

# **Environmental Noise Control Study**

## **Proposed Residential Development**

114 Richmond Road  
Ottawa, Ontario

Prepared for Concorde Properties

Report PG7881-1 dated February 12, 2026

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## 1.0 Introduction

Paterson Group (Paterson) was commissioned by Concorde Properties to conduct an environmental noise control study for the proposed residential development to be located at 114 Richmond Road in Ottawa, Ontario.

The objectives of the current study were 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.

This 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 one 4-storey apartment building and six stacked townhouse blocks. Associated at-grade roadways, parking areas and an outdoor living area are also anticipated as a part of the proposed residential development.

### 3.0 Methodology and Noise Assessment Criteria

The City of Ottawa outlines 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, and 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 occupied with an existing multi-storey structure within the northern portion of the site, and unoccupied within the southern portion of the site. The subject site is surrounded by Richmond Road to the north, Byron Avenue to the south, and residential and commercial buildings to the east and west. Richmond Road and Byron Avenue were identified within a 100 m radius of the proposed residential development.

Based on the new City of Ottawa Official Plan, Schedule F, Richmond Road is considered a four-lane urban arterial road (4-UAU) and Byron Avenue is considered a two-lane 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 PG7881-1-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.

| <b>Table 4 - Traffic and Road Parameters</b>        |                        |                       |                            |                          |                       |                      |
|-----------------------------------------------------|------------------------|-----------------------|----------------------------|--------------------------|-----------------------|----------------------|
| <b>Road</b>                                         | <b>Implied Roadway</b> | <b>AADT (Veh/day)</b> | <b>Posted Speed (km/h)</b> | <b>Day/Night Split %</b> | <b>Medium Truck %</b> | <b>Heavy Truck %</b> |
| Richmond Road                                       | 4-UAU                  | 30,000                | 50                         | 92/8                     | 7                     | 5                    |
| Byron Avenue                                        | 2-UMCU                 | 12,000                | 40                         | 92/8                     | 7                     | 5                    |
| Data obtained from the City of Ottawa document ENCG |                        |                       |                            |                          |                       |                      |

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.

| <b>Table 5 - Elevation of Reception Points</b> |                                                               |                     |                                   |
|------------------------------------------------|---------------------------------------------------------------|---------------------|-----------------------------------|
| <b>Floor Number</b>                            | <b>Elevation at the Centre of Window / Ground Surface (m)</b> | <b>Floor Use</b>    | <b>Daytime/Nighttime Analysis</b> |
| Ground Floor                                   | 1.5                                                           | Living Area/Bedroom | Daytime/nighttime                 |
| Second Floor                                   | 4.5                                                           | Living Area/Bedroom | Daytime/nighttime                 |
| Ground Surface                                 | 1.5                                                           | Outdoor Living Area | Daytime                           |
| Fourth Floor                                   | 10.5                                                          | 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 second floor. Reception points are detailed in Drawing PG7881-2 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 100 m buffer zone, which is reflected in the local angles described in Paterson Group Drawings PG7881-3A to 8C-Site Geometry in Appendix 1.

Table 9 - 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 ENCG. It should be noted that one receptor is assigned to the side of the building affected by noise. There are two noise sources: Richmond Road and Byron 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 are provided in Table 6 below.

| <b>Table 6 – Proposed Noise Levels – Indoor and Outdoor Living Areas</b> |                                                      |                                                                |                                                                 |
|--------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------|
| <b>Reception Point</b>                                                   | <b>Description</b>                                   | <b>Daytime at Facade<br/><math>L_{eq(16)}</math><br/>(dBA)</b> | <b>Nighttime at Facade<br/><math>L_{eq(8)}</math><br/>(dBA)</b> |
| REC 1-1                                                                  | Eastern Elevation - Apartment Building - 1st Floor   | 54.24                                                          | 46.64                                                           |
| REC 1-4                                                                  | Eastern Elevation - Apartment Building - 4th Floor   | 56.23                                                          | 48.63                                                           |
| REC 2-1                                                                  | Northern Elevation - Apartment Building - 1st Floor  | 60.80                                                          | 53.21                                                           |
| REC 2-4                                                                  | Northern Elevation - Apartment Building - 4th Floor  | 62.44                                                          | 54.84                                                           |
| REC 3-1                                                                  | Western Elevation - Apartment Building - 1st Floor   | 54.31                                                          | 46.71                                                           |
| REC 3-4                                                                  | Western Elevation - Apartment Building - 4th Floor   | 56.30                                                          | 48.71                                                           |
| REC 4                                                                    | Outdoor Living Area - Courtyard - Apartment Building | 56.13                                                          | -                                                               |
| REC 5-1                                                                  | Eastern Elevation - Block 1 - 1st Floor              | 41.40                                                          | 33.81                                                           |
| REC 5-2                                                                  | Eastern Elevation - Block 1 - 2nd Floor              | 42.20                                                          | 34.60                                                           |
| REC 6-1                                                                  | Southern Elevation - Block 1 - 1st Floor             | 47.74                                                          | 40.15                                                           |
| REC 6-2                                                                  | Southern Elevation - Block 1 - 2nd Floor             | 48.47                                                          | 40.87                                                           |
| REC 7-1                                                                  | Western Elevation - Block 1 - 1st Floor              | 42.39                                                          | 34.79                                                           |
| REC 7-2                                                                  | Western Elevation - Block 1 - 2nd Floor              | 43.18                                                          | 35.58                                                           |
| REC 8-1                                                                  | Eastern Elevation - Block 2 - 1st Floor              | 50.23                                                          | 42.63                                                           |
| REC 8-2                                                                  | Eastern Elevation - Block 2 - 2nd Floor              | 50.83                                                          | 43.23                                                           |
| REC 9-1                                                                  | Southern Elevation - Block 2 - 1st Floor             | 57.78                                                          | 50.18                                                           |
| REC 9-2                                                                  | Southern Elevation - Block 2 - 2nd Floor             | 58.21                                                          | 50.61                                                           |

**Table 6 continued – Proposed Noise Levels - Indoor and Outdoor Living Areas**

| <b>Reception Point</b> | <b>Description</b>                       | <b>Daytime at Facade<br/>L<sub>eq</sub>(16)<br/>(dBA)</b> | <b>Nighttime at Facade<br/>L<sub>eq</sub>(8)<br/>(dBA)</b> |
|------------------------|------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|
| REC 10-1               | Western Elevation - Block 2 - 1st Floor  | 50.39                                                     | 42.79                                                      |
| REC 10-2               | Western Elevation - Block 2 - 2nd Floor  | 51.00                                                     | 43.40                                                      |
| REC 11-1               | Eastern Elevation - Block 4 - 1st Floor  | 42.94                                                     | 35.34                                                      |
| REC 11-2               | Eastern Elevation - Block 4 - 2nd Floor  | 43.67                                                     | 36.07                                                      |
| REC 12-1               | Southern Elevation - Block 4 - 1st Floor | 48.61                                                     | 41.02                                                      |
| REC 12-2               | Southern Elevation - Block 4 - 2nd Floor | 49.33                                                     | 41.73                                                      |
| REC 13-1               | Western Elevation - Block 4 - 1st Floor  | 44.14                                                     | 36.54                                                      |
| REC 13-2               | Western Elevation - Block 4 - 2nd Floor  | 44.87                                                     | 37.27                                                      |
| REC 14-1               | Eastern Elevation - Block 5 - 1st Floor  | 48.57                                                     | 40.98                                                      |
| REC 14-2               | Eastern Elevation - Block 5 - 2nd Floor  | 49.21                                                     | 41.61                                                      |
| REC 15-1               | Southern Elevation - Block 5 - 1st Floor | 53.23                                                     | 45.63                                                      |
| REC 15-2               | Southern Elevation - Block 5 - 2nd Floor | 53.84                                                     | 46.24                                                      |
| REC 16-1               | Western Elevation - Block 5 - 1st Floor  | 49.09                                                     | 41.49                                                      |
| REC 16-2               | Western Elevation - Block 5 - 2nd Floor  | 49.72                                                     | 42.12                                                      |
| REC 17-1               | Eastern Elevation - Block 6 - 1st Floor  | 53.74                                                     | 46.14                                                      |
| REC 17-2               | Eastern Elevation - Block 6 - 2nd Floor  | 54.19                                                     | 46.59                                                      |
| REC 18-1               | Southern Elevation - Block 6 - 1st Floor | 58.99                                                     | 51.39                                                      |
| REC 18-2               | Southern Elevation - Block 6 - 2nd Floor | 59.37                                                     | 51.77                                                      |
| REC 19-1               | Western Elevation - Block 6 - 1st Floor  | 54.24                                                     | 46.64                                                      |
| REC 19-2               | Western Elevation - Block 6 - 2nd Floor  | 54.69                                                     | 47.09                                                      |

## 6.0 Discussion and Recommendations

### 6.1 Outdoor Living Areas

One outdoor living area was analysed as part of the current study, denoted as REC4. The results of the STAMSON modelling indicate that the  $L_{eq(16)}$  from all sources was 56.13 dBA. The noise level for the outdoor living area is above the 55 dBA limit that was specified in Table 1; therefore, additional noise attenuation features will be required.

Further analysis was carried out for the outdoor living areas as they exceeded the 55 dBA threshold. As per Table 7, denoted below, 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 considered and is denoted on Drawing PG7881- 3D.

| Table 7 – Outdoor Living Space Noise Control Measures for Surface Transportation Noise (Table 2.3a from the ENCG of the City of Ottawa)                                         |                                                                           |                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Primary Mitigation Measure to achieve required dBA – In order of Preference                                                                                                     | Secondary Mitigation Measures                                             |                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                 | Landscape plantings and/or non-acoustic fence to obscure the noise source | Warning Clauses *                                                                                                                                                                                                                                                                         |
| 1. Distance setback with soft ground;                                                                                                                                           | Recommended                                                               |                                                                                                                                                                                                                                                                                           |
| 1. Insertion of noise-insensitive land uses between the source and the sensitive receptor                                                                                       |                                                                           |                                                                                                                                                                                                                                                                                           |
| 2. Orientation of Buildings to provide sheltered zones in rear yards                                                                                                            | Required                                                                  | Warning Clauses are necessary and to include <ul style="list-style-type: none"><li>- Reference to specific noise mitigation measures in the development</li><li>- Whether noise is expected to increase in the future and</li><li>- That there is a need to maintain mitigation</li></ul> |
| 3. Shared outdoor amenity areas                                                                                                                                                 |                                                                           |                                                                                                                                                                                                                                                                                           |
| 4. Earth Berms (sound barriers)                                                                                                                                                 |                                                                           |                                                                                                                                                                                                                                                                                           |
| 5. Acoustic barriers (acoustic barriers)                                                                                                                                        |                                                                           |                                                                                                                                                                                                                                                                                           |
| * A warning clause is necessary whenever noise is expected to meet or exceed 55 dBA Leq 16 in the Outdoor Living Area or Pane of Window of any living space prior to mitigation |                                                                           |                                                                                                                                                                                                                                                                                           |

With the implementation of the building orientations, the noise levels for REC4 were reduced to below 55 dBA, as with the proposed structure and existing structures it is an enclosed space and are therefore considered acceptable as per the ENCG.

## 6.2 Indoor Living Areas and Ventilation

The results of the STAMSON modelling indicate that the  $L_{eq(16)}$  ranges between 58.57 dBA and 64.86 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 8 below.

| <b>Table 8 - Summary of Warning Clauses – Indoor Living Areas</b> |                  |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------|------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Building</b>                                                   | <b>Elevation</b> | <b>Applicable Warning Clause</b> | <b>Additional Considerations</b>                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Proposed Apartment Building</b>                                | Northern         | 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."                                                                                                                                         |
| <b>Proposed Apartment Building</b>                                | Eastern, Western | 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." |
| <b>Block 2</b>                                                    | Southern         | 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." |
| <b>Block 6</b>                                                    | Southern         | 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." |

## 7.0 Summary of Findings

The subject site is located at 114 Richmond Road in Ottawa, Ontario. It is understood that the proposed residential development will consist of one 4-storey apartment building and six stacked townhouse blocks. The associated analysis identified two surface transportation noise sources: Richmond Road and Byron Avenue.

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

Various receptors for the analysis exceeded the 55 dBA and 65 dBA thresholds as specified by the ENCG. Therefore, various elevations will require Warning Clause Type C and Warning Clause Type D.

The warning clauses for the proposed apartment building will consist of Warning Clause Type D for the northern elevation and Warning Clause Type C for the eastern and western elevations.

The warning clauses for Block 2 and Block 6 of the stacked townhouse blocks will require Warning Clause Type C for the southern elevation.

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

**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."

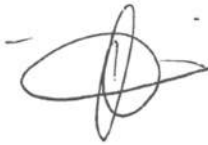
One outdoor living areas was analyzed as part of the current study. The results of the STAMSON modelling indicate that the  $L_{eq(16)}$  from all sources was 56.13 dBA. Further analysis was performed as they exceeded the 55 dBA threshold. As per the recommendations provided in Table 2.3a of the ENCG, the building orientations were considered. With the implementation of the prescribed measures as per the ENCG, the sound levels for the outdoor living area were reduced to within acceptable limits. Reference should be made to Drawings for the noise-reducing measures.

## 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 Concorde Properties, 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.**



Otilia McLaughlin, B.Eng.



Scott S. Dennis, P.Eng.

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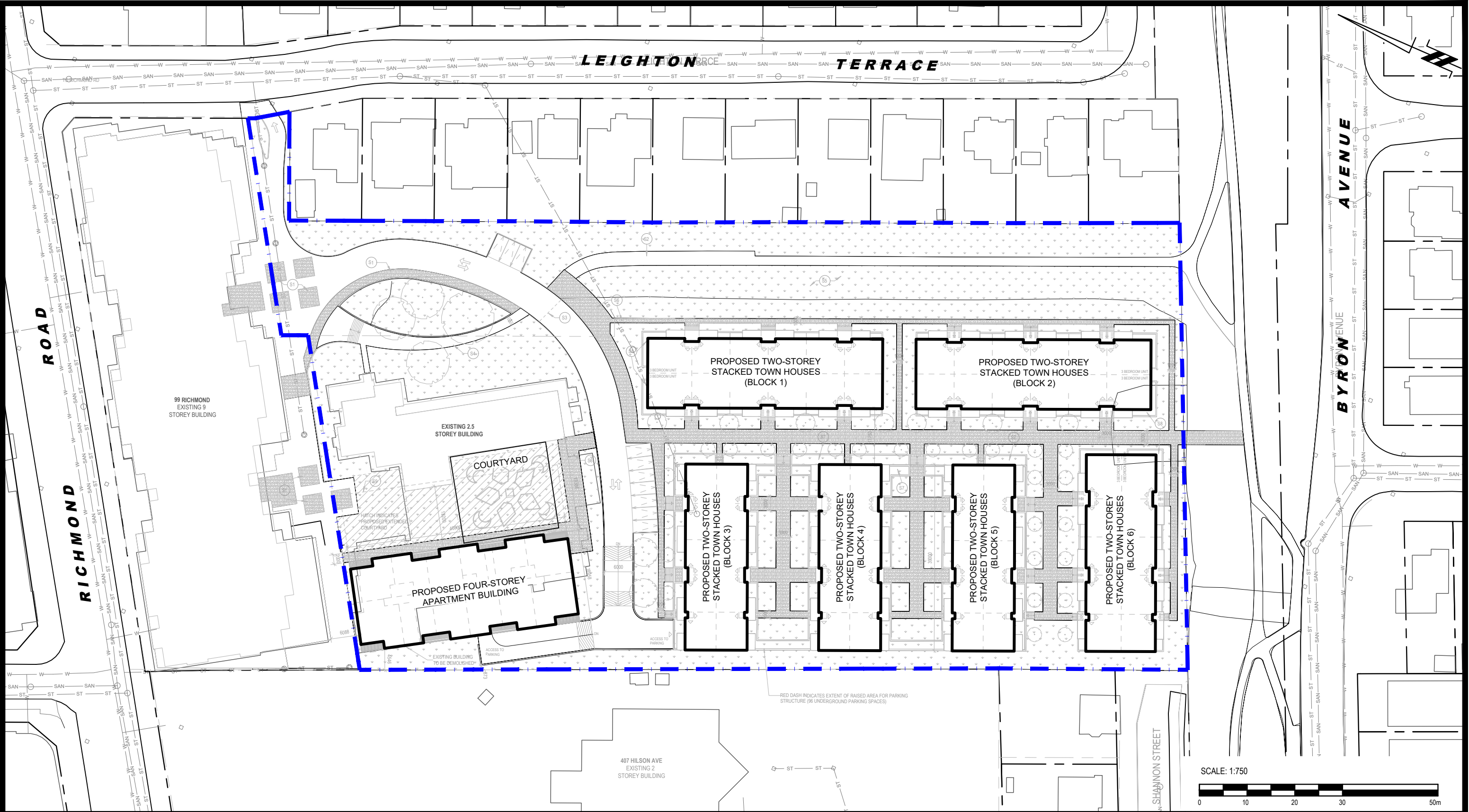
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# APPENDIX 1

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| DRAWING PG7881-8-SITE GEOMETRY                         |
| DRAWING PG7881-8A-SITE GEOMETRY (REC17-1 AND REC17-2)  |
| DRAWING PG7881-8B-SITE GEOMETRY (REC18-1 AND REC18-2)  |
| DRAWING PG7881-8C-SITE GEOMETRY (REC19-1 AND REC19-2)  |

| Table 9 - Summary of Reception Points and Geometry |                                                       |                     |                       |               |          |       |             |                |         |                |              |              |          |        |             |                |         |                |              |
|----------------------------------------------------|-------------------------------------------------------|---------------------|-----------------------|---------------|----------|-------|-------------|----------------|---------|----------------|--------------|--------------|----------|--------|-------------|----------------|---------|----------------|--------------|
| Proposed Residential Development                   |                                                       |                     |                       |               |          |       |             |                |         |                |              |              |          |        |             |                |         |                |              |
| Point of Reception                                 | Location                                              | Total Leq Day (dBA) | Total Leq Night (dBA) | Richmond Road |          |       |             |                |         |                |              | Byron Avenue |          |        |             |                |         |                |              |
|                                                    |                                                       |                     |                       | Horizontal    | Vertical | Total | Local Angle | Number of      | Density | Barrier Height | Barrier      | Horizontal   | Vertical | Total  | Local Angle | Number of      | Density | Barrier Height | Barrier      |
|                                                    |                                                       |                     |                       | (m)           | (m)      | (m)   | (degree)    | Rows of Houses | (%)     | (m)            | Distance (m) | (m)          | (m)      | (m)    | (degree)    | Rows of Houses | (%)     | (m)            | Distance (m) |
| REC 1-1                                            | Eastern Elevation - Apartment Building - 1st Floor    | 54.24               | 46.64                 | 72            | 1.5      | 72.02 | 0, 50       | n/a            | n/a     | n/a            | n/a          | n/a          | n/a      | n/a    | n/a         | n/a            | n/a     | n/a            | n/a          |
| REC 1-4                                            | Eastern Elevation - Apartment Building - 4th Floor    | 56.23               | 48.63                 | 72            | 10.5     | 72.76 | 0, 50       | n/a            | n/a     | n/a            | n/a          | n/a          | n/a      | n/a    | n/a         | n/a            | n/a     | n/a            | n/a          |
| REC 2-1                                            | Northern Elevation - Apartment Building - 1st Floor   | 60.8                | 53.21                 | 49            | 1.5      | 49.02 | -65, 62     | n/a            | n/a     | n/a            | n/a          | n/a          | n/a      | n/a    | n/a         | n/a            | n/a     | n/a            | n/a          |
| REC 2-4                                            | Northern Elevation - Apartment Building - 4th Floor   | 62.44               | 54.84                 | 49            | 10.5     | 50.11 | -65, 62     | n/a            | n/a     | n/a            | n/a          | n/a          | n/a      | n/a    | n/a         | n/a            | n/a     | n/a            | n/a          |
| REC 3-1                                            | Western Elevation - Apartment Building - 1st Floor    | 54.31               | 46.71                 | 72            | 1.5      | 72.02 | -51, 0      | n/a            | n/a     | n/a            | n/a          | n/a          | n/a      | n/a    | n/a         | n/a            | n/a     | n/a            | n/a          |
| REC 3-4                                            | Western Elevation - Apartment Building - 4th Floor    | 56.30               | 48.71                 | 72            | 10.5     | 72.76 | -51, 0      | n/a            | n/a     | n/a            | n/a          | n/a          | n/a      | n/a    | n/a         | n/a            | n/a     | n/a            | n/a          |
| REC 4                                              | Outdoor Living Area - Court Yard - Apartment Building | 56.13               | -                     | 83            | 1.5      | 83.01 | -56, 42     | n/a            | n/a     | n/a            | n/a          | n/a          | n/a      | n/a    | n/a         | n/a            | n/a     | n/a            | n/a          |
| REC 5-1                                            | Eastern Elevation - Block 1 - 1st Floor               | 41.4                | 33.81                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 112          | 1.5      | 112.01 | -19, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 5-2                                            | Eastern Elevation - Block 1 - 2nd Floor               | 42.2                | 34.6                  | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 112          | 4.5      | 112.09 | -19, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 6-1                                            | Southern Elevation - Block 1 - 1st Floor              | 47.74               | 40.15                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 91           | 1.5      | 91.01  | -27, 32     | n/a            | n/a     | n/a            | n/a          |
| REC 6-2                                            | Southern Elevation - Block 1 - 2nd Floor              | 48.47               | 40.87                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 91           | 4.5      | 91.11  | -27, 32     | n/a            | n/a     | n/a            | n/a          |
| REC 7-1                                            | Western Elevation - Block 1 - 1st Floor               | 42.39               | 34.79                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 112          | 1.5      | 112.01 | 0, 24       | n/a            | n/a     | n/a            | n/a          |
| REC 7-2                                            | Western Elevation - Block 1 - 2nd Floor               | 43.18               | 35.58                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 112          | 4.5      | 112.09 | 0, 24       | n/a            | n/a     | n/a            | n/a          |
| REC 8-1                                            | Eastern Elevation - Block 2 - 1st Floor               | 50.23               | 42.63                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 60           | 1.5      | 60.02  | -57, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 8-2                                            | Eastern Elevation - Block 2 - 2nd Floor               | 50.83               | 43.23                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 60           | 4.5      | 60.17  | -57, 0      | n/a            | n/a     | n/a            | n/a          |

| Table 9 - Summary of Reception Points and Geometry |                                          |                     |                       |               |          |       |             |                |         |                |              |              |          |       |             |                |         |                |              |
|----------------------------------------------------|------------------------------------------|---------------------|-----------------------|---------------|----------|-------|-------------|----------------|---------|----------------|--------------|--------------|----------|-------|-------------|----------------|---------|----------------|--------------|
| Proposed Residential Development                   |                                          |                     |                       |               |          |       |             |                |         |                |              |              |          |       |             |                |         |                |              |
| Point of Reception                                 | Location                                 | Total Leq Day (dBA) | Total Leq Night (dBA) | Richmond Road |          |       |             |                |         |                |              | Byron Avenue |          |       |             |                |         |                |              |
|                                                    |                                          |                     |                       | Horizontal    | Vertical | Total | Local Angle | Number of      | Density | Barrier Height | Barrier      | Horizontal   | Vertical | Total | Local Angle | Number of      | Density | Barrier Height | Barrier      |
|                                                    |                                          |                     |                       | (m)           | (m)      | (m)   | (degree)    | Rows of Houses | (%)     | (m)            | Distance (m) | (m)          | (m)      | (m)   | (degree)    | Rows of Houses | (%)     | (m)            | Distance (m) |
| REC 9-1                                            | Southern Elevation - Block 2 - 1st Floor | 57.78               | 50.18                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 35           | 1.5      | 35.03 | -70, 73     | n/a            | n/a     | n/a            | n/a          |
| REC 9-2                                            | Southern Elevation - Block 2 - 2nd Floor | 58.21               | 50.61                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | 1.5            | 16           | 35           | 4.5      | 35.29 | -70, 73     | n/a            | n/a     | n/a            | n/a          |
| REC 10-1                                           | Western Elevation - Block 2 - 1st Floor  | 50.39               | 42.79                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 60           | 1.5      | 60.02 | 0, 60       | n/a            | n/a     | n/a            | n/a          |
| REC 10-2                                           | Western Elevation - Block 2 - 2nd Floor  | 51                  | 43.4                  | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 60           | 4.5      | 60.17 | 0, 60       | n/a            | n/a     | n/a            | n/a          |
| REC 11-1                                           | Eastern Elevation - Block 4 - 1st Floor  | 42.94               | 35.34                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 96           | 1.5      | 96.01 | -21, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 11-2                                           | Eastern Elevation - Block 4 - 2nd Floor  | 43.67               | 36.07                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 96           | 4.5      | 96.11 | -21, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 12-1                                           | Southern Elevation - Block 4 - 1st Floor | 48.61               | 41.02                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 88           | 1.5      | 88.01 | -31, 38     | n/a            | n/a     | n/a            | n/a          |
| REC 12-2                                           | Southern Elevation - Block 4 - 2nd Floor | 49.33               | 41.73                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 88           | 4.5      | 88.11 | -31, 38     | n/a            | n/a     | n/a            | n/a          |
| REC 13-1                                           | Western Elevation - Block 4 - 1st Floor  | 44.14               | 36.54                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 94           | 1.5      | 94.01 | 0, 27       | n/a            | n/a     | n/a            | n/a          |
| REC 13-2                                           | Western Elevation - Block 4 - 2nd Floor  | 44.87               | 37.27                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 94           | 4.5      | 94.11 | 0, 27       | n/a            | n/a     | n/a            | n/a          |
| REC 14-1                                           | Eastern Elevation - Block 5 - 1st Floor  | 48.57               | 40.98                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 68           | 1.5      | 68.02 | -46, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 14-2                                           | Eastern Elevation - Block 5 - 2nd Floor  | 49.21               | 41.61                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 68           | 4.5      | 68.15 | -46, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 15-1                                           | Southern Elevation - Block 5 - 1st Floor | 53.23               | 45.63                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 60           | 1.5      | 60.02 | -55, 59     | n/a            | n/a     | n/a            | n/a          |
| REC 15-2                                           | Southern Elevation - Block 5 - 2nd Floor | 53.84               | 46.24                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 60           | 4.5      | 60.17 | -55, 59     | n/a            | n/a     | n/a            | n/a          |
| REC 16-1                                           | Western Elevation - Block 5 - 1st Floor  | 49.09               | 41.49                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 66           | 1.5      | 66.02 | 0, 50       | n/a            | n/a     | n/a            | n/a          |
| REC 16-2                                           | Western Elevation - Block 5 - 2nd Floor  | 49.72               | 42.12                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 66           | 4.5      | 66.15 | 0, 50       | n/a            | n/a     | n/a            | n/a          |
| REC 17-1                                           | Eastern Elevation - Block 6 - 1st Floor  | 53.74               | 46.14                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 39           | 1.5      | 39.03 | -65, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 17-2                                           | Eastern Elevation - Block 6 - 2nd Floor  | 54.19               | 46.59                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 39           | 4.5      | 39.26 | -65, 0      | n/a            | n/a     | n/a            | n/a          |
| REC 18-1                                           | Southern Elevation - Block 6 - 1st Floor | 58.99               | 51.39                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 30           | 1.5      | 30.04 | -73, 76     | n/a            | n/a     | n/a            | n/a          |
| REC 18-2                                           | Southern Elevation - Block 6 - 2nd Floor | 59.37               | 51.77                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 30           | 4.5      | 30.34 | -73, 76     | n/a            | n/a     | n/a            | n/a          |
| REC 19-1                                           | Western Elevation - Block 6 - 1st Floor  | 54.24               | 46.64                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 37           | 1.5      | 37.03 | 0, 68       | n/a            | n/a     | n/a            | n/a          |
| REC 19-2                                           | Western Elevation - Block 6 - 2nd Floor  | 54.69               | 47.09                 | n/a           | n/a      | n/a   | n/a         | n/a            | n/a     | n/a            | n/a          | 37           | 4.5      | 37.27 | 0, 68       | n/a            | n/a     | n/a            | n/a          |





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

| NO. | REVISIONS | DATE | INITIAL |
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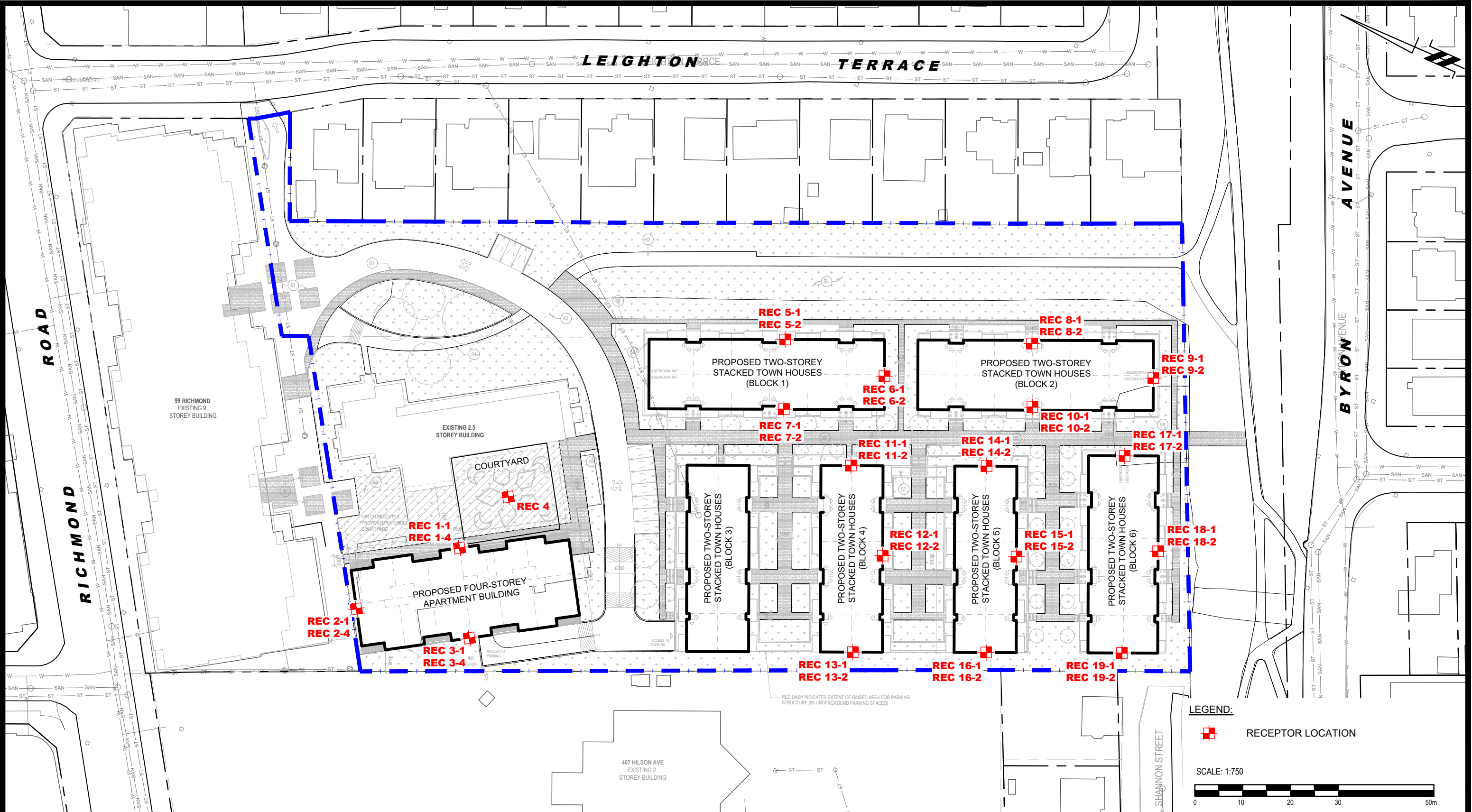
OTTAWA,  
Title:

CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD  
ONTARIO

SITE PLAN

Scale: 1:750  
Drawn by: YA  
Checked by: OM  
Approved by: SB

Date: 01/2026  
Report No.: PG7881-1  
Dwg. No.: PG7881-1  
Revision No.:





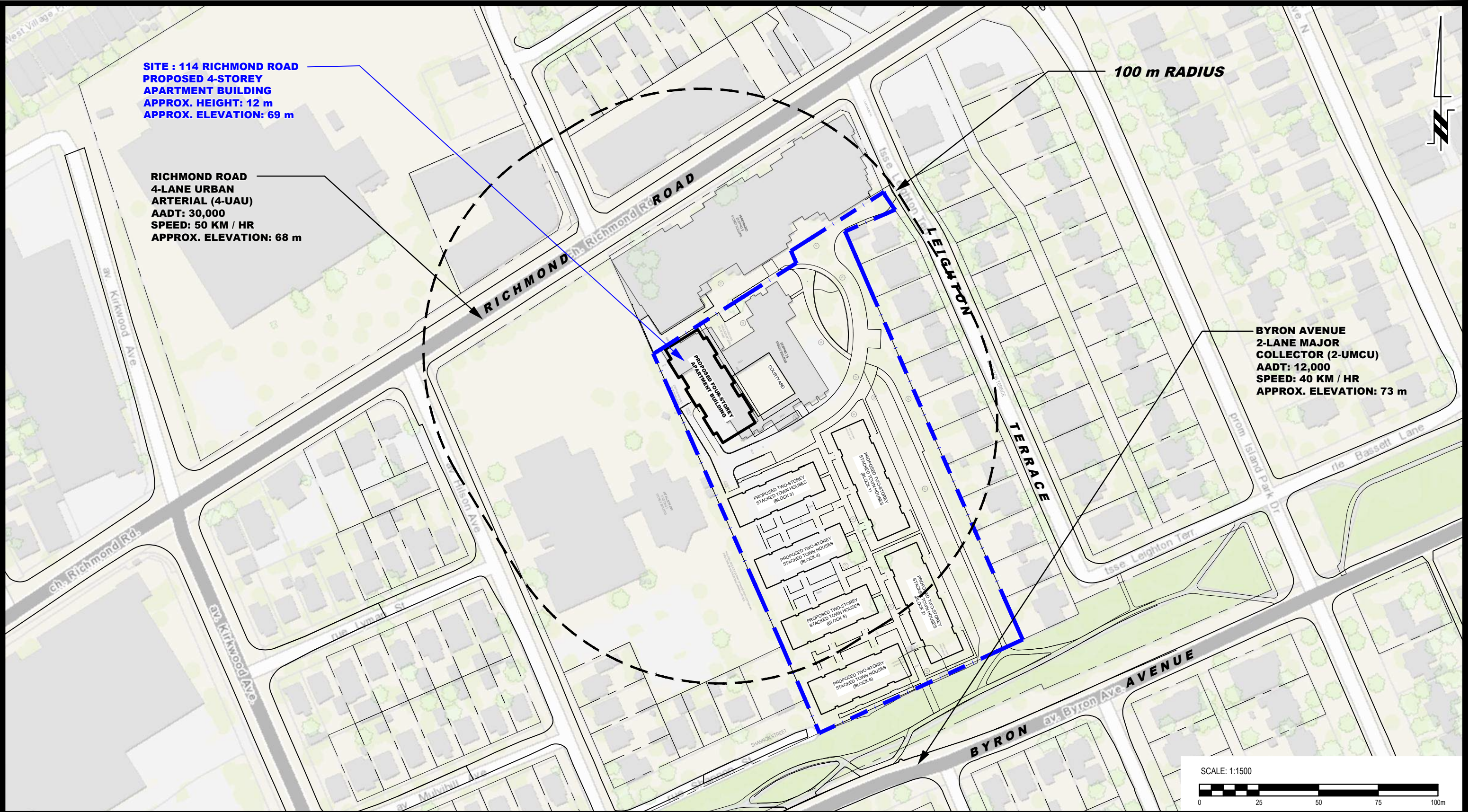
**PATERSON  
GROUP**  
9 AURIGA DRIVE  
OTTAWA, ON  
K2E 7T9  
TEL: (613) 226-7381

| NO. | REVISIONS | DATE | INITIAL |
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA,  
Title:RECEPTOR LOCATION PLANONTARIO

|              |       |               |          |
|--------------|-------|---------------|----------|
| Scale:       | 1:750 | Date:         | 01/2026  |
| Drawn by:    | YA    | Report No.:   | PG7881-1 |
| Checked by:  | OM    | Dwg. No.:     | PG7881-2 |
| Approved by: | SB    | Revision No.: |          |



**SITE : 114 RICHMOND ROAD**  
**PROPOSED 4-STOREY**  
**APARTMENT BUILDING**  
**APPROX. HEIGHT: 12 m**  
**APPROX. ELEVATION: 69 m**

**RICHMOND ROAD**  
**4-LANE URBAN**  
**ARTERIAL (4-UAU)**  
**AADT: 30,000**  
**SPEED: 50 KM / HR**  
**APPROX. ELEVATION: 68 m**

**100 m RADIUS**

**BYRON AVENUE**  
**2-LANE MAJOR**  
**COLLECTOR (2-UMCU)**  
**AADT: 12,000**  
**SPEED: 40 KM / HR**  
**APPROX. ELEVATION: 73 m**

SCALE: 1:1500



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

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| NO. | REVISIONS | DATE | INITIAL |

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| CONCORDE PROPERTIES                       |         |
| NOISE ATTENUATION STUDY                   |         |
| PROPOSED RESIDENTIAL DEVELOPMENT          |         |
| 114 RICHMOND ROAD                         |         |
| OTTAWA,                                   | ONTARIO |
| Title: SITE GEOMETRY - APARTMENT BUILDING |         |

|              |        |               |          |
|--------------|--------|---------------|----------|
| Scale:       | 1:1500 | Date:         | 01/2026  |
| Drawn by:    | YA     | Report No.:   | PG7881-1 |
| Checked by:  | OM     | Dwg. No.:     | PG7881-3 |
| Approved by: | SB     | Revision No.: |          |





**SITE : 114 RICHMOND ROAD**  
**PROPOSED 4-STOREY**  
**APARTMENT BUILDING**  
**APPROX. HEIGHT: 12 m**  
**APPROX. ELEVATION: 69 m**

**RICHMOND ROAD**  
**4-LANE URBAN**  
**ARTERIAL (4-UAU)**  
**AADT: 30,000**  
**SPEED: 50 KM / HR**  
**APPROX. ELEVATION: 68 m**

**100 m RADIUS**

**BYRON AVENUE**  
**2-LANE MAJOR**  
**COLLECTOR (2-UMCU)**  
**AADT: 12,000**  
**SPEED: 40 KM / HR**  
**APPROX. ELEVATION: 73 m**

**REC 2-1**  
**REC 2-4**

**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE

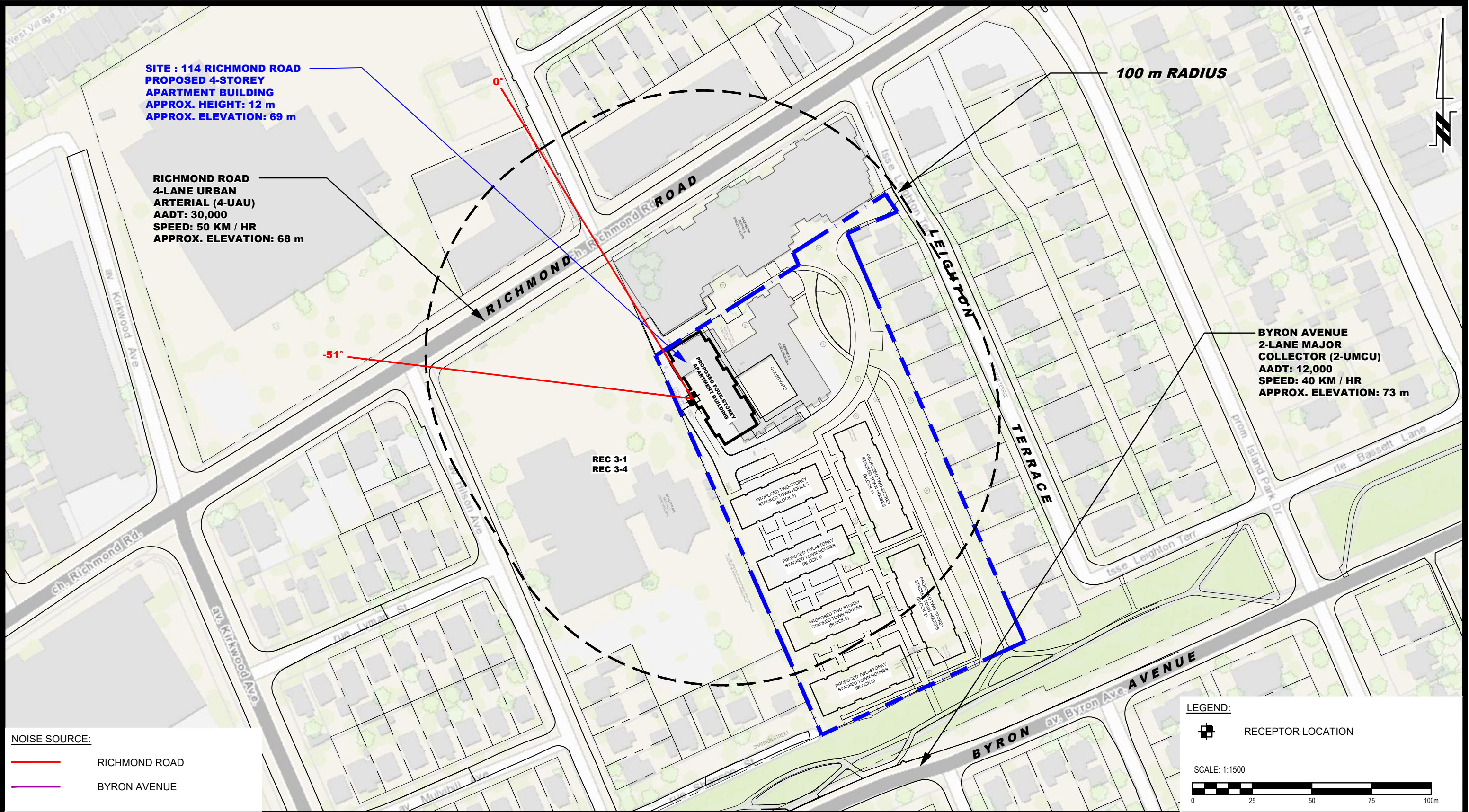
**LEGEND:**

 RECEPTOR LOCATION

SCALE: 1:1500



|                                                                                                                                                                                                                     |           |      |         |  |                                                                                                         |                    |                                                   |                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|---------|--|---------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------|-------------------------------|
| <div></div> <div><div>PATERSON<br/>GROUP</div><div>9 AURIGA DRIVE<br/>OTTAWA, ON<br/>K2E 7T9<br/>TEL: (613) 226-7381</div></div> |           |      |         |  | CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD | OTTAWA,<br>ONTARIO | Scale: 1:1500                                     | Date: 01/2026                 |
|                                                                                                                                                                                                                     |           |      |         |  |                                                                                                         |                    | Drawn by: YA                                      | Report No.: PG7881-1          |
|                                                                                                                                                                                                                     |           |      |         |  |                                                                                                         |                    | Checked by: OM                                    | Dwg. No.:<br><b>PG7881-3B</b> |
|                                                                                                                                                                                                                     |           |      |         |  |                                                                                                         |                    | Approved by: SB                                   |                               |
|                                                                                                                                                                                                                     |           |      |         |  |                                                                                                         |                    | Title: <b>SITE GEOMETRY - REC 2-1 AND REC 2-4</b> |                               |
|                                                                                                                                                                                                                     |           |      |         |  |                                                                                                         |                    |                                                   |                               |
| NO.                                                                                                                                                                                                                 | REVISIONS | DATE | INITIAL |  |                                                                                                         |                    |                                                   |                               |



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE



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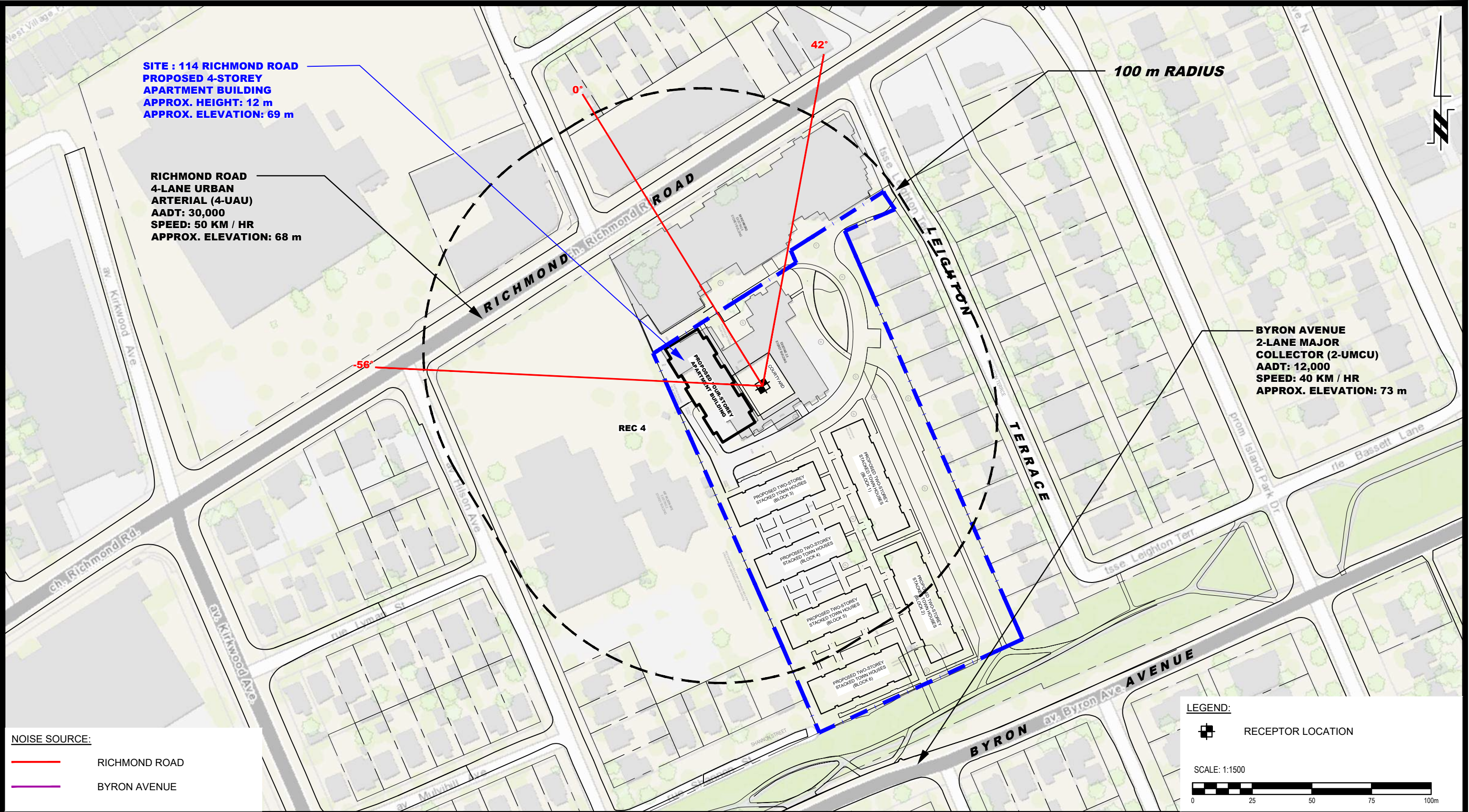
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

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

ONTARIO

|              |        |               |                  |
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| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-3C</b> |
| Approved by: | SB     | Revision No.: |                  |



**SITE : 114 RICHMOND ROAD**  
**PROPOSED 4-STOREY**  
**APARTMENT BUILDING**  
**APPROX. HEIGHT: 12 m**  
**APPROX. ELEVATION: 69 m**

**RICHMOND ROAD**  
**4-LANE URBAN**  
**ARTERIAL (4-UAU)**  
**AADT: 30,000**  
**SPEED: 50 KM / HR**  
**APPROX. ELEVATION: 68 m**

**100 m RADIUS**

**BYRON AVENUE**  
**2-LANE MAJOR**  
**COLLECTOR (2-UMCU)**  
**AADT: 12,000**  
**SPEED: 40 KM / HR**  
**APPROX. ELEVATION: 73 m**

**NOISE SOURCE:**

- RICHMOND ROAD
- BYRON AVENUE

**LEGEND:**

 RECEPTOR LOCATION

SCALE: 1:1500





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

| NO. | REVISIONS | DATE | INITIAL |
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 4 (COURTYARD)**

|              |        |               |                  |
|--------------|--------|---------------|------------------|
| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-3D</b> |
| Approved by: | SB     | Revision No.: |                  |



**SITE : 114 RICHMOND ROAD**  
**PROPOSED 4-STOREY**  
**APARTMENT BUILDING**  
**APPROX. HEIGHT: 12 m**  
**APPROX. ELEVATION: 69 m**

**RICHMOND ROAD**  
**4-LANE URBAN**  
**ARTERIAL (4-UAU)**  
**AADT: 30,000**  
**SPEED: 50 KM / HR**  
**APPROX. ELEVATION: 68 m**

**100 m RADIUS**

**BYRON AVENUE**  
**2-LANE MAJOR**  
**COLLECTOR (2-UMCU)**  
**AADT: 12,000**  
**SPEED: 40 KM / HR**  
**APPROX. ELEVATION: 73 m**

**REC 4**

**NOISE SOURCE:**

- RICHMOND ROAD
- BYRON AVENUE

**LEGEND:**

 **RECEPTOR LOCATION**

**SCALE: 1:1500**





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

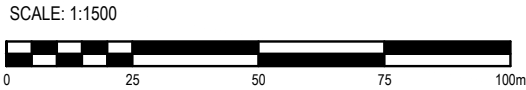
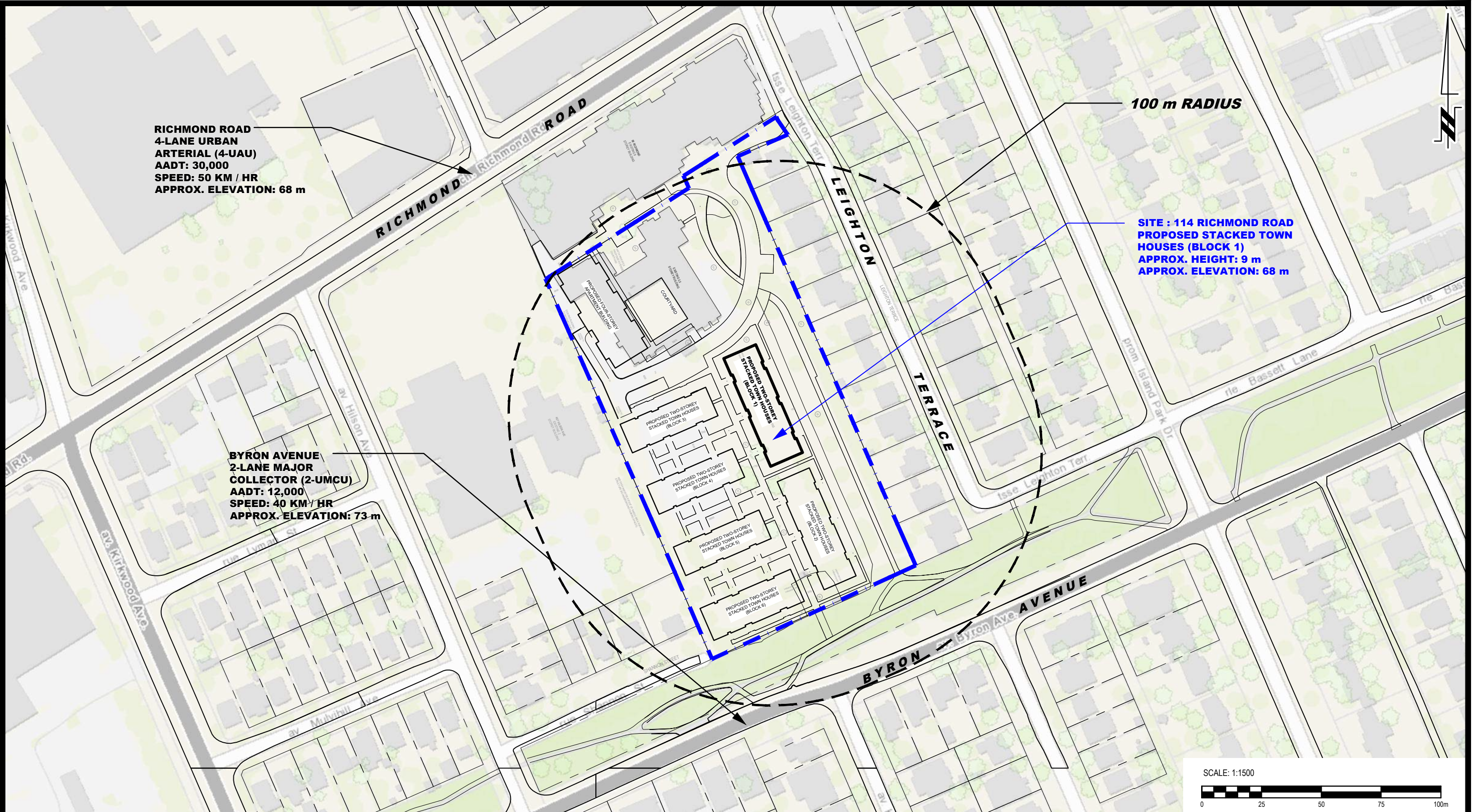
| NO. | REVISIONS | DATE | INITIAL |
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**CONCORDE PROPERTIES**  
**NOISE ATTENUATION STUDY**  
**PROPOSED RESIDENTIAL DEVELOPMENT**  
**114 RICHMOND ROAD**

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 4- REV.01 (COURTYARD)**

|              |        |               |                  |
|--------------|--------|---------------|------------------|
| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-3D</b> |
| Approved by: | SB     | Revision No.: |                  |



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

| NO. | REVISIONS | DATE | INITIAL |
|-----|-----------|------|---------|
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OTTAWA,  
Title:

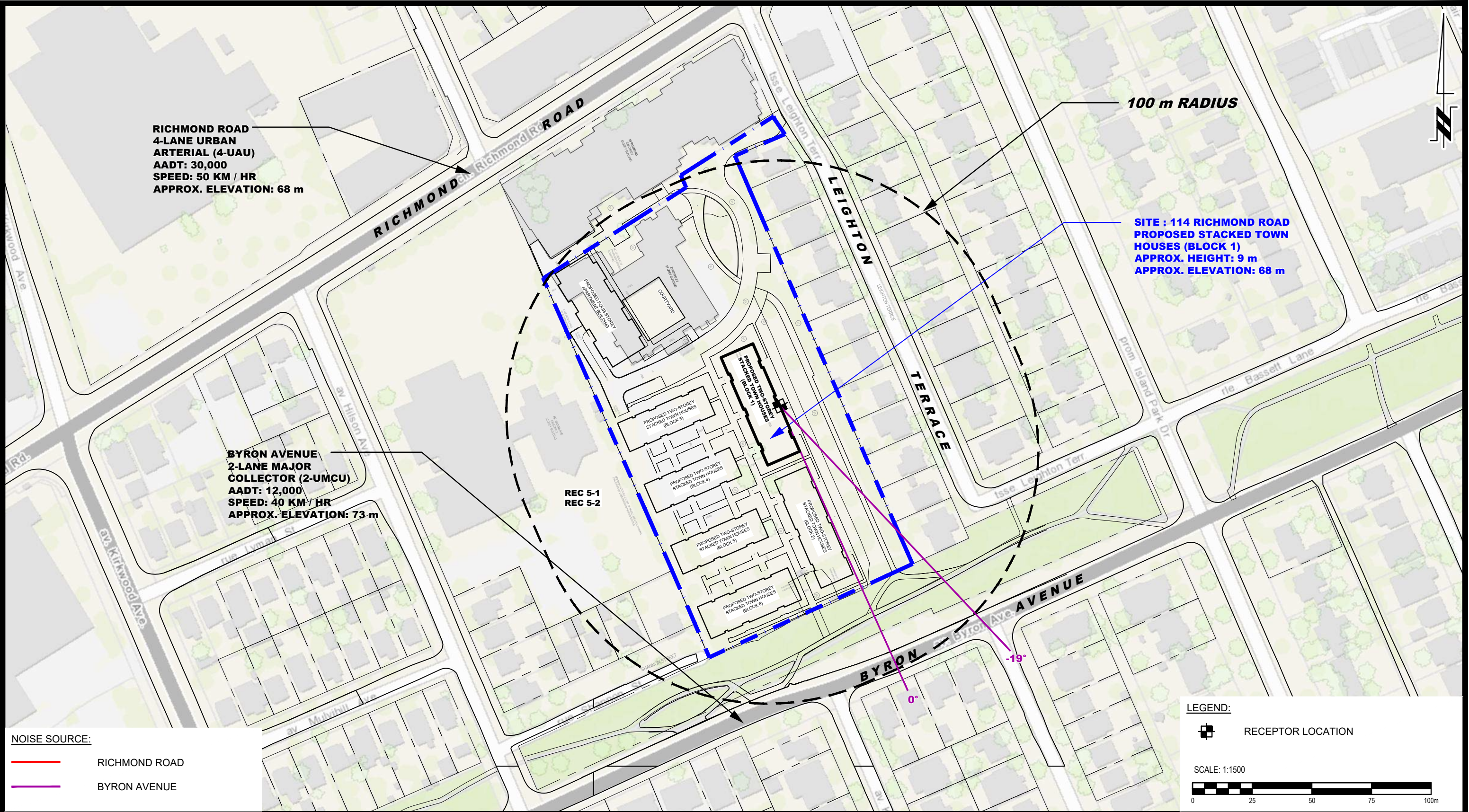
CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

ONTARIO

SITE GEOMETRY - BLOCK 1

Scale: 1:1500  
Drawn by: YA  
Checked by: OM  
Approved by: SB

Date: 01/2026  
Report No.: PG7881-1  
Dwg. No.: PG7881-4  
Revision No.:



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE



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

| NO. | REVISIONS | DATE | INITIAL |
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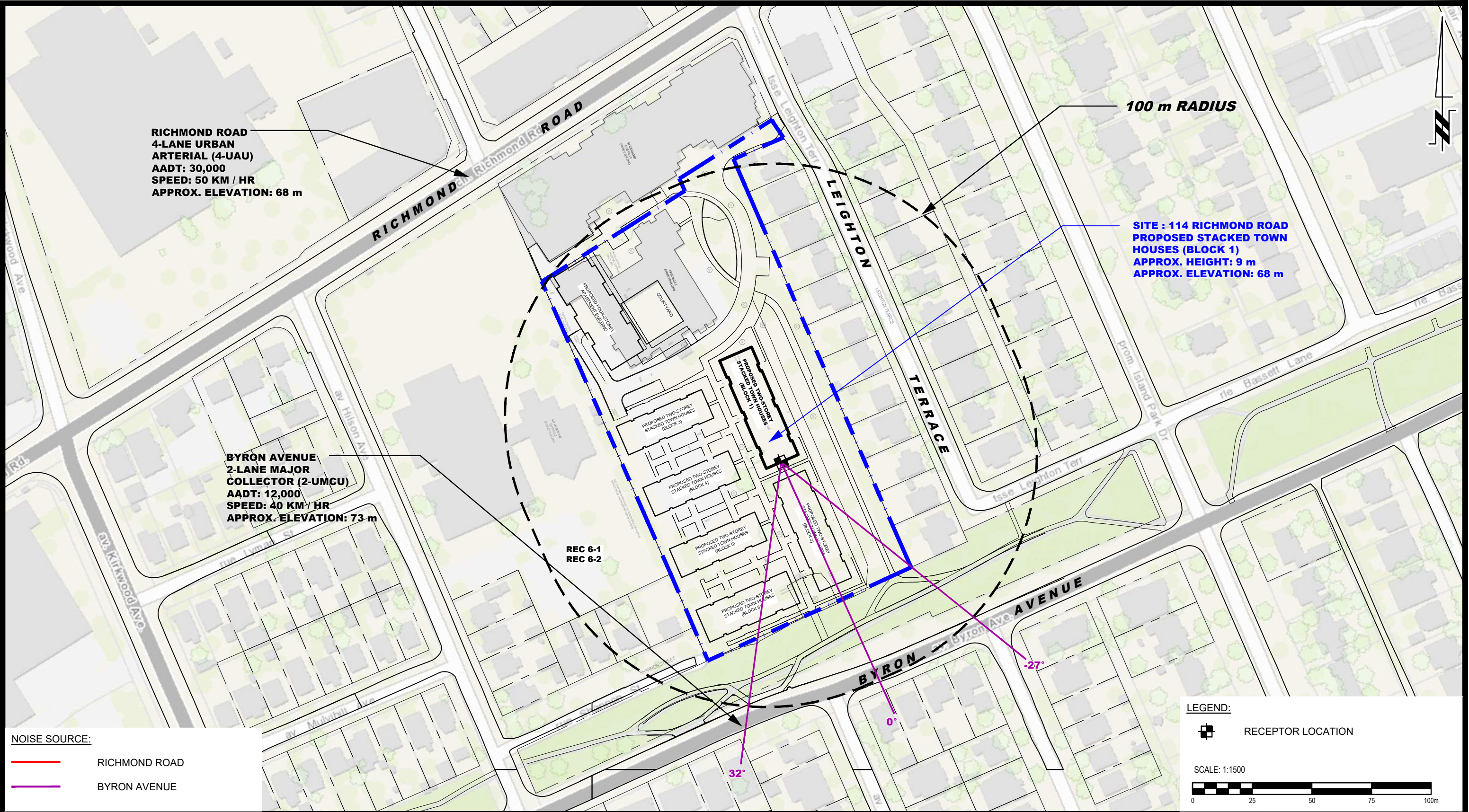
CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA,  
Title:

ONTARIO

**SITE GEOMETRY - REC 5-1 AND REC 5-2**

|              |        |               |                  |
|--------------|--------|---------------|------------------|
| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-4A</b> |
| Approved by: | SB     | Revision No.: |                  |



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE

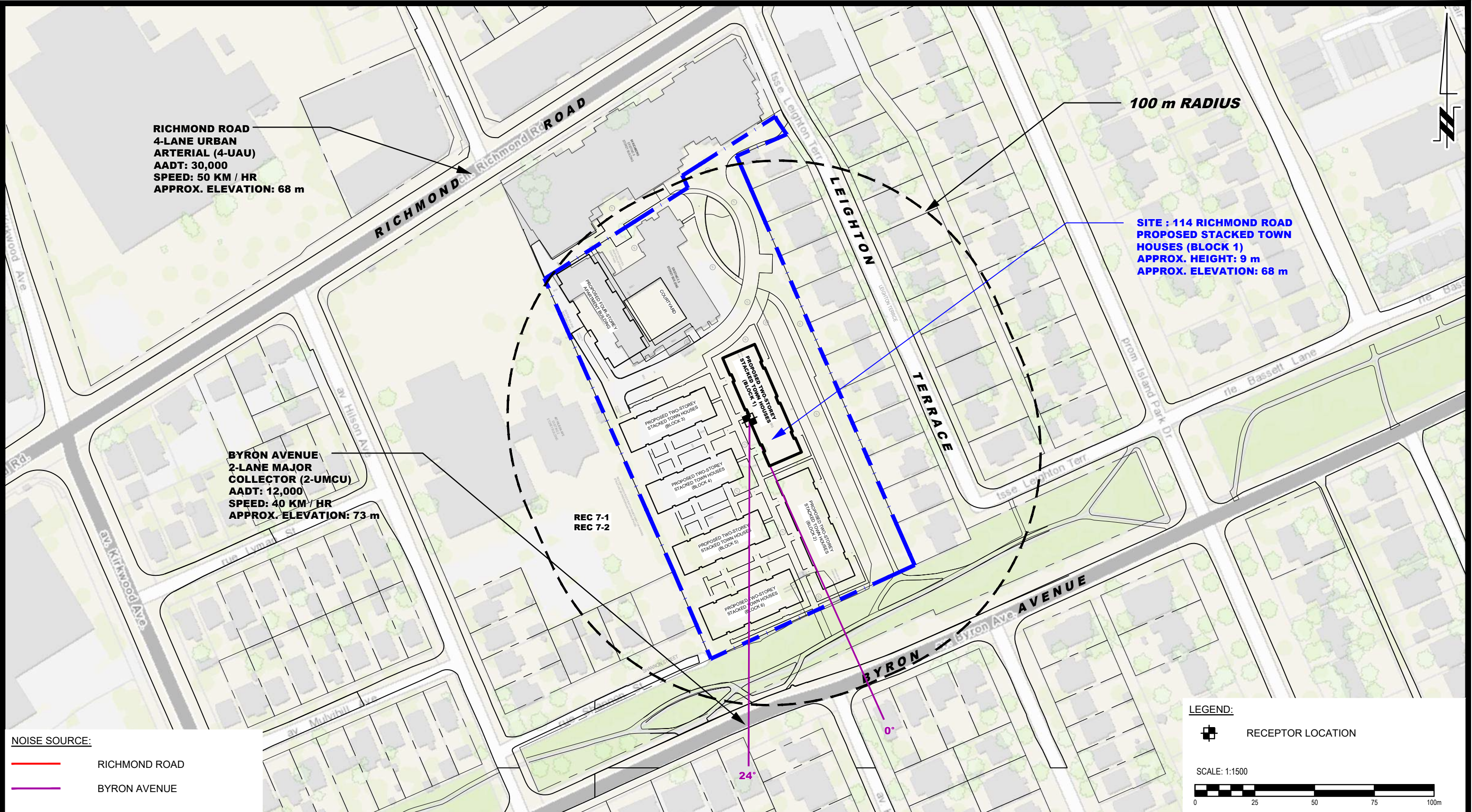
**LEGEND:**

■ RECEPTOR LOCATION

SCALE: 1:1500

0 25 50 75 100m

|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                   |                   |                        |                  |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|------|---------|---------------------------------------------------------------------------------------------------------|-------------------|-------------------|------------------------|------------------|-------------------------|
| <div><div><div>PATERSON<br/>GROUP</div><div>9 AURIGA DRIVE<br/>OTTAWA, ON<br/>K2E 7T9<br/>TEL: (613) 226-7381</div></div></div> |     |           |      |         | CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD | OTTAWA,<br>Title: | ONTARIO           | Scale:<br>1:1500       | Date:<br>01/2026 |                         |
|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                   |                   |                        |                  | Report No.:<br>PG7881-1 |
|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                   |                   |                        |                  |                         |
|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                   |                   |                        |                  |                         |
|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                   |                   |                        |                  |                         |
|                                                                                                                                                                                                                    | NO. | REVISIONS | DATE | INITIAL | SITE GEOMETRY - REC 6-1 AND REC 6-2                                                                     |                   | Checked by:<br>OM | Dwg. No.:<br>PG7881-4B |                  |                         |
|                                                                                                                                                                                                                    |     |           |      |         | Approved by:<br>SB                                                                                      | Revision No.:     |                   |                        |                  |                         |



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE



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

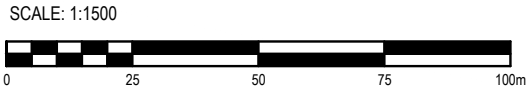
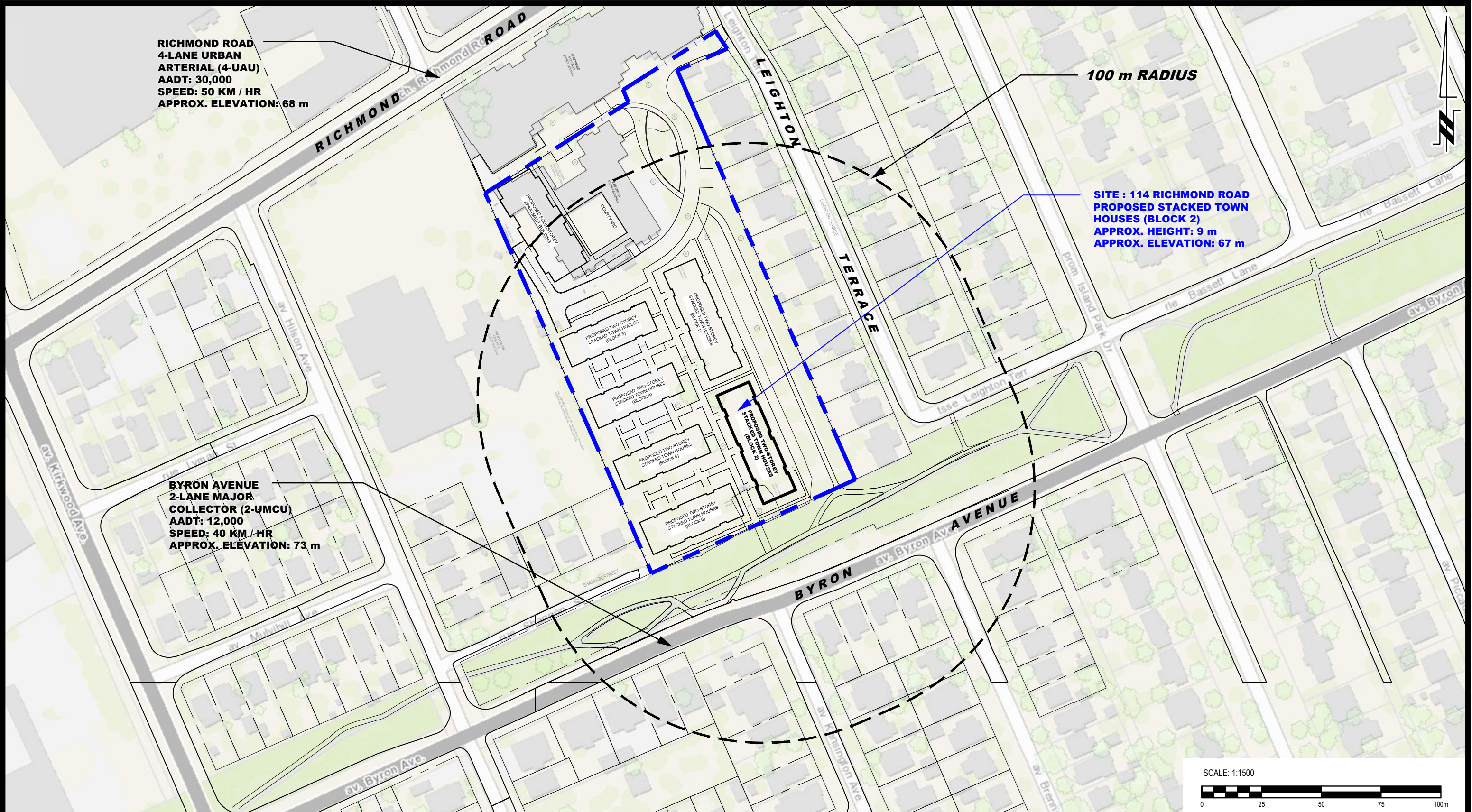
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 7-1 AND REC 7-2**

|              |        |               |           |
|--------------|--------|---------------|-----------|
| Scale:       | 1:1500 | Date:         | 01/2026   |
| Drawn by:    | YA     | Report No.:   | PG7881-1  |
| Checked by:  | OM     | Dwg. No.:     | PG7881-4C |
| Approved by: | SB     | Revision No.: |           |



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

| NO. | REVISIONS | DATE | INITIAL |
|-----|-----------|------|---------|
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OTTAWA,  
Title:

CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

ONTARIO

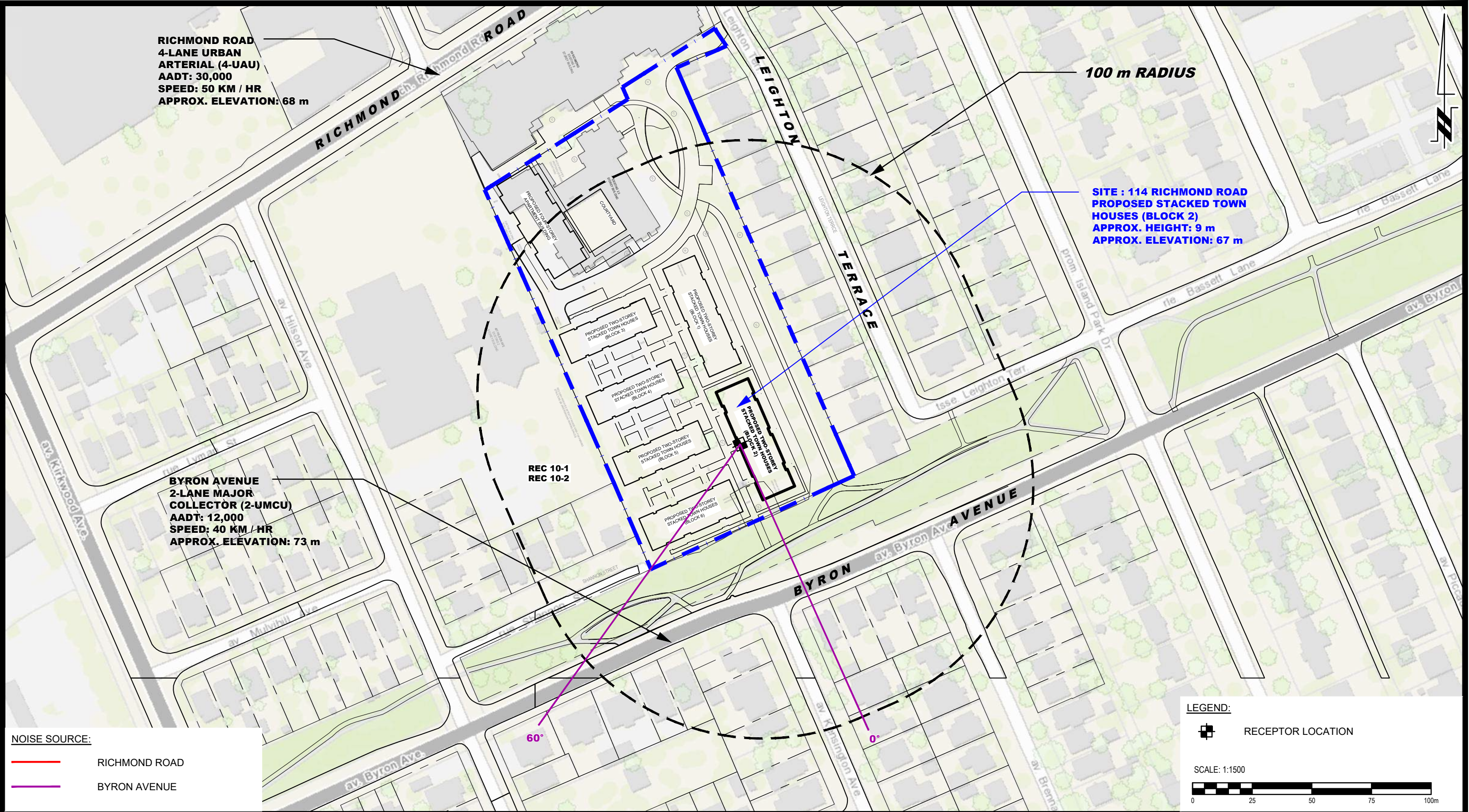
SITE GEOMETRY - BLOCK 2

Scale: 1:1500  
Drawn by: YA  
Checked by: OM  
Approved by: SB

Date: 01/2026  
Report No.: PG7881-1  
Dwg. No.: PG7881-5  
Revision No.:







**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE



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

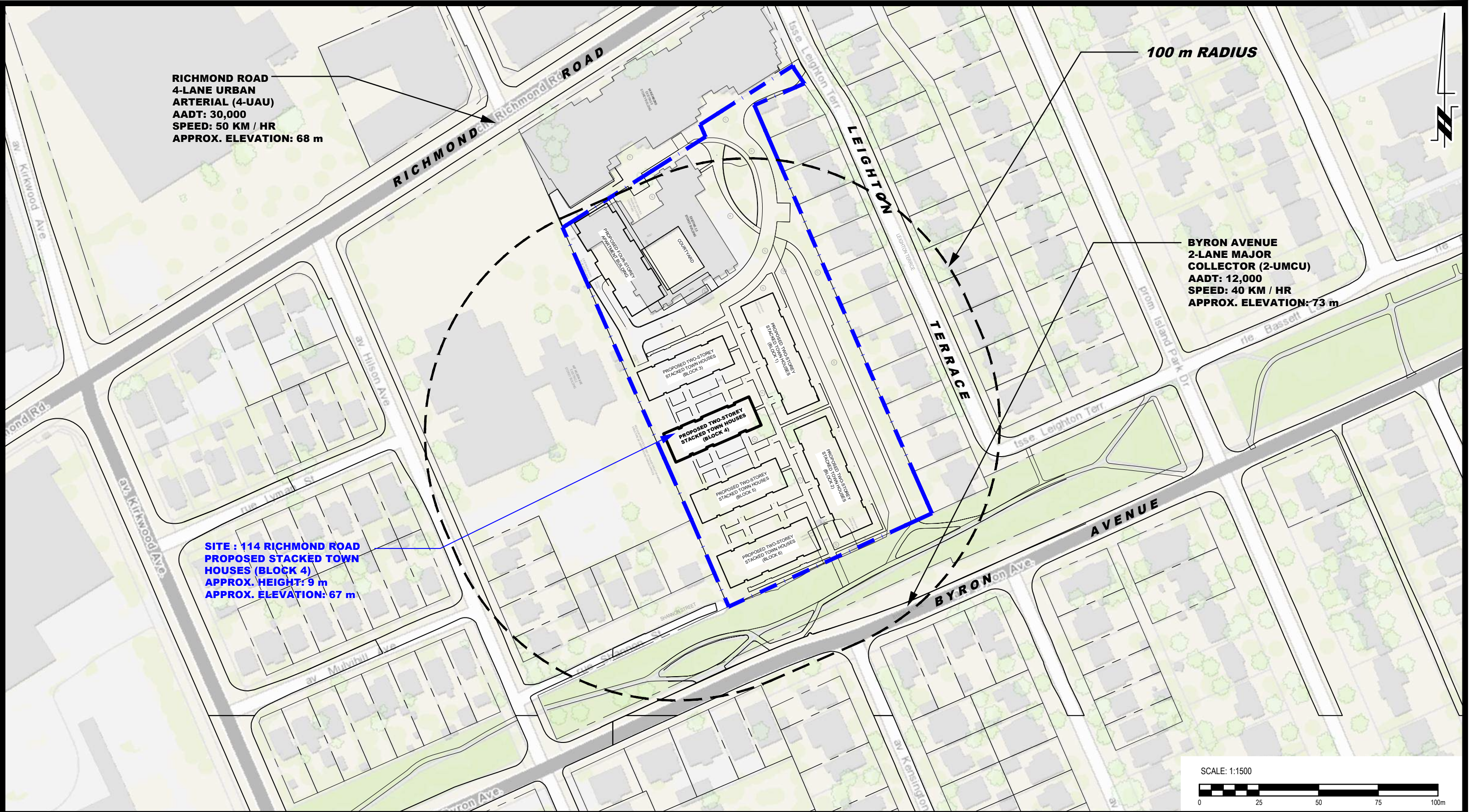
| NO. | REVISIONS | DATE | INITIAL |
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA,  
Title: **SITE GEOMETRY - REC 10-1 AND REC 10-2**

ONTARIO

|              |        |               |                  |
|--------------|--------|---------------|------------------|
| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-5C</b> |
| Approved by: | SB     | Revision No.: |                  |





**PATERSON  
GROUP**

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

| NO. | REVISIONS | DATE | INITIAL |
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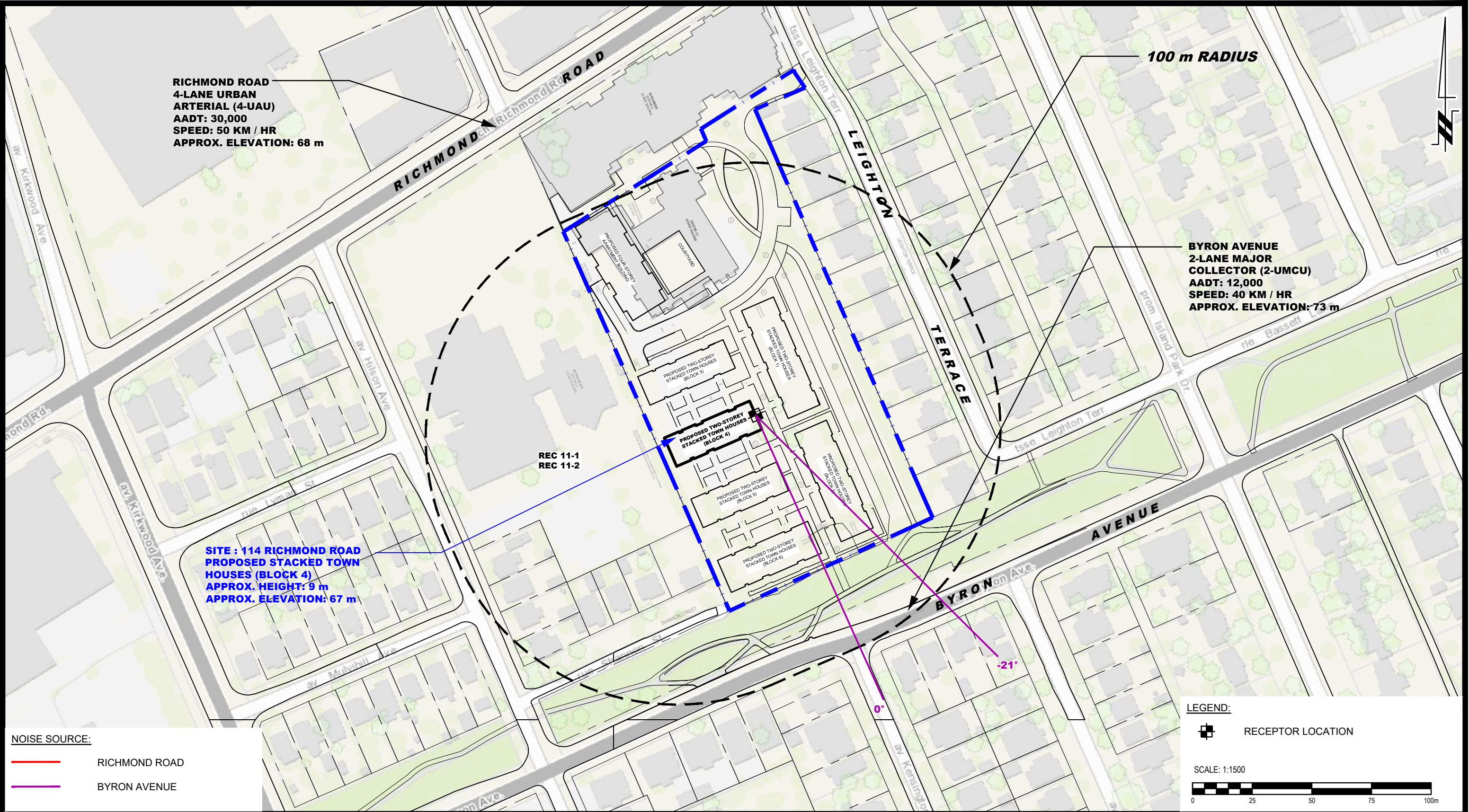
CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA,  
Title:

ONTARIO

**SITE GEOMETRY - BLOCK 4**

|              |        |               |                 |
|--------------|--------|---------------|-----------------|
| Scale:       | 1:1500 | Date:         | 01/2026         |
| Drawn by:    | YA     | Report No.:   | PG7881-1        |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-6</b> |
| Approved by: | SB     | Revision No.: |                 |



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE

**LEGEND:**

■ RECEPTOR LOCATION

SCALE: 1:1500

0 25 50 75 100m



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

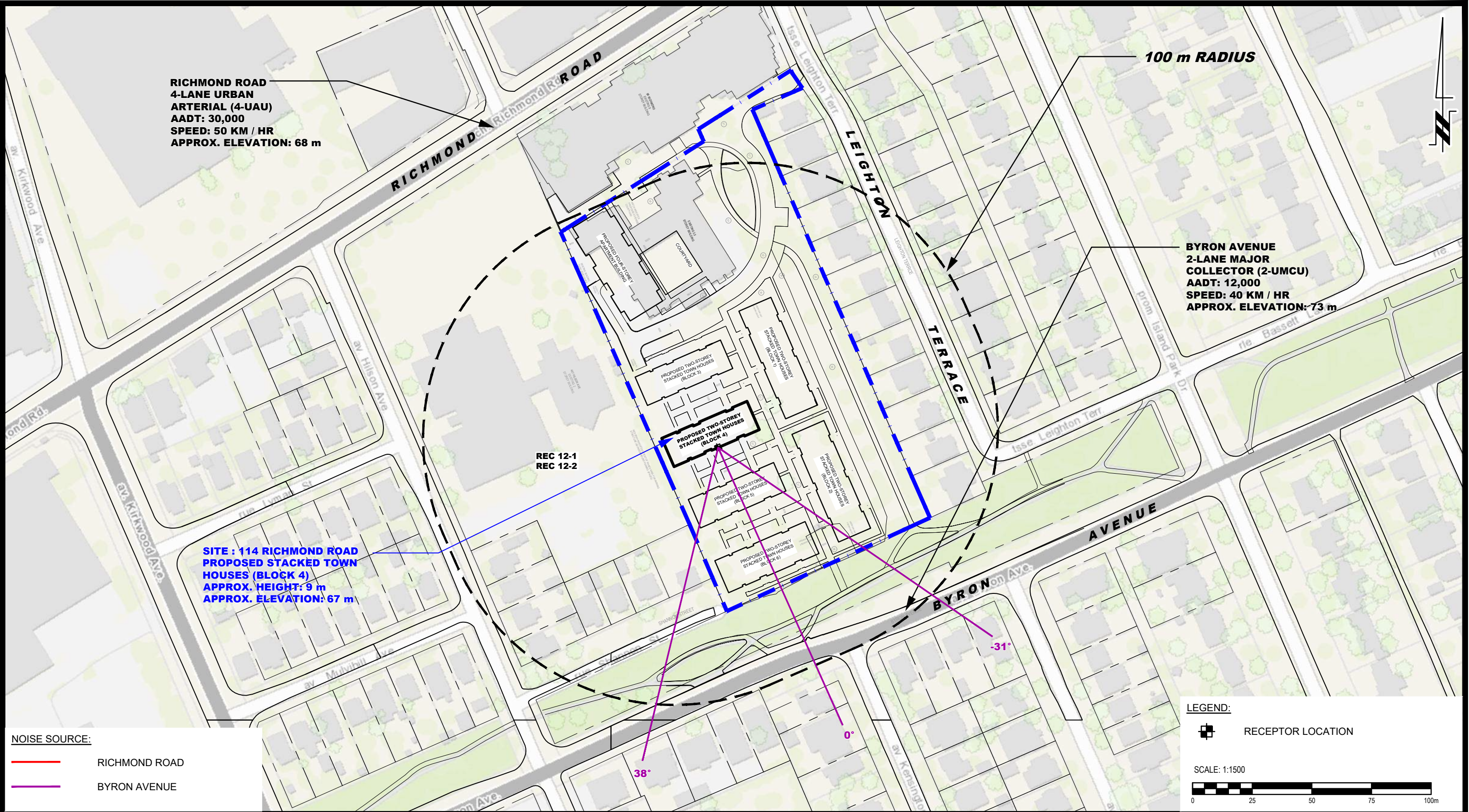
| NO. | REVISIONS | DATE | INITIAL |
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 11-1 AND REC 11-2**

|              |        |               |                  |
|--------------|--------|---------------|------------------|
| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-6A</b> |
| Approved by: | SB     | Revision No.: |                  |



**RICHMOND ROAD**  
4-LANE URBAN  
ARTERIAL (4-UAU)  
AADT: 30,000  
SPEED: 50 KM / HR  
APPROX. ELEVATION: 68 m

**100 m RADIUS**

**BYRON AVENUE**  
2-LANE MAJOR  
COLLECTOR (2-UMCU)  
AADT: 12,000  
SPEED: 40 KM / HR  
APPROX. ELEVATION: 73 m

**SITE : 114 RICHMOND ROAD**  
**PROPOSED STACKED TOWN**  
**HOUSES (BLOCK 4)**  
APPROX. HEIGHT: 9 m  
APPROX. ELEVATION: 67 m

**REC 12-1**  
**REC 12-2**

**PROPOSED TWO-STOREY**  
**STACKED TOWN HOUSES**  
**(BLOCK 4)**

**PROPOSED TWO-STOREY**  
**STACKED TOWN HOUSES**  
**(BLOCK 5)**

**PROPOSED TWO-STOREY**  
**STACKED TOWN HOUSES**  
**(BLOCK 6)**

**NOISE SOURCE:**

- RICHMOND ROAD
- BYRON AVENUE

**LEGEND:**

 RECEPTOR LOCATION

SCALE: 1:1500





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

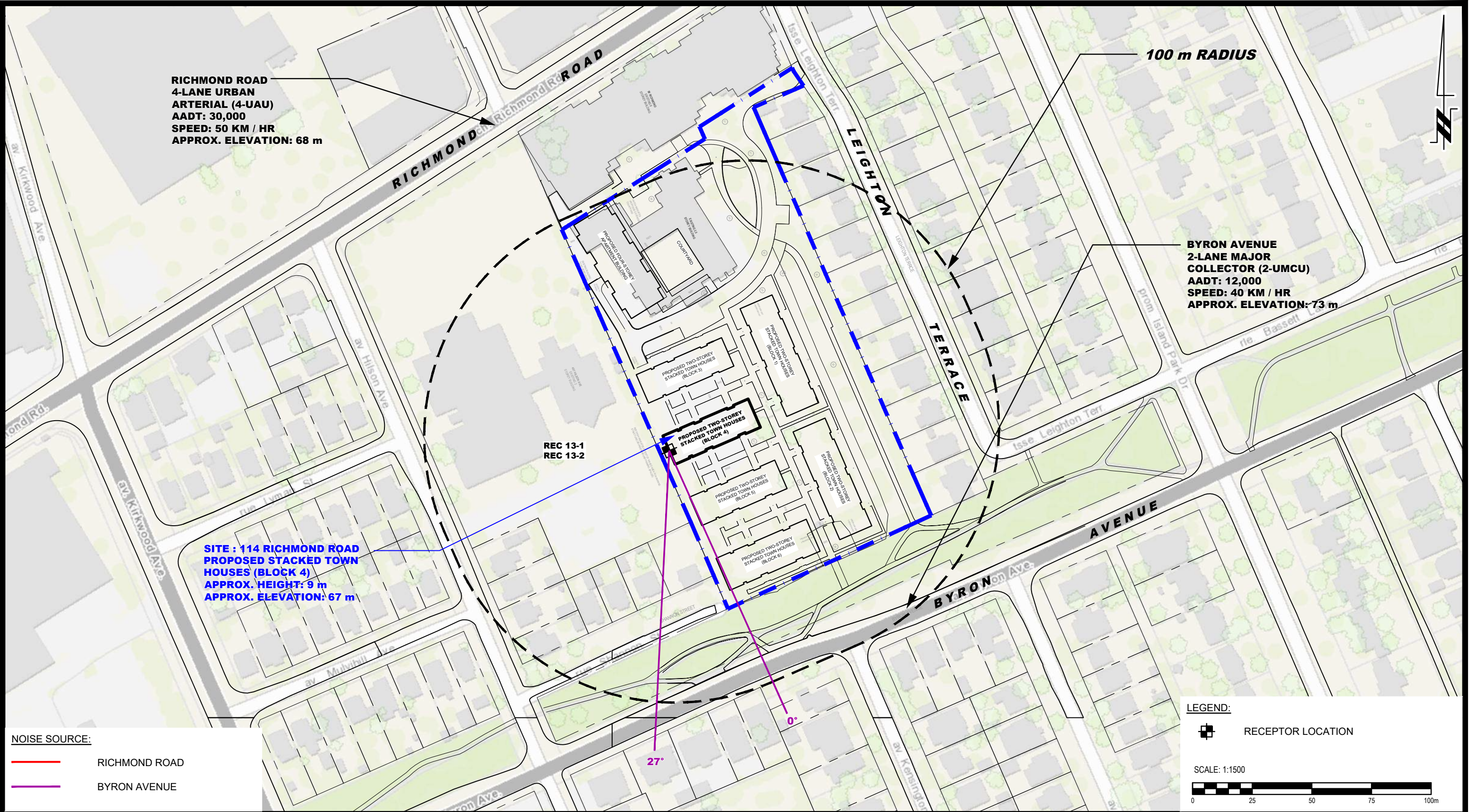
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA, ONTARIO

Title: **SITE GEOMETRY - REC 12-1 AND REC 12-2**

|              |        |               |                  |
|--------------|--------|---------------|------------------|
| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-6B</b> |
| Approved by: | SB     | Revision No.: |                  |



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE

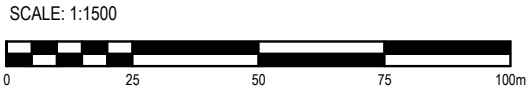
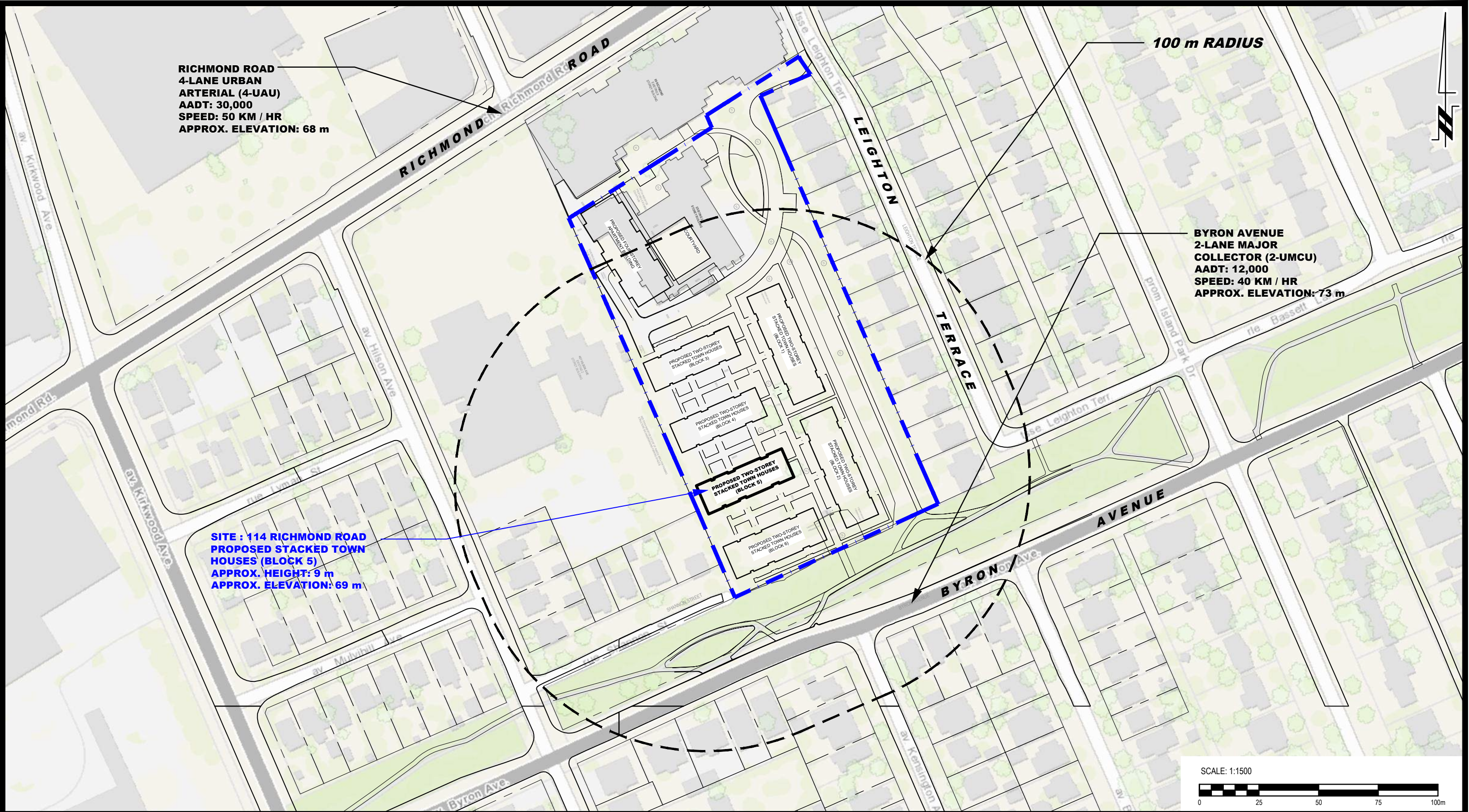


9 AURIGA DRIVE  
OTTAWA, ON  
K2E 7T9  
TEL: (613) 226-7381

| NO. | REVISIONS | DATE | INITIAL |
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| CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD |         |
| OTTAWA,<br>Title:                                                                                       | ONTARIO |
| SITE GEOMETRY - REC 13-1 AND REC 13-2                                                                   |         |

|              |        |               |           |
|--------------|--------|---------------|-----------|
| Scale:       | 1:1500 | Date:         | 01/2026   |
| Drawn by:    | YA     | Report No.:   | PG7881-1  |
| Checked by:  | OM     | Dwg. No.:     | PG7881-6C |
| Approved by: | SB     | Revision No.: |           |



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

| NO. | REVISIONS | DATE | INITIAL |
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OTTAWA,  
Title:

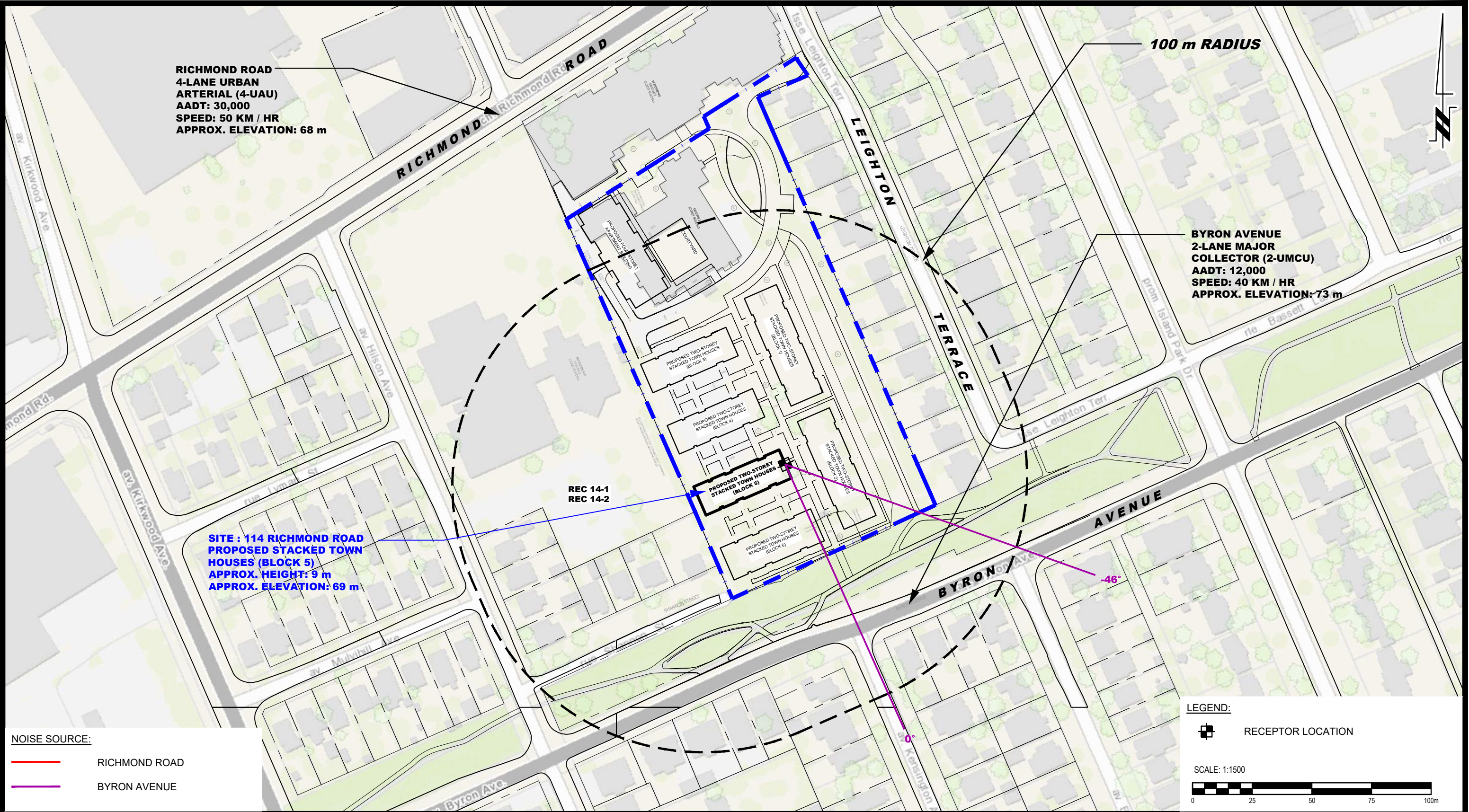
CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

ONTARIO

SITE GEOMETRY - BLOCK 5

Scale: 1:1500  
Drawn by: YA  
Checked by: OM  
Approved by: SB

Date: 01/2026  
Report No.: PG7881-1  
Dwg. No.: PG7881-7  
Revision No.:



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE



**PATERSON GROUP**

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

| NO. | REVISIONS | DATE | INITIAL |
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| CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD |  |         |  |
| OTTAWA,<br>Title:                                                                                       |  | ONTARIO |  |
| SITE GEOMETRY - REC 14-1 AND REC 14-2                                                                   |  |         |  |

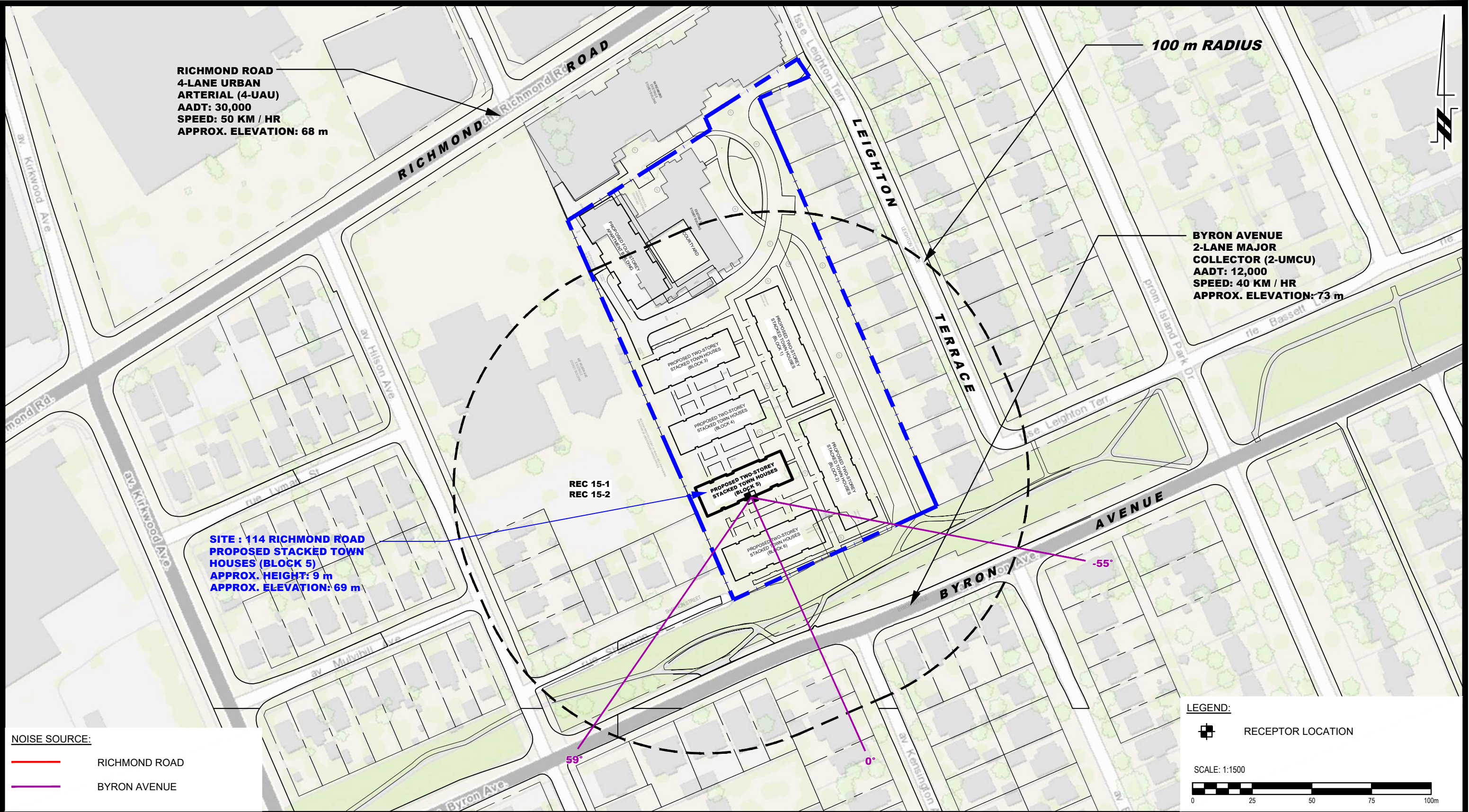
**LEGEND:**

 RECEPTOR LOCATION

SCALE: 1:1500



|              |        |               |                  |
|--------------|--------|---------------|------------------|
| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-7A</b> |
| Approved by: | SB     | Revision No.: |                  |



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE

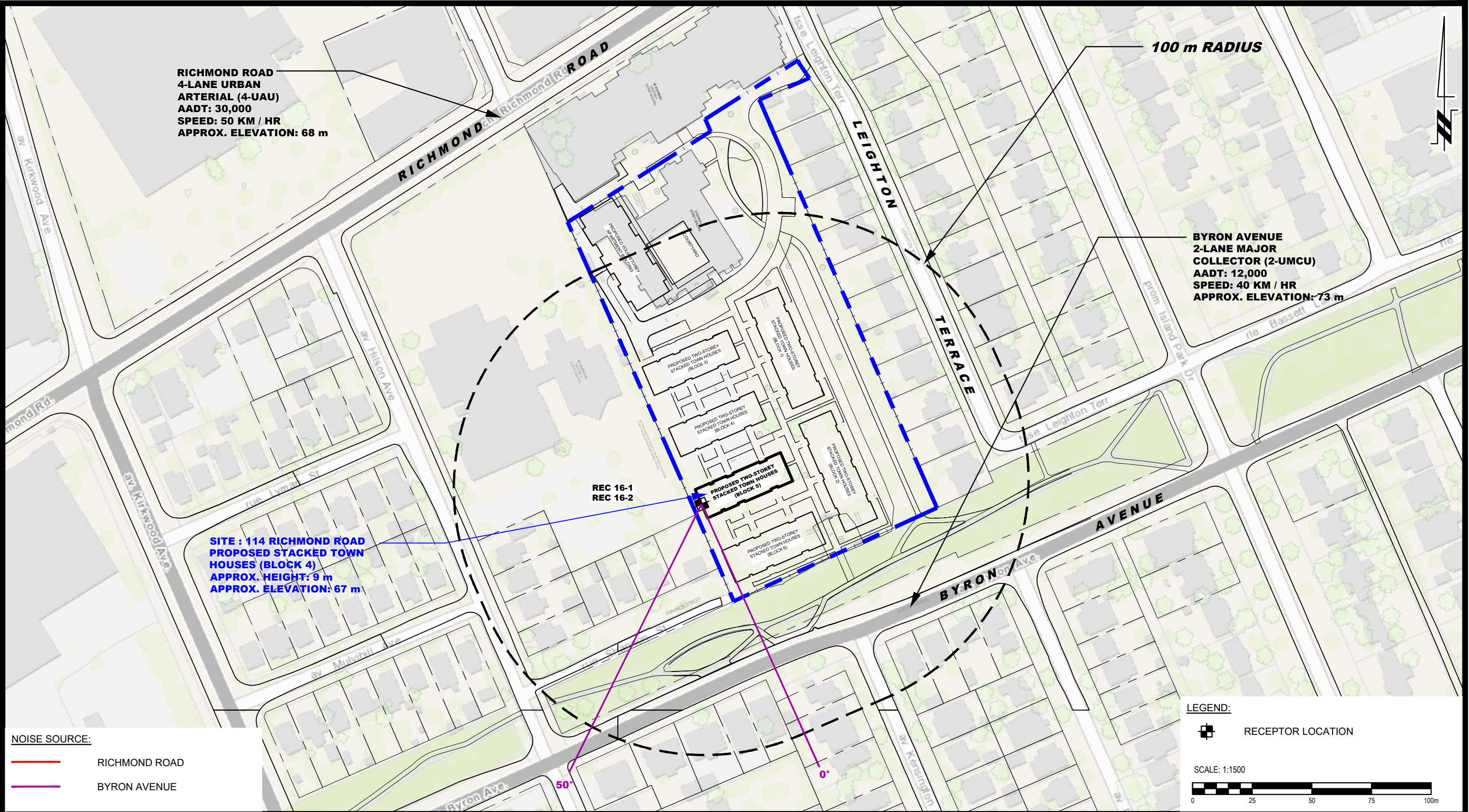
**LEGEND:**

RECEPTOR LOCATION

SCALE: 1:1500

0 25 50 75 100m

|                                                                                                                                                                        |           |      |         |  |                                                                                                                            |                                                        |                               |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|---------|--|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------|---------------|
| <div><p>9 AURIGA DRIVE<br/>OTTAWA, ON<br/>K2E 7T9<br/>TEL: (613) 226-7381</p></div> |           |      |         |  | CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD<br>OTTAWA, ONTARIO | Scale: 1:1500                                          | Date: 01/2026                 |               |
|                                                                                                                                                                        |           |      |         |  |                                                                                                                            | Drawn by: YA                                           | Report No.: PG7881-1          |               |
|                                                                                                                                                                        |           |      |         |  |                                                                                                                            | Checked by: OM                                         | Dwg. No.:<br><b>PG7881-7B</b> |               |
|                                                                                                                                                                        |           |      |         |  |                                                                                                                            | Approved by: SB                                        |                               | Revision No.: |
|                                                                                                                                                                        |           |      |         |  |                                                                                                                            | Title:<br><b>SITE GEOMETRY - REC 15-1 AND REC 15-2</b> |                               |               |
|                                                                                                                                                                        |           |      |         |  |                                                                                                                            |                                                        |                               |               |
| NO.                                                                                                                                                                    | REVISIONS | DATE | INITIAL |  |                                                                                                                            |                                                        |                               |               |



**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE

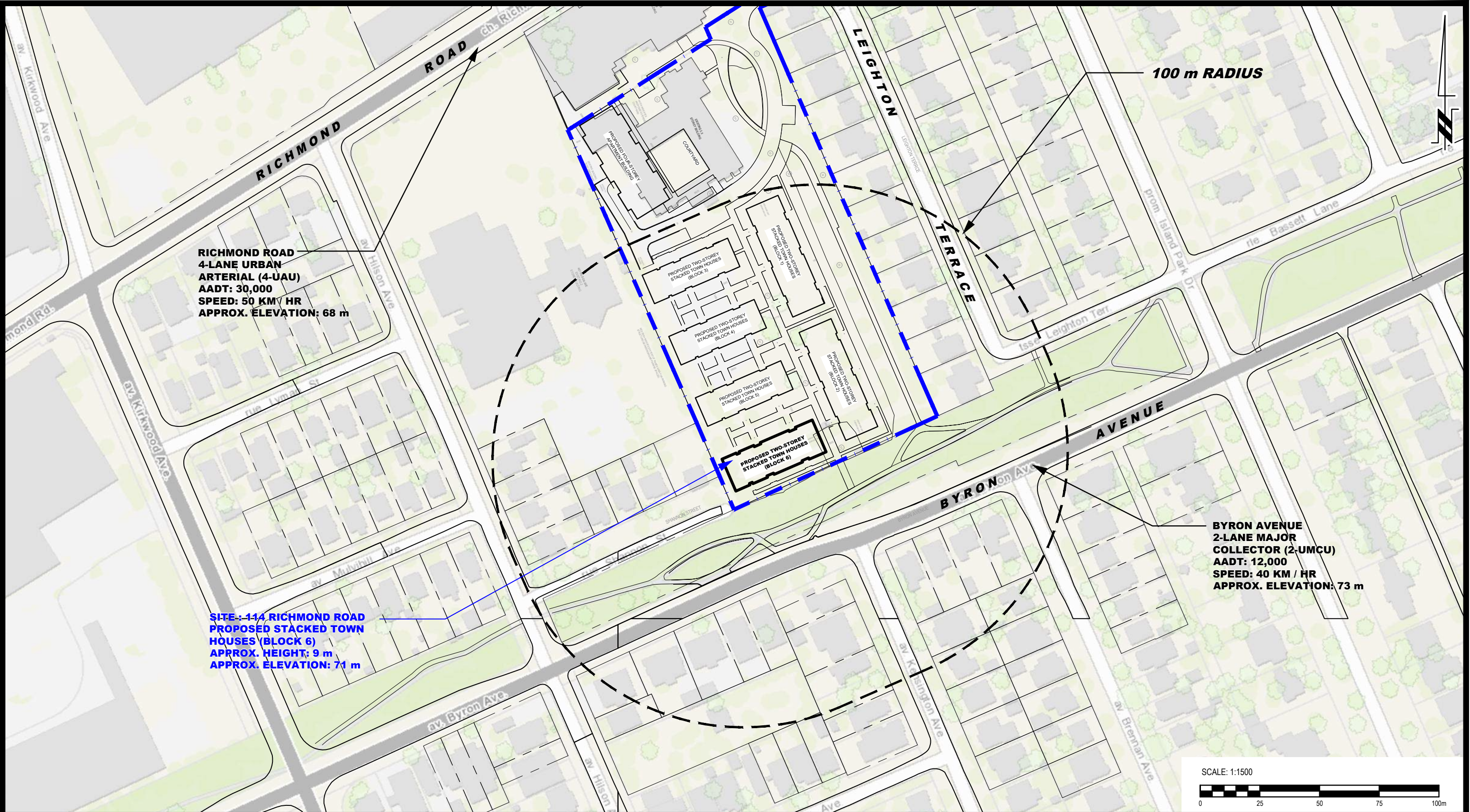
**LEGEND:**

 RECEPTOR LOCATION

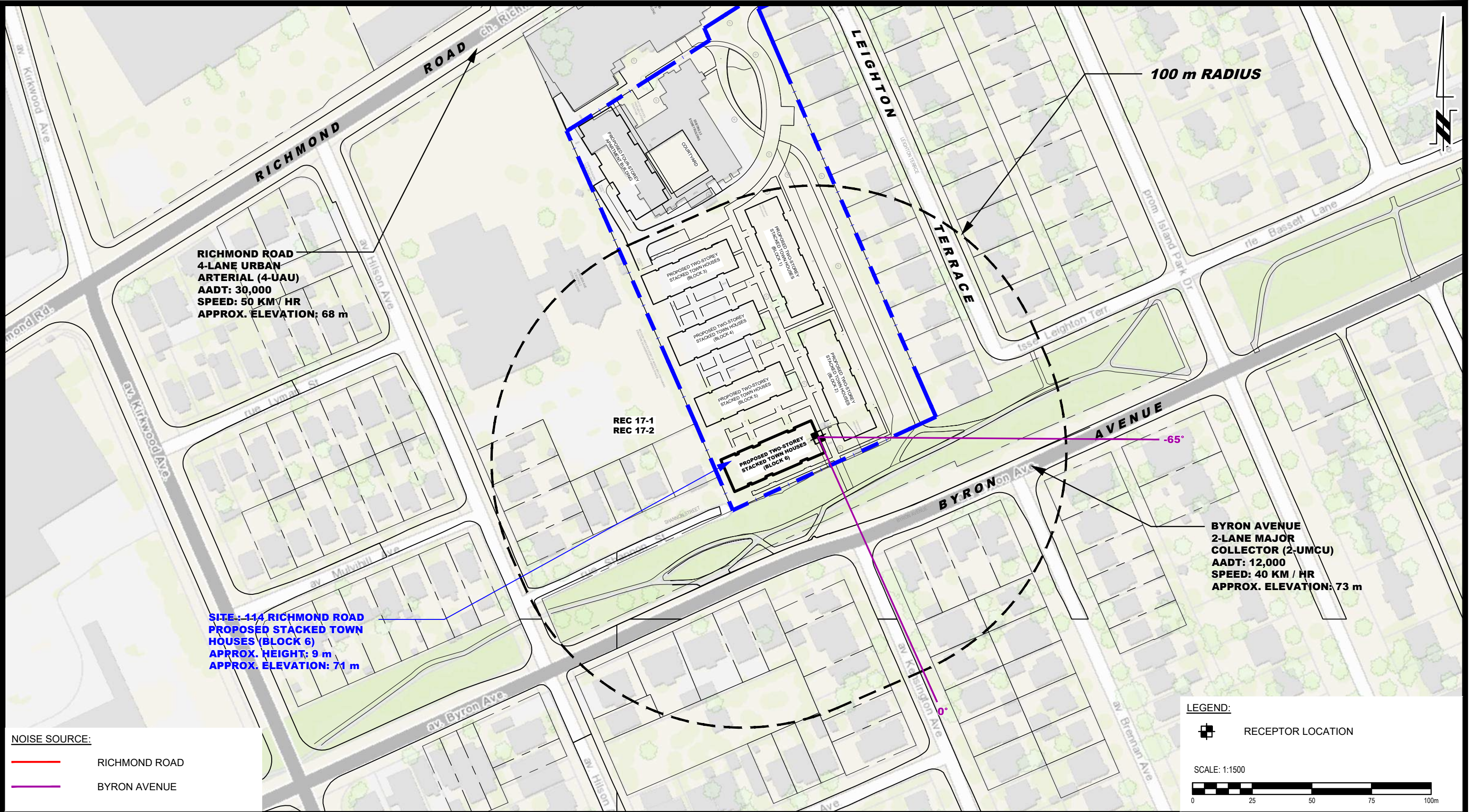
SCALE: 1:1500



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| <div></div> <div><b>PATERSON GROUP</b></div> <div>9 AURIGA DRIVE<br/>OTTAWA, ON<br/>K2E 7T9<br/>TEL: (613) 226-7381</div> |  |  |  |  | CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD | OTTAWA,<br>Title: | ONTARIO | SITE GEOMETRY - REC 16-1 AND REC 16-2 | Scale:       | 1:1500 | Date:                         | 01/2026       |
|                                                                                                                                                                                                              |  |  |  |  |                                                                                                         |                   |         |                                       | Drawn by:    | YA     | Report No.:                   | PG7881-1      |
|                                                                                                                                                                                                              |  |  |  |  |                                                                                                         |                   |         |                                       | Checked by:  | OM     | Dwg. No.:<br><b>PG7881-7C</b> |               |
|                                                                                                                                                                                                              |  |  |  |  |                                                                                                         |                   |         |                                       | Approved by: | SB     |                               | Revision No.: |
|                                                                                                                                                                                                              |  |  |  |  |                                                                                                         |                   |         |                                       |              |        |                               |               |
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| <div><div><div>PATERSON<br/>GROUP</div><div>9 AURIGA DRIVE<br/>OTTAWA, ON<br/>K2E 7T9<br/>TEL: (613) 226-7381</div></div></div> |     |           |      |         | CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD | OTTAWA,<br>Title: | ONTARIO | Scale:<br>1:1500<br>Drawn by:<br>YA<br>Checked by:<br>OM<br>Approved by:<br>SB | Date:<br>01/2026<br>Report No.:<br>PG7881-1<br>Dwg. No.:<br><b>PG7881-8</b><br>Revision No.: |
|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                   |         |                                                                                |                                                                                              |
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**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE

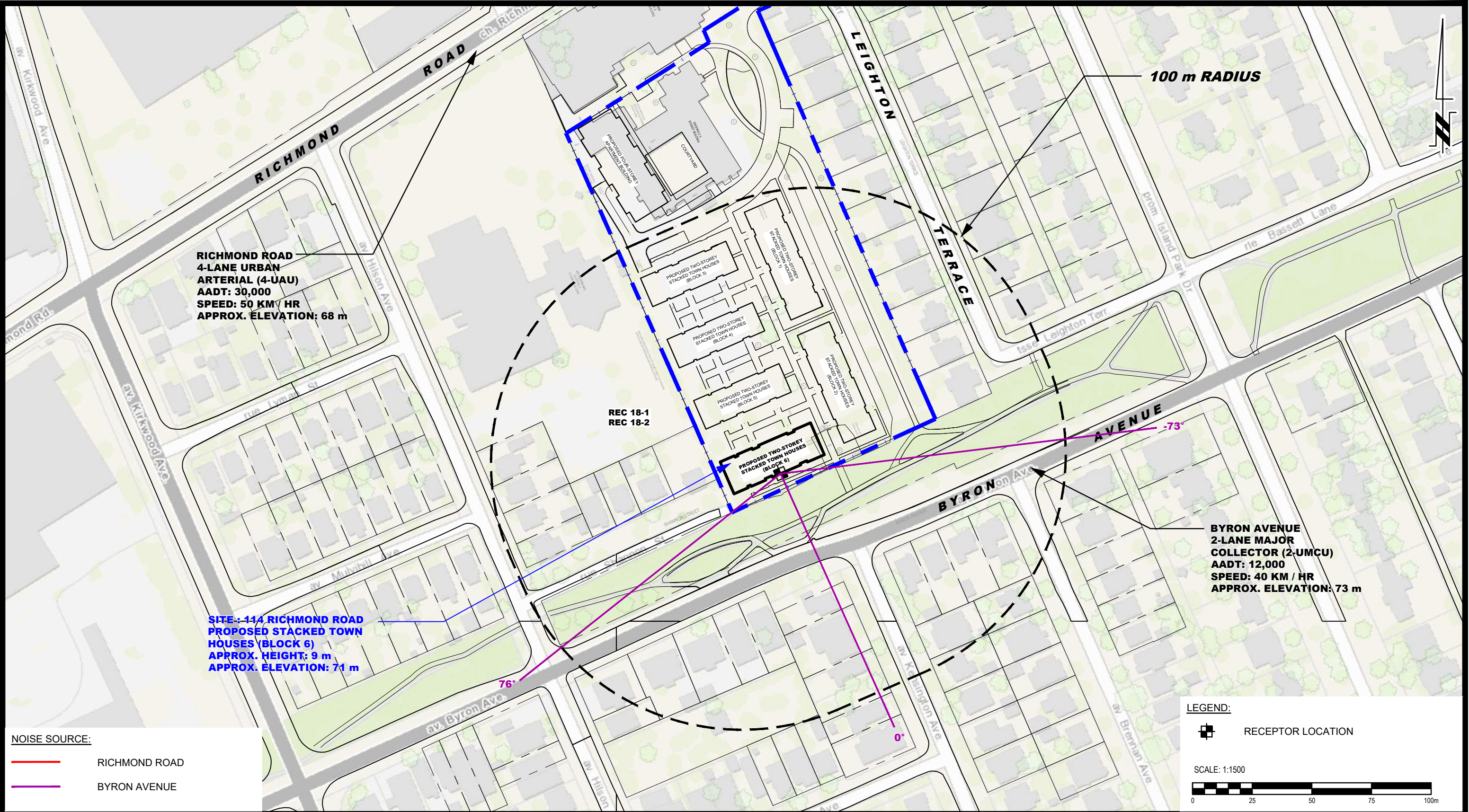
**LEGEND:**

 RECEPTOR LOCATION

SCALE: 1:1500



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| <div><div><div>PATERSON<br/>GROUP</div><div>9 AURIGA DRIVE<br/>OTTAWA, ON<br/>K2E 7T9<br/>TEL: (613) 226-7381</div></div></div> |     |           |      |         | CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD | OTTAWA,<br>Title: SITE GEOMETRY - REC 17-1 AND REC 17-2 | ONTARIO | Scale:       | 1:1500 | Date:                         | 01/2026       |
|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                                                         |         | Drawn by:    | YA     | Report No.:                   | PG7881-1      |
|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                                                         |         | Checked by:  | OM     | Dwg. No.:<br><b>PG7881-8A</b> |               |
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|                                                                                                                                                                                                                    |     |           |      |         |                                                                                                         |                                                         |         |              |        |                               |               |
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**NOISE SOURCE:**

— RICHMOND ROAD

— BYRON AVENUE



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

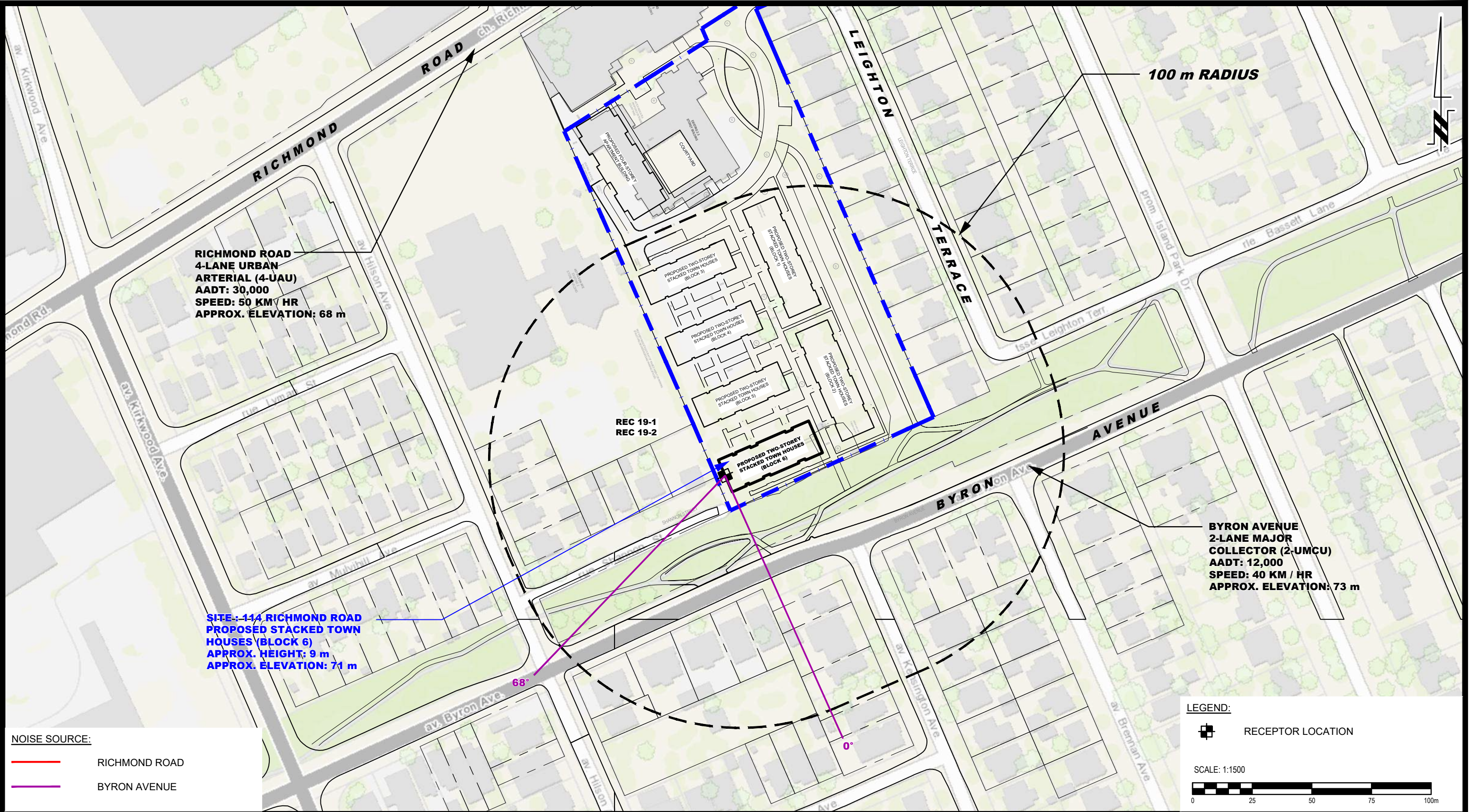
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CONCORDE PROPERTIES  
NOISE ATTENUATION STUDY  
PROPOSED RESIDENTIAL DEVELOPMENT  
114 RICHMOND ROAD

OTTAWA,  
Title: **SITE GEOMETRY - REC 18-1 AND REC 18-2**

ONTARIO

|              |        |               |                  |
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| Scale:       | 1:1500 | Date:         | 01/2026          |
| Drawn by:    | YA     | Report No.:   | PG7881-1         |
| Checked by:  | OM     | Dwg. No.:     | <b>PG7881-8B</b> |
| Approved by: | SB     | Revision No.: |                  |



**NOISE SOURCE:**

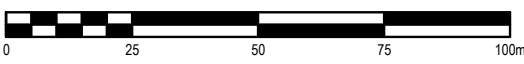
— RICHMOND ROAD

— BYRON AVENUE

**LEGEND:**

 RECEPTOR LOCATION

SCALE: 1:1500



|                                                                                                                                                                                                                     |     |           |      |         |                                                                                                         |                    |                 |                               |
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| <div></div> <div><div>PATERSON<br/>GROUP</div><div>9 AURIGA DRIVE<br/>OTTAWA, ON<br/>K2E 7T9<br/>TEL: (613) 226-7381</div></div> |     |           |      |         | CONCORDE PROPERTIES<br>NOISE ATTENUATION STUDY<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>114 RICHMOND ROAD | OTTAWA,<br>ONTARIO | Scale: 1:1500   | Date: 01/2026                 |
|                                                                                                                                                                                                                     |     |           |      |         |                                                                                                         |                    | Drawn by: YA    | Report No.: PG7881-1          |
|                                                                                                                                                                                                                     |     |           |      |         |                                                                                                         |                    | Checked by: OM  | Dwg. No.:<br><b>PG7881-8C</b> |
|                                                                                                                                                                                                                     |     |           |      |         |                                                                                                         |                    | Approved by: SB |                               |
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|                                                                                                                                                                                                                     | NO. | REVISIONS | DATE | INITIAL | Title: <b>SITE GEOMETRY - REC 19-1 AND REC 19-2</b>                                                     |                    |                 |                               |

# APPENDIX 2

## STAMSON RESULTS

STAMSON 5.0            NORMAL REPORT            Date: 09-02-2026 15:13:45  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC11.te                      Time Period: Day/Night 16/8 hours  
Description: REC 1-1 - Proposed Apartment

Road data, segment # 1: Richmond Rd (day/night)

-----  
Car traffic volume : 24288/2112 veh/TimePeriod \*  
Medium truck volume : 1932/168 veh/TimePeriod \*  
Heavy truck volume : 1380/120 veh/TimePeriod \*  
Posted speed limit : 50 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000  
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: Richmond Rd (day/night)

-----  
Angle1 Angle2 : 0.00 deg 50.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 72.00 / 72.00 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Results segment # 1: Richmond Rd (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 54.24 + 0.00) = 54.24 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj  | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|--------|-------|-------|-------|-------|--------|
| 0      | 50     | 0.66  | 71.49  | 0.00  | -11.31 | -5.94 | 0.00  | 0.00  | 0.00  | 54.24  |

-----

Segment Leq : 54.24 dBA

Total Leq All Segments: 54.24 dBA

↑

Results segment # 1: Richmond Rd (night)

-----

Source height = 1.50 m

ROAD (0.00 + 46.64 + 0.00) = 46.64 dBA

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

-----

|   |    |      |       |      |        |       |      |      |      |       |
|---|----|------|-------|------|--------|-------|------|------|------|-------|
| 0 | 50 | 0.66 | 63.89 | 0.00 | -11.31 | -5.94 | 0.00 | 0.00 | 0.00 | 46.64 |
|---|----|------|-------|------|--------|-------|------|------|------|-------|

-----

Segment Leq : 46.64 dBA

Total Leq All Segments: 46.64 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 54.24

(NIGHT): 46.64

↑

↑

STAMSON 5.0                      NORMAL REPORT                      Date: 09-02-2026 15:16:41  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: REC12.te                      Time Period: Day/Night 16/8 hours  
Description: REC 1-4 - Proposed Apartment

Road data, segment # 1: Richmond Rd (day/night)

-----  
Car traffic volume : 24288/2112 veh/TimePeriod \*  
Medium truck volume : 1932/168 veh/TimePeriod \*  
Heavy truck volume : 1380/120 veh/TimePeriod \*  
Posted speed limit : 50 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000  
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: Richmond Rd (day/night)

-----  
Angle1 Angle2 : 0.00 deg 50.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 72.00 / 72.00 m  
Receiver height : 10.50 / 10.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Results segment # 1: Richmond Rd (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 56.23 + 0.00) = 56.23 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| 0      | 50     | 0.39  | 71.49  | 0.00  | -9.47 | -5.79 | 0.00  | 0.00  | 0.00  | 56.23  |

-----

Segment Leq : 56.23 dBA

Total Leq All Segments: 56.23 dBA

↑

Results segment # 1: Richmond Rd (night)

-----

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 |
|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|

-----

|   |    |      |       |      |       |       |      |      |      |       |
|---|----|------|-------|------|-------|-------|------|------|------|-------|
| 0 | 50 | 0.39 | 63.89 | 0.00 | -9.47 | -5.79 | 0.00 | 0.00 | 0.00 | 48.63 |
|---|----|------|-------|------|-------|-------|------|------|------|-------|

-----

Segment Leq : 48.63 dBA

Total Leq All Segments: 48.63 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 56.23

(NIGHT): 48.63

↑

↑

STAMSON 5.0            NORMAL REPORT            Date: 09-02-2026 15:18:59  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec21.te                      Time Period: Day/Night 16/8 hours  
Description: REC 2-1 - Proposed Apartment

Road data, segment # 1: Richmond Rd (day/night)

-----  
Car traffic volume : 24288/2112 veh/TimePeriod \*  
Medium truck volume : 1932/168 veh/TimePeriod \*  
Heavy truck volume : 1380/120 veh/TimePeriod \*  
Posted speed limit : 50 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000  
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: Richmond Rd (day/night)

-----  
Angle1 Angle2 : -65.00 deg 62.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 49.00 / 49.00 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Results segment # 1: Richmond Rd (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 60.80 + 0.00) = 60.80 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| -65    | 62     | 0.66  | 71.49  | 0.00  | -8.53 | -2.15 | 0.00  | 0.00  | 0.00  | 60.80  |

-----

Segment Leq : 60.80 dBA

Total Leq All Segments: 60.80 dBA

↑

Results segment # 1: Richmond Rd (night)

-----

Source height = 1.50 m

ROAD (0.00 + 53.21 + 0.00) = 53.21 dBA

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

-----

|     |    |      |       |      |       |       |      |      |      |       |
|-----|----|------|-------|------|-------|-------|------|------|------|-------|
| -65 | 62 | 0.66 | 63.89 | 0.00 | -8.53 | -2.15 | 0.00 | 0.00 | 0.00 | 53.21 |
|-----|----|------|-------|------|-------|-------|------|------|------|-------|

-----

Segment Leq : 53.21 dBA

Total Leq All Segments: 53.21 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 60.80

(NIGHT): 53.21

↑

↑

STAMSON 5.0            NORMAL REPORT            Date: 09-02-2026 15:23:27  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec24.te                      Time Period: Day/Night 16/8 hours  
Description: REC 2-4 - Proposed Apartment

Road data, segment # 1: Richmond Rd (day/night)

-----  
Car traffic volume : 24288/2112 veh/TimePeriod \*  
Medium truck volume : 1932/168 veh/TimePeriod \*  
Heavy truck volume : 1380/120 veh/TimePeriod \*  
Posted speed limit : 50 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000  
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: Richmond Rd (day/night)

-----  
Angle1 Angle2 : -65.00 deg 62.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 49.00 / 49.00 m  
Receiver height : 10.50 / 10.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Results segment # 1: Richmond Rd (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 62.44 + 0.00) = 62.44 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| -65    | 62     | 0.39  | 71.49  | 0.00  | -7.15 | -1.90 | 0.00  | 0.00  | 0.00  | 62.44  |

-----

Segment Leq : 62.44 dBA

Total Leq All Segments: 62.44 dBA

↑

Results segment # 1: Richmond Rd (night)

-----

Source height = 1.50 m

ROAD (0.00 + 54.84 + 0.00) = 54.84 dBA

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

-----

|     |    |      |       |      |       |       |      |      |      |       |
|-----|----|------|-------|------|-------|-------|------|------|------|-------|
| -65 | 62 | 0.39 | 63.89 | 0.00 | -7.15 | -1.90 | 0.00 | 0.00 | 0.00 | 54.84 |
|-----|----|------|-------|------|-------|-------|------|------|------|-------|

-----

Segment Leq : 54.84 dBA

Total Leq All Segments: 54.84 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 62.44

(NIGHT): 54.84

↑

↑

Filename: rec31.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 3-1 - Proposed Apartment

Road data, segment # 1: Richmond Rd (day/night)

-----  
 Car traffic volume : 24288/2112 veh/TimePeriod \*  
 Medium truck volume : 1932/168 veh/TimePeriod \*  
 Heavy truck volume : 1380/120 veh/TimePeriod \*  
 Posted speed limit : 50 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000  
 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: Richmond Rd (day/night)

-----  
 Angle1 Angle2 : -51.00 deg 0.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 72.00 / 72.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Segment # 1: Richmond Rd (day)

-----  
 Source height = 1.50 m

ROAD (0.00 + 54.31 + 0.00) = 54.31 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj  | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|--------|-------|-------|-------|-------|--------|
| -51    | 0      | 0.66  | 71.49  | 0.00  | -11.31 | -5.87 | 0.00  | 0.00  | 0.00  | 54.31  |

-----

Segment Leq : 54.31 dBA

Total Leq All Segments: 54.31 dBA

↑

Segment # 1: Richmond Rd (night)

-----

Source height = 1.50 m

ROAD (0.00 + 46.71 + 0.00) = 46.71 dBA

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

-----

|     |   |      |       |      |        |       |      |      |      |       |
|-----|---|------|-------|------|--------|-------|------|------|------|-------|
| -51 | 0 | 0.66 | 63.89 | 0.00 | -11.31 | -5.87 | 0.00 | 0.00 | 0.00 | 46.71 |
|-----|---|------|-------|------|--------|-------|------|------|------|-------|

-----

Segment Leq : 46.71 dBA

Total Leq All Segments: 46.71 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 54.31

(NIGHT): 46.71

↑

↑

STAMSON 5.0                      NORMAL REPORT                      Date: 09-02-2026 15:32:38  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec34.te                      Time Period: Day/Night 16/8 hours  
Description: REC 3-4 - Proposed Apartment

Road data, segment # 1: Richmond Rd (day/night)

-----  
Car traffic volume : 24288/2112 veh/TimePeriod \*  
Medium truck volume : 1932/168 veh/TimePeriod \*  
Heavy truck volume : 1380/120 veh/TimePeriod \*  
Posted speed limit : 50 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000  
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: Richmond Rd (day/night)

-----  
Angle1 Angle2 : -51.00 deg 0.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 72.00 / 72.00 m  
Receiver height : 10.50 / 10.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Results segment # 1: Richmond Rd (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 56.30 + 0.00) = 56.30 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| -51    | 0      | 0.39  | 71.49  | 0.00  | -9.47 | -5.72 | 0.00  | 0.00  | 0.00  | 56.30  |

-----

Segment Leq : 56.30 dBA

Total Leq All Segments: 56.30 dBA

↑

Results segment # 1: Richmond Rd (night)

-----

Source height = 1.50 m

ROAD (0.00 + 48.71 + 0.00) = 48.71 dBA

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

-----

|     |   |      |       |      |       |       |      |      |      |       |
|-----|---|------|-------|------|-------|-------|------|------|------|-------|
| -51 | 0 | 0.39 | 63.89 | 0.00 | -9.47 | -5.72 | 0.00 | 0.00 | 0.00 | 48.71 |
|-----|---|------|-------|------|-------|-------|------|------|------|-------|

-----

Segment Leq : 48.71 dBA

Total Leq All Segments: 48.71 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 56.30

(NIGHT): 48.71

↑

↑

STAMSON 5.0                      NORMAL REPORT                      Date: 09-02-2026 15:36:20  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec41.te                      Time Period: Day/Night 16/8 hours  
Description: REC 4 - Proposed Apartment - Outdoor Living Area

Road data, segment # 1: Richmond Rd (day/night)

-----  
Car traffic volume : 24288/2112 veh/TimePeriod \*  
Medium truck volume : 1932/168 veh/TimePeriod \*  
Heavy truck volume : 1380/120 veh/TimePeriod \*  
Posted speed limit : 50 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000  
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: Richmond Rd (day/night)

-----  
Angle1 Angle2 : -56.00 deg 42.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 83.00 / 83.00 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑  
Results segment # 1: Richmond Rd (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 56.13 + 0.00) = 56.13 dBA  
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-56 42 0.66 71.49 0.00 -12.33 -3.03 0.00 0.00 0.00 56.13  
-----

Segment Leq : 56.13 dBA

Total Leq All Segments: 56.13 dBA

↑

Results segment # 1: Richmond Rd (night)

-----

Source height = 1.50 m

ROAD (0.00 + 48.53 + 0.00) = 48.53 dBA

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

-----

|     |    |      |       |      |        |       |      |      |      |       |
|-----|----|------|-------|------|--------|-------|------|------|------|-------|
| -56 | 42 | 0.66 | 63.89 | 0.00 | -12.33 | -3.03 | 0.00 | 0.00 | 0.00 | 48.53 |
|-----|----|------|-------|------|--------|-------|------|------|------|-------|

-----

Segment Leq : 48.53 dBA

Total Leq All Segments: 48.53 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 56.13

(NIGHT): 48.53

↑

↑

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

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : -19.00 deg 0.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 112.00 / 112.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 41.40 ! | 41.40     |
| Total       |            |         | 41.40 dBA |

 -----

↑  
 Result summary (night)

|             |   |        |   |        |   |           |
|-------------|---|--------|---|--------|---|-----------|
| -----       |   |        |   |        |   |           |
|             | ! | source | ! | Road   | ! | Total     |
|             | ! | height | ! | Leq    | ! | Leq       |
|             | ! | (m)    | ! | (dBA)  | ! | (dBA)     |
| -----+      |   |        |   | -----+ |   |           |
| 1.Byron Ave | ! | 1.50   | ! | 33.81  | ! | 33.81     |
| -----+      |   |        |   | -----+ |   |           |
|             |   | Total  |   |        |   | 33.81 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 41.40  
(NIGHT): 33.81

⬆

⬆

Filename: rec52.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 5-2 - Block 1

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -19.00 deg    0.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 112.00 / 112.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Result summary (day)

-----  

|             | ! source ! | Road  | ! Total   |
|-------------|------------|-------|-----------|
|             | ! height ! | Leq   | ! Leq     |
|             | ! (m) !    | (dBA) | ! (dBA)   |
| 1.Byron Ave | ! 1.50 !   | 42.20 | ! 42.20   |
| Total       |            |       | 42.20 dBA |

 -----

↑  
 Result summary (night)

|             | ! source | ! Road  | ! Total   |
|-------------|----------|---------|-----------|
|             | ! height | ! Leq   | ! Leq     |
|             | ! (m)    | ! (dBA) | ! (dBA)   |
| 1.Byron Ave | ! 1.50   | ! 34.60 | ! 34.60   |
|             | +        | +       | +         |
|             | Total    |         | 34.60 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 42.20  
(NIGHT): 34.60

⬆

⬆

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

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -27.00 deg    32.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 91.00 / 91.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Result summary (day)

|             | ! | source | ! | Road  | ! | Total     |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| -----       | + | -----  | + | ----- | + | -----     |
| 1.Byron Ave | ! | 1.50   | ! | 47.74 | ! | 47.74     |
| -----       | + | -----  | + | ----- | + | -----     |
|             |   | Total  |   |       |   | 47.74 dBA |

↑  
 Result summary (night)

|             | ! source | ! Road  | ! Total   |
|-------------|----------|---------|-----------|
|             | ! height | ! Leq   | ! Leq     |
|             | ! (m)    | ! (dBA) | ! (dBA)   |
| 1.Byron Ave | ! 1.50   | ! 40.15 | ! 40.15   |
|             | Total    |         | 40.15 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 47.74  
(NIGHT): 40.15

⬆

⬆

Filename: rec62.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 6-2 - Block 1

Road data, segment # 1: Byron 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  : 40 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: Byron Ave (day/night)

```
-----
Angle1   Angle2       : -27.00 deg   32.00 deg
Wood depth          : 0             (No woods.)
No of house rows    : 0 / 0
Surface             : 1             (Absorptive ground surface)
Receiver source distance : 91.00 / 91.00 m
Receiver height      : 4.50 / 4.50 m
Topography           : 1             (Flat/gentle slope; no barrier)
Reference angle      : 0.00
```

↑

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Byron Ave ! 1.50 ! 48.47 ! 48.47
-----+-----+-----+
Total 48.47 dBA
```

↑

Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 40.87 | ! | 40.87     |
|             |   | Total  |   |       |   | 40.87 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 48.47  
(NIGHT): 40.87

⬆

⬆

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

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : 0.00 deg 24.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 112.00 / 112.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 42.39 ! | 42.39     |
| Total       |            |         | 42.39 dBA |

 -----



Result summary (night)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 34.79 ! | 34.79     |
|             | Total      |         | 34.79 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 42.39  
(NIGHT): 34.79

⬆

⬆

Filename: rec72.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 7-2 - Block 1

Road data, segment # 1: Byron 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  : 40 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: Byron Ave (day/night)

```
-----
Angle1  Angle2      : 0.00 deg   24.00 deg
Wood depth          : 0          (No woods.)
No of house rows    : 0 / 0
Surface             : 1          (Absorptive ground surface)
Receiver source distance : 112.00 / 112.00 m
Receiver height      : 4.50 / 4.50 m
Topography          : 1          (Flat/gentle slope; no barrier)
Reference angle      : 0.00
```



Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq  ! Leq
! (m)    ! (dBA) ! (dBA)
-----+-----+-----+
1.Byron Ave ! 1.50 ! 43.18 ! 43.18
-----+-----+-----+
Total                                     43.18 dBA
```



Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq  ! Leq
```

|             | !     | (m)  | ! | (dBA)     | ! | (dBA) |
|-------------|-------|------|---|-----------|---|-------|
| 1.Byron Ave | !     | 1.50 | ! | 35.58     | ! | 35.58 |
|             | Total |      |   | 35.58 dBA |   |       |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 43.18  
(NIGHT): 35.58

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⬆

Filename: rec81.te Time Period: Day/Night 16/8 hours  
 Description: REC 8-1 - Block 2

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : -57.00 deg 0.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 60.00 / 60.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑

Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| -----+      |            |         |           |
| 1.Byron Ave | ! 1.50 !   | 50.23 ! | 50.23     |
| -----+      |            |         |           |
|             | Total      |         | 50.23 dBA |

↑

Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 42.63 | ! | 42.63     |
|             | ! |        | ! |       | ! |           |
|             |   | Total  |   |       |   | 42.63 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 50.23  
(NIGHT): 42.63

⬆

⬆

Filename: rec82.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 8-2 - Block 2

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -57.00 deg    0.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 60.00 / 60.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑

Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| -----+      |            |         |           |
| 1.Byron Ave | ! 1.50 !   | 50.83 ! | 50.83     |
| -----+      |            |         |           |
| Total       |            |         | 50.83 dBA |

↑

Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 43.23 | ! | 43.23     |
|             |   | Total  |   |       |   | 43.23 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 50.83  
(NIGHT): 43.23

⬆

⬆

Filename: rec91.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 9-1 - Block 2

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -70.00 deg    73.00 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



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 57.78 ! | 57.78     |
|             | +          | +       | +         |
| Total       |            |         | 57.78 dBA |

-----



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 50.18 | ! | 50.18     |
|             |   | Total  |   |       |   | 50.18 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 57.78  
(NIGHT): 50.18

⬆

⬆

Filename: rec92.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 9-2 - Block 2

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -70.00 deg    73.00 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 : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 58.21 ! | 58.21     |
| Total       |            |         | 58.21 dBA |

-----



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 50.61 | ! | 50.61     |
|             | ! |        | ! |       | ! |           |
|             |   | Total  |   |       |   | 50.61 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 58.21  
(NIGHT): 50.61

⬆

⬆

Filename: rec101.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 10-1 - Block 2

Road data, segment # 1: Byron 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 : 40 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: Byron 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 : 60.00 / 60.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| -----       | -----      | -----   | -----     |
| 1.Byron Ave | ! 1.50 !   | 50.39 ! | 50.39     |
| -----       | -----      | -----   | -----     |
|             | Total      |         | 50.39 dBA |



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 42.79 | ! | 42.79     |
|             |   | Total  |   |       |   | 42.79 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 50.39  
(NIGHT): 42.79

⬆

⬆

Filename: rec102.te Time Period: Day/Night 16/8 hours  
 Description: REC 10-2 - Block 2

Road data, segment # 1: Byron 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 : 40 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: Byron 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 : 60.00 / 60.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 51.00 ! | 51.00     |
| Total       |            |         | 51.00 dBA |



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 43.40 | ! | 43.40     |
|             |   | Total  |   |       |   | 43.40 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 51.00  
(NIGHT): 43.40

⬆

⬆

Filename: rec111.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 11-1 - Block 4

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -21.00 deg    0.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 96.00 / 96.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 42.94 ! | 42.94     |
|             | +          | +       | +         |
|             | Total      |         | 42.94 dBA |

-----



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 35.34 | ! | 35.34     |
|             | ! |        | ! |       | ! |           |
|             |   | Total  |   |       |   | 35.34 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 42.94  
(NIGHT): 35.34

⬆

⬆

Filename: rec112.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 11-2 - Block 4

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -21.00 deg    0.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 96.00 / 96.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 43.67 ! | 43.67     |
| Total       |            |         | 43.67 dBA |



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 36.07 | ! | 36.07     |
|             | + |        | + |       | + |           |
|             |   | Total  |   |       |   | 36.07 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 43.67  
(NIGHT): 36.07

⬆

⬆

Filename: rec121.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 12-1 - Block 4

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -31.00 deg    38.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 88.00 / 88.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 48.61 ! | 48.61     |
| -----       |            |         |           |
| Total       |            |         | 48.61 dBA |



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 41.02 | ! | 41.02     |
|             |   | Total  |   |       |   | 41.02 dBA |



TOTAL Leq FROM ALL SOURCES (DAY): 48.61  
(NIGHT): 41.02



Filename: rec122.te Time Period: Day/Night 16/8 hours  
 Description: REC 12-2 - Block 4

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : -31.00 deg 38.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 88.00 / 88.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 49.33 ! | 49.33     |
| Total       |            |         | 49.33 dBA |

 -----



Result summary (night)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 41.73 ! | 41.73     |
|             | Total      |         | 41.73 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 49.33  
(NIGHT): 41.73

⬆

⬆

Filename: rec131.te Time Period: Day/Night 16/8 hours  
 Description: REC 13-1 - Block 4

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : 0.00 deg 27.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 94.00 / 94.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 44.14 ! | 44.14     |
| Total       |            |         | 44.14 dBA |

 -----



Result summary (night)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 36.54 ! | 36.54     |
|             | Total      |         | 36.54 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 44.14  
(NIGHT): 36.54

⬆

⬆

Filename: rec134.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 13-2 - Block 4

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : 0.00 deg    27.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 94.00 / 94.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 44.87 ! | 44.87     |
| Total       |            |         | 44.87 dBA |

-----



Result summary (night)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 37.27 ! | 37.27     |
|             | Total      |         | 37.27 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 44.87  
(NIGHT): 37.27

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STAMSON 5.0            NORMAL REPORT            Date: 10-02-2026 10:07:24  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec141.te            Time Period: Day/Night 16/8 hours  
Description: REC 14-1 - Block 5

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
Angle1    Angle2 : -46.00 deg    0.00 deg  
Wood depth : 0    (No woods.)  
No of house rows : 0 / 0  
Surface : 1    (Absorptive ground surface)  
Receiver source distance : 68.00 / 68.00 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1    (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Results segment # 1: Byron Ave (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 48.57 + 0.00) = 48.57 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj  | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|--------|-------|-------|-------|-------|--------|
| -46    | 0      | 0.66  | 65.72  | 0.00  | -10.90 | -6.25 | 0.00  | 0.00  | 0.00  | 48.57  |

-----

Segment Leq : 48.57 dBA

Total Leq All Segments: 48.57 dBA

↑

Results segment # 1: Byron Ave (night)

-----

Source height = 1.50 m

ROAD (0.00 + 40.98 + 0.00) = 40.98 dBA

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

-----

|     |   |      |       |      |        |       |      |      |      |       |
|-----|---|------|-------|------|--------|-------|------|------|------|-------|
| -46 | 0 | 0.66 | 58.12 | 0.00 | -10.90 | -6.25 | 0.00 | 0.00 | 0.00 | 40.98 |
|-----|---|------|-------|------|--------|-------|------|------|------|-------|

-----

Segment Leq : 40.98 dBA

Total Leq All Segments: 40.98 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 48.57

(NIGHT): 40.98

↑

↑

Filename: rec142.te Time Period: Day/Night 16/8 hours  
 Description: REC 14-2 - Block 5

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : -46.00 deg 0.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 68.00 / 68.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 49.21 ! | 49.21     |
| Total       |            |         | 49.21 dBA |

 -----



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 41.61 | ! | 41.61     |
|             | ! |        | ! |       | ! |           |
|             |   | Total  |   |       |   | 41.61 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 49.21  
(NIGHT): 41.61

⬆

⬆

Filename: rec151.te Time Period: Day/Night 16/8 hours  
 Description: REC 15-1 - Block 5

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : -55.00 deg 59.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 60.00 / 60.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑

Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 53.23 ! | 53.23     |
| Total       |            |         | 53.23 dBA |

↑

Result summary (night)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 45.63 ! | 45.63     |
|             | Total      |         | 45.63 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 53.23  
(NIGHT): 45.63

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⬆

Filename: rec152.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 15-2 - Block 5

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -55.00 deg    59.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 60.00 / 60.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 53.84 ! | 53.84     |
| Total       |            |         | 53.84 dBA |



Result summary (night)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 46.24 ! | 46.24     |
|             | Total      |         | 46.24 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 53.84  
(NIGHT): 46.24

⬆

⬆

Filename: rec161.te Time Period: Day/Night 16/8 hours  
 Description: REC 16-1 - Block 5

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : 0.00 deg 50.00 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

↑  
 Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 49.09 ! | 49.09     |
| Total       |            |         | 49.09 dBA |

 -----

↑  
 Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 41.49 | ! | 41.49     |
|             |   | Total  |   |       |   | 41.49 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 49.09  
(NIGHT): 41.49

⬆

⬆

Filename: rec162.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 16-2 - Block 5

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : 0.00 deg    50.00 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 : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 49.72 ! | 49.72     |
| Total       |            |         | 49.72 dBA |

-----



Result summary (night)

|             | ! source | ! Road  | ! Total   |
|-------------|----------|---------|-----------|
|             | ! height | ! Leq   | ! Leq     |
|             | ! (m)    | ! (dBA) | ! (dBA)   |
| 1.Byron Ave | ! 1.50   | ! 42.12 | ! 42.12   |
|             | Total    |         | 42.12 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 49.72  
(NIGHT): 42.12

⬆

⬆

Filename: rec171.te Time Period: Day/Night 16/8 hours  
 Description: REC 17-1 - Block 6

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

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



Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 53.74 ! | 53.74     |
| Total       |            |         | 53.74 dBA |



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 46.14 | ! | 46.14     |
|             |   | Total  |   |       |   | 46.14 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 53.74  
(NIGHT): 46.14

⬆

⬆

Filename: rec172.te Time Period: Day/Night 16/8 hours  
 Description: REC 17-2 - Block 6

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1 Angle2 : -65.00 deg 0.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 39.00 / 39.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Result summary (day)

-----  

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 54.19 ! | 54.19     |
| Total       |            |         | 54.19 dBA |

 -----

↑  
 Result summary (night)

|             | ! source | ! Road  | ! Total   |
|-------------|----------|---------|-----------|
|             | ! height | ! Leq   | ! Leq     |
|             | ! (m)    | ! (dBA) | ! (dBA)   |
| 1.Byron Ave | ! 1.50   | ! 46.59 | ! 46.59   |
|             | +        | +       | +         |
|             | Total    |         | 46.59 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 54.19  
(NIGHT): 46.59

⬆

⬆

Filename: rec181.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 18-1 - Block 6

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -73.00 deg    76.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 30.00 / 30.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----  

|             | ! source ! | Road  | ! Total   |
|-------------|------------|-------|-----------|
|             | ! height ! | Leq   | ! Leq     |
|             | ! (m) !    | (dBA) | ! (dBA)   |
| 1.Byron Ave | ! 1.50 !   | 58.99 | ! 58.99   |
|             |            |       |           |
|             | Total      |       | 58.99 dBA |

-----



Result summary (night)

|             | ! | source | ! | Road  | ! | Total     |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 51.39 | ! | 51.39     |
|             |   | Total  |   |       |   | 51.39 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 58.99  
(NIGHT): 51.39

⬆

⬆

Filename: rec182.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 18-2 - Block 6

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : -73.00 deg    76.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 30.00 / 30.00 m  
 Receiver height : 4.50 / 4.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 59.37 ! | 59.37     |
| Total       |            |         | 59.37 dBA |



Result summary (night)

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 51.77 ! | 51.77     |
|             | Total      |         | 51.77 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 59.37  
(NIGHT): 51.77

⬆

⬆

Filename: rec191.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 19-1 - Block 6

Road data, segment # 1: Byron 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 : 40 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: Byron Ave (day/night)

-----  
 Angle1    Angle2 : 0.00 deg    68.00 deg  
 Wood depth : 0    (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1    (Absorptive ground surface)  
 Receiver source distance : 37.00 / 37.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1    (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Result summary (day)

-----

|             | ! source ! | Road !  | Total     |
|-------------|------------|---------|-----------|
|             | ! height ! | Leq !   | Leq       |
|             | ! (m) !    | (dBA) ! | (dBA)     |
| 1.Byron Ave | ! 1.50 !   | 54.24 ! | 54.24     |
| Total       |            |         | 54.24 dBA |



Result summary (night)

|             |   |        |   |       |   |           |
|-------------|---|--------|---|-------|---|-----------|
|             | ! | source | ! | Road  | ! | Total     |
|             | ! | height | ! | Leq   | ! | Leq       |
|             | ! | (m)    | ! | (dBA) | ! | (dBA)     |
| 1.Byron Ave | ! | 1.50   | ! | 46.64 | ! | 46.64     |
|             |   | Total  |   |       |   | 46.64 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 54.24  
(NIGHT): 46.64

⬆

⬆

Filename: rec192.te                      Time Period: Day/Night 16/8 hours  
 Description: REC 19-2 - Block 6

Road data, segment # 1: Byron 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  : 40 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: Byron Ave (day/night)

```
-----
Angle1  Angle2      : 0.00 deg  68.00 deg
Wood depth          : 0        (No woods.)
No of house rows    : 0 / 0
Surface             : 1        (Absorptive ground surface)
Receiver source distance : 37.00 / 37.00 m
Receiver height      : 4.50 / 4.50 m
Topography           : 1        (Flat/gentle slope; no barrier)
Reference angle      : 0.00
```

↑  
 Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq  ! Leq
! (m)    ! (dBA) ! (dBA)
-----+-----+-----+
1.Byron Ave ! 1.50 ! 54.69 ! 54.69
-----+-----+-----+
Total                                     54.69 dBA
```

↑  
 Result summary (night)

```
! source ! Road ! Total
! height ! Leq  ! Leq
```

|             | ! | (m)   | ! | (dBA) | ! | (dBA)     |
|-------------|---|-------|---|-------|---|-----------|
| 1.Byron Ave | ! | 1.50  | ! | 47.09 | ! | 47.09     |
|             |   | Total |   |       |   | 47.09 dBA |

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 54.69  
(NIGHT): 47.09

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