PATERSON GROUP

Environmental Noise Control Study

Proposed Residential Development

475 Terry Fox Drive
Ottawa, Ontario

Prepared for Ironclad Developments

Report PG7422-1 - Dated February 13, 2025

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Appendices

1.0 Introduction

Paterson Group (Paterson) was commissioned by Ironclad Developments to conduct an environmental noise control study for the proposed residential development to be located at 475 Terry Fox 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 Conservation and Parks (MOECP) 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 residential development as they are understood at the time of writing this report.

This study has been conducted according to the 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

It is understood that the proposed residential development will consist of three six-storey residential buildings (denoted as Building A, Building B and Building C) Associated at-grade roadways, parking areas, landscaped areas and outdoor living areas are also anticipated as a part of the proposed residential development.

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

The City of Ottawa's Official Plan, in addition to the ENCG, dictate that the influence area must contain any of the 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 principal main railway line.

The NPC-300 outlines the limitations of the stationary and environmental noise levels in relation to the location of the receptors. These can be found below in the following tables:

Table 1 - Sound Level Limits for Outdoor Living Areas	
Time Period	**Required $L_{eq(16)}$ (dBA)**
16-hour, 7:00-23:00	55
I. Standards taken from Table 2.2a; Sound Level Limit for Outdoor Living Areas - Road and Rail	

Table 2 - Sound Level Limits for Indoor Living Area			
Type of Space	**Time Period**	**Required L_{eq} (dBA)**	
		Road	**Rail**
Living/Dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc	7:00-23:00	45	40
Theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms	23:00-7:00	45	40
Sleeping quarters	7:00-23:00	45	40
	23:00-7:00	40	35
I. Standards taken from Table 2.2b; Sound Level Limit for Indoor Living Areas - Road and Rail			

It is noted in ENCG that the limits outlined in Table 2 are for the sound levels on the interior of the glass pane. The ENCG further goes on to state that the limit for the exterior of the pane of glass will be 55 dBA.

If the sound level limits are exceeded at the window panes for the indoor living areas, the following Warning Clauses may be referenced:

Table 3 - Warning Clauses for Sound Level Exceedances	
Warning Clause	**Description**
Warning Clause Type A	"Purchasers/tenants are advised that sound levels due to increasing road traffic (rail traffic) (air traffic) may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."
Warning Clause 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 (rail traffic) (air traffic) may, on occasions, interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."
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."
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."
I. Clauses taken from section C8 Warning Clauses; Environmental Noise Guidelines - 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 proposed residential development is not in proximity to any existing or approved stationary sources of noise. Therefore, a stationary noise analysis will not be required with respect to off-site stationary noise sources impacting the proposed development.

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 site is currently unoccupied, with Terry Fox Drive to the south, Kanata Avenue to the west and residential dwellings to the north and east. Terry Fox Drive, Kanata Avenue and Insmill Cresent were identified within the 100 m radius of the proposed residential development.

Based on the new City of Ottawa Official Plan, Schedule F, Terry Fox Drive is considered a four-lane urban arterial road (4-UAD), and Kanata Avenue is considered a two-lane urban major collector (2-UMCU). Other roads within the 100-m radius of the proposed residential development are not classified as either arterial, collector, or major collector roads and, therefore, are not included in this study.

All noise sources are presented in Drawing PG7422-1-Site Geometry, located in Appendix 1.

The City of Ottawa provides noise levels from road traffic, taking into consideration the right-of-way width and the implied roadway class. These values represent the maximum allowable capacity of the proposed roadways. The parameters to be used for sound-level predictions can be found below.

Table 4 - Traffic and Road Parameters

Road	Implied Roadway	AADT (Veh/day)	Posted Speed (km/h)	Day/Night Split %	Medium Truck %	Heavy Truck %
Terry Fox Drive	4-UAD	35000	60	92/8	7	5
Kanata Avenue	2-UMCU	12000	60	92/8	7	5
Data obtained from the City of Ottawa document ENCG or City of Ottawa Officials						

Three (3) 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.

Table 5 - Elevation of Reception Points			
Floor Number	**Elevation at the Centre of Window / Ground Surface (m)**	**Floor Use**	**Daytime/Nighttime Analysis**
Ground Surface	1.5	Outdoor Living Area	-
Ground Floor	1.5	Living Area/Bedroom	Daytime/nighttime
Sixth Floor	16.5	Living Area/Bedroom	Daytime/nighttime

For this analysis, a reception point was taken at the centre of each floor, on the ground floor and the sixth floor. Additionally, receptor points for the outdoor living areas were taken 1.5 m above the ground surface. Reception points are detailed in Drawing PG7422-2 Receptor Location Plans presented in Appendix 1.

All horizontal distances have been measured from the reception point to the edge of the right-of-way. The roadways were analyzed where they intersected the 100m buffer zone, which is reflected in the local angles described in Paterson Drawings PG7422-3A to 13-Site Geometry in Appendix 1.

Table 10 - Summary of Reception Points and Geometry, located in Appendix 1, provides a summary of the points of reception and their geometry concerning the noise sources. The analysis is completed so that no effects of sound reflection off the building facade are considered, as stipulated by the ENGC. It should be noted that one receptor is assigned to the side of the building affected by noise. There are two noise sources: Terry Fox Drive and Kanata Avenue. The anticipated noise at each receptor represents the worst-case scenario for each building.

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.

The subject site is relatively level and at grade with the neighbouring roads within a 100 m radius.

5.0 Results

Surface Transportation

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

The proposed traffic noise levels were analyzed at all reception points. The results of the STAMSON software are located in Appendix 2, and the summary of the results is noted in Table 6 below.

Table 6 – Proposed Noise Levels

Reception Point	Description	OLA (dBA)	Daytime at Facade $L_{eq(16)}$ (dBA)	Nighttime at Facade $L_{eq(8)}$ (dBA)
REC 1-1	Northern Elevation - 1st Floor - Building A		59.73	52.13
REC 1-6	Northern Elevation - 6th Floor - Building A		61.18	53.58
REC 2-1	Western Elevation - 1st Floor - Building A		65.11	57.52
REC 2-6	Western Elevation - 6th Floor - Building A		66.83	59.23
REC 3-1	Southern Elevation - 1st Floor - Building A		70.53	62.93
REC 3-6	Southern Elevation - 6th Floor - Building A		72.62	65.02
REC 4-1	Eastern Elevation - 1st Floor - Building A		58.75	51.15
REC 4-6	Eastern Elevation - 6th Floor - Building A		61.91	54.32
REC 5	Outdoor Living Area - Building A	74.11	-	-
REC 5 Rev 1	Outdoor Living Area - Building B - Building Orientation Analysed	70.10	-	-
REC 5 Rev 2	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (2.5m) Analysed	61.78	-	-
REC 5 Rev 3	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (3.0m) Analysed	59.32	-	-
REC 5 Rev 4	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (3.5m) Analysed	56.91	-	-
REC 5 Rev 5	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (4.0m) Analysed	55.23	-	-
REC 6-1	Western Elevation - 1st Floor - Building B		68.35	60.76
REC 6-6	Western Elevation - 6th Floor - Building B		69.99	57.55
REC 7-1	Northern Elevation - 1st Floor - Building B		52.54	44.94

Reception Point	Description	OLA (dBA)	Daytime at Facade $L_{eq(16)}$ (dBA)	Nighttime at Facade $L_{eq(8)}$ (dBA)
REC 7-6	Northern Elevation - 6th Floor - Building B		55.71	48.11
REC 8-1	Southern Elevation - 1st Floor - Building B		76.67	69.07
REC 8-6	Southern Elevation - 6th Floor - Building B		77.42	69.82
REC 9-1	Eastern Elevation - 1st Floor - Building B		68.25	60.65
REC 9-6	Eastern Elevation - 6th Floor - Building B		69.45	61.86
REC 10-1	Western Elevation - 1st Floor - Building C		67.64	60.04
REC 10-6	Western Elevation - 6th Floor - Building C		69.08	61.48
REC 11-1	Southern Elevation - 1st Floor - Building C		73.5	65.9
REC 11-6	Southern Elevation - 6th Floor - Building C		74.29	66.70
REC 12-1	Eastern Elevation - 1st Floor - Building C		66.94	59.34
REC 12-6	Eastern Elevation - 6th Floor - Building C		68.50	60.90
REC 13	Outdoor Living Area - Building C	70.65	-	-
REC 13 Rev 1	Outdoor Living Area - Building C - Building Orientation Analysed	69.72	-	-
REC 13 Rev 2	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (2.5m) Analysed	61.94	-	-
REC 13 Rev 3	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (3.0m) Analysed	59.72	-	-
REC 13 Rev 4	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (3.5m) Analysed	57.76	-	-
REC 13 Rev 5	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (4.0m) Analysed	56.11	-	-
REC 14	Outdoor Living Area	63.88	-	-
REC 14 Rev 1	Outdoor Living Area – Building Orientation Analysed	53.35	-	-

6.0 Discussion and Recommendations

6.1 Outdoor Living Areas

Three outdoor living areas were analyzed as part of the current study. The first outdoor living area (REC 5) is located to the south of Building A and to the west of Building B. The second outdoor living area (REC13) is located to the east of Building C. The third outdoor living area (REC14) is located to the north of Building B and to the east of Building A. The results of the STAMSON modelling indicate that the $L_{eq(16)}$ from all sources was 73.90, 70.65 and 63.88 dBA, respectively. These values are above the 55 dBA limit that was specified in Table 1 therefore, additional noise attenuation features will be required.

Further analysis was performed for the three outdoor living areas as they exceeded the 55 dBA threshold. As per Table 2.3 of the City of Ottawa Guidelines, the following recommended methods were considered to reduce the noise levels: It is not possible to provide additional setbacks with the current orientation and size of the proposed buildings, and it is not possible to insert noise-insensitive lands between the source and the receptor. The orientation of the proposed buildings was analyzed as part of the current investigation as denoted in Drawings PG7422-3E, PG7422-5D and PG7422-5E. The results of the STAMSON modelling, taking into consideration the building orientations, indicate that the $L_{eq(16)}$ from all sources for REC 5 was 69.71 dBA and REC13 was 69.73 dBA.

The values for REC 5 and REC13 were above the 55 dBA limit therefore, noise attenuation barriers (Earth Berms or Acoustic Barriers) were additionally analysed to help reduce the noise levels in combination with the orientation of the proposed residential buildings. Various heights for the proposed barriers were analysed, ranging from 2.5 m to 4.0 m. The STAMSON results for the various heights for REC 5, and REC13 are noted in Table 7 and Table 8. below.

Table 7 - REC 5 – Outdoor Living Area – Building A – Barrier Heights

Barrier Height (m)	Noise Level (dBA)
2.5	61.41
3.0	58.97
3.5	56.91
4.0	55.23

Table 8 - REC 13 – Outdoor Living Area – Building A – Barrier Heights

Barrier Height (m)	Noise Level (dBA)
2.5	69.72
3.0	61.94
3.5	59.72
4.0	57.76

The STAMSON results indicate that the sound levels are reduced with the implementation of an acoustic barrier, but they are not reduced to below 55 dBA as specified by the ENCG.

The results for the third outdoor living area (REC14), taking into consideration the building orientations, indicate that the $L_{eq(16)}$ from all sources was 53.35 dBA, which is below the 55 dBA threshold as specified by the ENCG and therefore is considered an acceptable outdoor living area.

As there are no feasible or economical methods to reduce the noise levels below 55 dba for REC 5 and REC 13, Warning Clause Type B will be required on all deeds of sale that would utilize this as an outdoor living area. Additionally, as there is a shared outdoor amenity area (REC14) that the residents can utilize if they determine that the noise levels are excessive within these areas, no additional mitigation measures are required as there is an outdoor area that is within the overall noise thresholds.

Warning Clause 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 (rail traffic) (air traffic) may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."
in Table 1, and no noise attenuation features will be required.

6.2 Indoor Living Areas and Ventilation

The results of the STAMSON modelling indicate that the $L_{eq(16)}$ ranges between 52.54 dBA and 77.42 dBA. Some of the values calculated exceed the limit of 55 dBA as specified by the ENCG, and therefore, warning clauses will be required to be stated on any deeds of sale. The applicable warning clauses are summarized in Table 9.

Table 9 - Summary of Warning Clauses – Indoor Living Areas

Building	Elevation	Floor	Applicable Warning Clause	Additional Considerations
A	Northern	All	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.
	Eastern			
	Southern			
	Western			
B	Northern	All	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.
	Eastern			
	Southern			
	Western			
C	Eastern	All	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.
	Western			
	Southern			

Various receptors exceed the 65 dBA threshold. 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 will need to be completed once the building materials have been finalized.

Proposed Construction Specifications

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

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

Where:

$\boldsymbol{L_{eq(16)(Exterior)}}$**:** Calculated value at the windowpane

$\boldsymbol{L_{eq(16)(Interior)}}$**:** Equals 45 dBA

$\boldsymbol{N}$**:** Number of components in the room

No floor plans or detailed design drawings were provided at the time of preparing the current study. A conservative approach was used, assuming two components per room. Therefore, the AIF would need to be at least **32 dBA** for Building A, **37 dBA** for Building B and **34 dBA** for Building C.

A conversion from AIF to a Standard Transmission Class (STC) rating will require knowledge of room dimensions in addition to the wall and window dimensions. However, as this information was not available, a conservative approach was used, which included increasing the AIF factor by 3. **Therefore, provided the building materials of either the windows and/or exterior walls have an STC rating of 35 or higher for Building A, 40 or higher for Building B and 37 or higher for Building C, it would be considered a sufficient noise attenuation device.**

7.0 Summary of Findings

The subject site is located at 475 Terry Fox Drive in the City of Ottawa. It is understood that the proposed residential development will consist of three six-storey residential buildings. The associated analysis identified two surface transportation noise sources: Kanata Avenue and Terry Fox Drive.

Several reception points were selected for the analysis, consisting of panes of glass reception points on both the first, middle and top levels and outdoor living areas.

All units of Building A and Building C and various elevations for Building B exceeded the 65 dBA guideline specified by the ENCG. Therefore, all buildings will require Warning Clause Type D and will be required to provide central air for all units.

A review of building materials was completed as part of this analysis for all elevations exceeding 65 dBA. The building materials of either the windows and/or exterior walls will require an STC rating of 35 or higher for Building A, 40 or higher for Building B and 37 or higher for Building C, which would be considered a sufficient noise attenuation device. Reference can be made to Appendix 3 for Building Material Industry Standards.

All warning clauses are reiterated below and are to be included on all Offers of Purchase and Sale:

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."

Analysis of the outdoor living areas consisting of three at-grade outdoor living areas. The first outdoor living area (REC 5) is located to the south of Building A and to the west of Building B. The second outdoor living area (REC13) is located to the east of Building C. The third outdoor living area (REC14) is located to the north of Building B and to the east of Building A). The analysis indicated that all three outdoor living areas exceeded the 55 dBA threshold as specified by the ENCG.

Further analysis was performed, taking into consideration the orientations of the proposed residential buildings. The results for REC 14 resulted in a noise level below the 55 dBA threshold and is considered an acceptable outdoor living area. Additionally, the resulting analysis showed that REC 5 and REC 13 still exceeded the 55 dBA threshold. Additional noise attenuation measures were analysed. However, there is no feasible or economical method to reduce the noise levels below 55 dBA at this location. Therefore, any property owner that can access this outdoor living area should have a warning clause Type B listed on all Offers of Purchase and Sale. All other outdoor living areas were considered acceptable without additional noise mitigation measures.

It should be noted that there is a shared outdoor amenity area that the residents can utilize (REC 14) if they determine that the noise levels within the other outdoor living areas are excessive. Therefore, no additional mitigation measures are required, and the exceedance of the noise levels for REC 5 and REC 13 requires no additional noise mitigation measures.

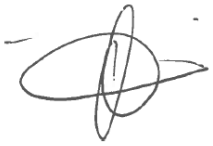
Warning Clause Type B: "Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic (rail traffic) (air traffic) may on occasions interfere with some activities of the dwelling occupants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

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 Ironclad Developments 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.



February 13, 2025

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Report Distribution:

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APPENDIX 1

TABLE 10 – SUMMARY OF RECEPTION POINTS AND GEOMETRY

DRAWING PG7422-1-SITE PLAN

DRAWING PG7422-2-RECEPTOR LOCATION PLAN

DRAWING PG7422-3-SITE GEOMETRY BUILDING A

DRAWING PG7422-3A-SITE GEOMETRY (REC 1-1 AND REC 1-6)

DRAWING PG7422-3B-SITE GEOMETRY (REC 2-1 AND REC 2-6)

DRAWING PG7422-3C-SITE GEOMETRY (REC 3-1 AND REC 3-6)

DRAWING PG7422-3D-SITE GEOMETRY (REC 4-1 AND REC 4-6)

DRAWING PG7422-3E-SITE GEOMETRY (REC 5)

DRAWING PG7422-3E-SITE GEOMETRY (REC 5 REV.01)

DRAWING PG7422-4-SITE GEOMETRY BUILDING B

DRAWING PG7422-4A-SITE GEOMETRY (REC 6-1 AND REC 6-6)

DRAWING PG7422-4B-SITE GEOMETRY (REC 7-1 AND REC 7-6)

DRAWING PG7422-4C-SITE GEOMETRY (REC 8-1 AND REC 8-6)

DRAWING PG7422-4D-SITE GEOMETRY (REC 9-1 AND REC 9-6)

DRAWING PG7422-5-SITE GEOMETRY BUILDING C

DRAWING PG7422-5A-SITE GEOMETRY (REC 10-1 AND REC 10-6)

DRAWING PG7422-5B-SITE GEOMETRY (REC 11-1 AND REC 11-6)

DRAWING PG7422-5C-SITE GEOMETRY (REC 12-1 AND REC 12-6)

DRAWING PG7422-5D-SITE GEOMETRY (REC 13)

DRAWING PG7422-5D-SITE GEOMETRY (REC 13 REV.01)

DRAWING-PG7422-5E-SITE GEOMETRY (REC 14)

DRAWING-PG7422-5E-SITE GEOMETRY (REC 14 REV.01)

Table 10 - Summary of Reception Points and Geometry

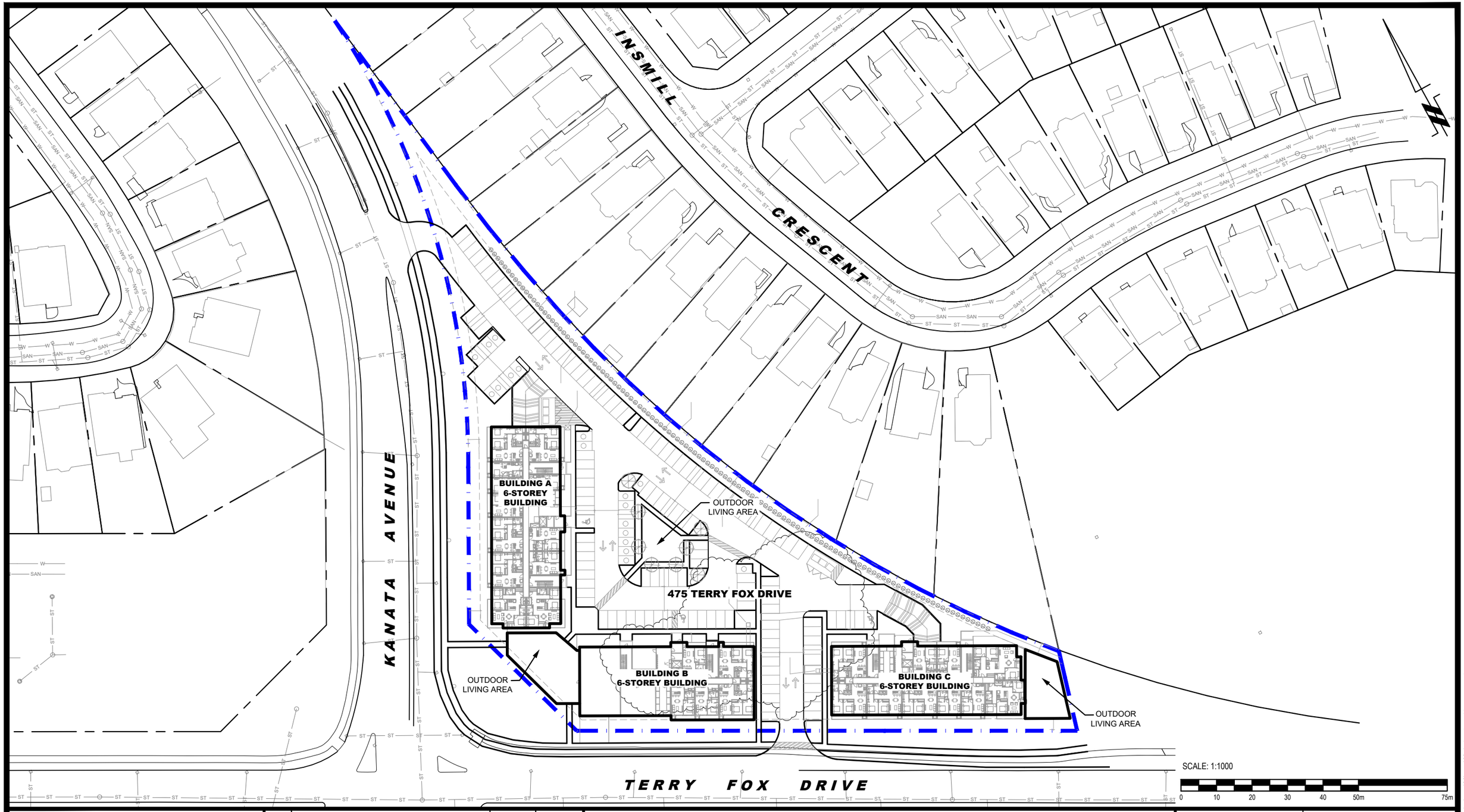
475 Terry Fox Drive

Point of Reception	Location	Total Leq Day (dBA)	Total Leq Night (dBA)	Kanata Avenue								Terry Fox Drive							
				Horizontal (m)	Vertical (m)	Total (m)	Local Angle (degree)	Number of Rows of Houses	Density (%)	Barrier Height (m)	Barrier Distance (m)	Horizontal (m)	Vertical (m)	Total (m)	Local Angle (degree)	Number of Rows of Houses	Density (%)	Barrier Height (m)	Barrier Distance (m)
REC 1-1	Northern Elevation - 1st Floor - Building A	59.73	52.13	26	1.5	26.04	0, 60	n/a	-	n/a	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 1-6	Northern Elevation - 6th Floor - Building A	61.18	53.58	26	16.5	30.79	0, 60	n/a	-	n/a	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 2-1	Western Elevation - 1st Floor - Building A	65.11	57.52	22	1.5	22.05	-50, 70	n/a	-	n/a	-	62	1.5	62.02	0, 53	n/a	-	n/a	-
REC 2-6	Western Elevation - 6th Floor - Building A	66.83	59.23	22	16.5	27.5	-50, 70	n/a	-	n/a	-	62	16.5	64.16	0, 53	n/a	-	n/a	-
REC 3-1	Southern Elevation - 1st Floor - Building A	70.53	62.93	25	1.5	25.04	-58, 0	n/a	-	n/a	-	35	1.5	35.03	-69, 68	n/a	-	n/a	-
REC 3-6	Southern Elevation - 6th Floor - Building A	72.62	65.02	25	16.5	29.95	-58, 0	n/a	-	n/a	-	35	16.5	38.69	-69, 68	n/a	-	n/a	-
REC 4-1	Eastern Elevation - 1st Floor - Building A	58.75	51.15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	65	1.5	65.02	-54, 0	n/a	-	n/a	-
REC 4-6	Eastern Elevation - 6th Floor - Building A	61.91	54.32	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	65	16.5	67.06	-54, 0	n/a	-	n/a	-
REC 5	Outdoor Living Area - Building A	73.90	-	31	1.5	31.04	-30, 70	n/a	-	n/a	-	25	1.5	25.04	-74, 74	n/a	-	n/a	-
REC 5 Rev 1	Outdoor Living Area - Building B - Building Orientation Analysed	69.71	-	31	1.5	31.04	-30, 37	n/a	-	n/a	-	25	1.5	25.04	-32, 74	n/a	-	n/a	-
REC 5 Rev 2	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (2.5m) Analysed	61.41	-	31	1.5	31.04	-30, 37	n/a	-	2.5	5	25	1.5	25.04	-32, 74	n/a	-	2.5	5
REC 5 Rev 3	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (3.0m) Analysed	58.97	-	31	1.5	31.04	-30, 37	n/a	-	3	5	25	1.5	25.04	-32, 74	n/a	-	3	5
REC 5 Rev 4	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (3.5m) Analysed	56.91	-	31	1.5	31.04	-30, 37	n/a	-	3.5	5	25	1.5	25.04	-32, 74	n/a	-	3.5	5
REC 5 Rev 5	Outdoor Living Area - Building B - Building Orientation and Barrier Walls (4.0m) Analysed	55.23	-	31	1.5	31.04	-30, 37	n/a	-	4	5	25	1.5	25.04	-32, 74	n/a	-	4	5
REC 6-1	Western Elevation - 1st Floor - Building B	68.35	60.76	40	1.5	40.03	-28, 65	n/a	-	n/a	-	21	1.5	21.05	0, 76	n/a	-	n/a	-
REC 6-6	Western Elevation - 6th Floor - Building B	69.99	57.55	40	16.5	43.27	-28, 65	n/a	-	n/a	-	21	16.5	26.71	0, 76	n/a	-	n/a	-
REC 7-1	Northern Elevation - 1st Floor - Building B	52.54	44.94	66	1.5	66.02	0, 52	n/a	-	n/a	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 7-6	Northern Elevation - 6th Floor - Building B	55.71	48.11	66	16.5	68.03	0, 52	n/a	-	n/a	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 8-1	Southern Elevation - 1st Floor - Building B	76.67	69.07	63	1.5	63.02	-18, 0	n/a	-	n/a	-	15	1.5	15.07	-83, 83	n/a	-	n/a	-
REC 8-6	Southern Elevation - 6th Floor - Building B	77.42	69.82	63	16.5	65.12	-18, 0	n/a	-	n/a	-	15	16.5	22.3	-83, 83	n/a	-	n/a	-
REC 9-1	Eastern Elevation - 1st Floor - Building B	68.25	60.65	n/a	n/a	n/a	n/a	n/a	-	n/a	-	20	1.5	20.06	-77, 0	n/a	-	n/a	-
REC 9-6	Eastern Elevation - 6th Floor - Building B	69.45	61.86	n/a	n/a	n/a	n/a	n/a	-	n/a	-	20	16.5	25.93	-77, 0	n/a	-	n/a	-
REC 10-1	Western Elevation - 1st Floor - Building C	67.64	60.04	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	1.5	22.05	0, 80	n/a	-	n/a	-
REC 10-6	Western Elevation - 6th Floor - Building C	69.08	61.48	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	16.5	27.5	0, 80	n/a	-	n/a	-
REC 11-1	Southern Elevation - 1st Floor - Building C	73.5	65.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15	1.5	15.07	-84, 86	n/a	-	n/a	-
REC 11-6	Southern Elevation - 6th Floor - Building C	74.29	66.70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15	16.5	22.3	-84, 86	n/a	-	n/a	-
REC 12-1	Eastern Elevation - 1st Floor - Building C	66.94	59.34	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	24	1.5	24.05	-77, 0	n/a	-	n/a	-
REC 12-6	Eastern Elevation - 6th Floor - Building C	68.50	60.90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	24	16.5	29.12	-77, 0	n/a	-	n/a	-
REC 13	Outdoor Living Area - Building C	70.65	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	1.5	22.05	-77, 84	n/a	-	n/a	-

Table 10 - Summary of Reception Points and Geometry

475 Terry Fox Drive

Point of Reception	Location	Total Leq Day (dBA)	Total Leq Night (dBA)	Kanata Avenue								Terry Fox Drive							
				Horizontal (m)	Vertical (m)	Total (m)	Local Angle (degree)	Number of Rows of Houses	Density (%)	Barrier Height (m)	Barrier Distance (m)	Horizontal (m)	Vertical (m)	Total (m)	Local Angle (degree)	Number of Rows of Houses	Density (%)	Barrier Height (m)	Barrier Distance (m)
REC 13 Rev 1	Outdoor Living Area - Building C - Building Orientation Analysed	69.72	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	1.5	22.05	-77, 84	n/a	-	n/a	-
REC 13 Rev 2	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (2.5m) Analysed	61.94	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	1.5	22.05	-77, 42	n/a	-	3	7
REC 13 Rev 3	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (3.0m) Analysed	59.72	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	1.5	22.05	-77, 42	n/a	-	3	7
REC 13 Rev 4	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (3.5m) Analysed	57.76	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	1.5	22.05	-77, 42	n/a	-	3	7
REC 13 Rev 5	Outdoor Living Area - Building C - Building Orientation and Barrier Walls (4.0m) Analysed	56.11	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	1.5	22.05	-77, 42	n/a	-	3	7
REC 14	Outdoor Living Area	63.88	-	65	1.5	65.02	-47, 49	n/a	n/a	n/a	n/a	73	1.5	73.02	77, 59	n/a	n/a	n/a	n/a
REC 14 Rev 1	Outdoor Living Area - Building Orientation Analysed	53.35	-	65	1.5	65.02	-47, -39	n/a	n/a	n/a	n/a	73	1.5	73.02	37, 51	n/a	n/a	n/a	n/a



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

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:

SITE PLAN

Scale: 1:1000	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-1
Approved by: SB	Revision No.:

11x17

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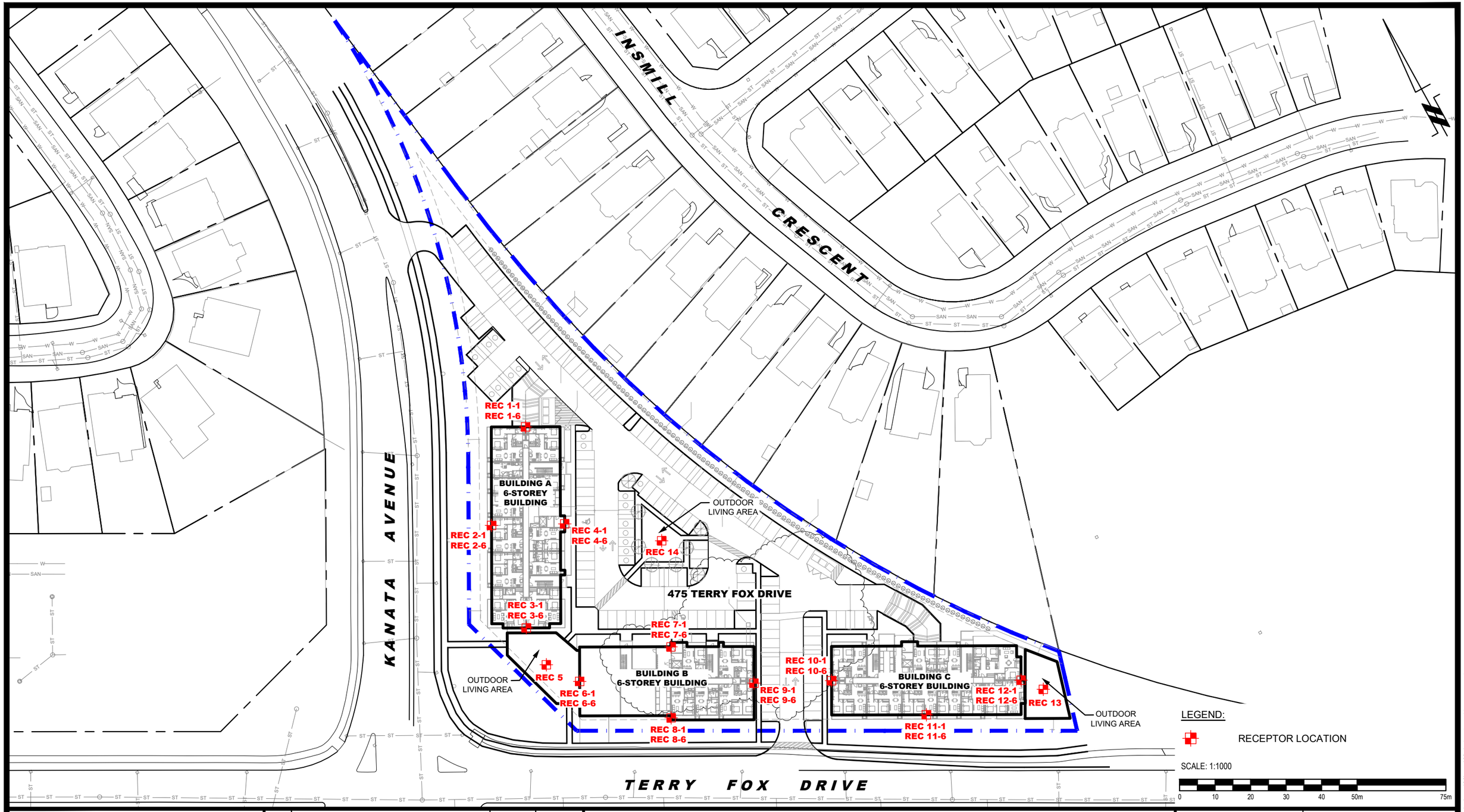

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TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
RECEPTOR LOCATION PLAN

Scale: 1:1000	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-2
Approved by: SB	Revision No.:

11x17

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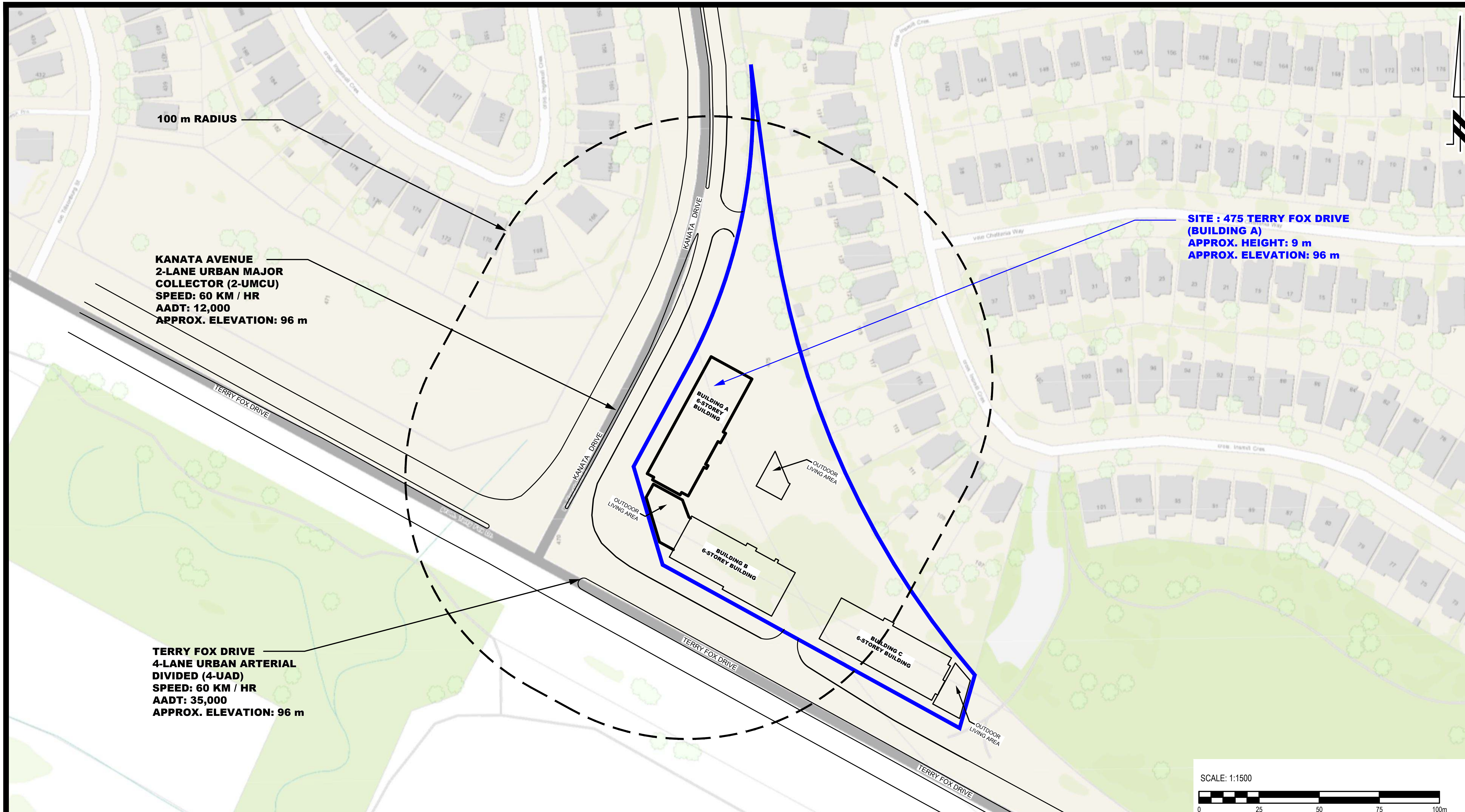

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NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE

OTTAWA, ONTARIO

Title:

SITE GEOMETRY - BUILDING A

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-3
Approved by: SB	Revision No.:

11x17

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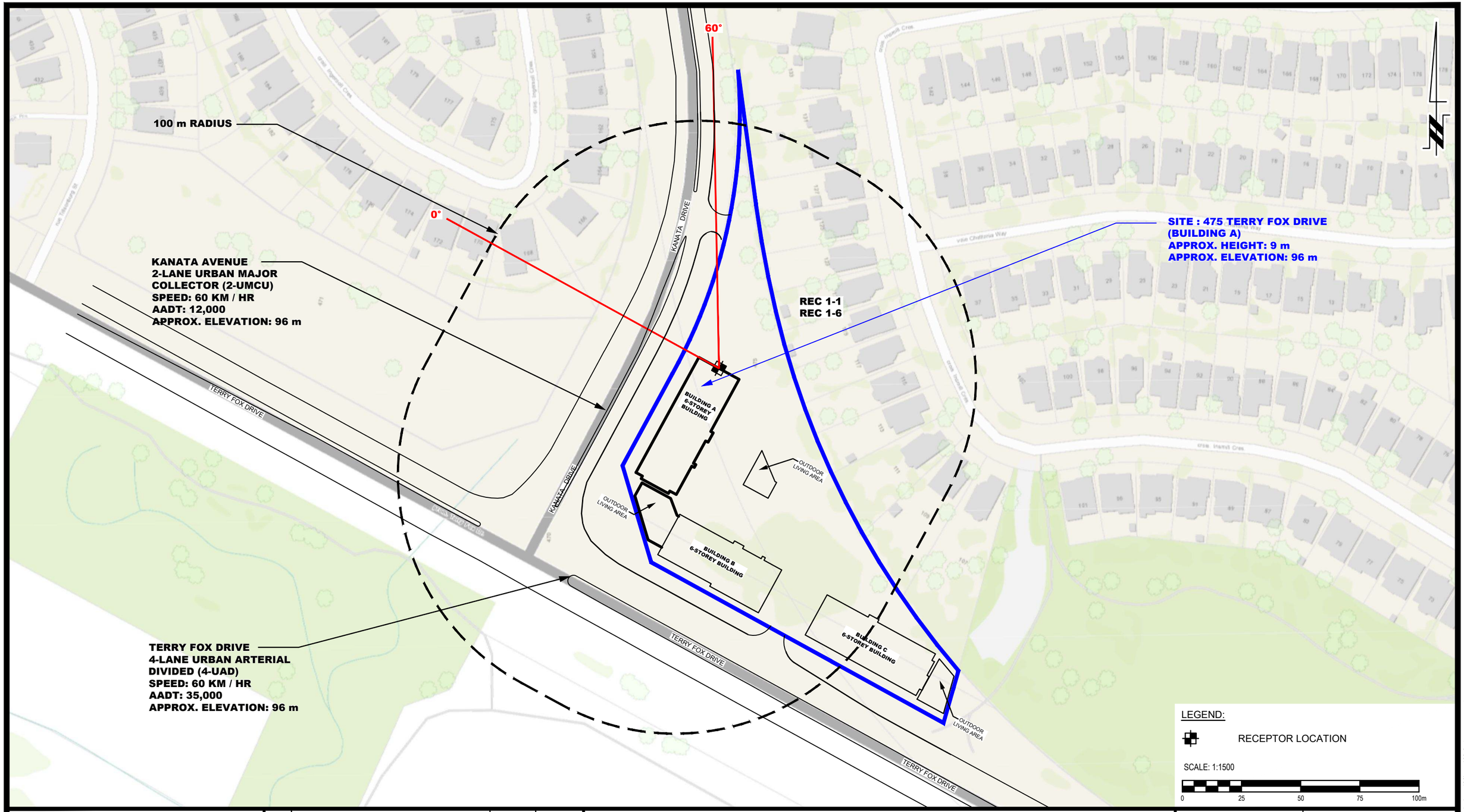

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OTTAWA, ON
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NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

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

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-3A
Approved by: SB	Revision No.:

11x17

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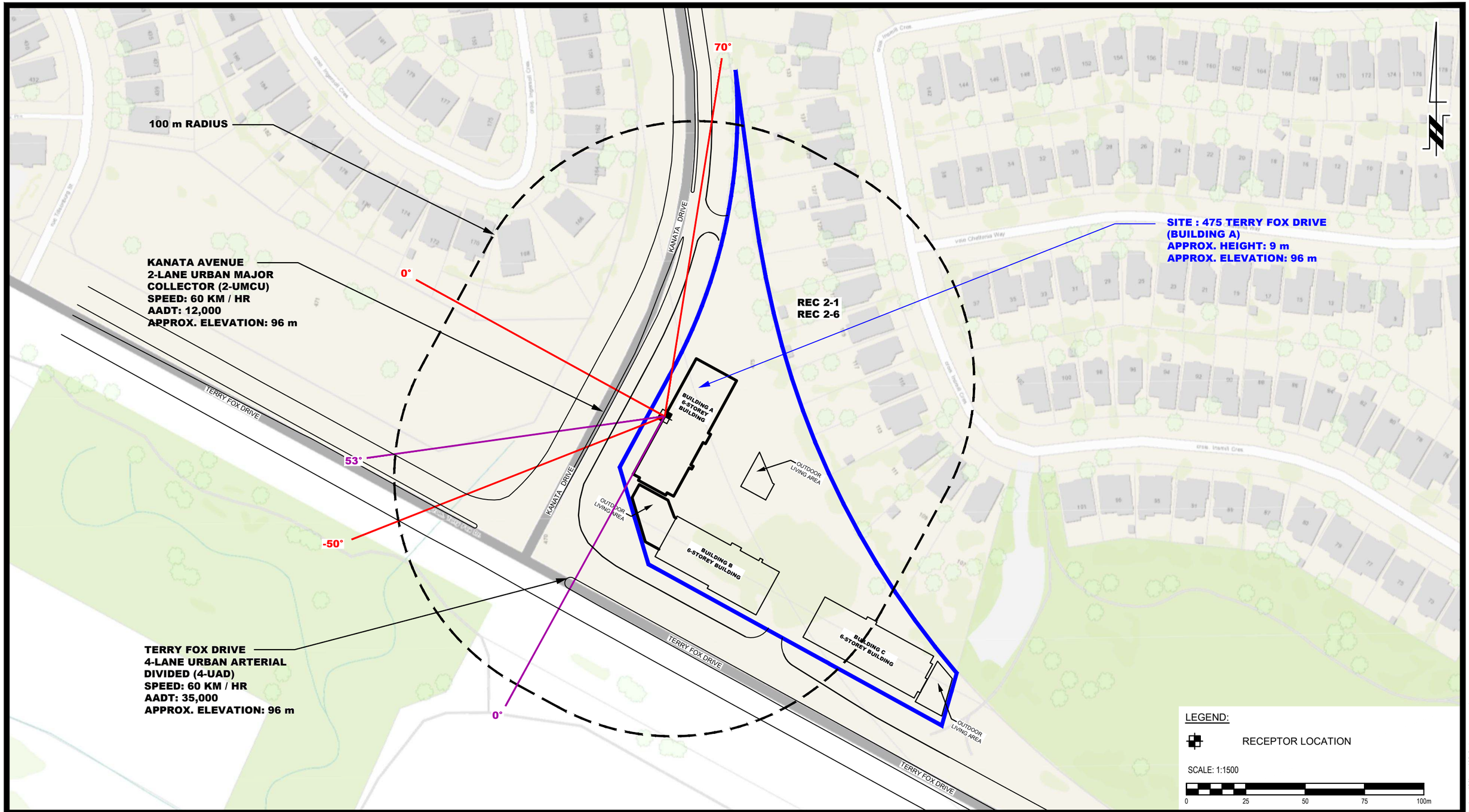

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K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 2-1 AND REC 2-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-3B
Approved by: SB	Revision No.:

11x17

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100 m RADIUS

KANATA AVENUE
2-LANE URBAN MAJOR
COLLECTOR (2-UMCU)
SPEED: 60 KM / HR
AADT: 12,000
APPROX. ELEVATION: 96 m

TERRY FOX DRIVE
4-LANE URBAN ARTERIAL
DIVIDED (4-UAD)
SPEED: 60 KM / HR
AADT: 35,000
APPROX. ELEVATION: 96 m

SITE : 475 TERRY FOX DRIVE
(BUILDING A)
APPROX. HEIGHT: 9 m
APPROX. ELEVATION: 96 m

0°
68°
-58°
-69°
0°

BUILDING A
6-STOREY
BUILDING

BUILDING B
6-STOREY BUILDING

BUILDING C
6-STOREY BUILDING

OUTDOOR
LIVING AREA

KANATA DRIVE

TERRY FOX DRIVE

LEGEND:

RECEPTOR LOCATION

SCALE: 1:1500

0 25 50 75 100m

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

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

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

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-3C
Approved by: SB	Revision No.:

11x17

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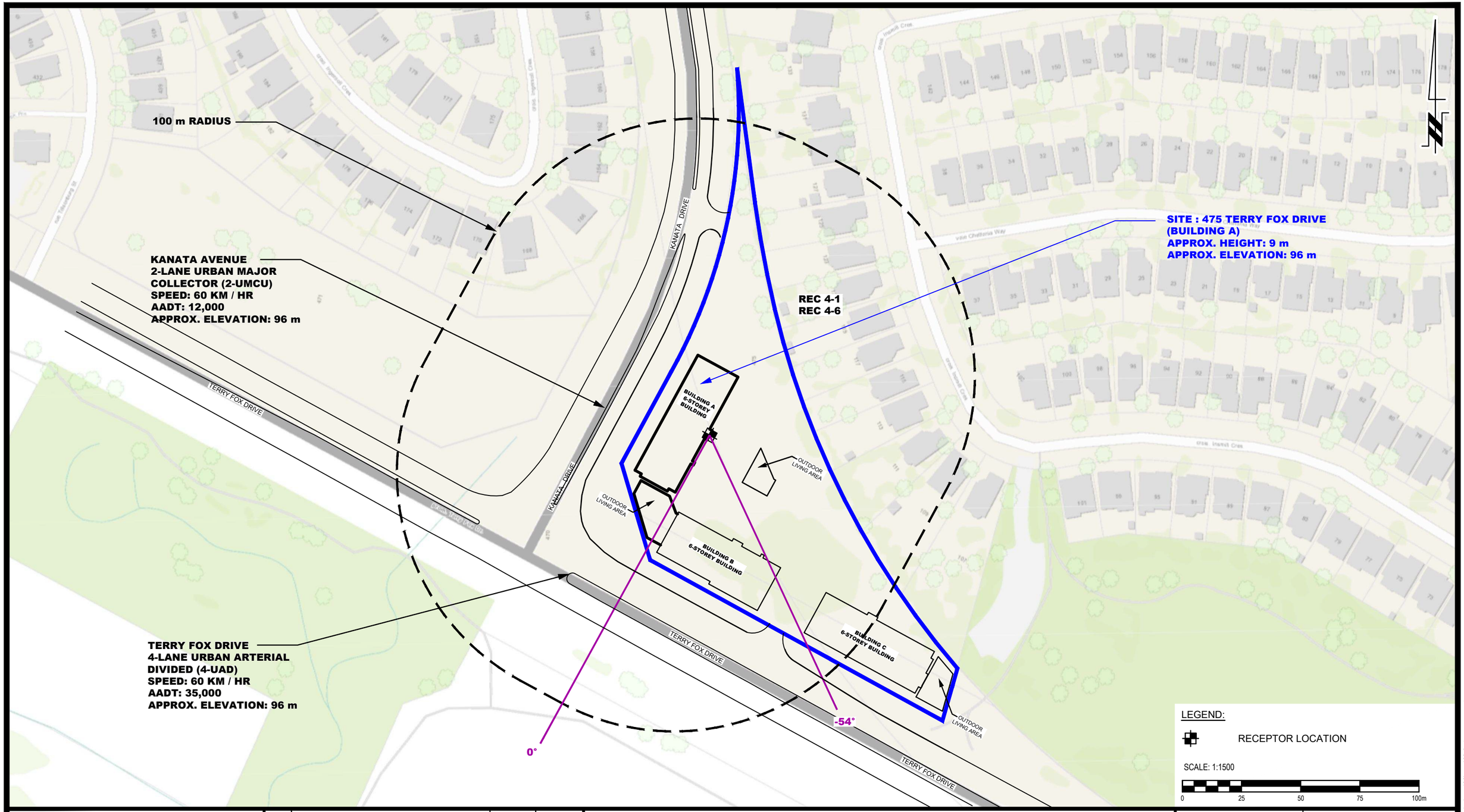

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OTTAWA, ON
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NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 4-1 AND REC 4-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-3D
Approved by: SB	Revision No.:

11x17

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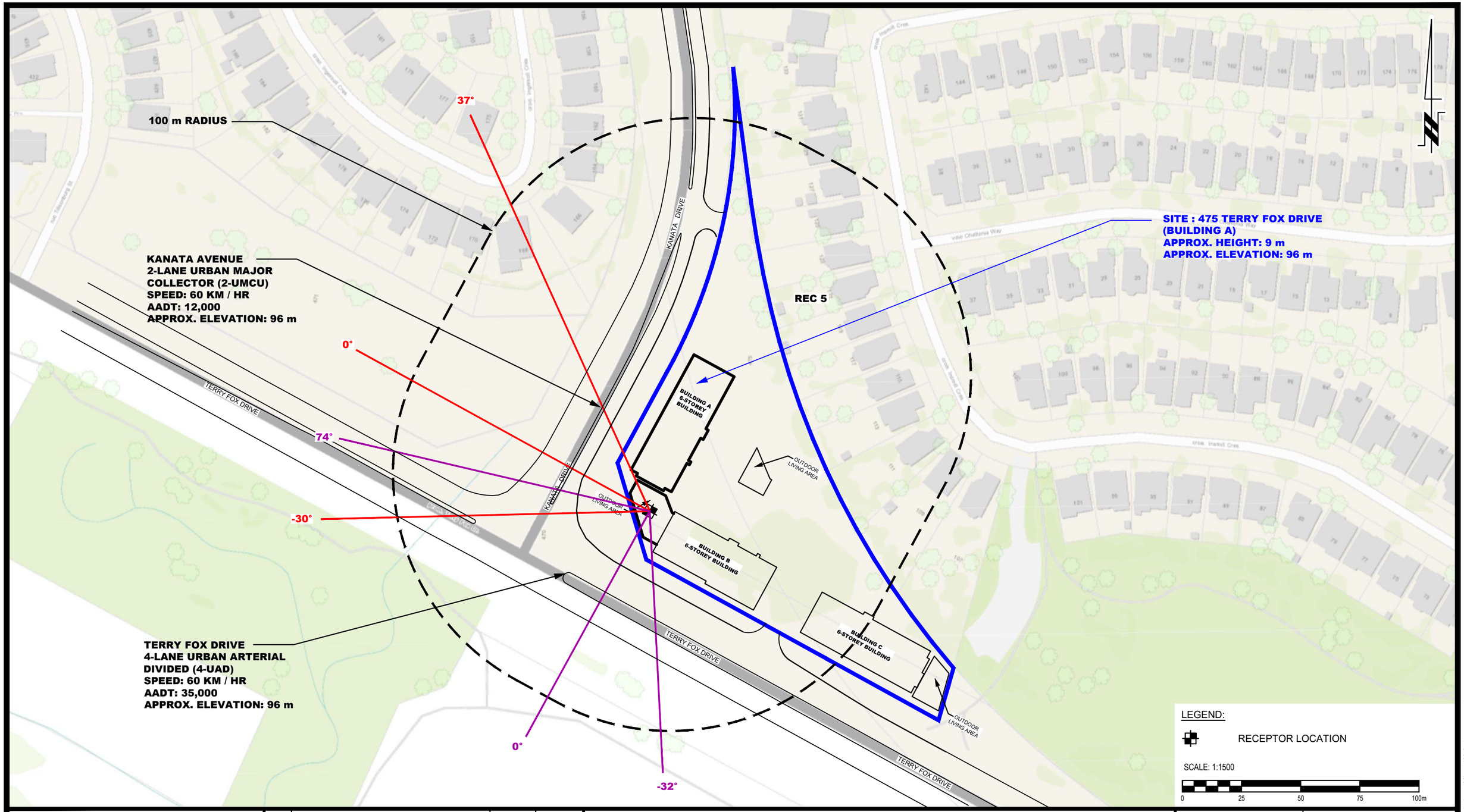

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 5 REV.01

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-3E
Approved by: SB	Revision No.:

11x17

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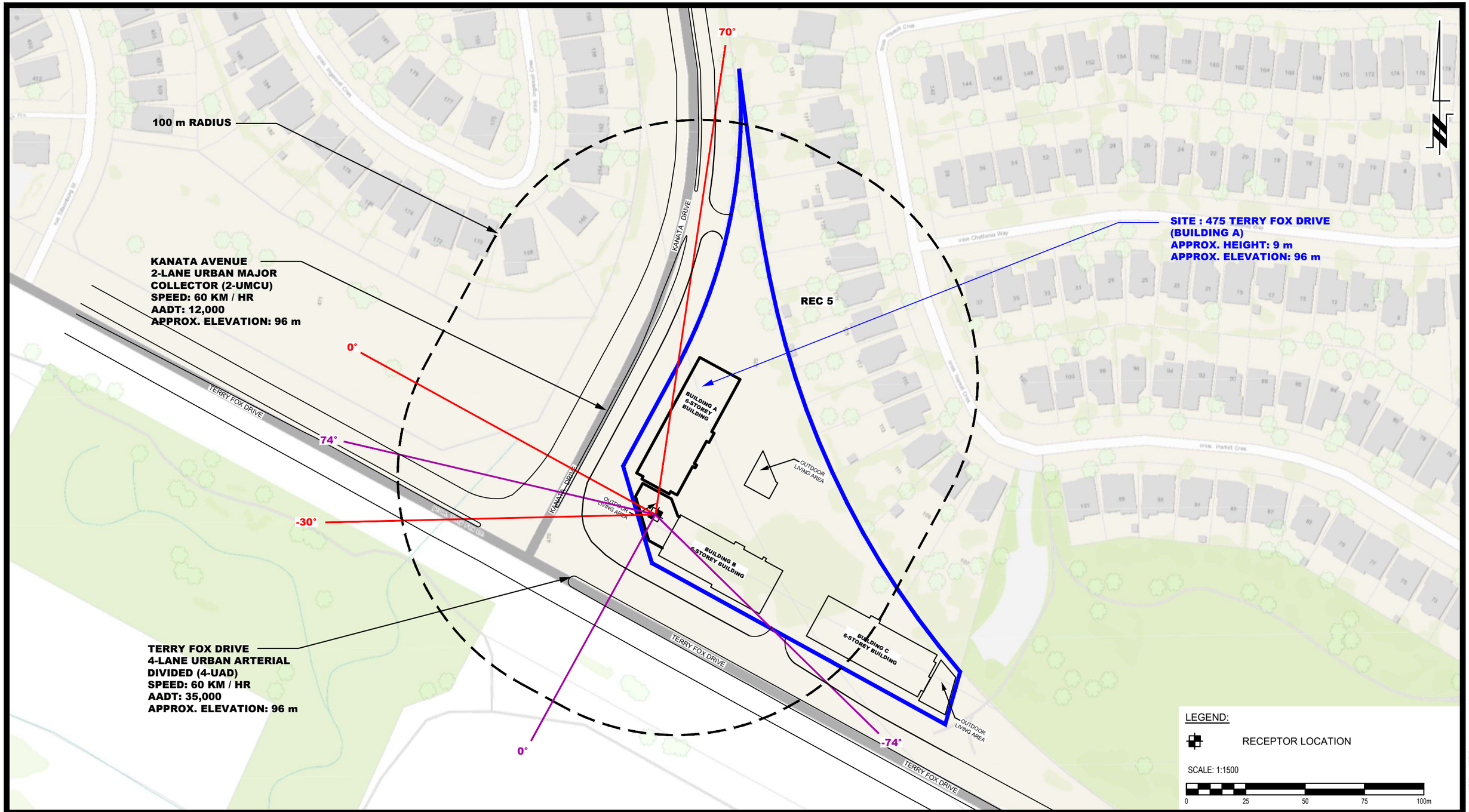

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IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 5

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-3E
Approved by: SB	Revision No.:

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IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:

SITE GEOMETRY - BUILDING B

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-4
Approved by: SB	Revision No.:

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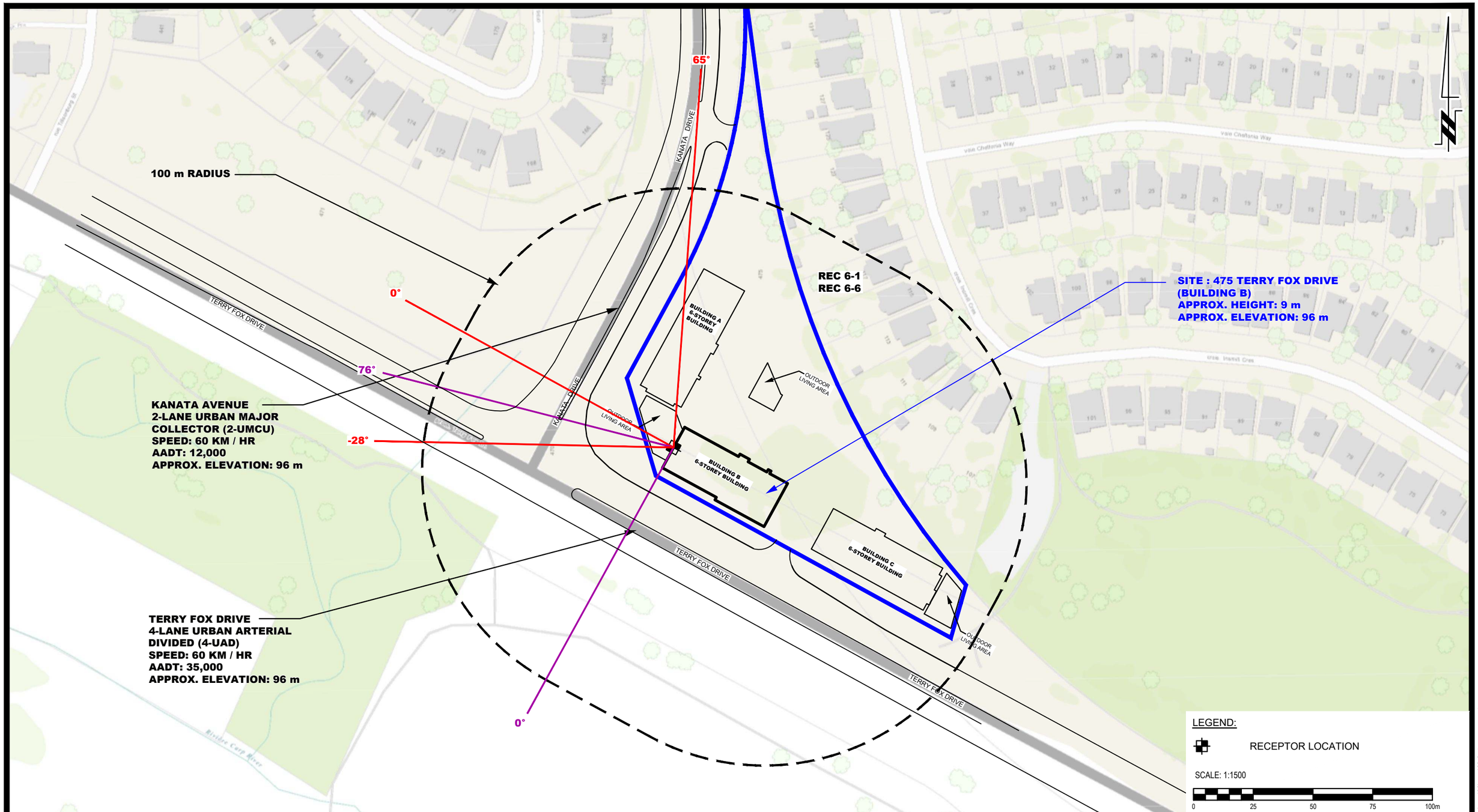

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OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

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

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-4A
Approved by: SB	Revision No.:

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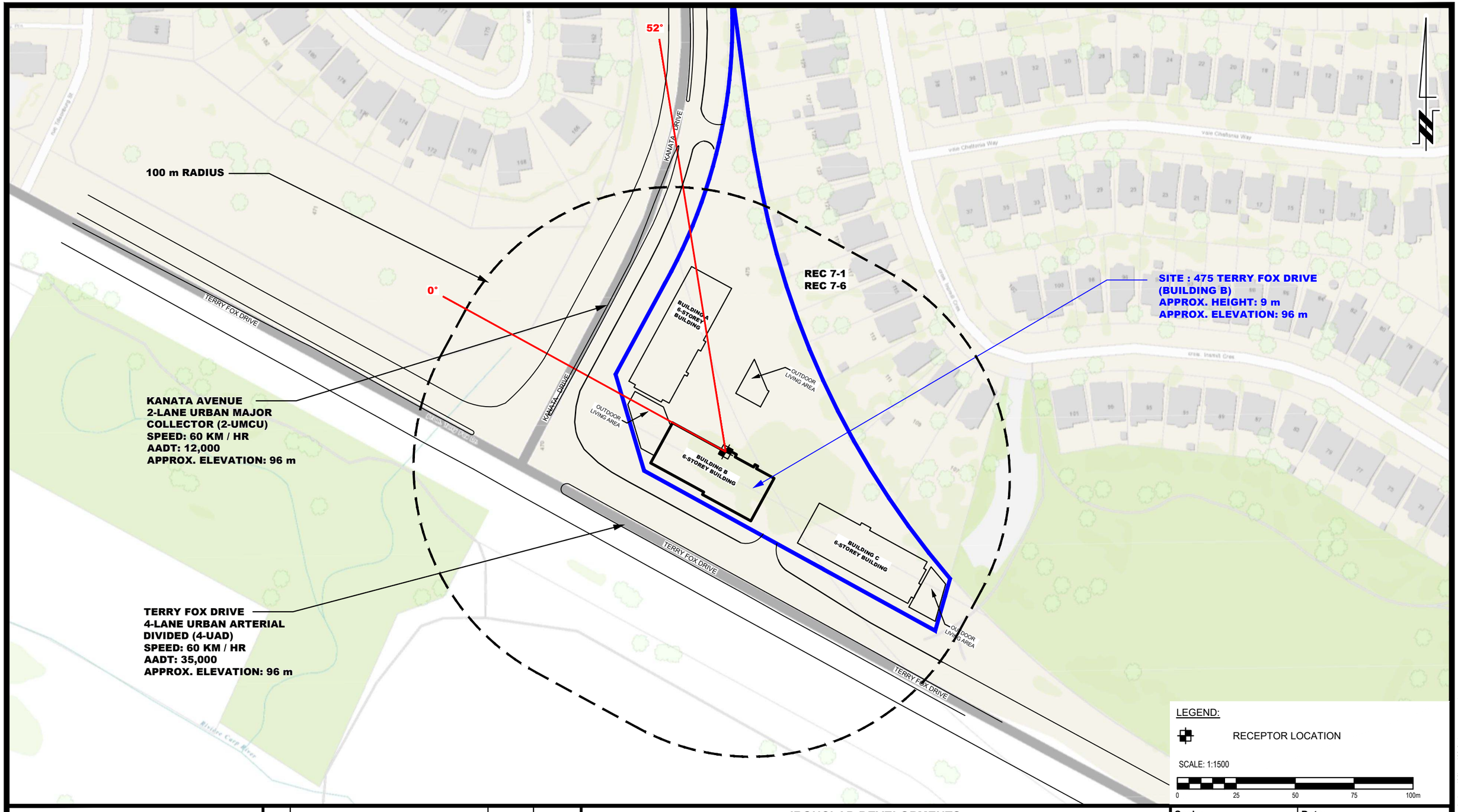

PATERSON GROUP
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OTTAWA, ON
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TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 7-1 AND REC 7-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-4B
Approved by: SB	Revision No.:

11x17

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100 m RADIUS

KANATA AVENUE
2-LANE URBAN MAJOR
COLLECTOR (2-UMCU)
SPEED: 60 KM / HR
AADT: 12,000
APPROX. ELEVATION: 96 m

TERRY FOX DRIVE
4-LANE URBAN ARTERIAL
DIVIDED (4-UAD)
SPEED: 60 KM / HR
AADT: 35,000
APPROX. ELEVATION: 96 m

REC 8-1
REC 8-6

SITE : 475 TERRY FOX DRIVE
(BUILDING B)
APPROX. HEIGHT: 9 m
APPROX. ELEVATION: 96 m

0°
83°
-18°
0°
-83°

BUILDING A
8-STOREY
BUILDING

BUILDING B
6-STOREY BUILDING

BUILDING C
6-STOREY BUILDING

OUTDOOR LIVING AREA

KANATA DRIVE

TERRY FOX DRIVE

LEGEND:

RECEPTOR LOCATION

SCALE: 1:1500

0 25 50 75 100m

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

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 8-1 AND REC 8-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-4C
Approved by: SB	Revision No.:

11x17

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100 m RADIUS

KANATA AVENUE
2-LANE URBAN MAJOR
COLLECTOR (2-UMCU)
SPEED: 60 KM / HR
AADT: 12,000
APPROX. ELEVATION: 96 m

TERRY FOX DRIVE
4-LANE URBAN ARTERIAL
DIVIDED (4-UAD)
SPEED: 60 KM / HR
AADT: 35,000
APPROX. ELEVATION: 96 m

REC 9-1
REC 9-6

SITE : 475 TERRY FOX DRIVE
(BUILDING B)
APPROX. HEIGHT: 9 m
APPROX. ELEVATION: 96 m

BUILDING A
6-STOREY
BUILDING

BUILDING B
6-STOREY BUILDING

BUILDING C
6-STOREY BUILDING

OUTDOOR
LIVING AREA

OUTDOOR
LIVING AREA

OUTDOOR
LIVING AREA

KANATA DRIVE

TERRY FOX DRIVE

TERRY FOX DRIVE

-77°

0°

LEGEND:

RECEPTOR LOCATION

SCALE: 1:1500

0 25 50 75 100m

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

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:

SITE GEOMETRY - REC 9-1 AND REC 9-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-4D
Approved by: SB	Revision No.:

11x17

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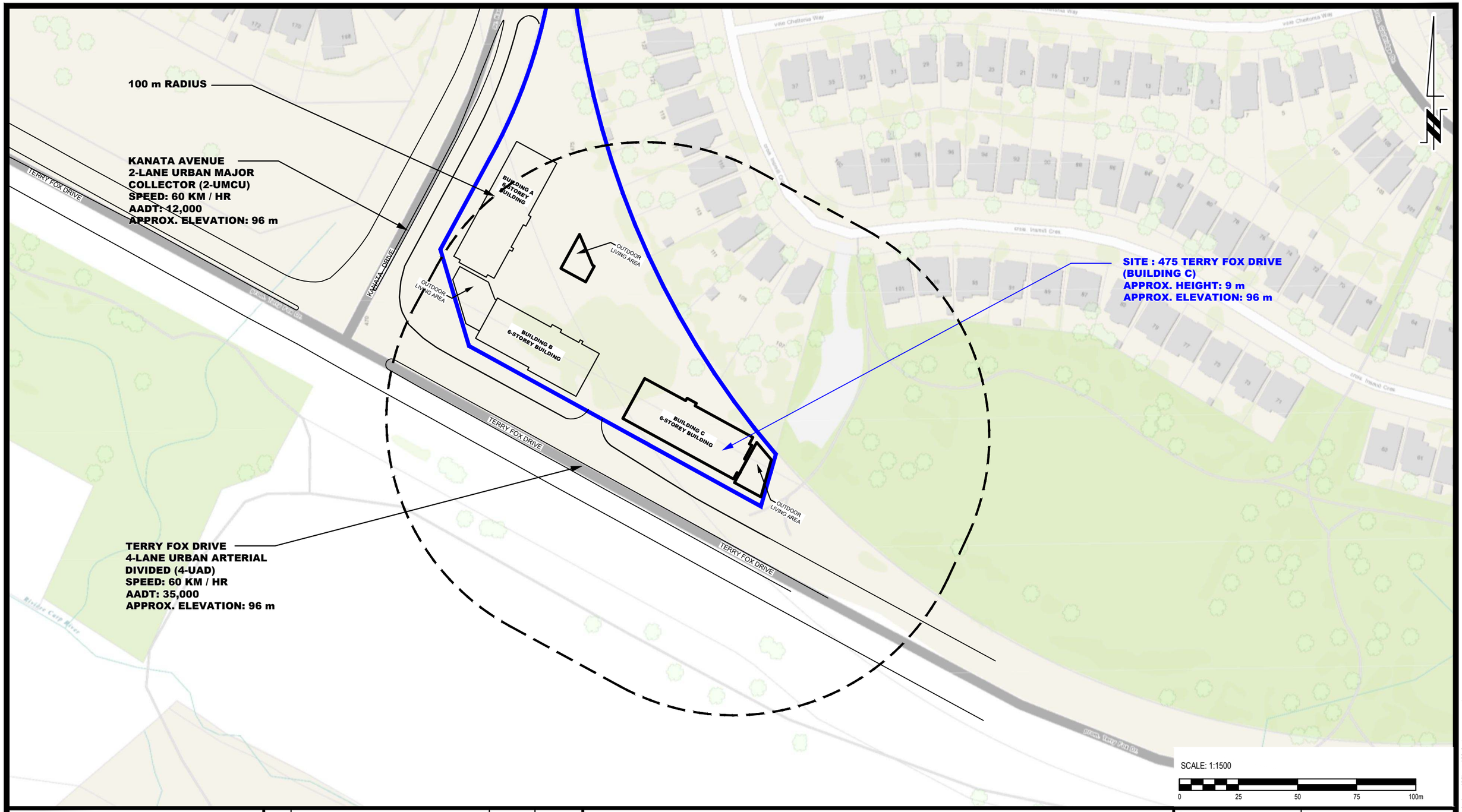

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OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - BUILDING C

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5
Approved by: SB	Revision No.:

11x17

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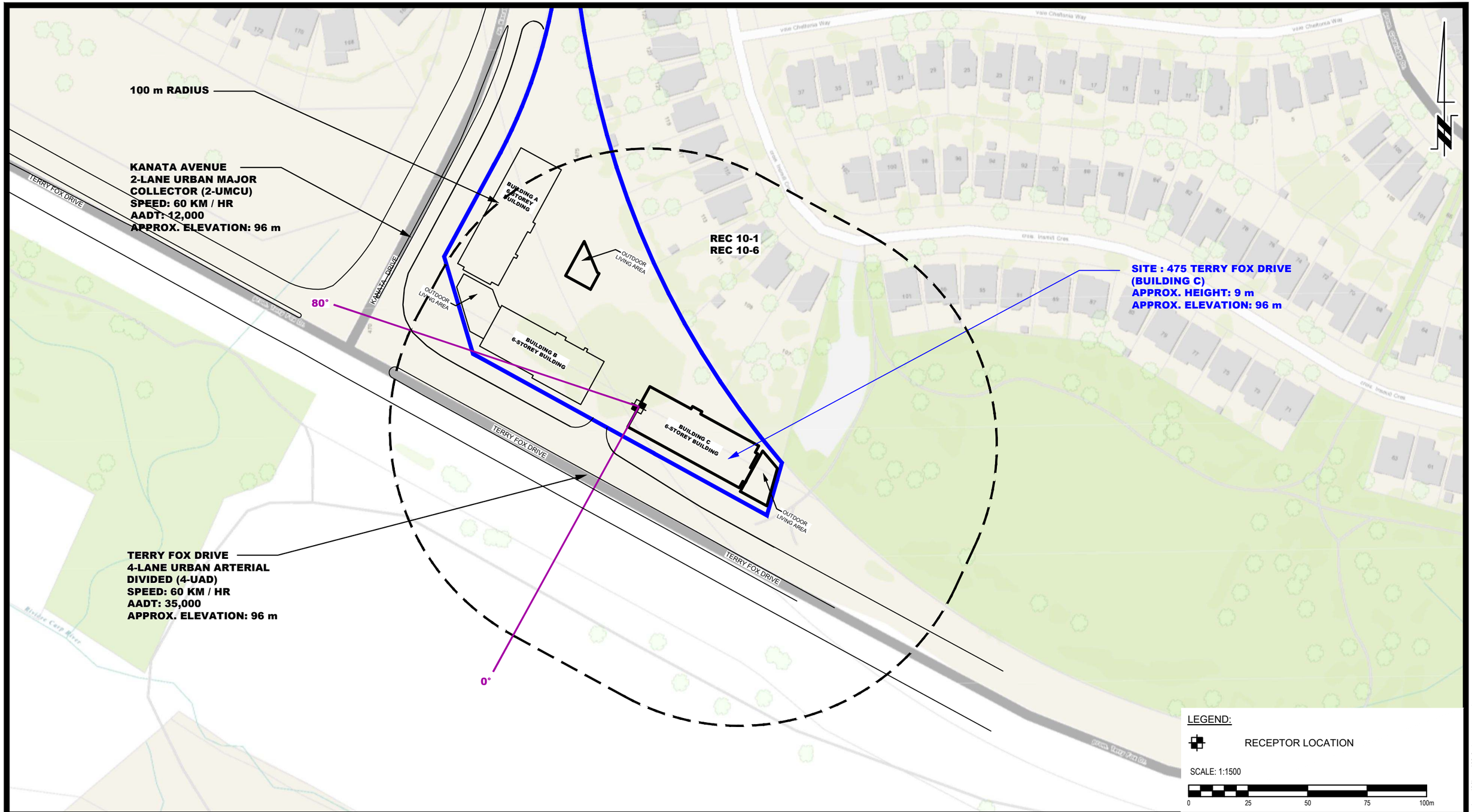

PATERSON GROUP
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OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 10-1 AND REC 10-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5A
Approved by: SB	Revision No.:

11x17

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100 m RADIUS

KANATA AVENUE
2-LANE URBAN MAJOR
COLLECTOR (2-UMCU)
SPEED: 60 KM / HR
AADT: 12,000
APPROX. ELEVATION: 96 m

TERRY FOX DRIVE
4-LANE URBAN ARTERIAL
DIVIDED (4-UAD)
SPEED: 60 KM / HR
AADT: 35,000
APPROX. ELEVATION: 96 m

86°

0°

-84°

REC 11-1
REC 11-6

SITE : 475 TERRY FOX DRIVE
(BUILDING C)
APPROX. HEIGHT: 9 m
APPROX. ELEVATION: 96 m

BUILDING A
6-STOREY
BUILDING

BUILDING B
6-STOREY BUILDING

BUILDING C
6-STOREY BUILDING

OUTDOOR
LIVING AREA

KANATA DRIVE

TERRY FOX DRIVE

LEGEND:

RECEPTOR LOCATION

SCALE: 1:1500

0 25 50 75 100m

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

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 11-1 AND REC 11-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5B
Approved by: SB	Revision No.:

11x17

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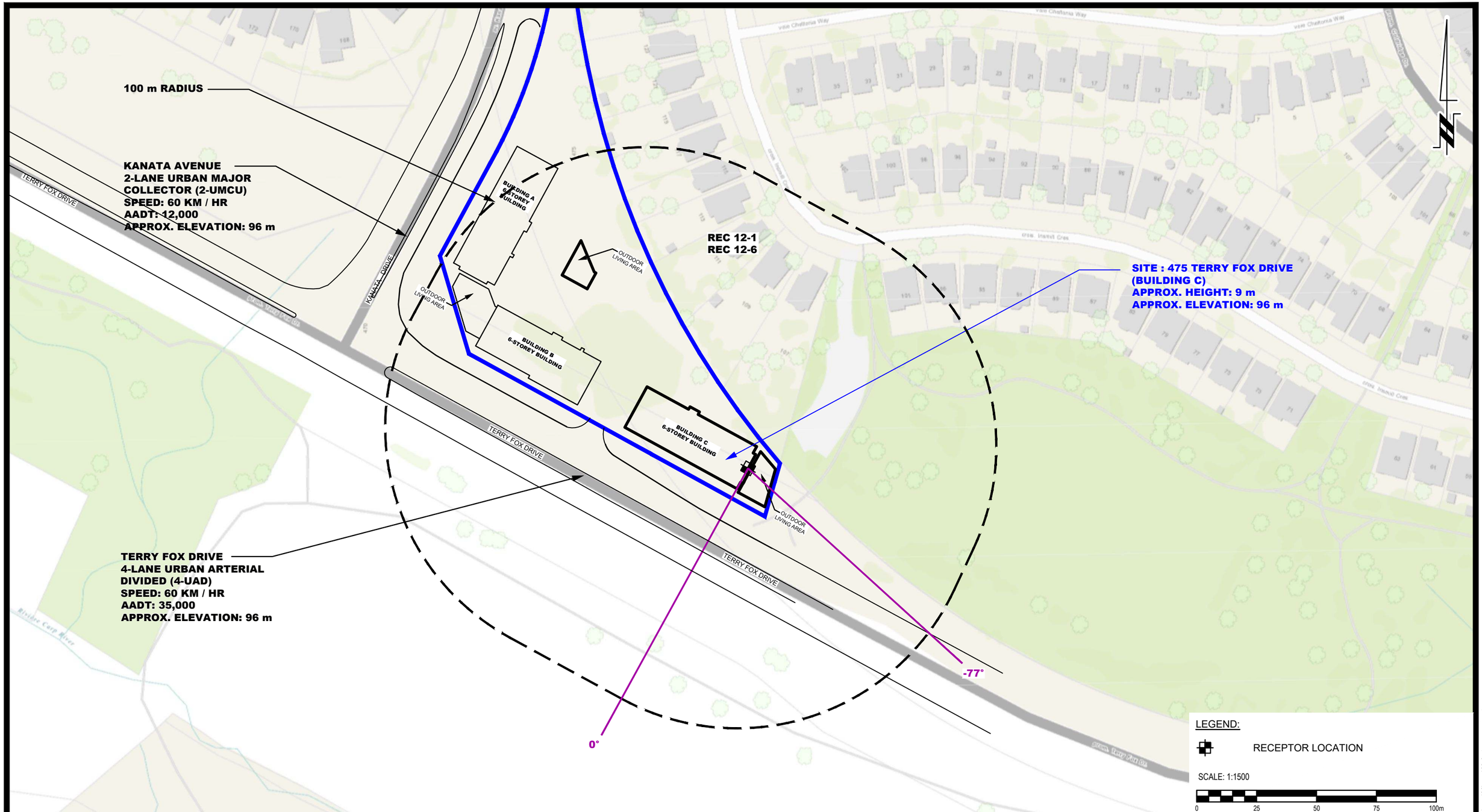

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TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 12-1 AND REC 12-6

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5C
Approved by: SB	Revision No.:

11x17

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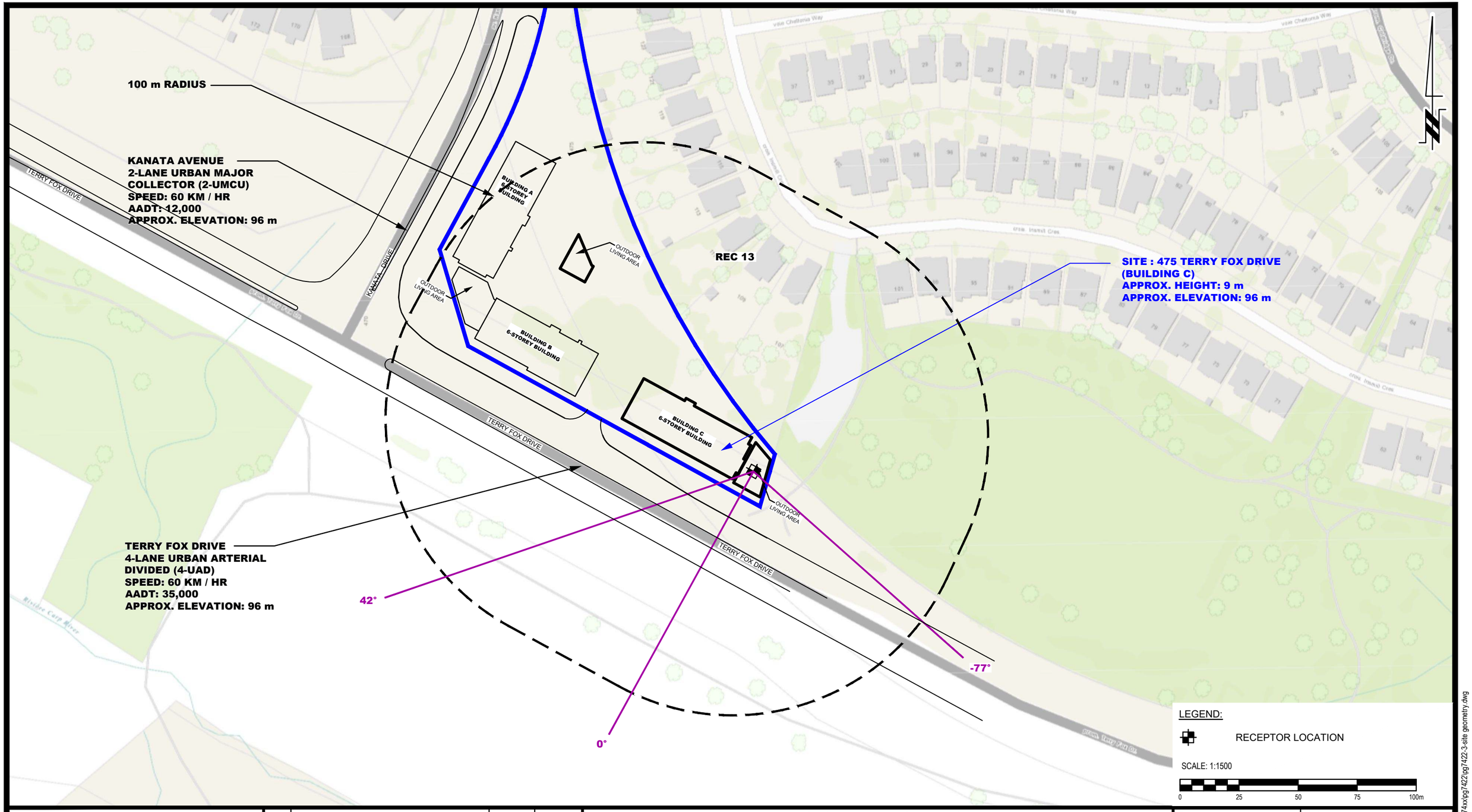

PATERSON GROUP
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OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 13 REV.01

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5D
Approved by: SB	Revision No.:

11x17

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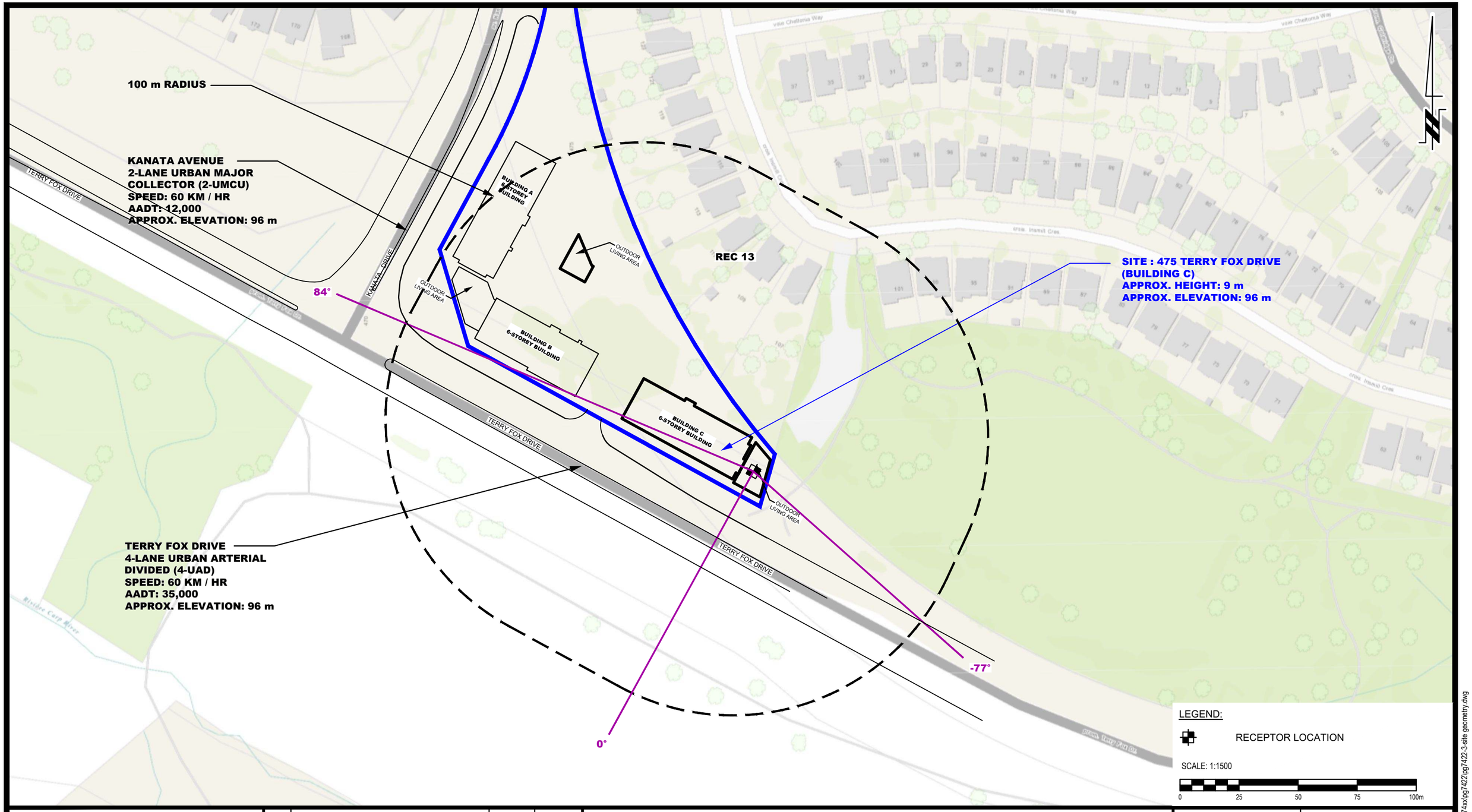

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 13

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5D
Approved by: SB	Revision No.:

11x17

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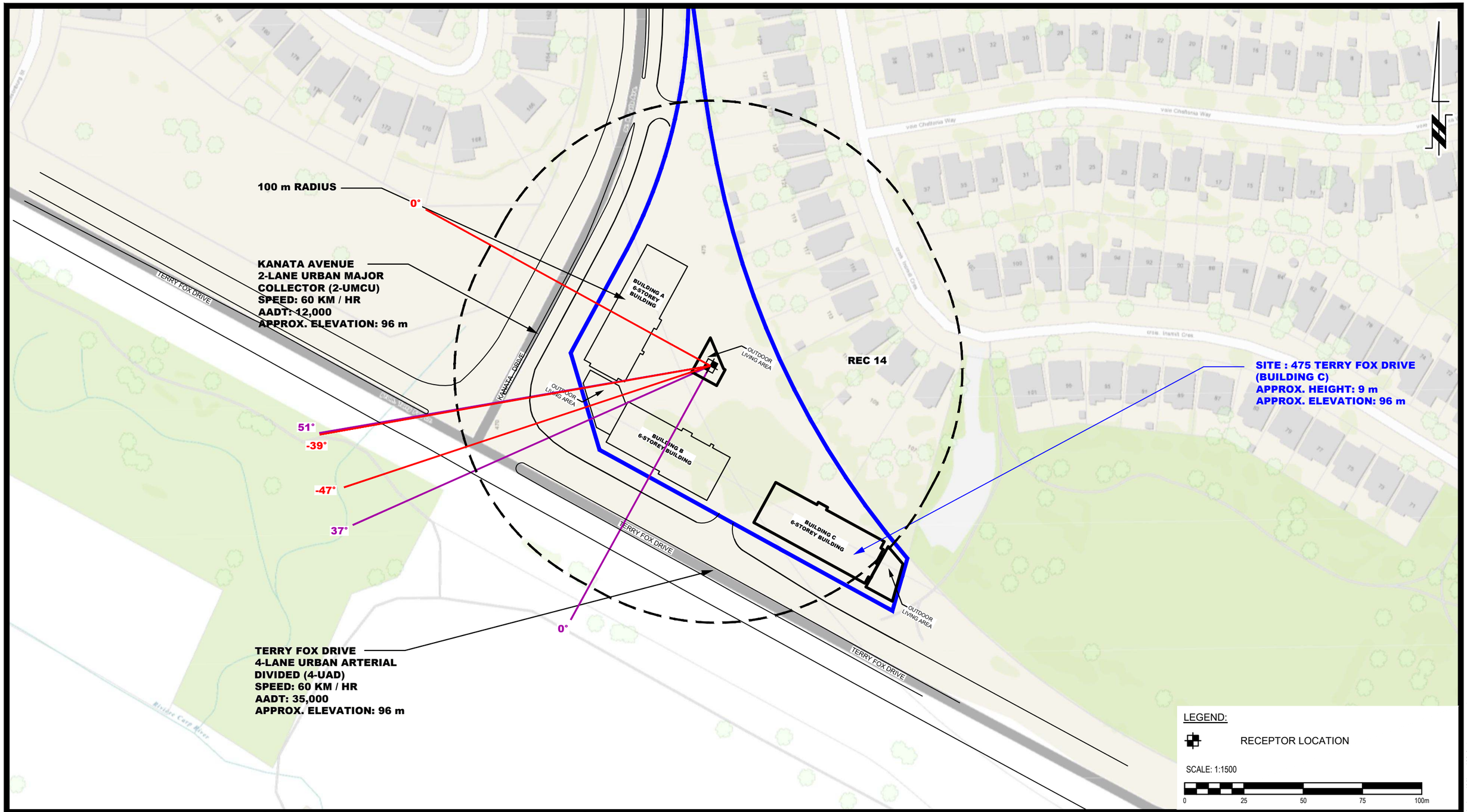

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 14 REV.01

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5E
Approved by: SB	Revision No.:

11x17

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

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS
NOISE ATTENUATION STUDY
PROPOSED MULTI-USE BUILDINGS
475 TERRY FOX DRIVE
OTTAWA, ONTARIO

Title:
SITE GEOMETRY - REC 14

Scale: 1:1500	Date: 01/2025
Drawn by: YA	Report No.: PG7422-1
Checked by: OM	Dwg. No.: PG7422-5E
Approved by: SB	Revision No.:

11x17

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APPENDIX 2

STAMSON RESULTS

STAMSON 5.0 NORMAL REPORT Date: 16-01-2025 12:36:51
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC11.te Time Period: Day/Night 16/8 hours
Description: REC 1-1 - Northern Elevation - Building A

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : 0.00 deg 60.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 26.00 / 26.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Results segment # 1: Kanata Ave (day)

Source height = 1.50 m

ROAD (0.00 + 59.73 + 0.00) = 59.73 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	60	0.66	69.03	0.00	-3.97	-5.33	0.00	0.00	0.00	59.73

Segment Leq : 59.73 dBA

Total Leq All Segments: 59.73 dBA

↑
Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

ROAD (0.00 + 52.13 + 0.00) = 52.13 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	60	0.66	61.43	0.00	-3.97	-5.33	0.00	0.00	0.00	52.13

Segment Leq : 52.13 dBA

Total Leq All Segments: 52.13 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 59.73
(NIGHT): 52.13

STAMSON 5.0 NORMAL REPORT Date: 16-01-2025 12:37:49
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC16.te Time Period: Day/Night 16/8 hours
Description: REC 1-6 - Northern Elevation - Building A

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : 0.00 deg 60.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 26.00 / 26.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Kanata Ave (day)

Source height = 1.50 m

ROAD (0.00 + 61.18 + 0.00) = 61.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	60	0.21	69.03	0.00	-2.89	-4.96	0.00	0.00	0.00	61.18

Segment Leq : 61.18 dBA

Total Leq All Segments: 61.18 dBA

↟
Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

ROAD (0.00 + 53.58 + 0.00) = 53.58 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	60	0.21	61.43	0.00	-2.89	-4.96	0.00	0.00	0.00	53.58

Segment Leq : 53.58 dBA

Total Leq All Segments: 53.58 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 61.18
(NIGHT): 53.58
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 16-01-2025 13:01:07
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec21.te Time Period: Day/Night 16/8 hours
Description: REC 2-1 - Western Elevation - Building A

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -50.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   53.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  62.00 / 62.00  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 63.89 + 0.00) = 63.89 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -50     70   0.66  69.03   0.00  -2.76  -2.38   0.00   0.00   0.00  63.89
-------------------------------------------------------------------------------

Segment Leq : 63.89 dBA

↟
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 59.02 + 0.00) = 59.02 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     53   0.66  75.00   0.00 -10.23  -5.74   0.00   0.00   0.00  59.02
-------------------------------------------------------------------------------

Segment Leq : 59.02 dBA

Total Leq All Segments: 65.11 dBA

↟
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 56.29 + 0.00) = 56.29 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-50	70	0.66	61.43	0.00	-2.76	-2.38	0.00	0.00	0.00	56.29

Segment Leq : 56.29 dBA

↟

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 51.43 + 0.00) = 51.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	53	0.66	67.40	0.00	-10.23	-5.74	0.00	0.00	0.00	51.43

Segment Leq : 51.43 dBA

Total Leq All Segments: 57.52 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 65.11
(NIGHT): 57.52

↟

↟

STAMSON 5.0 NORMAL REPORT Date: 16-01-2025 13:02:13
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec26.te Time Period: Day/Night 16/8 hours
Description: REC 2-6 - Western Elevation - Building A

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -50.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   53.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  62.00 / 62.00  m
Receiver height           :  16.50 / 16.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 65.05 + 0.00) = 65.05 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -50     70   0.21  69.03   0.00  -2.01  -1.97   0.00   0.00   0.00  65.05
-------------------------------------------------------------------------------

Segment Leq : 65.05 dBA

↟
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 62.09 + 0.00) = 62.09 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     53   0.21  75.00   0.00  -7.46  -5.45   0.00   0.00   0.00  62.09
-------------------------------------------------------------------------------

Segment Leq : 62.09 dBA

Total Leq All Segments: 66.83 dBA

↟
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 57.45 + 0.00) = 57.45 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-50	70	0.21	61.43	0.00	-2.01	-1.97	0.00	0.00	0.00	57.45

Segment Leq : 57.45 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 54.49 + 0.00) = 54.49 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	53	0.21	67.40	0.00	-7.46	-5.45	0.00	0.00	0.00	54.49

Segment Leq : 54.49 dBA

Total Leq All Segments: 59.23 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.83
(NIGHT): 59.23

STAMSON 5.0 COMPREHENSIVE REPORT Date: 20-01-2025 13:15:14
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec31.te Time Period: Day/Night 16/8 hours
Description: REC 3-1 - Southern Elevation - Building A

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -58.00 deg 0.00 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: Terry Fox (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 : 100 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: Terry Fox (day/night)

```
Angle1   Angle2           : -69.00 deg   68.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  35.00 / 35.00  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

Segment # 1: Kanata Ave (day)

Source height = 1.50 m

ROAD (0.00 + 59.90 + 0.00) = 59.90 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-58	0	0.66	69.03	0.00	-3.68	-5.44	0.00	0.00	0.00	59.90

Segment Leq : 59.90 dBA

↟

Segment # 2: Terry Fox (day)

Source height = 1.50 m

ROAD (0.00 + 70.14 + 0.00) = 70.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-69	68	0.66	78.18	0.00	-6.11	-1.94	0.00	0.00	0.00	70.14

Segment Leq : 70.14 dBA

Total Leq All Segments: 70.53 dBA

↟

Segment # 1: Kanata Ave (night)

Source height = 1.50 m

ROAD (0.00 + 52.30 + 0.00) = 52.30 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-58	0	0.66	61.43	0.00	-3.68	-5.44	0.00	0.00	0.00	52.30

Segment Leq : 52.30 dBA

↟
Segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 62.54 + 0.00) = 62.54 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-69	68	0.66	70.59	0.00	-6.11	-1.94	0.00	0.00	0.00	62.54

Segment Leq : 62.54 dBA

Total Leq All Segments: 62.93 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 70.53
(NIGHT): 62.93

↟
↟

STAMSON 5.0 COMPREHENSIVE REPORT Date: 20-01-2025 13:55:21
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec36.te Time Period: Day/Night 16/8 hours
Description: REC 3-6 - Southern Elevation - Building A

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -58.00 deg 0.00 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 : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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 : 100 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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -69.00 deg   68.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  35.00 / 35.00  m
Receiver height           :  16.50 / 16.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Segment # 1: Kanata Ave (day)
-----------------------------

Source height = 1.50 m

ROAD (0.00 + 61.25 + 0.00) = 61.25 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -58      0   0.21  69.03   0.00  -2.68  -5.09   0.00   0.00   0.00  61.25
-------------------------------------------------------------------------------

Segment Leq : 61.25 dBA

↟
Segment # 2: Terry Fox (day)
----------------------------

Source height = 1.50 m

ROAD (0.00 + 72.29 + 0.00) = 72.29 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -69     68   0.21  78.18   0.00  -4.45  -1.44   0.00   0.00   0.00  72.29
-------------------------------------------------------------------------------

Segment Leq : 72.29 dBA

Total Leq All Segments: 72.62 dBA

↟
Segment # 1: Kanata Ave (night)
-------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 53.65 + 0.00) = 53.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-58	0	0.21	61.43	0.00	-2.68	-5.09	0.00	0.00	0.00	53.65

Segment Leq : 53.65 dBA

Segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 64.69 + 0.00) = 64.69 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-69	68	0.21	70.59	0.00	-4.45	-1.44	0.00	0.00	0.00	64.69

Segment Leq : 64.69 dBA

Total Leq All Segments: 65.02 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 72.62
(NIGHT): 65.02

STAMSON 5.0 NORMAL REPORT Date: 16-01-2025 15:37:45
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec41.te Time Period: Day/Night 16/8 hours
Description: REC 4-1 - Eastern Elevation - Building A

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -54.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 65.00 / 65.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Results segment # 1: Terry Fox (day)

Source height = 1.50 m

ROAD (0.00 + 58.75 + 0.00) = 58.75 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-54	0	0.66	75.00	0.00	-10.57	-5.68	0.00	0.00	0.00	58.75

Segment Leq : 58.75 dBA

Total Leq All Segments: 58.75 dBA

↟
Results segment # 1: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 51.15 + 0.00) = 51.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-54	0	0.66	67.40	0.00	-10.57	-5.68	0.00	0.00	0.00	51.15

Segment Leq : 51.15 dBA

Total Leq All Segments: 51.15 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 58.75
(NIGHT): 51.15

↟
↟

STAMSON 5.0 NORMAL REPORT Date: 16-01-2025 15:40:38
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC46.te Time Period: Day/Night 16/8 hours
Description: REC 4-6 - Eastern Elevation - Building A

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -54.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 65.00 / 65.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Terry Fox (day)

Source height = 1.50 m

ROAD (0.00 + 61.91 + 0.00) = 61.91 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-54	0	0.21	75.00	0.00	-7.71	-5.38	0.00	0.00	0.00	61.91

Segment Leq : 61.91 dBA

Total Leq All Segments: 61.91 dBA

↟
Results segment # 1: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 54.32 + 0.00) = 54.32 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-54	0	0.21	67.40	0.00	-7.71	-5.38	0.00	0.00	0.00	54.32

Segment Leq : 54.32 dBA

Total Leq All Segments: 54.32 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 61.91
(NIGHT): 54.32
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 11:51:59
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC5.te Time Period: Day/Night 16/8 hours
Description: REC 5 - Outdoor Living Area - Building A

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -30.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 31.00 / 31.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -74.00 deg 74.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 15.00 / 15.00 m
Receiver height : 1.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Results segment # 1: Kanata Ave (day)

Source height = 1.50 m

ROAD (0.00 + 65.31 + 0.00) = 65.31 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	70	0.66	73.68	0.00	-5.23	-3.13	0.00	0.00	0.00	65.31

Segment Leq : 65.31 dBA

↟
Results segment # 2: Terry Fox (day)

Source height = 1.50 m

ROAD (0.00 + 73.25 + 0.00) = 73.25 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-74	74	0.66	75.00	0.00	0.00	-1.75	0.00	0.00	0.00	73.25

Segment Leq : 73.25 dBA

Total Leq All Segments: 73.90 dBA

↟
Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

ROAD (0.00 + 57.71 + 0.00) = 57.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	70	0.66	66.08	0.00	-5.23	-3.13	0.00	0.00	0.00	57.71

Segment Leq : 57.71 dBA

↟
Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 65.76 + 0.00) = 65.76 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-74	74	0.57	67.40	0.00	0.00	-1.64	0.00	0.00	0.00	65.76

Segment Leq : 65.76 dBA

Total Leq All Segments: 66.39 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 73.90
(NIGHT): 66.39

↟
↟

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 12:07:09
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec5r1.te Time Period: Day/Night 16/8 hours
Description: REC 5 R1 - Outdoor Living Area - Building A

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -30.00 deg 37.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 31.00 / 31.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -32.00 deg   74.00 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 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 63.98 + 0.00) = 63.98 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -30     37   0.66  73.68   0.00  -5.23  -4.46   0.00   0.00   0.00  63.98
-------------------------------------------------------------------------------

Segment Leq : 63.98 dBA

↟
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 68.36 + 0.00) = 68.36 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -32     74   0.66  75.00   0.00  -3.68  -2.96   0.00   0.00   0.00  68.36
-------------------------------------------------------------------------------

Segment Leq : 68.36 dBA

Total Leq All Segments: 69.71 dBA

↟
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 56.38 + 0.00) = 56.38 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	37	0.66	66.08	0.00	-5.23	-4.46	0.00	0.00	0.00	56.38

Segment Leq : 56.38 dBA

↟

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 61.04 + 0.00) = 61.04 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	74	0.57	67.40	0.00	-3.48	-2.88	0.00	0.00	0.00	61.04

Segment Leq : 61.04 dBA

Total Leq All Segments: 62.32 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 69.71
(NIGHT): 62.32

↟
↟

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 12:10:02
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec5r2.te Time Period: Day/Night 16/8 hours
Description: REC 5 R2 - Outdoor Living Area - Building A

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -30.00 deg 37.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 31.00 / 31.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -30.00 deg Angle2 : 37.00 deg
Barrier height : 2.50 m
Barrier receiver distance : 5.00 / 5.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

↟
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -32.00 deg   74.00 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 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -32.00 deg   Angle2 : 74.00 deg
Barrier height            :   2.50 m
Barrier receiver distance :   5.00 / 5.00   m
Source elevation          :  96.00 m
Receiver elevation        :  96.00 m
Barrier elevation         :  96.00 m
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 55.39 + 0.00) = 55.39 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -30     37   0.51  73.68   0.00  -4.76  -4.43   0.00   0.00  -9.10  55.39
-------------------------------------------------------------------------------

Segment Leq : 55.39 dBA

↟
```

Results segment # 2: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 60.16 + 0.00) = 60.16 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	74	0.51	75.00	0.00	-3.35	-2.82	0.00	0.00	-8.67	60.16

Segment Leq : 60.16 dBA

Total Leq All Segments: 61.41 dBA

↟
Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 47.80 + 0.00) = 47.80 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	37	0.51	66.08	0.00	-4.76	-4.43	0.00	0.00	-9.10	47.80

Segment Leq : 47.80 dBA

↟
Results segment # 2: Terry Fox (night)

Source height = 1.50 m

Barrier height for grazing incidence

```
-------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        4.50 !        3.90 !        99.90

ROAD (0.00 + 61.04 + 0.00) = 61.04 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -32     74   0.42  67.40   0.00  -3.15  -2.74   0.00   0.00  -0.00  61.51*
   -32     74   0.57  67.40   0.00  -3.48  -2.88   0.00   0.00   0.00  61.04
-------------------------------------------------------------------------------

 * Bright Zone !

Segment Leq : 61.04 dBA

Total Leq All Segments: 61.24 dBA

♠



TOTAL Leq FROM ALL SOURCES (DAY): 61.41
                           (NIGHT): 61.24
♠
♠
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 12:09:02
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec5r3.te Time Period: Day/Night 16/8 hours
Description: REC 5 R3 - Outdoor Living Area - Building A

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -30.00 deg 37.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 31.00 / 31.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -30.00 deg Angle2 : 37.00 deg
Barrier height : 3.00 m
Barrier receiver distance : 5.00 / 5.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -32.00 deg   74.00 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 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -32.00 deg   Angle2 : 74.00 deg
Barrier height            :   3.00 m
Barrier receiver distance :   5.00 / 5.00   m
Source elevation          :  96.00 m
Receiver elevation        :  96.00 m
Barrier elevation         :  96.00 m
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 52.78 + 0.00) = 52.78 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -30     37   0.48  73.68   0.00  -4.67  -4.42   0.00   0.00 -11.81  52.78
-------------------------------------------------------------------------------

Segment Leq : 52.78 dBA

↟
```

Results segment # 2: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 57.77 + 0.00) = 57.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	74	0.48	75.00	0.00	-3.28	-2.79	0.00	0.00	-11.15	57.77

Segment Leq : 57.77 dBA

Total Leq All Segments: 58.97 dBA

Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 45.18 + 0.00) = 45.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	37	0.48	66.08	0.00	-4.67	-4.42	0.00	0.00	-11.81	45.18

Segment Leq : 45.18 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

Barrier height for grazing incidence

```
-------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        4.50 !        3.90 !        99.90

ROAD (0.00 + 61.04 + 0.00) = 61.04 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -32     74   0.39  67.40   0.00  -3.08  -2.71   0.00   0.00  -0.36  61.24*
   -32     74   0.57  67.40   0.00  -3.48  -2.88   0.00   0.00   0.00  61.04
-------------------------------------------------------------------------------

 * Bright Zone !

Segment Leq : 61.04 dBA

Total Leq All Segments: 61.15 dBA

♠



TOTAL Leq FROM ALL SOURCES (DAY): 58.97
                           (NIGHT): 61.15
♠
♠
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 12:11:04
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec5r4.te Time Period: Day/Night 16/8 hours
Description: REC 5 R4 - Outdoor Living Area - Building A

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -30.00 deg 37.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 31.00 / 31.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -30.00 deg Angle2 : 37.00 deg
Barrier height : 3.50 m
Barrier receiver distance : 5.00 / 5.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -32.00 deg   74.00 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 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -32.00 deg   Angle2 : 74.00 deg
Barrier height            :   3.50 m
Barrier receiver distance :   5.00 / 5.00   m
Source elevation          :  96.00 m
Receiver elevation        :  96.00 m
Barrier elevation         :  96.00 m
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 50.63 + 0.00) = 50.63 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -30     37   0.45  73.68   0.00  -4.57  -4.41   0.00   0.00 -14.07  50.63
-------------------------------------------------------------------------------

Segment Leq : 50.63 dBA

↟
```

Results segment # 2: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 55.74 + 0.00) = 55.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	74	0.45	75.00	0.00	-3.22	-2.77	0.00	0.00	-13.27	55.74

Segment Leq : 55.74 dBA

Total Leq All Segments: 56.91 dBA

Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 43.03 + 0.00) = 43.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	37	0.45	66.08	0.00	-4.57	-4.41	0.00	0.00	-14.07	43.03

Segment Leq : 43.03 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

Barrier height for grazing incidence

```
-------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        4.50 !        3.90 !        99.90

ROAD (0.00 + 61.04 + 0.00) = 61.04 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -32     74   0.36  67.40   0.00  -3.02  -2.68   0.00   0.00  -4.10  57.60*
   -32     74   0.57  67.40   0.00  -3.48  -2.88   0.00   0.00   0.00  61.04
-------------------------------------------------------------------------------

 * Bright Zone !

Segment Leq : 61.04 dBA

Total Leq All Segments: 61.11 dBA

↟



TOTAL Leq FROM ALL SOURCES (DAY): 56.91
                           (NIGHT): 61.11
↟
↟
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 12:11:57
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec5r5.te Time Period: Day/Night 16/8 hours
Description: REC 5 R5 - Outdoor Living Area - Building A

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -30.00 deg 37.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 31.00 / 31.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -30.00 deg Angle2 : 37.00 deg
Barrier height : 4.00 m
Barrier receiver distance : 5.00 / 5.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -32.00 deg   74.00 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 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -32.00 deg   Angle2 : 74.00 deg
Barrier height            :   4.00 m
Barrier receiver distance :   5.00 / 5.00   m
Source elevation          :  96.00 m
Receiver elevation        :  96.00 m
Barrier elevation         :  96.00 m
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 48.91 + 0.00) = 48.91 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -30     37   0.42  73.68   0.00  -4.48  -4.40   0.00   0.00 -15.89  48.91
-------------------------------------------------------------------------------

Segment Leq : 48.91 dBA

↟
```

Results segment # 2: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 54.08 + 0.00) = 54.08 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	74	0.42	75.00	0.00	-3.15	-2.74	0.00	0.00	-15.03	54.08

Segment Leq : 54.08 dBA

Total Leq All Segments: 55.23 dBA

Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 41.31 + 0.00) = 41.31 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	37	0.42	66.08	0.00	-4.48	-4.40	0.00	0.00	-15.89	41.31

Segment Leq : 41.31 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

Barrier height for grazing incidence

```
-------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        4.50 !        3.90 !        99.90

ROAD (0.00 + 56.74 + 0.00) = 56.74 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -32     74   0.33  67.40   0.00  -2.95  -2.65   0.00   0.00  -5.05  56.74
-------------------------------------------------------------------------------

Segment Leq : 56.74 dBA

Total Leq All Segments: 56.86 dBA

↟



TOTAL Leq FROM ALL SOURCES (DAY): 55.23
                           (NIGHT): 56.86
↟
↟
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 12:14:17
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec5r6.te Time Period: Day/Night 16/8 hours
Description: REC 5 R6 - Outdoor Living Area - Building A

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -30.00 deg 37.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 31.00 / 31.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -30.00 deg Angle2 : 37.00 deg
Barrier height : 4.50 m
Barrier receiver distance : 5.00 / 5.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -32.00 deg   74.00 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 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -32.00 deg   Angle2 : 74.00 deg
Barrier height            :   4.50 m
Barrier receiver distance :   5.00 / 5.00   m
Source elevation          :  96.00 m
Receiver elevation        :  96.00 m
Barrier elevation         :  96.00 m
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 47.52 + 0.00) = 47.52 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -30     37   0.39  73.68   0.00  -4.38  -4.39   0.00   0.00 -17.38  47.52
-------------------------------------------------------------------------------

Segment Leq : 47.52 dBA

↟
```

Results segment # 2: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 52.71 + 0.00) = 52.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	74	0.39	75.00	0.00	-3.08	-2.71	0.00	0.00	-16.49	52.71

Segment Leq : 52.71 dBA

Total Leq All Segments: 53.86 dBA

↟

Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 39.93 + 0.00) = 39.93 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-30	37	0.39	66.08	0.00	-4.38	-4.39	0.00	0.00	-17.38	39.93

Segment Leq : 39.93 dBA

↟

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

Barrier height for grazing incidence

```
-------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        4.50 !        3.90 !        99.90

ROAD (0.00 + 55.27 + 0.00) = 55.27 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -32     74   0.30  67.40   0.00  -2.88  -2.62   0.00   0.00  -6.63  55.27
-------------------------------------------------------------------------------

Segment Leq : 55.27 dBA

Total Leq All Segments: 55.40 dBA

↟



TOTAL Leq FROM ALL SOURCES (DAY): 53.86
                           (NIGHT): 55.40
↟
↟
```

STAMSON 5.0 NORMAL REPORT Date: 17-01-2025 08:51:17
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec61.te Time Period: Day/Night 16/8 hours
Description: REC 6-1 - Western Elevation - Buuilding B

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -28.00 deg 65.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 40.00 / 40.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   76.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  21.00 / 21.00  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 58.59 + 0.00) = 58.59 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -28     65   0.66  69.03   0.00  -7.07  -3.36   0.00   0.00   0.00  58.59
-------------------------------------------------------------------------------

Segment Leq : 58.59 dBA
```

↟

```
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 67.87 + 0.00) = 67.87 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     76   0.66  75.00   0.00  -2.43  -4.70   0.00   0.00   0.00  67.87
-------------------------------------------------------------------------------

Segment Leq : 67.87 dBA

Total Leq All Segments: 68.35 dBA
```

↟

```
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 50.99 + 0.00) = 50.99 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-28	65	0.66	61.43	0.00	-7.07	-3.36	0.00	0.00	0.00	50.99

Segment Leq : 50.99 dBA

↟

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 60.28 + 0.00) = 60.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	76	0.66	67.40	0.00	-2.43	-4.70	0.00	0.00	0.00	60.28

Segment Leq : 60.28 dBA

Total Leq All Segments: 60.76 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 68.35
(NIGHT): 60.76

↟
↟

STAMSON 5.0 NORMAL REPORT Date: 17-01-2025 08:50:34
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec66.te Time Period: Day/Night 16/8 hours
Description: REC 6-6 - Western Elevation - Buuilding B

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -28.00 deg 65.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 40.00 / 40.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (day/night)

Car traffic volume : 30184/616 veh/TimePeriod *
Medium truck volume : 2401/49 veh/TimePeriod *
Heavy truck volume : 1715/35 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     :  98.00

Data for Segment # 2: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           :   0.00 deg   76.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  21.00 / 21.00  m
Receiver height           :  16.50 / 16.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 60.84 + 0.00) = 60.84 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -28     65   0.21  69.03   0.00  -5.15  -3.04   0.00   0.00   0.00  60.84
-------------------------------------------------------------------------------

Segment Leq : 60.84 dBA
```

↟

```
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 69.43 + 0.00) = 69.43 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     76   0.21  75.27   0.00  -1.77  -4.07   0.00   0.00   0.00  69.43
-------------------------------------------------------------------------------

Segment Leq : 69.43 dBA

Total Leq All Segments: 69.99 dBA
```

↟

```
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 53.24 + 0.00) = 53.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-28	65	0.21	61.43	0.00	-5.15	-3.04	0.00	0.00	0.00	53.24

Segment Leq : 53.24 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 55.54 + 0.00) = 55.54 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	76	0.21	61.38	0.00	-1.77	-4.07	0.00	0.00	0.00	55.54

Segment Leq : 55.54 dBA

Total Leq All Segments: 57.55 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 69.99
(NIGHT): 57.55

STAMSON 5.0 NORMAL REPORT Date: 17-01-2025 08:45:04
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC71.te Time Period: Day/Night 16/8 hours
Description: REC 7-1 - Northern Elevation - Buuilding B

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : 0.00 deg 52.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 66.00 / 66.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Results segment # 1: Kanata Ave (day)

Source height = 1.50 m

ROAD (0.00 + 52.54 + 0.00) = 52.54 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	52	0.66	69.03	0.00	-10.68	-5.81	0.00	0.00	0.00	52.54

Segment Leq : 52.54 dBA

Total Leq All Segments: 52.54 dBA

↟
Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

ROAD (0.00 + 44.94 + 0.00) = 44.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	52	0.66	61.43	0.00	-10.68	-5.81	0.00	0.00	0.00	44.94

Segment Leq : 44.94 dBA

Total Leq All Segments: 44.94 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 52.54
(NIGHT): 44.94
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 17-01-2025 08:45:41
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC76.te Time Period: Day/Night 16/8 hours
Description: REC 7-6 - Northern Elevation - Buuilding B

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : 0.00 deg 52.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 66.00 / 66.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Results segment # 1: Kanata Ave (day)

Source height = 1.50 m

ROAD (0.00 + 55.71 + 0.00) = 55.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	52	0.21	69.03	0.00	-7.79	-5.53	0.00	0.00	0.00	55.71

Segment Leq : 55.71 dBA

Total Leq All Segments: 55.71 dBA

↟
Results segment # 1: Kanata Ave (night)

Source height = 1.50 m

ROAD (0.00 + 48.11 + 0.00) = 48.11 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	52	0.21	61.43	0.00	-7.79	-5.53	0.00	0.00	0.00	48.11

Segment Leq : 48.11 dBA

Total Leq All Segments: 48.11 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 55.71
(NIGHT): 48.11
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 17-01-2025 08:54:13
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC81.te Time Period: Day/Night 16/8 hours
Description: REC 8-1 - Southern Elevation - Buuilding B

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -18.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 63.00 / 63.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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 : 100 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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -83.00 deg   83.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  15.00 / 15.00  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 48.63 + 0.00) = 48.63 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -18      0   0.66  69.03   0.00 -10.35 -10.05   0.00   0.00   0.00  48.63
-------------------------------------------------------------------------------

Segment Leq : 48.63 dBA

↟
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 76.66 + 0.00) = 76.66 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -83     83   0.66  78.18   0.00   0.00  -1.53   0.00   0.00   0.00  76.66
-------------------------------------------------------------------------------

Segment Leq : 76.66 dBA

Total Leq All Segments: 76.67 dBA

↟
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 41.03 + 0.00) = 41.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-18	0	0.66	61.43	0.00	-10.35	-10.05	0.00	0.00	0.00	41.03

Segment Leq : 41.03 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 69.06 + 0.00) = 69.06 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-83	83	0.66	70.59	0.00	0.00	-1.53	0.00	0.00	0.00	69.06

Segment Leq : 69.06 dBA

Total Leq All Segments: 69.07 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 76.67
(NIGHT): 69.07

STAMSON 5.0 NORMAL REPORT Date: 17-01-2025 08:55:20
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC86.te Time Period: Day/Night 16/8 hours
Description: REC 8-6 - Southern Elevation - Buuilding B

Road data, segment # 1: Kanata Ave (day/night)

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 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): 12000
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: Kanata Ave (day/night)

Angle1 Angle2 : -18.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 63.00 / 63.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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 : 100 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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -83.00 deg   83.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  15.00 / 15.00  m
Receiver height           :  16.50 / 16.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 51.47 + 0.00) = 51.47 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -18      0   0.21  69.03   0.00  -7.54 -10.02   0.00   0.00   0.00  51.47
-------------------------------------------------------------------------------

Segment Leq : 51.47 dBA

↟
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 77.41 + 0.00) = 77.41 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -83     83   0.21  78.18   0.00   0.00  -0.77   0.00   0.00   0.00  77.41
-------------------------------------------------------------------------------

Segment Leq : 77.41 dBA

Total Leq All Segments: 77.42 dBA

↟
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 43.87 + 0.00) = 43.87 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-18	0	0.21	61.43	0.00	-7.54	-10.02	0.00	0.00	0.00	43.87

Segment Leq : 43.87 dBA

Results segment # 2: Terry Fox (night)

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
-83	83	0.21	70.59	0.00	0.00	-0.77	0.00	0.00	0.00	69.81

Segment Leq : 69.81 dBA

Total Leq All Segments: 69.82 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 77.42
(NIGHT): 69.82

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:15:04
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec91.te Time Period: Day/Night 16/8 hours
Description: REC 9-1 - Eastern Elevation - Building B

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	68.25	68.25
Total			68.25 dBA

Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	60.65	60.65
Total			60.65 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.25
(NIGHT): 60.65

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:15:50
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec96.te Time Period: Day/Night 16/8 hours
Description: REC 9-6 - Eastern Elevation - Building B

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	69.45	69.45
Total			69.45 dBA

Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	61.86	61.86
Total			61.86 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 69.45
(NIGHT): 61.86

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:17:53
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec101.te Time Period: Day/Night 16/8 hours
Description: REC 10-1 - Western Elevation - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : 0.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	67.64	67.64
Total			67.64 dBA

Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	60.04	60.04
Total			60.04 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.64
(NIGHT): 60.04

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:18:32
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC106.te Time Period: Day/Night 16/8 hours
Description: REC 10-6 - Western Elevation - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : 0.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	69.08	69.08
Total			69.08 dBA

↟
Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	61.48	61.48
Total			61.48 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 69.08
(NIGHT): 61.48

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:21:45
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC111.te Time Period: Day/Night 16/8 hours
Description: REC 11-1 - Southern Elevation - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -84.00 deg 86.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 15.00 / 15.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	73.50	73.50
Total			73.50 dBA

Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	65.90	65.90
Total			65.90 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 73.50
(NIGHT): 65.90

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:22:34
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC116.te Time Period: Day/Night 16/8 hours
Description: REC 11-6 - Southern Elevation - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -84.00 deg 86.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 15.00 / 15.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	74.29	74.29
Total			74.29 dBA

↟
Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	66.70	66.70
Total			66.70 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 74.29
(NIGHT): 66.70

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:24:07
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC121.te Time Period: Day/Night 16/8 hours
Description: REC 12-1 - Eastern Elevation - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 24.00 / 24.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	66.94	66.94
Total			66.94 dBA

Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	59.34	59.34
Total			59.34 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.94
(NIGHT): 59.34

STAMSON 5.0 SUMMARY REPORT Date: 17-01-2025 09:24:39
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC126.te Time Period: Day/Night 16/8 hours
Description: REC 12-6 - Eastern Elevation - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 24.00 / 24.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Result summary (day)
---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	68.50	68.50
Total			68.50 dBA

↟
Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Terry Fox	1.50	60.90	60.90
Total			60.90 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.50
(NIGHT): 60.90

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 13:35:20
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec13.te Time Period: Day/Night 16/8 hours
Description: REC 13 - Outdoor Living Area - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 84.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Terry Fox (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
-77	84	0.66	75.00	0.00	-2.76	-1.59	0.00	0.00	0.00	70.65

Segment Leq : 70.65 dBA

Total Leq All Segments: 70.65 dBA

↟
Results segment # 1: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 63.05 + 0.00) = 63.05 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-77	84	0.66	67.40	0.00	-2.76	-1.59	0.00	0.00	0.00	63.05

Segment Leq : 63.05 dBA

Total Leq All Segments: 63.05 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 70.65
(NIGHT): 63.05
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 13:25:21
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec13r1.te Time Period: Day/Night 16/8 hours
Description: REC 13 R1 - Outdoor Living Area - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 42.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Terry Fox (day)

Source height = 1.50 m

ROAD (0.00 + 69.72 + 0.00) = 69.72 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-77	42	0.66	75.00	0.00	-2.76	-2.51	0.00	0.00	0.00	69.72

Segment Leq : 69.72 dBA

Total Leq All Segments: 69.72 dBA

↟
Results segment # 1: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 62.12 + 0.00) = 62.12 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-77	42	0.66	67.40	0.00	-2.76	-2.51	0.00	0.00	0.00	62.12

Segment Leq : 62.12 dBA

Total Leq All Segments: 62.12 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 69.72
(NIGHT): 62.12
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 13:28:29
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec13r2.te Time Period: Day/Night 16/8 hours
Description: REC 13 R2 - Outdoor Living Area - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 42.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -77.00 deg Angle2 : 42.00 deg
Barrier height : 2.50 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

Results segment # 1: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

```
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 61.94 + 0.00) = 61.94 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.51  75.00   0.00  -2.51  -2.37   0.00   0.00  -8.18  61.94
-------------------------------------------------------------------------------

Segment Leq : 61.94 dBA

Total Leq All Segments: 61.94 dBA

↟
Results segment # 1: Terry Fox (night)
--------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 54.34 + 0.00) = 54.34 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.51  67.40   0.00  -2.51  -2.37   0.00   0.00  -8.18  54.34
-------------------------------------------------------------------------------

Segment Leq : 54.34 dBA

Total Leq All Segments: 54.34 dBA

↟



TOTAL Leq FROM ALL SOURCES (DAY): 61.94
                          (NIGHT): 54.34
↟
↟
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 13:29:04
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC13r3.te Time Period: Day/Night 16/8 hours
Description: REC 13 R3 - Outdoor Living Area - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 42.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -77.00 deg Angle2 : 42.00 deg
Barrier height : 3.00 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

Results segment # 1: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

```
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 59.72 + 0.00) = 59.72 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.48  75.00   0.00  -2.46  -2.34   0.00   0.00 -10.48  59.72
-------------------------------------------------------------------------------

Segment Leq : 59.72 dBA

Total Leq All Segments: 59.72 dBA

↟
Results segment # 1: Terry Fox (night)
--------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 52.12 + 0.00) = 52.12 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.48  67.40   0.00  -2.46  -2.34   0.00   0.00 -10.48  52.12
-------------------------------------------------------------------------------

Segment Leq : 52.12 dBA

Total Leq All Segments: 52.12 dBA

↟



TOTAL Leq FROM ALL SOURCES (DAY): 59.72
                          (NIGHT): 52.12
↟
↟
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 13:31:37
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC13r4.te Time Period: Day/Night 16/8 hours
Description: REC 13 R4 - Outdoor Living Area - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 42.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -77.00 deg Angle2 : 42.00 deg
Barrier height : 3.50 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

Results segment # 1: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

```
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 57.76 + 0.00) = 57.76 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.45  75.00   0.00  -2.41  -2.31   0.00   0.00 -12.52  57.76
-------------------------------------------------------------------------------

Segment Leq : 57.76 dBA

Total Leq All Segments: 57.76 dBA

↟
Results segment # 1: Terry Fox (night)
--------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 50.16 + 0.00) = 50.16 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.45  67.40   0.00  -2.41  -2.31   0.00   0.00 -12.52  50.16
-------------------------------------------------------------------------------

Segment Leq : 50.16 dBA

Total Leq All Segments: 50.16 dBA

↟



TOTAL Leq FROM ALL SOURCES (DAY): 57.76
                           (NIGHT): 50.16
↟
↟
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 13:32:17
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC13r5.te Time Period: Day/Night 16/8 hours
Description: REC 13 R5 - Outdoor Living Area - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 42.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -77.00 deg Angle2 : 42.00 deg
Barrier height : 4.00 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

Results segment # 1: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

```
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 56.11 + 0.00) = 56.11 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.42  75.00   0.00  -2.36  -2.27   0.00   0.00 -14.25  56.11
-------------------------------------------------------------------------------

Segment Leq : 56.11 dBA

Total Leq All Segments: 56.11 dBA

↟
Results segment # 1: Terry Fox (night)
--------------------------------------

Source height = 1.50 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.50 !        1.50 !        1.50 !        97.50

ROAD (0.00 + 48.51 + 0.00) = 48.51 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     42   0.42  67.40   0.00  -2.36  -2.27   0.00   0.00 -14.25  48.51
-------------------------------------------------------------------------------

Segment Leq : 48.51 dBA

Total Leq All Segments: 48.51 dBA

↟



TOTAL Leq FROM ALL SOURCES (DAY): 56.11
                          (NIGHT): 48.51
↟
↟
```

STAMSON 5.0 NORMAL REPORT Date: 27-01-2025 13:32:56
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC13r6.te Time Period: Day/Night 16/8 hours
Description: REC 13 R6 - Outdoor Living Area - Building C

Road data, segment # 1: Terry Fox (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: Terry Fox (day/night)

Angle1 Angle2 : -77.00 deg 42.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 22.00 / 22.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -77.00 deg Angle2 : 42.00 deg
Barrier height : 4.50 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation : 96.00 m
Receiver elevation : 96.00 m
Barrier elevation : 96.00 m
Reference angle : 0.00

Results segment # 1: Terry Fox (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 54.72 + 0.00) = 54.72 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-77	42	0.39	75.00	0.00	-2.31	-2.24	0.00	0.00	-15.72	54.72

Segment Leq : 54.72 dBA

Total Leq All Segments: 54.72 dBA

Results segment # 1: Terry Fox (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	1.50	97.50

ROAD (0.00 + 47.12 + 0.00) = 47.12 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-77	42	0.39	67.40	0.00	-2.31	-2.24	0.00	0.00	-15.72	47.12

Segment Leq : 47.12 dBA

Total Leq All Segments: 47.12 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 54.72
(NIGHT): 47.12

STAMSON 5.0 NORMAL REPORT Date: 28-01-2025 16:52:41
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC14.te Time Period: Day/Night 16/8 hours
Description: REC 14 - OUTDOOR LIVING AREA

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -47.00 deg 49.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 65.00 / 65.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           : -77.00 deg   59.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  73.00 / 73.00  m
Receiver height           :   1.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 60.02 + 0.00) = 60.02 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -47     49   0.66  73.68   0.00 -10.57  -3.08   0.00   0.00   0.00  60.02
-------------------------------------------------------------------------------

Segment Leq : 60.02 dBA

↟
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 61.58 + 0.00) = 61.58 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -77     59   0.66  75.00   0.00 -11.41  -2.00   0.00   0.00   0.00  61.58
-------------------------------------------------------------------------------

Segment Leq : 61.58 dBA

Total Leq All Segments: 63.88 dBA

↟
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 52.43 + 0.00) = 52.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-47	49	0.66	66.08	0.00	-10.57	-3.08	0.00	0.00	0.00	52.43

Segment Leq : 52.43 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 54.70 + 0.00) = 54.70 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-77	59	0.57	67.40	0.00	-10.79	-1.91	0.00	0.00	0.00	54.70

Segment Leq : 54.70 dBA

Total Leq All Segments: 56.72 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.88
(NIGHT): 56.72

STAMSON 5.0 NORMAL REPORT Date: 28-01-2025 16:05:07
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec14r1.te Time Period: Day/Night 16/8 hours
Description: REC 14 REV 1 - OUTDOOR LIVING AREA

Road data, segment # 1: Kanata Ave (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 : 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): 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: Kanata Ave (day/night)

Angle1 Angle2 : -47.00 deg -39.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 65.00 / 65.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Terry Fox (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: Terry Fox (day/night)
-------------------------------------------
Angle1   Angle2           :  37.00 deg   51.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  73.00 / 73.00  m
Receiver height           :   1.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Kanata Ave (day)
-------------------------------------

Source height = 1.50 m

ROAD (0.00 + 48.68 + 0.00) = 48.68 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -47    -39   0.66  73.68   0.00 -10.57 -14.42   0.00   0.00   0.00  48.68
-------------------------------------------------------------------------------

Segment Leq : 48.68 dBA

↟
Results segment # 2: Terry Fox (day)
------------------------------------

Source height = 1.50 m

ROAD (0.00 + 51.54 + 0.00) = 51.54 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    37     51   0.66  75.00   0.00 -11.41 -12.05   0.00   0.00   0.00  51.54
-------------------------------------------------------------------------------

Segment Leq : 51.54 dBA

Total Leq All Segments: 53.35 dBA

↟
Results segment # 1: Kanata Ave (night)
---------------------------------------
```

Source height = 1.50 m

ROAD (0.00 + 41.09 + 0.00) = 41.09 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-47	-39	0.66	66.08	0.00	-10.57	-14.42	0.00	0.00	0.00	41.09

Segment Leq : 41.09 dBA

Results segment # 2: Terry Fox (night)

Source height = 1.50 m

ROAD (0.00 + 44.69 + 0.00) = 44.69 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
37	51	0.57	67.40	0.00	-10.79	-11.92	0.00	0.00	0.00	44.69

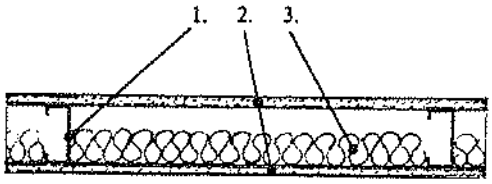
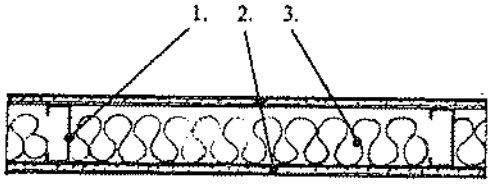
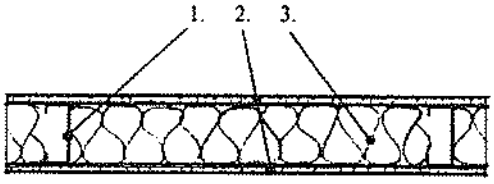
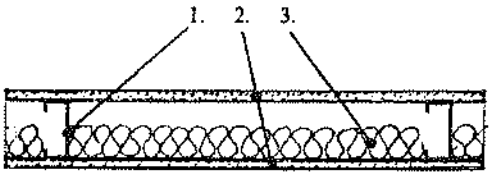
Segment Leq : 44.69 dBA

Total Leq All Segments: 46.26 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 53.35
(NIGHT): 46.26

APPENDIX 3

BUILDING MATERIALS INDUSTRY STANDARDS

Sketch	Brief Description	...	Laboratory Test Number Year Frequencies Tested Source of Data	STC	Section Number
	1. 3 5/8" metal studs, 24"o.c. 2. 5/8" gypsum board screwed to studs. 3. 2" thick sound attenuation blanket.	...	National Research Council of Canada NRC #66 1968 16f National Research Council of Canada	47	1.3.3.1.5.7
	1. 3 5/8" metal studs, 24"o.c. 2. 5/8" type X gypsum board screwed to studs. 3. 3" thick sound attenuation blanket.	...	Owens/Corning Fiberglas OCF 469 1967 16f Owens/Corning Fiberglas	44	1.3.3.1.5.8
	1. 3 5/8" metal studs, 24"o.c. 2. 5/8" gypsum board screwed to studs. 3. 4" thick sound attenuation blanket compressed to fit in stud space.	...	National Research Council of Canada NRC #66 1968 16f National Research Council of Canada	45	1.3.3.1.5.9
	1. 3 5/8" metal studs, 24"o.c. 2. 5/8" type X gypsum board spot-laminated to studs with daubs of adhesive 12"o.c. drywall screws at third points along joints and ends. 3. 2" thick sound attenuation blanket.	...	Riverbank Acoustical Labs. TL66-253 1966 16f Celotex Corp.	51	1.3.3.1.5.10