 17606471.06 m

Y: 4819672.60 m

Z: 35.10 m

Road, TNM, Name: "Dundas Street", ID: ""

Nr.	X (m)	Y (m)	Z (m)	Refl.	DEN	Freq. (Hz)	Lw dB(A)	Ad (dB)	Aair (dB)	Agr (dB)	Afol (dB)	RL (dB)	Lr dB(A)
9	17606646.94	4819850.58	1.10	0	D	A	64.4	-21.7	0.0	32.0	0.0	0.0	10.7
11	17606595.59	4819783.53	1.10	0	D	A	64.4	-18.0	0.0	32.3	0.0	0.0	14.1
12	17606555.06	4819730.61	1.10	0	D	A	64.4	-16.2	0.0	35.1	0.0	0.0	13.1
14	17606532.79	4819701.52	1.10	0	D	A	64.4	-15.8	0.0	36.5	0.0	0.0	12.1
18	17606517.94	4819682.13	1.10	0	D	A	64.4	-12.7	0.0	33.6	0.0	0.0	18.1
19	17606508.19	4819669.40	1.10	0	D	A	64.4	-15.7	0.0	37.4	0.0	0.0	11.3
20	17606499.00	4819657.40	1.10	0	D	A	64.4	-9.8	0.0	18.9	0.0	0.0	35.7
20	17606499.00	4819657.40	1.10	0	N	A	54.9	-9.8	0.0	18.9	0.0	0.0	26.2
22	17606485.27	4819639.46	1.10	0	D	A	64.4	-10.8	0.0	15.2	0.0	0.0	38.5
22	17606485.27	4819639.46	1.10	0	N	A	54.9	-10.8	0.0	15.2	0.0	0.0	28.9
23	17606478.04	4819630.03	1.10	0	D	A	64.4	-25.2	0.0	9.7	0.0	0.0	29.5
23	17606478.04	4819630.03	1.10	0	N	A	54.9	-25.2	0.0	9.7	0.0	0.0	20.0
24	17606472.82	4819623.21	1.10	0	D	A	64.4	-14.9	0.0	11.4	0.0	0.0	38.1
24	17606472.82	4819623.21	1.10	0	N	A	54.9	-14.9	0.0	11.4	0.0	0.0	28.6
27	17606464.23	4819611.99	1.10	0	D	A	64.4	-17.9	0.0	9.5	0.0	0.0	37.0
27	17606464.23	4819611.99	1.10	0	N	A	54.9	-17.9	0.0	9.5	0.0	0.0	27.4
28	17606455.51	4819600.60	1.10	0	D	A	64.4	-18.3	0.0	8.6	0.0	0.0	37.5
28	17606455.51	4819600.60	1.10	0	N	A	54.9	-18.3	0.0	8.6	0.0	0.0	28.0
29	17606442.14	4819583.14	1.10	0	D	A	64.4	-18.1	0.0	6.2	0.0	0.0	40.1
29	17606442.14	4819583.14	1.10	0	N	A	54.9	-18.1	0.0	6.2	0.0	0.0	30.5
30	17606431.07	4819568.68	1.10	0	D	A	64.4	-24.6	0.0	4.3	0.0	0.0	35.6
30	17606431.07	4819568.68	1.10	0	N	A	54.9	-24.6	0.0	4.3	0.0	0.0	26.0
33	17606425.80	4819561.81	1.10	0	D	A	64.4	-25.4	0.0	4.4	0.0	0.0	34.6
33	17606425.80	4819561.81	1.10	0	N	A	54.9	-25.4	0.0	4.4	0.0	0.0	25.0
37	17606422.25	4819557.17	1.10	0	D	A	64.4	-30.0	0.0	2.7	0.0	0.0	31.7
37	17606422.25	4819557.17	1.10	0	N	A	54.9	-30.0	0.0	2.7	0.0	0.0	22.2
43	17606414.79	4819547.43	1.10	0	D	A	64.4	-22.6	0.0	18.4	0.0	0.0	23.4
43	17606414.79	4819547.43	1.10	0	N	A	54.9	-22.6	0.0	18.4	0.0	0.0	13.9
54	17606399.37	4819527.29	1.10	0	D	A	64.4	-22.6	0.0	18.6	0.0	0.0	23.2
54	17606399.37	4819527.29	1.10	0	N	A	54.9	-22.6	0.0	18.6	0.0	0.0	13.7
80	17606580.02	4819763.20	2.52	0	D	A	62.0	-19.7	0.0	30.2	0.0	0.0	12.1
86	17606517.55	4819681.62	2.52	0	D	A	62.0	-12.9	0.0	37.6	0.0	0.0	11.5
89	17606499.00	4819657.40	2.52	0	D	A	62.0	-9.8	0.0	18.9	0.0	0.0	33.3
89	17606499.00	4819657.40	2.52	0	N	A	52.4	-9.8	0.0	18.9	0.0	0.0	23.7
90	17606485.27	4819639.46	2.52	0	D	A	62.0	-10.8	0.0	13.9	0.0	0.0	37.3
90	17606485.27	4819639.46	2.52	0	N	A	52.4	-10.8	0.0	13.9	0.0	0.0	27.7
92	17606478.04	4819630.03	2.52	0	D	A	62.0	-25.2	0.0	8.7	0.0	0.0	28.1
92	17606478.04	4819630.03	2.52	0	N	A	52.4	-25.2	0.0	8.7	0.0	0.0	18.6
95	17606472.82	4819623.21	2.52	0	D	A	62.0	-14.9	0.0	13.8	0.0	0.0	33.3
95	17606472.82	4819623.21	2.52	0	N	A	52.4	-14.9	0.0	13.8	0.0	0.0	23.7
98	17606464.97	4819612.96	2.52	0	D	A	62.0	-18.8	0.0	8.7	0.0	0.0	34.5
98	17606464.97	4819612.96	2.52	0	N	A	52.4	-18.8	0.0	8.7	0.0	0.0	24.9
103	17606456.25	4819601.57	2.52	0	D	A	62.0	-17.5	0.0	6.5	0.0	0.0	38.0
103	17606456.25	4819601.57	2.52	0	N	A	52.4	-17.5	0.0	6.5	0.0	0.0	28.4
104	17606442.14	4819583.14	2.52	0	D	A	62.0	-18.1	0.0	5.3	0.0	0.0	38.5
104	17606442.14	4819583.14	2.52	0	N	A	52.4	-18.1	0.0	5.3	0.0	0.0	29.0
106	17606431.07	4819568.68	2.52	0	D	A	62.0	-24.6	0.0	4.0	0.0	0.0	33.3
106	17606431.07	4819568.68	2.52	0	N	A	52.4	-24.6	0.0	4.0	0.0	0.0	23.8
108	17606425.80	4819561.81	2.52	0	D	A	62.0	-25.4	0.0	3.8	0.0	0.0	32.7
108	17606425.80	4819561.81	2.52	0	N	A	52.4	-25.4	0.0	3.8	0.0	0.0	23.2
112	17606422.25	4819557.17	2.52	0	D	A	62.0	-30.0	0.0	1.6	0.0	0.0	30.4
112	17606422.25	4819557.17	2.52	0	N	A	52.4	-30.0	0.0	1.6	0.0	0.0	20.8

Road, TNM, Name: "Dundas Street", ID: ""													
Nr.	X	Y	Z	Ref.	DEN	Freq.	Lw	Ad	Aair	Agr	Afol	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
117	17606416.63	4819549.82	2.52	0	D	A	62.0	-23.8	0.0	17.1	0.0	0.0	21.0
117	17606416.63	4819549.82	2.52	0	N	A	52.4	-23.8	0.0	17.1	0.0	0.0	11.5
123	17606401.20	4819529.68	2.52	0	D	A	62.0	-21.6	0.0	22.7	0.0	0.0	17.6
157	17606516.97	4819680.86	4.66	0	D	A	57.5	-13.2	0.0	30.5	0.0	0.0	13.9
161	17606502.44	4819661.89	4.66	0	D	A	57.5	-13.0	0.0	7.1	0.0	0.0	37.3
161	17606502.44	4819661.89	4.66	0	N	A	47.9	-13.0	0.0	7.1	0.0	0.0	27.8
163	17606495.57	4819652.92	4.66	0	D	A	57.5	-12.6	0.0	7.1	0.0	0.0	37.8
163	17606495.57	4819652.92	4.66	0	N	A	47.9	-12.6	0.0	7.1	0.0	0.0	28.3
164	17606485.27	4819639.46	4.66	0	D	A	57.5	-10.8	0.0	6.5	0.0	0.0	40.3
164	17606485.27	4819639.46	4.66	0	N	A	47.9	-10.8	0.0	6.5	0.0	0.0	30.7
165	17606478.04	4819630.03	4.66	0	D	A	57.5	-25.2	0.0	8.9	0.0	0.0	23.4
165	17606478.04	4819630.03	4.66	0	N	A	47.9	-25.2	0.0	8.9	0.0	0.0	13.9
166	17606472.82	4819623.21	4.66	0	D	A	57.5	-14.9	0.0	8.4	0.0	0.0	34.1
166	17606472.82	4819623.21	4.66	0	N	A	47.9	-14.9	0.0	8.4	0.0	0.0	24.6
167	17606466.09	4819614.41	4.66	0	D	A	57.5	-20.6	0.0	11.1	0.0	0.0	25.9
167	17606466.09	4819614.41	4.66	0	N	A	47.9	-20.6	0.0	11.1	0.0	0.0	16.3
169	17606457.36	4819603.02	4.66	0	D	A	57.5	-16.5	0.0	6.3	0.0	0.0	34.7
169	17606457.36	4819603.02	4.66	0	N	A	47.9	-16.5	0.0	6.3	0.0	0.0	25.1
170	17606442.14	4819583.14	4.66	0	D	A	57.5	-18.1	0.0	5.4	0.0	0.0	34.0
170	17606442.14	4819583.14	4.66	0	N	A	47.9	-18.1	0.0	5.4	0.0	0.0	24.4
171	17606431.07	4819568.68	4.66	0	D	A	57.5	-24.6	0.0	4.0	0.0	0.0	28.9
171	17606431.07	4819568.68	4.66	0	N	A	47.9	-24.6	0.0	4.0	0.0	0.0	19.4
172	17606425.80	4819561.81	4.66	0	D	A	57.5	-25.4	0.0	3.1	0.0	0.0	28.9
172	17606425.80	4819561.81	4.66	0	N	A	47.9	-25.4	0.0	3.1	0.0	0.0	19.4
178	17606422.25	4819557.17	4.66	0	D	A	57.5	-30.0	0.0	0.7	0.0	0.0	26.7
178	17606422.25	4819557.17	4.66	0	N	A	47.9	-30.0	0.0	0.7	0.0	0.0	17.2
182	17606419.37	4819553.41	4.66	0	D	A	57.5	-27.4	0.0	18.0	0.0	0.0	12.1
192	17606403.95	4819533.27	4.66	0	D	A	57.5	-20.4	0.0	23.0	0.0	0.0	14.1

Road, TNM, Name: "Winston Churchill Blvd", ID: ""													
Nr.	X	Y	Z	Ref.	DEN	Freq.	Lw	Ad	Aair	Agr	Afol	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
232	17606355.76	4819896.00	1.10	0	D	A	62.8	-20.9	0.0	22.4	0.0	0.0	19.5
279	17606539.58	4819717.98	1.10	0	D	A	62.8	-17.3	0.0	35.3	0.0	0.0	10.2
280	17606558.32	4819699.84	1.10	0	D	A	62.8	-18.2	0.0	29.6	0.0	0.0	15.0
283	17606577.32	4819681.44	1.10	0	D	A	62.8	-19.4	0.0	28.9	0.0	0.0	14.5
284	17606599.77	4819659.70	1.10	0	D	A	62.8	-19.8	0.0	30.9	0.0	0.0	12.1
285	17606622.37	4819637.81	1.10	0	D	A	62.8	-22.6	0.0	-0.1	0.0	0.0	40.3
285	17606622.37	4819637.81	1.10	0	N	A	53.3	-22.6	0.0	-0.1	0.0	0.0	30.8
287	17606664.22	4819597.28	1.10	0	D	A	62.8	-19.8	0.0	-4.2	0.0	0.0	47.2
287	17606664.22	4819597.28	1.10	0	N	A	53.3	-19.8	0.0	-4.2	0.0	0.0	37.7
288	17606728.34	4819535.19	1.10	0	D	A	62.8	-22.8	0.0	-3.8	0.0	0.0	43.8
288	17606728.34	4819535.19	1.10	0	N	A	53.3	-22.8	0.0	-3.8	0.0	0.0	34.3
296	17606358.45	4819893.40	2.52	0	D	A	60.4	-20.5	0.0	28.8	0.0	0.0	11.1
350	17606576.34	4819682.38	2.52	0	D	A	60.4	-18.9	0.0	30.3	0.0	0.0	11.1
353	17606620.04	4819640.07	2.52	0	D	A	60.4	-23.6	0.0	2.3	0.0	0.0	34.5
353	17606620.04	4819640.07	2.52	0	N	A	50.8	-23.6	0.0	2.3	0.0	0.0	24.9
354	17606660.72	4819600.67	2.52	0	D	A	60.4	-19.4	0.0	-4.2	0.0	0.0	45.1
354	17606660.72	4819600.67	2.52	0	N	A	50.8	-19.4	0.0	-4.2	0.0	0.0	35.6
355	17606727.17	4819536.32	2.52	0	D	A	60.4	-22.6	0.0	-5.2	0.0	0.0	42.9
355	17606727.17	4819536.32	2.52	0	N	A	50.8	-22.6	0.0	-5.2	0.0	0.0	33.4
363	17606417.62	4819836.09	4.66	0	D	A	55.9	-22.7	0.0	18.9	0.0	0.0	14.3
388	17606616.55	4819643.45	4.66	0	D	A	55.9	-26.1	0.0	2.9	0.0	0.0	26.8
388	17606616.55	4819643.45	4.66	0	N	A	46.3	-26.1	0.0	2.9	0.0	0.0	17.3
389	17606655.48	4819605.74	4.66	0	D	A	55.9	-18.9	0.0	-4.6	0.0	0.0	41.6
389	17606655.48	4819605.74	4.66	0	N	A	46.3	-18.9	0.0	-4.6	0.0	0.0	32.1
390	17606725.42	4819538.01	4.66	0	D	A	55.9	-22.3	0.0	-4.3	0.0	0.0	37.9
390	17606725.42	4819538.01	4.66	0	N	A	46.3	-22.3	0.0	-4.3	0.0	0.0	28.3