

Environmental Noise Control Study Proposed Warehouse Buildings

405 Huntmar Drive
Ottawa, Ontario

Prepared for Rosefellow Holdings Inc.

Report PG6516-1 dated December 14, 2022

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1.0 Introduction

Paterson Group (Paterson) was commissioned by Rosefellow Holdings Inc. to conduct an environmental noise control study for the proposed warehouse buildings to be located at 405 Huntmar Drive, in the City of Ottawa.

The objective of the current study is to:

- Determine the primary noise sources impacting the site and compare the projected sound levels to guidelines set out by the Ministry of Environment and Climate Change (MOECC) and the City of Ottawa.
- Review the projected noise levels and offer recommendations regarding warning classes, construction materials or alternative sound barriers.

The following report has been prepared specifically and solely for the aforementioned project which is described herein. It contains our findings and includes acoustical recommendations pertaining to the design and construction of the subject development as they are understood at the time of writing this report.

This study has been conducted according to City of Ottawa document - Engineering Noise Control Guidelines (ENCG), dated January 2016, and the Ontario Ministry of the Environment Guideline NPC-300.

2.0 Proposed Development

Based on the available conceptual drawings, it is anticipated that the proposed industrial development will consist of two (2) three-storey warehouse buildings (Building A and Building B). Each warehouse building will consist of four units and rise 10 m above grade. Associated access lanes, loading docks, parking areas and landscaped areas are further anticipated. No outdoor living area is identified on the proposed site plan.

3.0 Methodology and Noise Assessment Criteria

The City of Ottawa outlines three (3) sources of environmental noise that must be analyzed separately:

- Surface Transportation Noise
- Stationary Noise
 - new noise-sensitive development applications (noise receptors) in proximity to existing or approved stationary sources of noise, and
 - new stationary sources of noise (noise generating) in proximity to existing or approved noise-sensitive developments
- Aircraft Noise

Surface Transportation Noise

Surface roadway traffic noise, equivalent to sound level energy L_{eq} , provides a measure of the time varying noise level over a period of time. For roadways, the L_{eq} is commonly calculated on the basis of 16-hour (L_{eq16}) daytime (07:00-23:00) and 8-hour (L_{eq8}) nighttime (23:00-7:00) split to assess its impact on residential, commercial and institutional buildings.

The City of Ottawa's Official Plan dictates that the influence area must contain any of following conditions to classify as a surface transportation noise source for a subject site:

- Within 100 m of the right-of-way of an existing or proposed arterial, collector or major collector road; a light rail transit corridor; bus rapid transit, or transit priority corridor
- Within 250 m of the right-of-way for an existing or proposed highway or secondary rail line
- Within 300 m from the right of way of a proposed or existing rail corridor or a secondary main railway line
- Within 500 m of an existing 400 series provincial highway, freeway or principle main railway line.

The Environmental Noise Guidelines for Stationary and Transportation Sources – NPC-300 outlines the limitations of noise levels in relation to the location of the receptors. These can be found in the following tables:

Table 1 – Noise Level Limit for Outdoor Living Areas	
Time Period	L_{eq} Level (dBA)
Daytime, 7:00-23:00	55
➤ Standard taken from Table 2.2a; Sound Level Limit for Outdoor Living Areas – Road and Rail	

Table 2 – Noise Level Limits for Indoor Living Areas			
Type of Space	Time Period	L_{eq} Level (dBA)	
		Road	Rail
General offices, reception areas, retail stores, etc.	Daytime 7:00-23:00	50	45
Theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc.	Daytime 7:00-23:00	45	40
Living/dining/den areas of residences , hospitals, nursing/retirement homes, schools, day-care centres	Daytime 7:00-23:00	45	40
Living/dining/den areas of residences , hospitals, nursing/retirement homes etc. (except schools or day-care centres)	Nighttime 23:00-7:00	45	40
Sleeping quarters of hotels/motels	Nighttime 23:00-7:00	45	40
Sleeping quarters of residences , hospitals, nursing/retirement homes, etc.	Nighttime 23:00-7:00	40	35
➤ Standards taken from Table 2.2b, Sound Level Limit for Indoor Living Areas – Road and Rail and Table 2.2c, Supplementary Sound Level Limits for Indoor Spaces – Road and Rail			

Predicted noise levels at the pane of window dictate the action required to achieve recommended noise levels. It is noted in ENCG that the limits outlined in Table 2 are for the noise levels on the interior of the window glass pane. An open window is considered to provide a 10 dBA noise reduction, while a standard closed window is capable to provide a minimum 20 dBA noise reduction. The noise level limit of commercial building is 60 dBA daytime. Therefore, where noise levels exceed 60 dBA daytime, the ventilation for the building should consider the provision for central air conditioning. Where noise levels exceed 70 dBA daytime, central air conditioning will be required, and the building components will require higher levels of sound attenuation.

When the noise levels are equal to or less than the specified criteria, no noise attenuation (control) measures are required.

Noise attenuation (control) measures include any or all of the following:

- Noise attenuation barrier
- Provisions for the installation of central air conditioning
- Central air conditioning
- Architectural components designed to provide additional acoustic insulation

In addition to the implementation of noise attenuation features, if required, the following Warning Clauses may be recommended to advise the prospective purchasers / tenants of affected units of potential environmental noise problem:

Table 3 – Warning Clauses for Indoor Living Areas (Commercial Building)		
Leq (dBA)	Warning Clause	Description
60 dBA < $L_{eq(16)}$ ≤ 70 dBA	Warning Clause Type 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."
70 dBA < $L_{eq(16)}$	Warning Clause Type 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."
<ul style="list-style-type: none"> ➤ Clauses taken from section C8 Warning Clauses; Environmental Noise Guidelines for Stationary and Transportation Sources - NPC-300 		

Stationary Noise

Stationary noise sources include sources or facilities that are fixed or mobile and can cause a combination of sound and vibration levels emitted beyond the property line. These sources may include commercial air conditioner units, generators and fans. Facilities that may contribute to stationary noise may include car washes, snow disposal sites, transit stations and manufacturing facilities.

The subject site is not in proximity to existing or approved stationary sources of noise. Therefore, a stationary noise analysis will not be required.

Aircraft / Airport Noise

The subject site is not located within the Airport Vicinity Development Zone. Therefore this project will not require an aircraft/airport noise analysis. No warning clauses regarding aircraft or airport noise will be required.

4.0 Analysis

Surface Transportation Noise

The subject development is bordered to the north by residential dwellings and undeveloped grassed areas, to the east by Huntmar Drive followed by residential dwellings, Mission Trail Crescent, and Fallengale Crescent, to the south by Campeau Drive followed by parking areas and commercial buildings, and to the west by Journeyman Street and Upper Canada Street followed by parking areas and institution building. Huntmar Drive, Mission Trail Crescent, Fallengale Crescent, Campeau Drive, Journeyman Street, and Upper Canada Street are identified within the 100 m radius of proposed development.

Based on the City of Ottawa's Official Plan, Schedule E, Huntmar Drive is considered a 4-lane urban arterial road - divided (4-UAD). Campeau Drive is considered a 4-lane urban arterial road - divided (4-UAD). Other roads within the 100 m radius of the proposed development are not classified as either arterial, collector or major collector roads and therefore are not included in this study. The major sources of traffic noise are due to the Huntmar Drive to the east and Campeau Drive to the south of the proposed development.

Additionally, the 3-lane Highway 417 Westbound is identified slightly out of the 500 m radius from the proposed Building A while the ramp of Highway 417 Westbound is identified within the 500 m radius from the proposed Building B. The 3-lane Highway 417 Eastbound is identified slightly out of the 500 m radius from both Building A and Building B.

All noise sources are presented in Drawings PG6516-3 and PG6516-4 - Site Geometry located in Appendix 1.

The noise levels from road traffic are provided by the City of Ottawa, taking into consideration the right-of-way width and the implied roadway classification. It is understood that these values represent the maximum allowable capacity of the proposed roadways. The parameters to be used for sound level predictions can be found below.

Segment	Roadway Classification	AADT Veh/Day	Speed Limit (km/h)	Day/Night Split %	Medium Truck %	Heavy Truck %
Huntmar Drive	4-UAD	35000	70	92/8	7	5
Campeau Drive	4-UAD	35000	70	92/8	7	5
Hwy 417 West (Ramp)	3-Queensway	54999	60	92/8	7	5

➤ Data obtained from the City of Ottawa document ENCG

Two (2) levels of reception points were selected for this analysis. The following elevations were selected from the heights provided on the survey plan for the subject buildings.

Floor Number	Elevation at Centre of Window (m)	Floor Use	Daytime / Nighttime Analysis
First Floor	1.5	Commercial	Daytime
Third Floor	8.5	Commercial	Daytime

For this analysis, a reception point was taken at the centre of the first floor and top floor. Reception points are detailed on Drawing PG6516-2 - Receptor Locations presented in Appendix 1.

All horizontal distances have been measured from the reception point to the edge of the right-of-way. The roadway was analyzed where it intersected the 100 m buffer zone, which is reflected in the local angles described in Paterson Drawings PG6516-3A to 3D, and PG6516-4A to 4C - Site Geometry in Appendix 1.

Table 7 - Summary of Reception Points and Geometry, located in Appendix 1, provides a summary of the points of reception and their geometry with respect to the noise sources. The analysis is completed so that no effects of sound reflection off of the building facade are considered, as stipulated by the ENCG.

The subject site is sloping down to the east and at grade with the neighbouring roads within the 100 m radius.

The analysis was completed using STAMSON version 5.04, a computer program which uses the road and rail traffic noise prediction methods using ORNAMENT (Ontario Road Noise Analysis Method for Environment and Transportation) and STEAM (Sound from Trains Environment Analysis Method), publications from the Ontario Ministry of Environment and Energy.

5.0 Results

Surface Transportation Noise

The primary descriptors are the 16-hour daytime (7:00-23:00) and the 8-hour nighttime (23:00-7:00) equivalent sound levels, $L_{eq(16)}$ and $L_{eq(8)}$ for City roads.

The exterior noise levels due to roadway traffic sources were analyzed with the STAMSON version 5.04 software at all reception points. The input and output data of the STAMSON modeling can be found in Appendix 2, and the summary of the results can be found in Table 6.

Table 6: Exterior Noise Levels due to Roadway Traffic Sources				
Reception Point	Height Above Grade (m)	Receptor Location	Daytime $L_{eq(16)}$ (dBA)	Nighttime $L_{eq(8)}$ (dBA)
REC 1-1	1.5	Building A, Northern Elevation, 1st Floor	57	--
REC 1-3	8.5	Building A, Northern Elevation, 3rd Floor	59	--
REC 2-1	1.5	Building A, Eastern Elevation, 1st Floor	66	--
REC 2-3	8.5	Building A, Eastern Elevation, 3rd Floor	67	--
REC 3-1	1.5	Building A, Southern Elevation, 1st Floor	70	--
REC 3-3	8.5	Building A, Southern Elevation, 3rd Floor	71	--
REC 4-1	1.5	Building A, Western Elevation, 1st Floor	51	--
REC 4-3	8.5	Building A, Western Elevation, 3rd Floor	54	--
REC 5-1	1.5	Building B, Eastern Elevation, 1st Floor	51	--
REC 5-3	8.5	Building B, Eastern Elevation, 3rd Floor	53	--
REC 6-1	1.5	Building B, Southern Elevation, 1st Floor	70	--
REC 6-3	8.5	Building B, Southern Elevation, 3rd Floor	71	--
REC 7-1	1.5	Building B, Western Elevation, 1st Floor	52	--
REC 7-3	8.5	Building B, Western Elevation, 3rd Floor	54	--

6.0 Discussion and Recommendations

6.1 Outdoor Living Areas

No outdoor living areas were identified for this development.

6.2 Indoor Living Areas and Ventilation

The results of the STAMSON modeling indicate that the noise levels at both proposed warehouses Building A and Building B will range between 51 dBA and 71 dBA during the daytime period (07:00-23:00). The noise levels on the eastern and southern elevations of Building A and the southern elevation of Building B will exceed the limit for the exterior of the pane of glass (60 dBA) specified by the ENCG. It is also noted that the noise levels on the southern elevation of both Building A and Building B will exceed 70 dBA. Therefore, office areas on the eastern and southern elevations of Building A and the southern elevation of Building B should be supplied with a central air conditioning unit, along with the warning clause Type D, as outlined in Table 3.

Both Building A and Building B do exceed the 70 dBA threshold for noise on the southern elevation. Therefore, an analysis of the building materials will be required. However, at this time the building materials and exterior wall construction details have not been finalized. Therefore, a review of the proposed building materials on the southern elevation will need to be completed.

Proposed Construction Specifications

It is understood that typical window and wall details are proposed for the warehouse buildings. The effectiveness of the noise insulation can be expressed as the Acoustical Insulation Factor (AIF), calculated as follows:

$$\text{AIF} = L_{\text{eq}(16)}(\text{Exterior}) - L_{\text{eq}(16)}(\text{Interior}) + 10 \log_{10}(N) + 2 \text{ dBA}$$

Where:

$L_{\text{eq}(16)}(\text{Exterior})$ = Calculated value at the window pane
 $L_{\text{eq}(16)}(\text{Interior})$ = 50 dBA
N = number of components in the room

No floor plans or detailed design drawings were provided for this portion of the review. A conservative approach is to assume that there are 2 components per room. Therefore, the AIF would need to be at least 26 dBA.

A conversion from AIF to a Standard Transmission Class (STC) rating will require the knowledge of room dimensions in addition to the wall and window dimensions. However, a conservative approach would be to increase the AIF factor by 3. **Therefore, provided the building materials of either the windows and/or exterior walls have an STC rating of 29 or higher, this would be a sufficient noise attenuation device.**

A review of industry standards for construction material indicates that, provided the exterior cladding on the southern elevation of Building A and Building B consist of brick or concrete panels and that all windows consist of double pane glass, these materials have an STC rating of greater than 29 and are considered acceptable. If alternative materials are to be utilized on the southern elevation of Building A and Building B, then a review will need to be completed once design details are finalized.

7.0 Summary of Findings

The subject site is located at 405 Huntmar Drive, in the City of Ottawa. It is understood that the proposed development will consist of two three-storey commercial warehouse buildings. The buildings will rise 10 metres above grade. There are three major sources of surface transportation noise to the proposed development: Huntmar Drive, Campeau Drive, and Highway 417 Westbound (Ramp).

It is noted that there is no outdoor living area at this development.

Several reception points were selected for the surface transportation noise analysis, consisting of the centre of first level and top level. The results of STAMSON modeling indicate that the noise levels on the eastern and southern elevations of proposed Building A and the southern elevation of proposed Building B are expected to exceed the 60 dBA threshold specified by the ENCG. It is also noted that the noise levels on the southern elevation of proposed Building A and Building B will exceed 70 dBA. Therefore, the installation of a central air conditioning unit, along with a warning clause Type D, will be required for any offices located along the eastern and southern elevations of proposed Building A and the southern elevation of proposed Building B. A review of industry standards for construction material indicates that, provided the exterior cladding of the southern elevation of Building A and Building B consist of brick or concrete panels and that all windows consist of double pane glass, these materials have an STC rating of greater than 29 and are considered acceptable.

The following warning clause is to be included on all Offers of Purchase and Sale and/or lease agreements:

" This commercial 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."

8.0 Statement of Limitations

The recommendations made in this report are in accordance with our present understanding of the project. Our recommendations should be reviewed when the project drawings and specifications are complete.

The present report applies only to the project described in this document. Use of this report for purposes other than those described herein or by person(s) other than Rosefellow Holdings Inc. or their agent(s) is not authorized without review by this firm for the applicability of our recommendations to the altered use of the report.

Paterson Group Inc.



Yolanda Tang, M.A.Sc.



Stephanie A. Boisvenue, P.Eng.

Report Distribution:

- Rosefellow Holdings Inc. (email copy)
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APPENDIX 1

Table 7 - Summary of Reception Points and Geometry

Drawing PG6516-1 - Site Plan

Drawing PG6516-2 - Receptor Location Plan

Drawing PG6516-3 - Site Geometry (Building A)

Drawing PG6516-3A - Site Geometry - REC 1-1 and REC 1-3

Drawing PG6516-3B - Site Geometry - REC 2-1 and REC 2-3

Drawing PG6516-3C - Site Geometry - REC 3-1 and REC 3-3

Drawing PG6516-3D - Site Geometry - REC 4-1 and REC 4-3

Drawing PG6516-4 - Site Geometry (Building B)

Drawing PG6516-4A - Site Geometry - REC 5-1 and REC 5-3

Drawing PG6516-4B - Site Geometry - REC 6-1 and REC 6-3

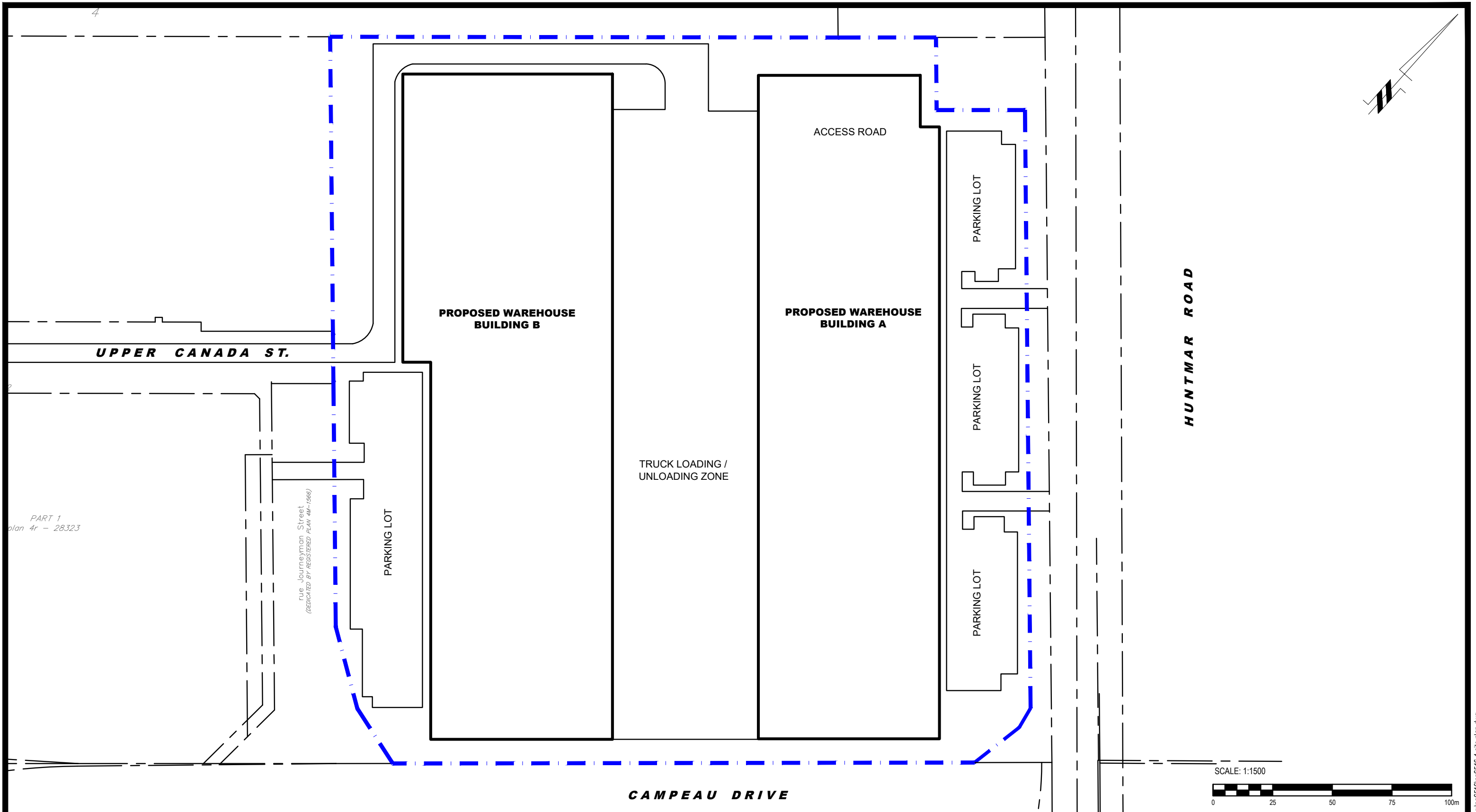
Drawing PG6516-4C - Site Geometry - REC 7-1 and REC 7-3

**Table 7 - Summary of Reception Points and Geometry
405 Huntmar Drive**

Point of Reception	Location	Leq Day (dBA)	Huntmar Drive						Campeau Drive					
			Horizontal (m)	Vertical (m)	Total (m)	Local Angle (degree)	Number of Rows of Houses	Density (%)	Horizontal (m)	Vertical (m)	Total (m)	Local Angle (degree)	Number of Rows of Houses	Density (%)
REC 1-1	Building A, Northern Elevation, 1st Floor	57	75	1.5	75.0	-45, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 1-3	Building A, Northern Elevation, 3rd Floor	59	75	8.5	75.5	-45, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 2-1	Building A, Eastern Elevation, 1st Floor	66	45	1.5	45.0	-79, 79	n/a	n/a	140	1.5	140.0	-33, 0	n/a	n/a
REC 2-3	Building A, Eastern Elevation, 3rd Floor	67	45	8.5	45.8	-79, 79	n/a	n/a	140	8.5	140.3	-33, 0	n/a	n/a
REC 3-1	Building A, Southern Elevation, 1st Floor	70	75	1.5	75.0	0, 54	n/a	n/a	25	1.5	25.0	-85, 85	n/a	n/a
REC 3-3	Building A, Southern Elevation, 3rd Floor	71	75	8.5	75.5	0, 54	n/a	n/a	25	8.5	26.4	-85, 85	n/a	n/a
REC 4-1	Building A, Western Elevation, 1st Floor	51	n/a	n/a	n/a	n/a	n/a	n/a	140	1.5	140.0	0, 34	n/a	n/a
REC 4-3	Building A, Western Elevation, 3rd Floor	54	n/a	n/a	n/a	n/a	n/a	n/a	140	8.5	140.3	0, 34	n/a	n/a
REC 5-1	Building B, Eastern Elevation, 1st Floor	51	n/a	n/a	n/a	n/a	n/a	n/a	140	1.5	140.0	-32, 0	n/a	n/a
REC 5-3	Building B, Eastern Elevation, 3rd Floor	53	n/a	n/a	n/a	n/a	n/a	n/a	140	8.5	140.3	-32, 0	n/a	n/a
REC 6-1	Building B, Southern Elevation, 1st Floor	70	n/a	n/a	n/a	n/a	n/a	n/a	25	1.5	25.0	-87, 86	n/a	n/a
REC 6-3	Building B, Southern Elevation, 3rd Floor	71	n/a	n/a	n/a	n/a	n/a	n/a	25	8.5	26.4	-87, 86	n/a	n/a
REC 7-1	Building B, Western Elevation, 1st Floor	52	n/a	n/a	n/a	n/a	n/a	n/a	140	1.5	140.0	0, 35	n/a	n/a
REC 7-3	Building B, Western Elevation, 3rd Floor	54	n/a	n/a	n/a	n/a	n/a	n/a	140	8.5	140.3	0, 35	n/a	n/a

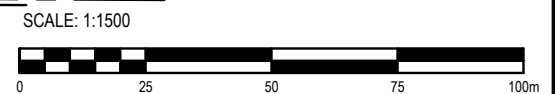
**Table 7 - Summary of Reception Points and Geometry
405 Huntmar Drive**

Point of Reception	Location	Leq Day (dBA)	Highway 417 Westbound (Ramp)									
			Horizontal (m)	Vertical (m)	Total (m)	Local Angle (degree)	Number of Rows of Houses	Density (%)				
REC 1-1	Building A, Northern Elevation, 1st Floor	57	n/a	n/a	n/a	n/a	n/a	n/a				
REC 1-3	Building A, Northern Elevation, 3rd Floor	59	n/a	n/a	n/a	n/a	n/a	n/a				
REC 2-1	Building A, Eastern Elevation, 1st Floor	66	n/a	n/a	n/a	n/a	n/a	n/a				
REC 2-3	Building A, Eastern Elevation, 3rd Floor	67	n/a	n/a	n/a	n/a	n/a	n/a				
REC 3-1	Building A, Southern Elevation, 1st Floor	70	n/a	n/a	n/a	n/a	n/a	n/a				
REC 3-3	Building A, Southern Elevation, 3rd Floor	71	n/a	n/a	n/a	n/a	n/a	n/a				
REC 4-1	Building A, Western Elevation, 1st Floor	51	n/a	n/a	n/a	n/a	n/a	n/a				
REC 4-3	Building A, Western Elevation, 3rd Floor	54	n/a	n/a	n/a	n/a	n/a	n/a				
REC 5-1	Building B, Eastern Elevation, 1st Floor	51	n/a	n/a	n/a	n/a	n/a	n/a				
REC 5-3	Building B, Eastern Elevation, 3rd Floor	53	n/a	n/a	n/a	n/a	n/a	n/a				
REC 6-1	Building B, Southern Elevation, 1st Floor	70	475	1.5	475.0	13, 50	1	60				
REC 6-3	Building B, Southern Elevation, 3rd Floor	71	475	8.5	475.1	13, 50	1	60				
REC 7-1	Building B, Western Elevation, 1st Floor	52	500	1.5	500.0	10, 38	1	60				
REC 7-3	Building B, Western Elevation, 3rd Floor	54	500	8.5	500.1	10, 38	1	60				



PART 1
plan 4r - 28323

rue Journeyman Street
(DEDICATED BY REGISTERED PLAN 4M-1566)



PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

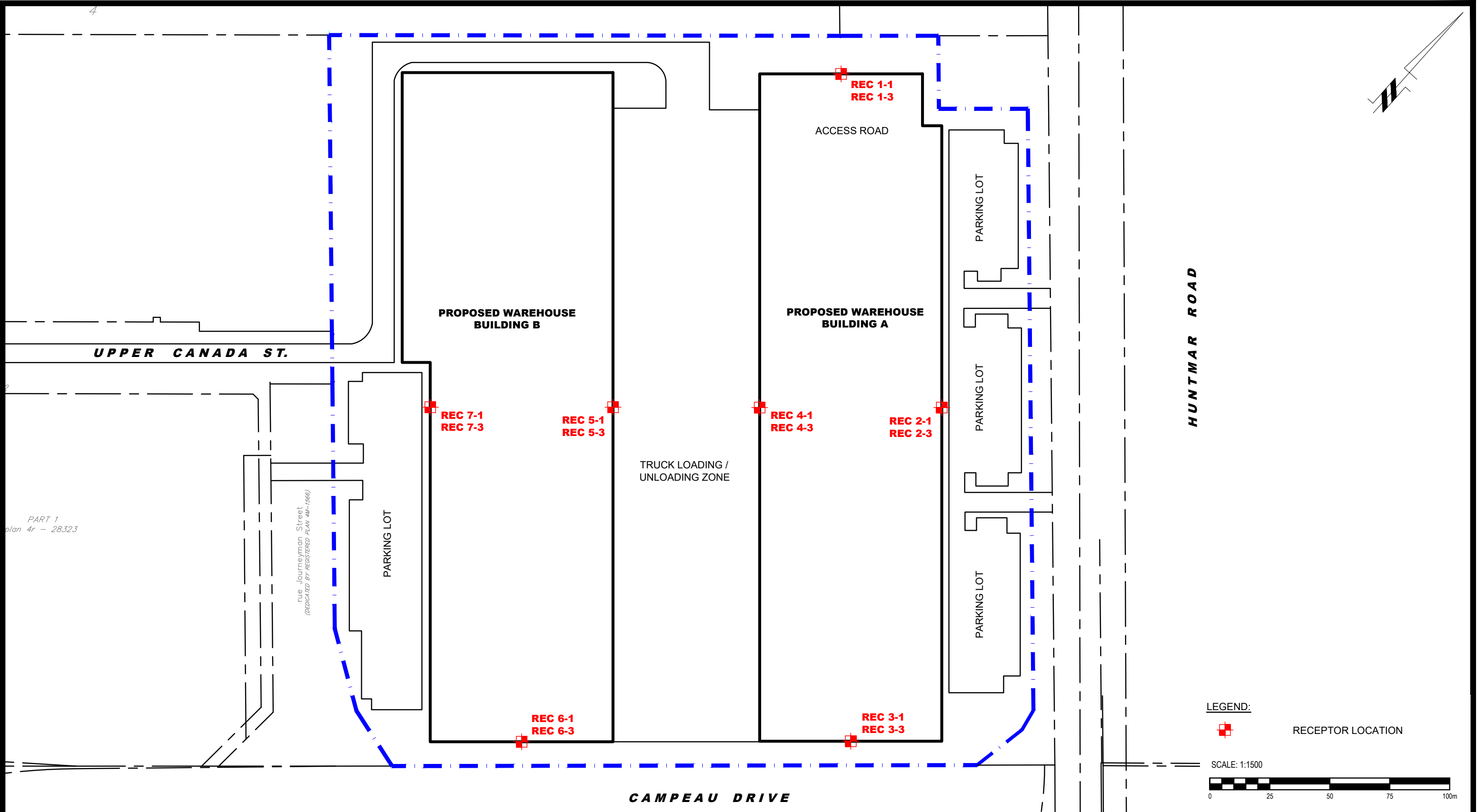
NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE
ONTARIO

OTTAWA,
Title:

SITE PLAN

Scale:	1:1500	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-1
Approved by:	SB	Revision No.:	



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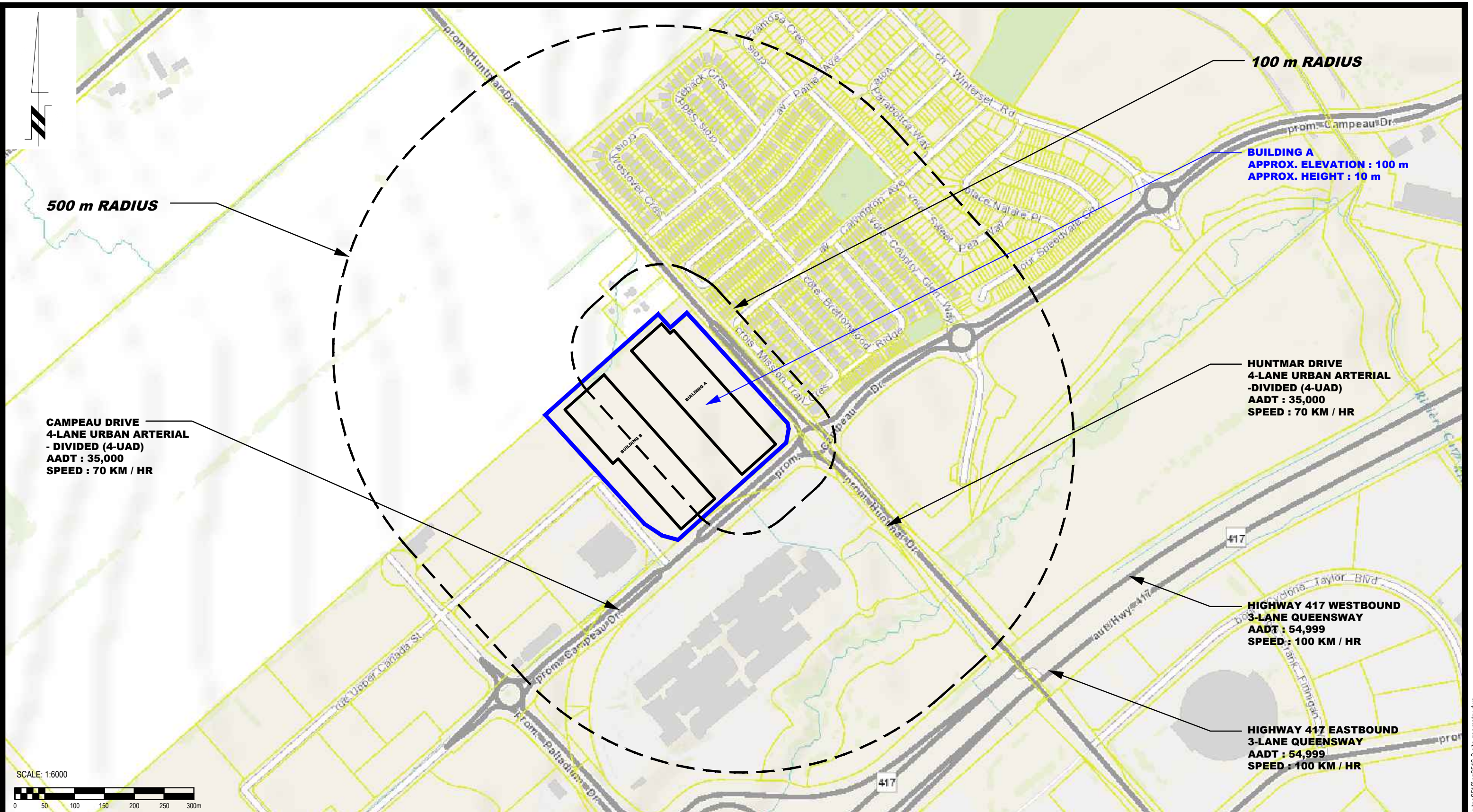
NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE
ONTARIO

OTTAWA,
Title:

RECEPTOR LOCATION PLAN

Scale:	1:1500	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-2
Approved by:	SB	Revision No.:	



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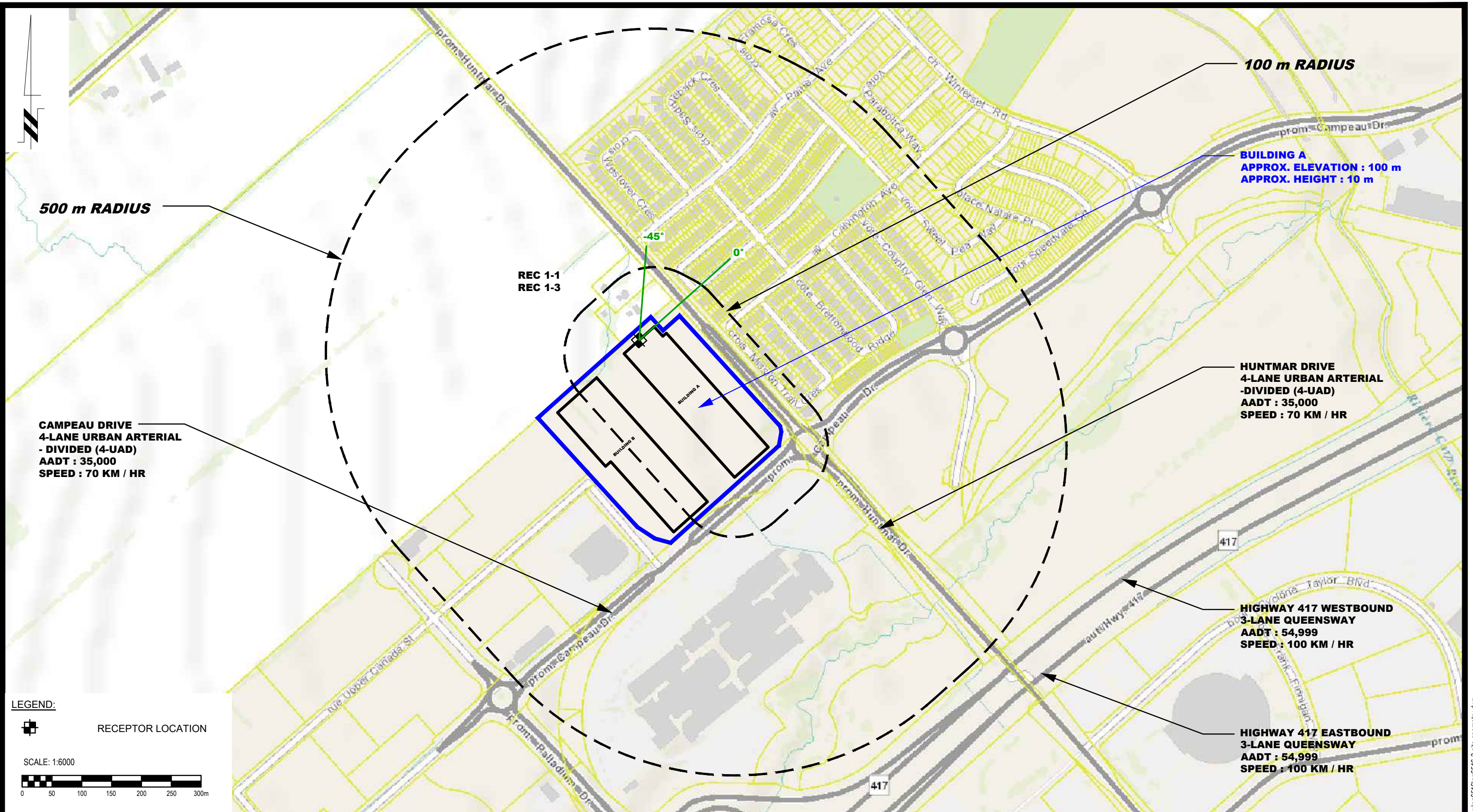
NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE
ONTARIO

OTTAWA,
Title:

SITE GEOMETRY - BUILDING A

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-3
Approved by:	SB	Revision No.:	

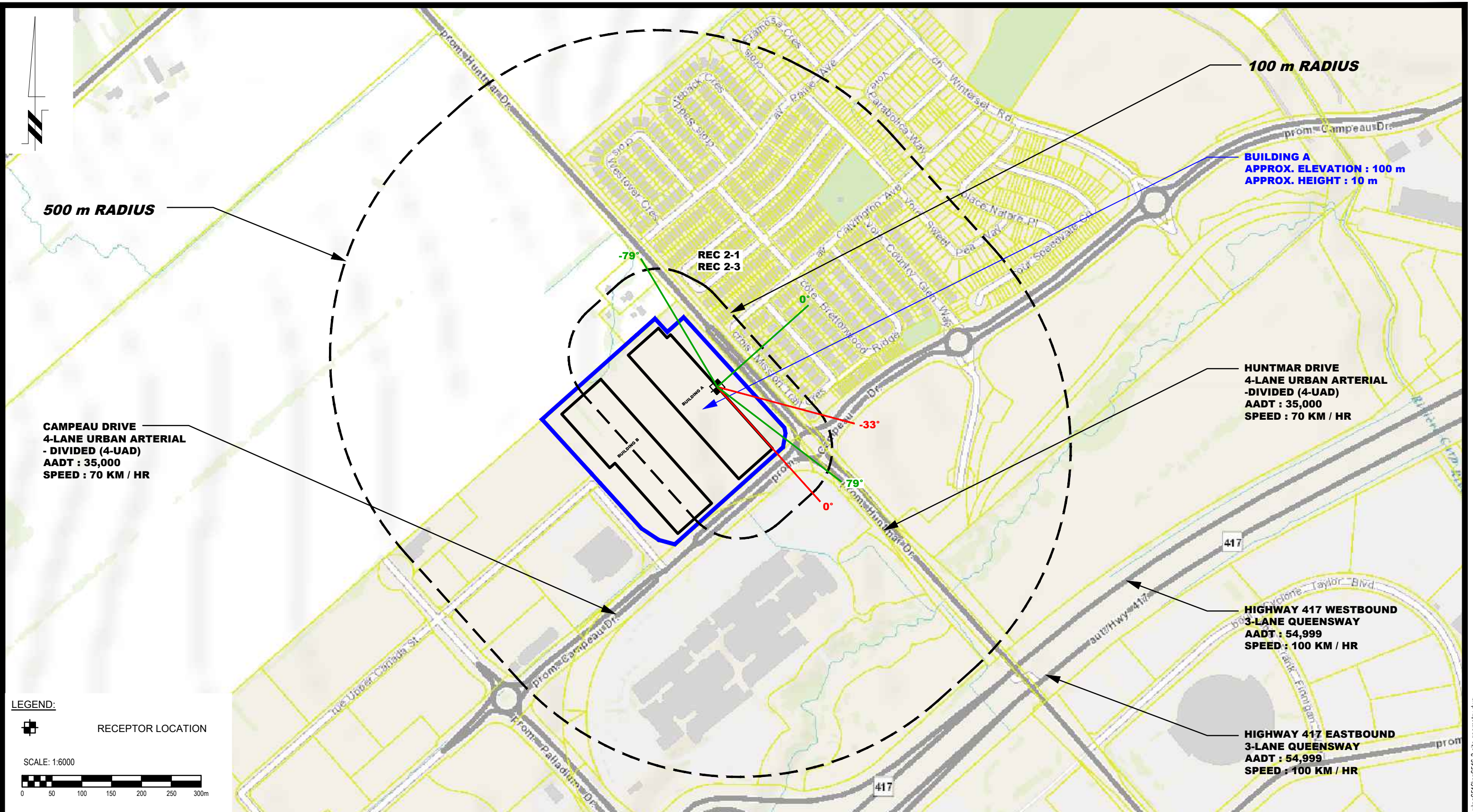


NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE
ONTARIO

OTTAWA,
Title: **SITE GEOMETRY - REC 1-1 AND REC 1-3**

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-3A
Approved by:	SB	Revision No.:	



500 m RADIUS

100 m RADIUS

BUILDING A
APPROX. ELEVATION : 100 m
APPROX. HEIGHT : 10 m

CAMPEAU DRIVE
4-LANE URBAN ARTERIAL
- DIVIDED (4-UAD)
AADT : 35,000
SPEED : 70 KM / HR

HUNTMAR DRIVE
4-LANE URBAN ARTERIAL
- DIVIDED (4-UAD)
AADT : 35,000
SPEED : 70 KM / HR

HIGHWAY 417 WESTBOUND
3-LANE QUEENSWAY
AADT : 54,999
SPEED : 100 KM / HR

HIGHWAY 417 EASTBOUND
3-LANE QUEENSWAY
AADT : 54,999
SPEED : 100 KM / HR

REC 2-1
REC 2-3

-79°

0°

-33°

79°

LEGEND:

RECEPTOR LOCATION

SCALE: 1:6000

9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

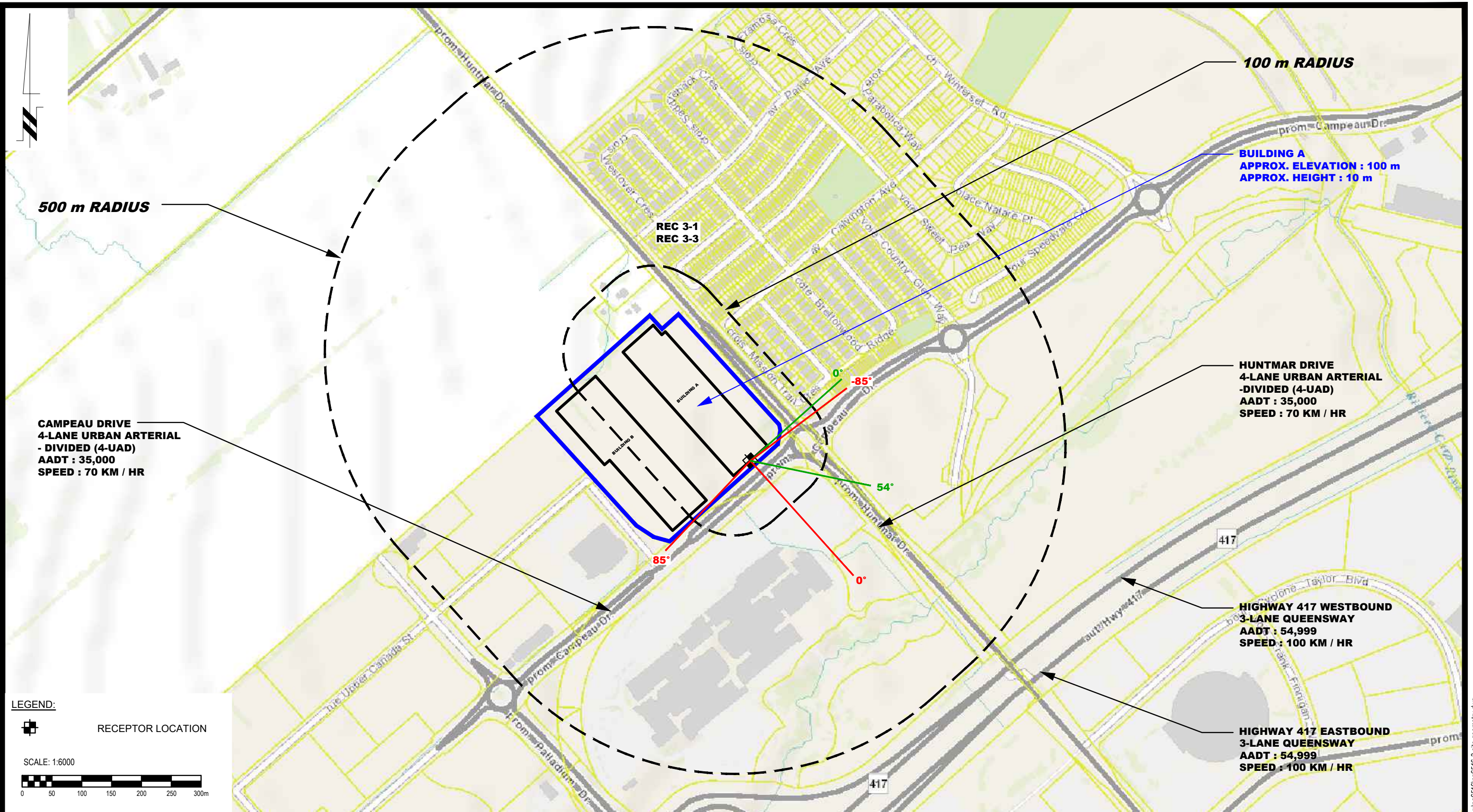
NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 2-1 AND REC 2-3**

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-3B
Approved by:	SB	Revision No.:	



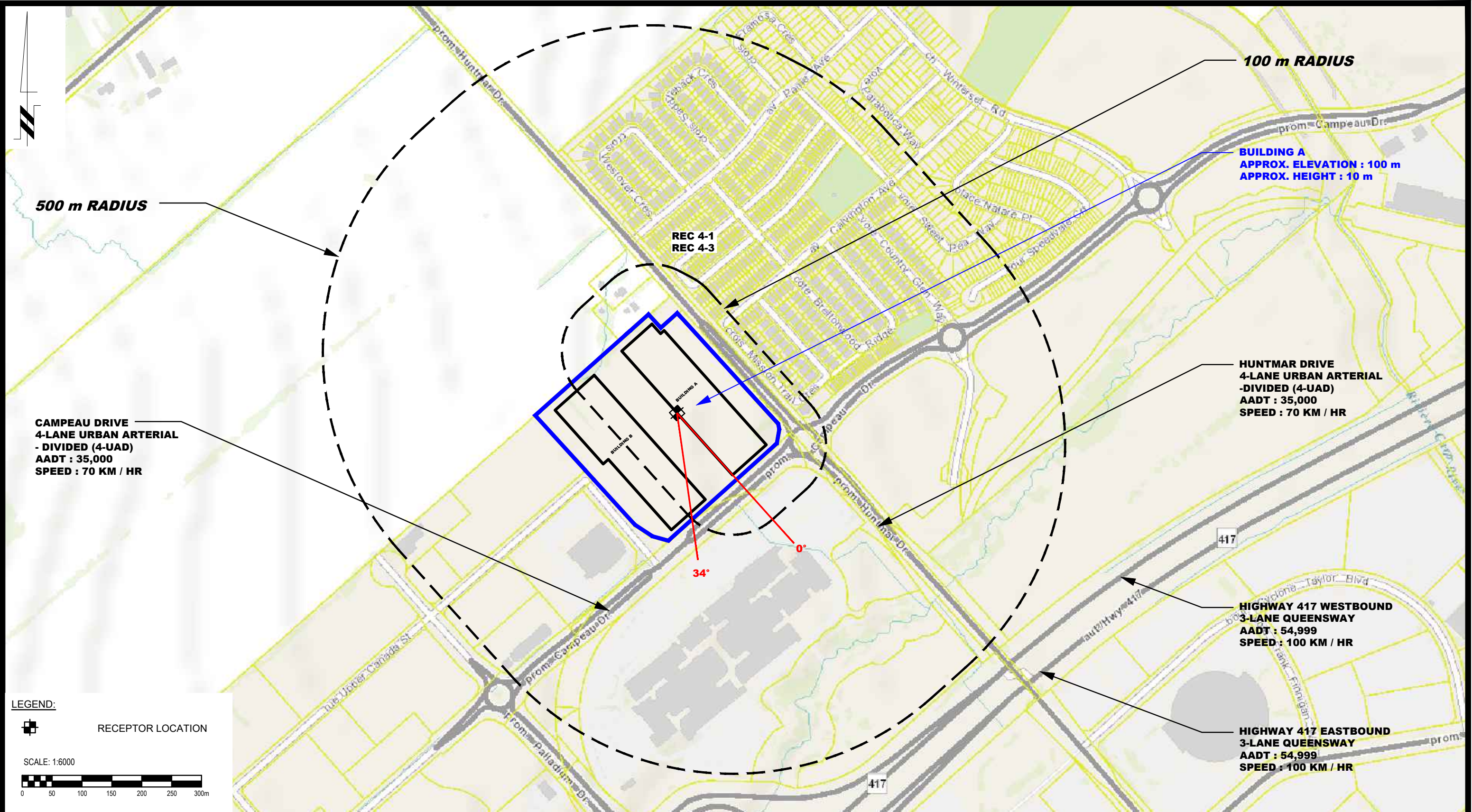
PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE
OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 3-1 AND REC 3-3**

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-3C
Approved by:	SB	Revision No.:	

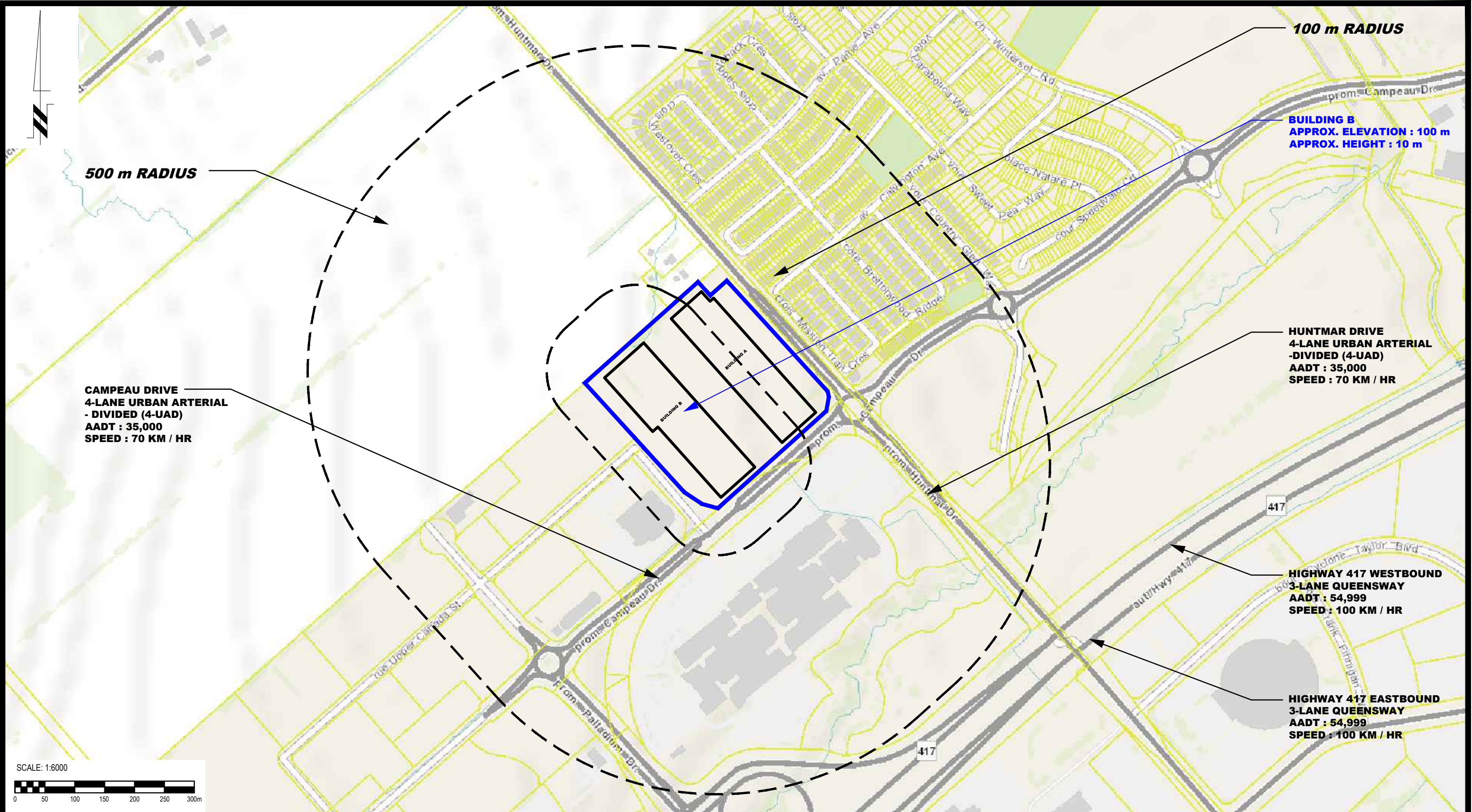


NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE
OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 4-1 AND REC 4-3**

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-3D
Approved by:	SB	Revision No.:	



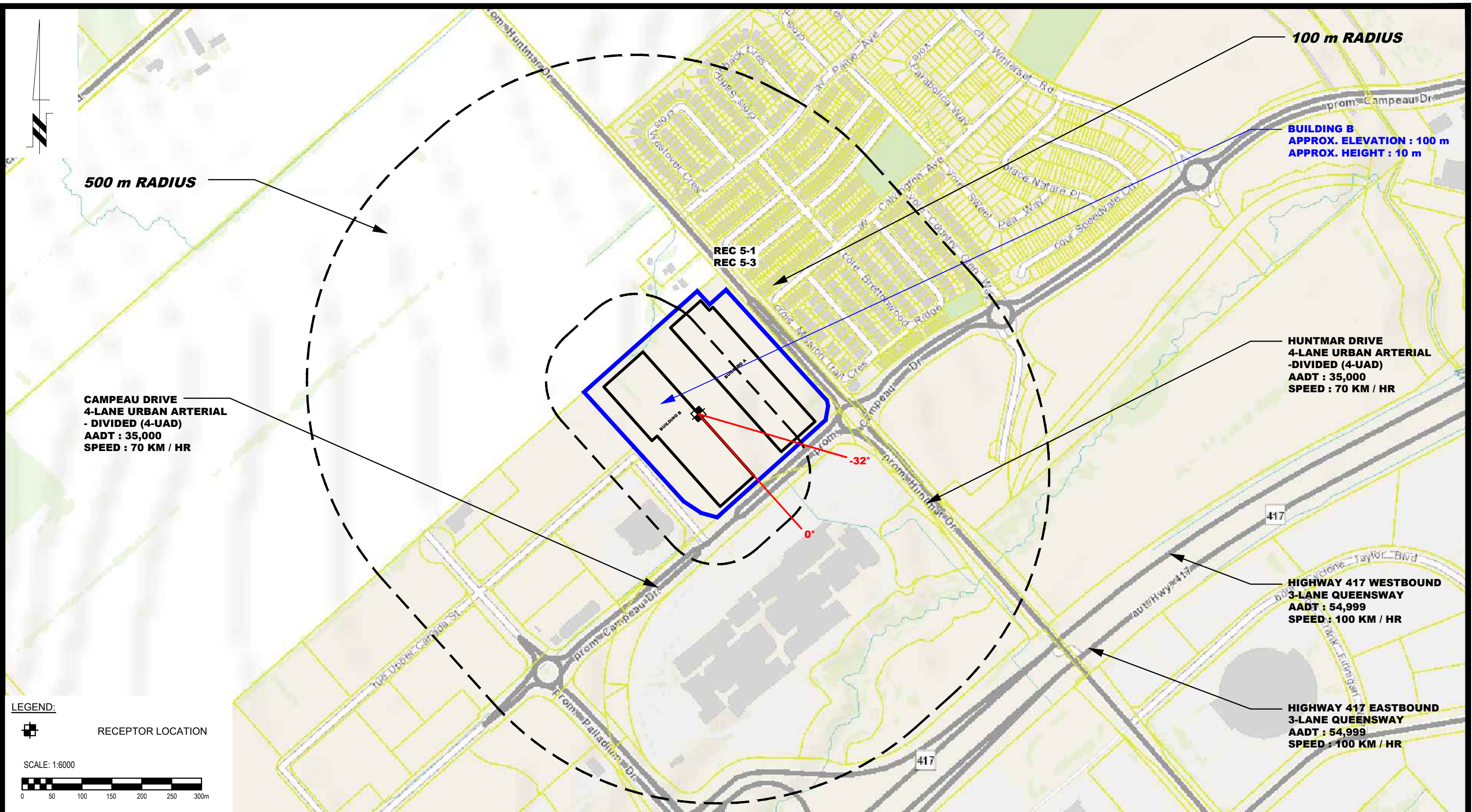
NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE
ONTARIO

OTTAWA,
Title:

SITE GEOMETRY - BUILDING B

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-4
Approved by:	SB	Revision No.:	



PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

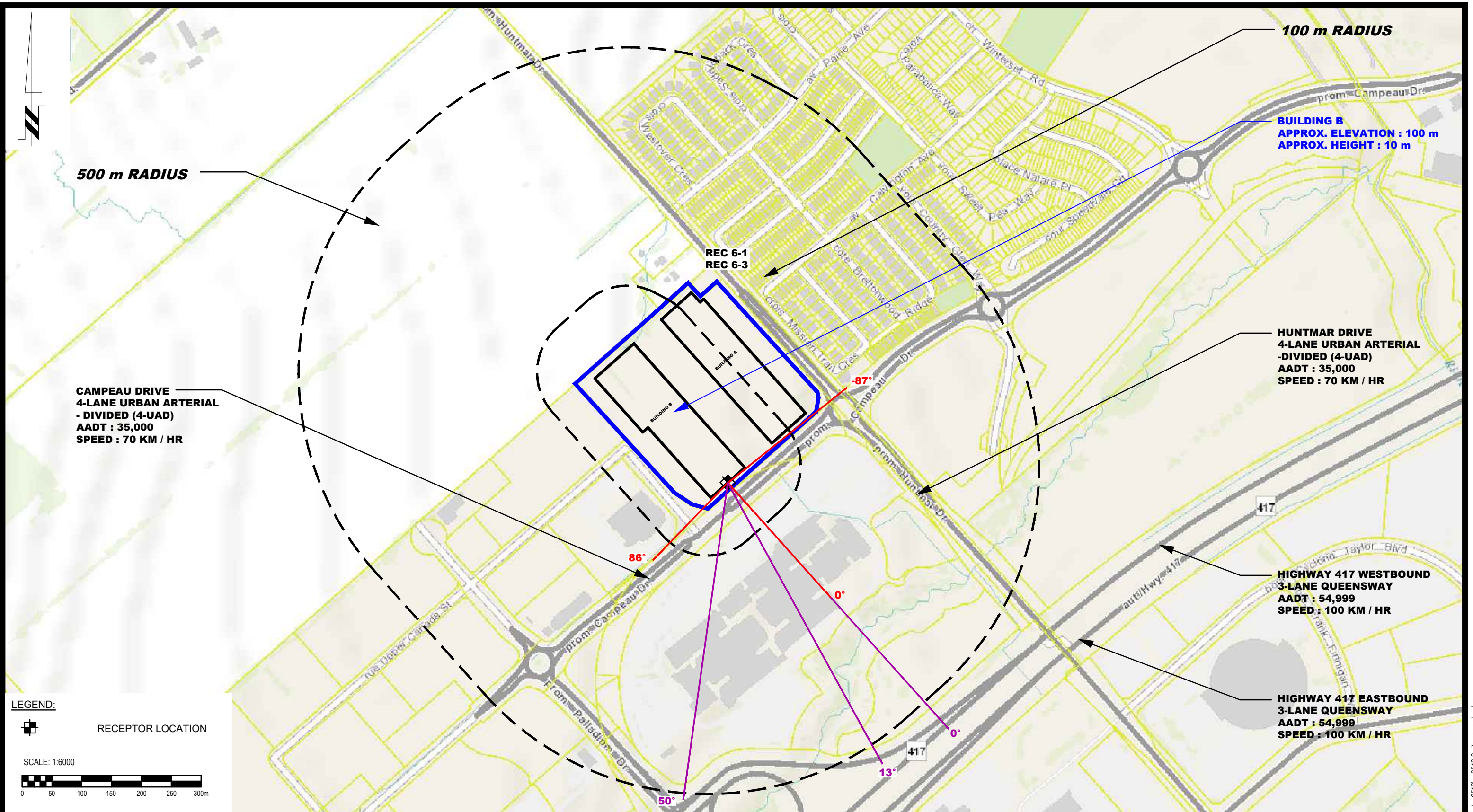
NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 5-1 AND REC 5-3**

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-4A
Approved by:	SB	Revision No.:	



LEGEND:

RECEPTOR LOCATION

SCALE: 1:6000

PATERSON GROUP

9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

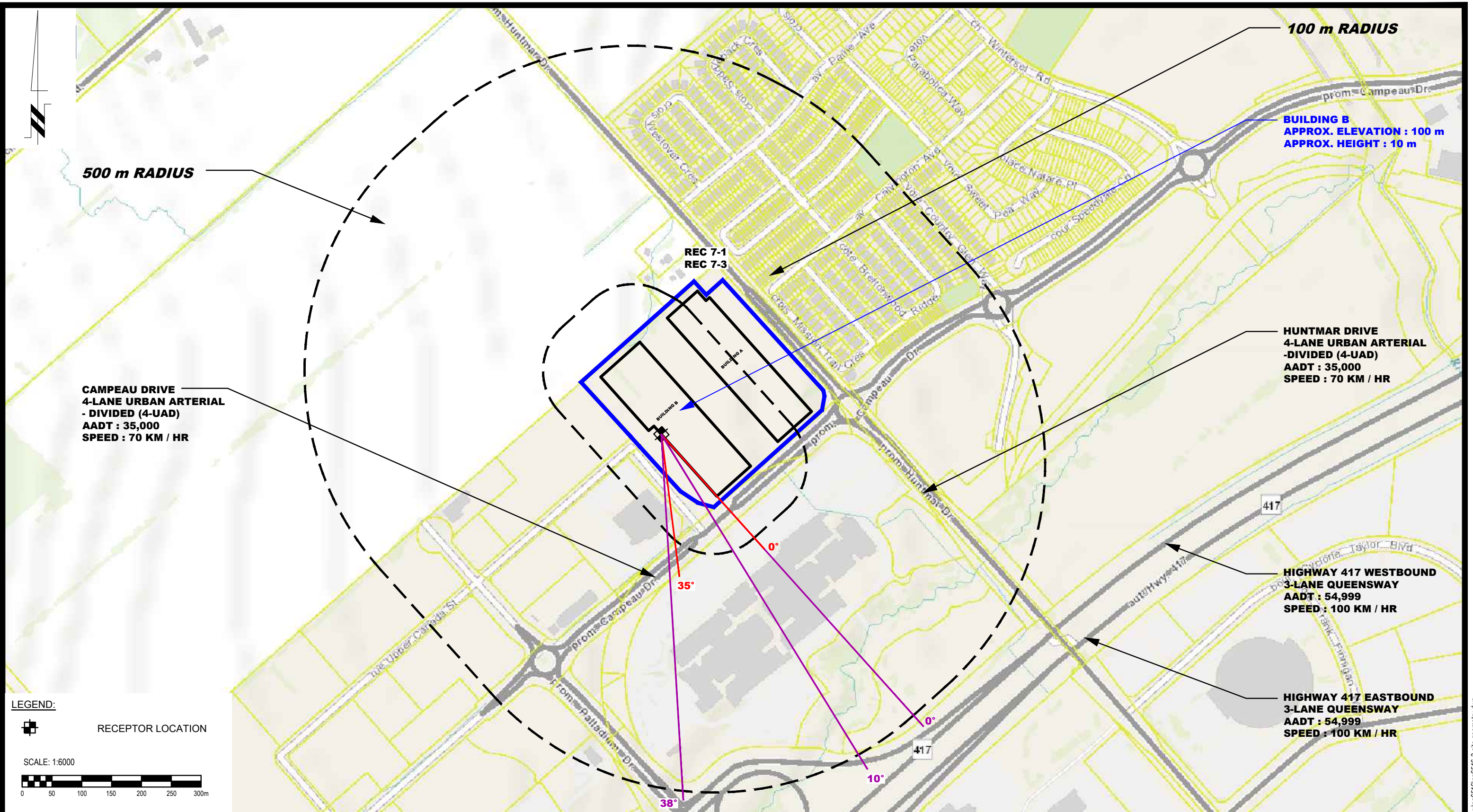
NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 6-1 AND REC 6-3**

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-4B
Approved by:	SB	Revision No.:	



LEGEND:

RECEPTOR LOCATION

SCALE: 1:6000

PATERSON GROUP

9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

ROSEFELLOW HOLDINGS INC.
NOISE ATTENUATION STUDY
PROPOSED WAREHOUSE BUILDINGS
405 HUNTMAR DRIVE

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 7-1 AND REC 7-3**

Scale:	1:6000	Date:	11/2022
Drawn by:	YA	Report No.:	PG6516-1
Checked by:	YT	Dwg. No.:	PG6516-4C
Approved by:	SB	Revision No.:	

APPENDIX 2

STAMSON RESULTS

Filename: rec11.te Time Period: Day/Night 16/8 hours
 Description: Receptor Point 1-1

Road data, segment # 1: Huntmar Dr (day/night)

 Car traffic volume : 28336/2464 veh/TimePeriod *
 Medium truck volume : 2254/196 veh/TimePeriod *
 Heavy truck volume : 1610/140 veh/TimePeriod *
 Posted speed limit : 70 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): 35000
 Percentage of Annual Growth : 0.00
 Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Huntmar Dr (day/night)

 Angle1 Angle2 : -45.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 75.00 / 75.00 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Huntmar Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 57.07 + 0.00) = 57.07 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-45	0	0.66	75.00	0.00	-11.60	-6.33	0.00	0.00	0.00	57.07

Segment Leq : 57.07 dBA

Total Leq All Segments: 57.07 dBA

↑

Results segment # 1: Huntmar Dr (night)

Source height = 1.50 m

ROAD (0.00 + 49.47 + 0.00) = 49.47 dBA

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

-45	0	0.66	67.40	0.00	-11.60	-6.33	0.00	0.00	0.00	49.47
-----	---	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 49.47 dBA

Total Leq All Segments: 49.47 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 57.07

(NIGHT): 49.47

↑

↑

Filename: rec13.te Time Period: Day/Night 16/8 hours
 Description: Receptor Point 1-3

Road data, segment # 1: Huntmar Dr (day/night)

 Car traffic volume : 28336/2464 veh/TimePeriod *
 Medium truck volume : 2254/196 veh/TimePeriod *
 Heavy truck volume : 1610/140 veh/TimePeriod *
 Posted speed limit : 70 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): 35000
 Percentage of Annual Growth : 0.00
 Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Huntmar Dr (day/night)

 Angle1 Angle2 : -45.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 75.00 / 75.00 m
 Receiver height : 8.50 / 8.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Huntmar Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 58.63 + 0.00) = 58.63 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-45	0	0.45	75.00	0.00	-10.14	-6.23	0.00	0.00	0.00	58.63

Segment Leq : 58.63 dBA

Total Leq All Segments: 58.63 dBA

↑

Results segment # 1: Huntmar Dr (night)

Source height = 1.50 m

ROAD (0.00 + 51.03 + 0.00) = 51.03 dBA

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

-45	0	0.45	67.40	0.00	-10.14	-6.23	0.00	0.00	0.00	51.03
-----	---	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 51.03 dBA

Total Leq All Segments: 51.03 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 58.63

(NIGHT): 51.03

↑

↑

Filename: rec21.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 2-1

Road data, segment # 1: Huntmar Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Huntmar Dr (day/night)

Angle1 Angle2 : -79.00 deg 79.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 45.00 / 45.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

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

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau Dr (day/night)

 Angle1 Angle2 : -33.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 140.00 / 140.00 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Results segment # 1: Huntmar Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 65.47 + 0.00) = 65.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-79	79	0.66	75.00	0.00	-7.92	-1.61	0.00	0.00	0.00	65.47

Segment Leq : 65.47 dBA

↑

Results segment # 2: Campeau Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 51.36 + 0.00) = 51.36 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-33	0	0.66	75.00	0.00	-16.10	-7.53	0.00	0.00	0.00	51.36

Segment Leq : 51.36 dBA

Total Leq All Segments: 65.64 dBA

↑

Results segment # 1: Huntmar Dr (night)

Source height = 1.50 m

ROAD (0.00 + 57.87 + 0.00) = 57.87 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-79	79	0.66	67.40	0.00	-7.92	-1.61	0.00	0.00	0.00	57.87

Segment Leq : 57.87 dBA

↑

Results segment # 2: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 43.77 + 0.00) = 43.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-33	0	0.66	67.40	0.00	-16.10	-7.53	0.00	0.00	0.00	43.77

Segment Leq : 43.77 dBA

Total Leq All Segments: 58.04 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 65.64
(NIGHT): 58.04

↑

↑

Filename: rec23.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 2-3

Road data, segment # 1: Huntmar Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Huntmar Dr (day/night)

Angle1 Angle2 : -79.00 deg 79.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 45.00 / 45.00 m
Receiver height : 8.50 / 8.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

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

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau Dr (day/night)

 Angle1 Angle2 : -33.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 140.00 / 140.00 m
 Receiver height : 8.50 / 8.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Huntmar Dr (day)

Source height = 1.50 m

ROAD (0.00 + 66.77 + 0.00) = 66.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-79	79	0.45	75.00	0.00	-6.92	-1.31	0.00	0.00	0.00	66.77

Segment Leq : 66.77 dBA

↑
 Results segment # 2: Campeau Dr (day)

Source height = 1.50 m

ROAD (0.00 + 53.45 + 0.00) = 53.45 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-33	0	0.45	75.00	0.00	-14.07	-7.48	0.00	0.00	0.00	53.45

Segment Leq : 53.45 dBA

Total Leq All Segments: 66.97 dBA

↑
 Results segment # 1: Huntmar Dr (night)

Source height = 1.50 m

ROAD (0.00 + 59.17 + 0.00) = 59.17 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-79	79	0.45	67.40	0.00	-6.92	-1.31	0.00	0.00	0.00	59.17

Segment Leq : 59.17 dBA

↑

Results segment # 2: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 45.85 + 0.00) = 45.85 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-33	0	0.45	67.40	0.00	-14.07	-7.48	0.00	0.00	0.00	45.85

Segment Leq : 45.85 dBA

Total Leq All Segments: 59.37 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 66.97
(NIGHT): 59.37

↑

↑

Filename: rec31.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 3-1

Road data, segment # 1: Huntmar Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Huntmar Dr (day/night)

Angle1 Angle2 : 0.00 deg 54.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 75.00 / 75.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

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

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau Dr (day/night)

 Angle1 Angle2 : -85.00 deg 85.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 25.00 / 25.00 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Huntmar Dr (day)

Source height = 1.50 m

ROAD (0.00 + 57.72 + 0.00) = 57.72 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	54	0.66	75.00	0.00	-11.60	-5.68	0.00	0.00	0.00	57.72

Segment Leq : 57.72 dBA

↑
 Results segment # 2: Campeau Dr (day)

Source height = 1.50 m

ROAD (0.00 + 69.81 + 0.00) = 69.81 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-85	85	0.66	75.00	0.00	-3.68	-1.50	0.00	0.00	0.00	69.81

Segment Leq : 69.81 dBA

Total Leq All Segments: 70.07 dBA

↑
 Results segment # 1: Huntmar Dr (night)

Source height = 1.50 m

ROAD (0.00 + 50.12 + 0.00) = 50.12 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	54	0.66	67.40	0.00	-11.60	-5.68	0.00	0.00	0.00	50.12

Segment Leq : 50.12 dBA

↑

Results segment # 2: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 62.22 + 0.00) = 62.22 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-85	85	0.66	67.40	0.00	-3.68	-1.50	0.00	0.00	0.00	62.22

Segment Leq : 62.22 dBA

Total Leq All Segments: 62.48 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 70.07
(NIGHT): 62.48

↑

↑

Filename: rec33.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 3-3

Road data, segment # 1: Huntmar Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Huntmar Dr (day/night)

Angle1 Angle2 : 0.00 deg 54.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 75.00 / 75.00 m
Receiver height : 8.50 / 8.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

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

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau Dr (day/night)

 Angle1 Angle2 : -85.00 deg 85.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 25.00 / 25.00 m
 Receiver height : 8.50 / 8.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Huntmar Dr (day)

Source height = 1.50 m

ROAD (0.00 + 59.32 + 0.00) = 59.32 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	54	0.45	75.00	0.00	-10.14	-5.54	0.00	0.00	0.00	59.32

Segment Leq : 59.32 dBA

↑
 Results segment # 2: Campeau Dr (day)

Source height = 1.50 m

ROAD (0.00 + 70.62 + 0.00) = 70.62 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-85	85	0.45	75.00	0.00	-3.22	-1.15	0.00	0.00	0.00	70.62

Segment Leq : 70.62 dBA

Total Leq All Segments: 70.93 dBA

↑
 Results segment # 1: Huntmar Dr (night)

Source height = 1.50 m

ROAD (0.00 + 51.72 + 0.00) = 51.72 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	54	0.45	67.40	0.00	-10.14	-5.54	0.00	0.00	0.00	51.72

Segment Leq : 51.72 dBA

↑

Results segment # 2: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 63.03 + 0.00) = 63.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-85	85	0.45	67.40	0.00	-3.22	-1.15	0.00	0.00	0.00	63.03

Segment Leq : 63.03 dBA

Total Leq All Segments: 63.34 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 70.93
(NIGHT): 63.34

↑

↑

Filename: rec41.te Time Period: Day/Night 16/8 hours
 Description: Receptor Point 4-1

Road data, segment # 1: Campeau Dr (day/night)

 Car traffic volume : 28336/2464 veh/TimePeriod *
 Medium truck volume : 2254/196 veh/TimePeriod *
 Heavy truck volume : 1610/140 veh/TimePeriod *
 Posted speed limit : 70 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): 35000
 Percentage of Annual Growth : 0.00
 Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

 Angle1 Angle2 : 0.00 deg 34.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 140.00 / 140.00 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Campeau Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 51.48 + 0.00) = 51.48 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	34	0.66	75.00	0.00	-16.10	-7.41	0.00	0.00	0.00	51.48

Segment Leq : 51.48 dBA

Total Leq All Segments: 51.48 dBA

↑

Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 43.89 + 0.00) = 43.89 dBA

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

0	34	0.66	67.40	0.00	-16.10	-7.41	0.00	0.00	0.00	43.89
---	----	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 43.89 dBA

Total Leq All Segments: 43.89 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 51.48

(NIGHT): 43.89

↑

↑

Filename: rec43.te Time Period: Day/Night 16/8 hours
 Description: Receptor Point 4-3

Road data, segment # 1: Campeau Dr (day/night)

 Car traffic volume : 28336/2464 veh/TimePeriod *
 Medium truck volume : 2254/196 veh/TimePeriod *
 Heavy truck volume : 1610/140 veh/TimePeriod *
 Posted speed limit : 70 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): 35000
 Percentage of Annual Growth : 0.00
 Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

 Angle1 Angle2 : 0.00 deg 34.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 140.00 / 140.00 m
 Receiver height : 8.50 / 8.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Campeau Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 53.57 + 0.00) = 53.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	34	0.45	75.00	0.00	-14.07	-7.36	0.00	0.00	0.00	53.57

Segment Leq : 53.57 dBA

Total Leq All Segments: 53.57 dBA

↑

Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 45.98 + 0.00) = 45.98 dBA

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

0	34	0.45	67.40	0.00	-14.07	-7.36	0.00	0.00	0.00	45.98
---	----	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 45.98 dBA

Total Leq All Segments: 45.98 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 53.57

(NIGHT): 45.98

↑

↑

Filename: rec51.te Time Period: Day/Night 16/8 hours
 Description: Receptor Point 5-1

Road data, segment # 1: Campeau Dr (day/night)

 Car traffic volume : 28336/2464 veh/TimePeriod *
 Medium truck volume : 2254/196 veh/TimePeriod *
 Heavy truck volume : 1610/140 veh/TimePeriod *
 Posted speed limit : 70 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): 35000
 Percentage of Annual Growth : 0.00
 Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

 Angle1 Angle2 : -32.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 140.00 / 140.00 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Campeau Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 51.24 + 0.00) = 51.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	0	0.66	75.00	0.00	-16.10	-7.65	0.00	0.00	0.00	51.24

Segment Leq : 51.24 dBA

Total Leq All Segments: 51.24 dBA

↑

Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 43.64 + 0.00) = 43.64 dBA

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

-32	0	0.66	67.40	0.00	-16.10	-7.65	0.00	0.00	0.00	43.64
-----	---	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 43.64 dBA

Total Leq All Segments: 43.64 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 51.24

(NIGHT): 43.64

↑

↑

Filename: rec53.te Time Period: Day/Night 16/8 hours
 Description: Receptor Point 5-3

Road data, segment # 1: Campeau Dr (day/night)

 Car traffic volume : 28336/2464 veh/TimePeriod *
 Medium truck volume : 2254/196 veh/TimePeriod *
 Heavy truck volume : 1610/140 veh/TimePeriod *
 Posted speed limit : 70 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): 35000
 Percentage of Annual Growth : 0.00
 Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

 Angle1 Angle2 : -32.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 140.00 / 140.00 m
 Receiver height : 8.50 / 8.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑
 Results segment # 1: Campeau Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 53.32 + 0.00) = 53.32 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	0	0.45	75.00	0.00	-14.07	-7.61	0.00	0.00	0.00	53.32

Segment Leq : 53.32 dBA

Total Leq All Segments: 53.32 dBA

↑

Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 45.73 + 0.00) = 45.73 dBA

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

-32	0	0.45	67.40	0.00	-14.07	-7.61	0.00	0.00	0.00	45.73
-----	---	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 45.73 dBA

Total Leq All Segments: 45.73 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 53.32

(NIGHT): 45.73

↑

↑

Filename: rec61.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 6-1

Road data, segment # 1: Campeau Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

Angle1 Angle2 : -87.00 deg 86.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 25.00 / 25.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: Hwy 417 West (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 60 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Hwy 417 West (day/night)

 Angle1 Angle2 : 13.00 deg 50.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 1 / 1
 House density : 60 %
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 475.00 / 475.00 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Results segment # 1: Campeau Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 69.83 + 0.00) = 69.83 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-87	86	0.66	75.00	0.00	-3.68	-1.48	0.00	0.00	0.00	69.83

Segment Leq : 69.83 dBA

↑

Results segment # 2: Hwy 417 West (day)

 Source height = 1.50 m

ROAD (0.00 + 40.34 + 0.00) = 40.34 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
13	50	0.66	75.64	0.00	-24.91	-7.38	0.00	-3.00	0.00	40.34

Segment Leq : 40.34 dBA

Total Leq All Segments: 69.83 dBA

↑

Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 62.24 + 0.00) = 62.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-87	86	0.66	67.40	0.00	-3.68	-1.48	0.00	0.00	0.00	62.24

Segment Leq : 62.24 dBA

↑
Results segment # 2: Hwy 417 West (night)

Source height = 1.50 m

ROAD (0.00 + 32.74 + 0.00) = 32.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
13	50	0.66	68.04	0.00	-24.91	-7.38	0.00	-3.00	0.00	32.74

Segment Leq : 32.74 dBA

Total Leq All Segments: 62.24 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 69.83
(NIGHT): 62.24

↑
↑

Filename: rec63.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 6-3

Road data, segment # 1: Campeau Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

Angle1 Angle2 : -87.00 deg 86.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 25.00 / 25.00 m
Receiver height : 8.50 / 8.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: Hwy 417 West (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 60 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Hwy 417 West (day/night)

 Angle1 Angle2 : 13.00 deg 50.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 1 / 1
 House density : 60 %
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 475.00 / 475.00 m
 Receiver height : 8.50 / 8.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00



Results segment # 1: Campeau Dr (day)

Source height = 1.50 m

ROAD (0.00 + 70.65 + 0.00) = 70.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-87	86	0.45	75.00	0.00	-3.22	-1.12	0.00	0.00	0.00	70.65

Segment Leq : 70.65 dBA



Results segment # 2: Hwy 417 West (day)

Source height = 1.50 m

ROAD (0.00 + 43.65 + 0.00) = 43.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
13	50	0.45	75.64	0.00	-21.76	-7.22	0.00	-3.00	0.00	43.65

Segment Leq : 43.65 dBA

Total Leq All Segments: 70.66 dBA



Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 63.06 + 0.00) = 63.06 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-87	86	0.45	67.40	0.00	-3.22	-1.12	0.00	0.00	0.00	63.06

Segment Leq : 63.06 dBA

↑
Results segment # 2: Hwy 417 West (night)

Source height = 1.50 m

ROAD (0.00 + 36.05 + 0.00) = 36.05 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
13	50	0.45	68.04	0.00	-21.76	-7.22	0.00	-3.00	0.00	36.05

Segment Leq : 36.05 dBA

Total Leq All Segments: 63.07 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 70.66
(NIGHT): 63.07

↑
↑

Filename: rec71.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 7-1

Road data, segment # 1: Campeau Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

Angle1 Angle2 : 0.00 deg 35.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 140.00 / 140.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: Hwy 417 West (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 60 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Hwy 417 West (day/night)

 Angle1 Angle2 : 10.00 deg 38.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 1 / 1
 House density : 60 %
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 500.00 / 500.00 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Results segment # 1: Campeau Dr (day)

Source height = 1.50 m

ROAD (0.00 + 51.60 + 0.00) = 51.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	35	0.66	75.00	0.00	-16.10	-7.29	0.00	0.00	0.00	51.60

Segment Leq : 51.60 dBA

↑

Results segment # 2: Hwy 417 West (day)

Source height = 1.50 m

ROAD (0.00 + 38.99 + 0.00) = 38.99 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
10	38	0.66	75.64	0.00	-25.28	-8.37	0.00	-3.00	0.00	38.99

Segment Leq : 38.99 dBA

Total Leq All Segments: 51.83 dBA

↑

Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 44.00 + 0.00) = 44.00 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	35	0.66	67.40	0.00	-16.10	-7.29	0.00	0.00	0.00	44.00

Segment Leq : 44.00 dBA

↑
Results segment # 2: Hwy 417 West (night)

Source height = 1.50 m

ROAD (0.00 + 31.39 + 0.00) = 31.39 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
10	38	0.66	68.04	0.00	-25.28	-8.37	0.00	-3.00	0.00	31.39

Segment Leq : 31.39 dBA

Total Leq All Segments: 44.23 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 51.83
(NIGHT): 44.23

↑
↑

Filename: rec73.te Time Period: Day/Night 16/8 hours
Description: Receptor Point 7-3

Road data, segment # 1: Campeau Dr (day/night)

Car traffic volume : 28336/2464 veh/TimePeriod *
Medium truck volume : 2254/196 veh/TimePeriod *
Heavy truck volume : 1610/140 veh/TimePeriod *
Posted speed limit : 70 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): 35000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau Dr (day/night)

Angle1 Angle2 : 0.00 deg 35.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 140.00 / 140.00 m
Receiver height : 8.50 / 8.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: Hwy 417 West (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 60 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 7.00
 Heavy Truck % of Total Volume : 5.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Hwy 417 West (day/night)

 Angle1 Angle2 : 10.00 deg 38.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 1 / 1
 House density : 60 %
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 500.00 / 500.00 m
 Receiver height : 8.50 / 8.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Results segment # 1: Campeau Dr (day)

 Source height = 1.50 m

ROAD (0.00 + 53.69 + 0.00) = 53.69 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	35	0.45	75.00	0.00	-14.07	-7.24	0.00	0.00	0.00	53.69

 Segment Leq : 53.69 dBA

↑

Results segment # 2: Hwy 417 West (day)

 Source height = 1.50 m

ROAD (0.00 + 42.28 + 0.00) = 42.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
10	38	0.45	75.64	0.00	-22.08	-8.28	0.00	-3.00	0.00	42.28

 Segment Leq : 42.28 dBA

Total Leq All Segments: 53.99 dBA

↑

Results segment # 1: Campeau Dr (night)

Source height = 1.50 m

ROAD (0.00 + 46.09 + 0.00) = 46.09 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	35	0.45	67.40	0.00	-14.07	-7.24	0.00	0.00	0.00	46.09

Segment Leq : 46.09 dBA

↑
Results segment # 2: Hwy 417 West (night)

Source height = 1.50 m

ROAD (0.00 + 34.68 + 0.00) = 34.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
10	38	0.45	68.04	0.00	-22.08	-8.28	0.00	-3.00	0.00	34.68

Segment Leq : 34.68 dBA

Total Leq All Segments: 46.39 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 53.99
(NIGHT): 46.39

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↑