Environmental Noise Update

69 & 117 John Street

Proposed Residential Development

City of Mississauga

October 6, 2025
Project: 122-0393

Prepared for

13545130 Canada Inc.

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VALCOUSTICS
Canada Ltd.

Version History

Version #	Date	Comments
1.0	April 19, 2024	Final – Issued to Client
2.0	October 2, 2024	Final – Issued to Client
3.0	October 6, 2025	Update – Revised Architectural Drawings

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Environmental Noise Update

69 & 117 John Street

Proposed Residential Development

City of Mississauga

EXECUTIVE SUMMARY

Valcoustics Canada Ltd. (VCL) previously prepared an Environmental Noise Feasibility Study report dated April 19, 2024 and an Environmental Noise Feasibility Study Update report dated October 2, 2024 for the proposed residential development. This subsequent update has been prepared to address revisions to the architectural drawings.

The project will consist of three (3) towers that are 32, 31 and 24 storeys in height. An eight (8) storey podium with two (2) levels of underground parking will be used to connect the towers.

The main noise source with potential to impact the subject site is rail traffic on CPR Galt Subdivision and GO Transit Milton Line and road traffic on Hurontario Street and Kirwin Avenue.

To meet the applicable transportation noise source guideline limits:

- All residential units in the development require air conditioning to allow windows to remain closed for noise control purposes;
- Brick veneer exterior wall construction or masonry equivalent (STC 54) construction from the foundation to the rafters for the west, north and east facades of the entire development (including Buildings A, B and C), exposed to the railway noise; and
- Upgraded windows are also required:
  - North facade: Up to STC 49; and
  - West and east facades: Up to STC 46.
- Sound barriers are required for the 2nd-level patios and the parking rooftop outdoor amenity space on the north sides of the buildings. Additional sound barriers are required for terraces on levels 6 and 7 if the terrace depth is not modified to less than 4 m.

Requirements should be reviewed prior to site plan approval and confirmed when detailed building plans are finalized. This could be done as a condition for obtaining a building permit.

1.0 INTRODUCTION

VCL previously prepared an Environmental Noise Feasibility Study report dated April 19, 2024 and an Environmental Noise Feasibility Study Update report dated October 2, 2024 for the proposed residential development. This subsequent update has been prepared to address revisions to the architectural drawings.

The predicted sound levels and noise mitigation measures needed for the proposed development to comply with noise guidelines of the Ministry of the Environment, Conservation and Parks (MECP) are outlined herein.

1.1 THE SITE AND SURROUNDING AREA

The proposed development is located at 69 & 117 John Street in the City of Mississauga. The site is bounded by:

- CPR Galt Subdivision and GO Transit Milton Line, with existing residential dwellings beyond, to the north;
- Existing residential dwellings to the east;
- John Street, with existing residential dwelling beyond, to the south; and
- Existing storage facility, with existing commercial plaza and Hurontario Street beyond, to the west.

A Key Plan is included as Figure 1.

1.2 THE PROPOSED DEVELOPMENT

The Project will consist of three (3) towers that are 31, 30 and 20 storeys in height, for Buildings A, B and C, respectively. A eight (8) storey podium with two (2) levels of underground parking will be used to connect the towers. The underground parking structure extends beyond the footprint of the podium, towards the rail ROW. The development will also include a safety berm along the north property line. The berm will be approximately 2.5 m in height relative to the rail track elevation.

This report is based on the architectural drawings prepared by Tregebov Cogan Architect, latest revised September 17, 2025 (“For Review”). Figures 2 to 6 show the site plan, ground floor plan, 2nd floor plan, 6th floor plan and 7th floor plan from the drawings respectively. Additional relevant plans from the drawings are included in Appendix A.

2.0 NOISE SOURCES

2.1 TRANSPORTATION SOURCES

The noise source with potential to impact the proposed development is rail traffic on CPR Galt Subdivision and GO Transit Milton Line and road traffic on Hurontario Street and Kirwin Avenue. The traffic data is shown in Appendix B.

The planned future rail traffic data for the GO Transit Milton Line was obtained from Metrolinx on October 2, 2025.

The data indicates that GO rail service on this subdivision will be comprised of diesel trains. There are no anti-whistling by-laws in affect near the subject site.

Note, as of November 2020, CPR is no longer supplying rail traffic data. This project is using the CPR rail data dated April 12, 2018 from our previous projects, and escalated to the Year 2035 design condition using the 2.5% annual growth rate.

The rail traffic data is summarized in Table 1A.

TABLE 1A RAIL TRAFFIC DATA

Railway	Time Period	Volume	# Cars per Train	# Locos per Train	Speed (km/hr)
Milton GO Line (1)	Day (0700-2300)	20	10	1	105
	Night (2300-0700)	2			
CP Galt Subdivision (2)	Day (0700-2300)	9 (13.7)	151	4	80
	Night (2300-0700)	8 (12.2)			

Notes:

(1) The future planned rail traffic data was provided by Metrolinx/GO Transit on October 2, 2025.

(2) Obtained from CPR for the year 2018. Data shown in brackets was projected to the year 2035 design condition at a 2.5% growth rate, compounded annually. The data provided shows the maximum number of train cars and locomotives.

Ultimate (2041) road traffic data for Hurontario Street and Kirwin Avenue were obtained from the City of Mississauga on October 11, 2022. The traffic data indicates a proposed LRT line along Hurontario Street, and existing lanes may be converted from 6 lanes to 4 lanes with 2 LRT lines in the middle. Currently, traffic data and a timeline for the proposed LRT line is not available and thus was not included in the analysis. The road traffic data is summarized in Table 1B.

TABLE 1B ROAD TRAFFIC DATA

Road	24-Hour Volume(1)	Day/Night Split (%)	Trucks (%)		Speed (km/hr)
			Medium	Heavy	
Hurontario Street	53 200	90/10	2.2	1.8	50
Kirwin Avenue	12 500	90/10	1.1	0.9	50

Note:

(1) Ultimate traffic data (2041) obtained from the City of Mississauga.

2.2 STATIONARY SOURCES

Based on a visit to the area by VCL staff on November 23, 2022, there are no stationary sources in the vicinity with the potential to significantly impact the subject site and therefore noise impact from stationary noise sources is not considered further in this report.

3.0 ENVIRONMENTAL NOISE GUIDELINES

3.1 MECP NPC-300 – TRANSPORTATION SOURCES

The applicable noise guidelines for new residential development are those in MECP Publication NPC-300, "Environmental Noise Guideline, Stationary, and Transportation Sources – Approval and Planning".

The environmental noise guidelines of the MECP, as provided in Publication NPC-300, are discussed briefly below and summarized in Appendix A.

3.1.1 Architectural Elements

In the daytime, the indoor criterion for road noise is $L_{eq\ Day}$(1)of 45 dBA for sensitive spaces such as living/dining rooms, dens and bedrooms. At night, the indoor criterion for road noise is $L_{eq\ Night}$(2) of 45 dBA for sensitive spaces such as living/dining rooms and dens and 40 dBA for bedrooms. The indoor criteria for rail noise are 5 dBA more stringent (i.e. lower) than those for the road; that is 40 dBA for living/dining rooms, dens and bedrooms during the daytime and nighttime periods except for bedrooms where the nighttime indoor criterion is 35 dBA.

The architectural design of the building envelope (walls, windows, etc.) must provide adequate sound isolation to achieve these indoor sound level limits, based on the applicable outdoor sound level on the facades.

In addition, the MECP requires brick veneer exterior wall construction or masonry equivalent construction from the foundation to the rafters for the first row of dwellings provided they are within 100 m of the rail line and the $L_{eq\ 24}$ is greater than 60 dBA.

3.1.2 Ventilation

In accordance with the MECP noise guideline for road traffic sources, if the daytime sound level, $L_{eq\ Day}$, at the exterior face of a noise sensitive window is greater than 65 dBA, means must be provided so that windows can be kept closed for noise control purposes and central air conditioning is required. For daytime sound levels between 56 dBA and 65 dBA inclusive, there need only be the provision for adding air conditioning at a later date. A warning clause advising the occupant of the potential interference with some activities is also required. At nighttime, air conditioning would be required when the sound level exceeds 60 dBA ($L_{eq\ Night}$) at a noise sensitive window (provision for adding air conditioning is required when greater than 50 dBA).

(1) 16-hour energy equivalent sound level (0700-2300 hours).
(2) 8-hour energy equivalent sound level (2300-0700 hours).

3.1.3 Outdoors

For outdoor amenity areas ("Outdoor Living Areas" – OLAs), the guideline is $L_{eq\ Day}$ of 55 dBA, with an excess not exceeding 5 dBA considered acceptable if it is technically not practicable to achieve the 55 dBA objective, providing warning clauses are registered on title.

Note, a balcony or elevated terrace is not considered an OLA, unless it is:

- the only OLA for the occupant;
- at least 4 m in depth; and
- unenclosed.

3.2 FEDERATION OF CANADIAN MUNICIPALITIES (FCM) AND RAILWAY ASSOCIATION OF CANADA (RAC)

The standard noise mitigation measures recommended jointly by the Federation of Canadian Municipalities and the Railway Association of Canada (FCM/RAC) in the guidelines of Reference 5 are:

- a minimum setback of 30 m from the edge of the railway right-of-way to the closest dwelling facade;
- a safety berm at least 2.5 m above grade at the property line;
- an approximately 3.0 m high acoustic fence atop the safety berm (to achieve a total height of 5.5 m above the top of the rail);
- upgraded exterior wall construction (such as brick veneer), where needed; and
- warning clauses specific to the railway for all dwellings within 300 m of the right-of-way.

Aside from the "standard" requirements regarding the setback of dwellings and safety berm/sound barrier configuration, the sound level design objectives of the FCM/RAC guidelines are similar to those of the MECP. See Appendix A. The FCM/RAC guidelines also permit modifications to their standard requirements where substantiated by a detailed noise impact assessment.

4.0 NOISE IMPACT ASSESSMENT

4.1 ANALYSIS METHOD

Using the rail and road traffic data in Tables 1A and 1B, the sound levels, in terms of $L_{eq\ Day}$ and $L_{eq\ Night}$, were determined using STAMSON V5.04 – ORNAMENT/STEAM, the computerized road/rail traffic noise prediction models of the MECP.

The receptor locations used in the noise assessment are shown in Figures 2 to 6.

The worst-case facade receptors were assessed at the heights corresponding to windows on the highest floors for the Buildings.

The daytime sound levels at the grade-level private patios were assessed at a height of 1.5 m above grade, at the centre of each outdoor amenity area, in accordance with the NPC-300 requirements.

The daytime sound levels at elevated terraces were assessed at a height of 1.5 m above each terrace elevation, at the centre of the amenity space.

Inherent acoustical screening due to the orientation of the buildings relative to the noise sources was included in the assessment. Screening from off-site buildings was not included for the facade sound level calculations. However, screening from the safety berm and the off-site buildings was included for the OLA calculations.

4.2 SOUND LEVEL PREDICTION

Table 2 summarises the predicted sound levels outdoors at the receptor locations.

The highest daytime/nighttime unmitigated sound levels of 72 dBA/74 dBA are predicted to occur at the north facade of Building A.

The highest daytime OLA sound level of 71 dBA is predicted to occur at the 6th and 7th floor terraces on north sides of the buildings.

Sample sound level calculation is included in Appendix D.

TABLE 2 PREDICTED SOUND LEVELS – TRANSPORTATION SOURCES

Location	Source	Distance (m)(1)	$L_{eq\ Day}$ (dBA)	$L_{eq\ Night}$ (dBA)
A(2) Building A Northwest Corner (North Facade)	Milton GO Line/CP Galt Subdivision	43	72	74
	Hurontario Street	233	56	49
	TOTAL	–	**72**	**74**
A(2) Building A Northwest Corner (West Facade)	Milton GO Line/CP Galt Subdivision	43	69	71
	Hurontario Street	233	59	52
	TOTAL	–	**69**	**71**
B(2) Building A Southwest Corner (West Facade)	Milton GO Line/CP Galt Subdivision	81	66	68
	Hurontario Street	231	59	52
	Kirwin Avenue	145	50	43
	TOTAL	–	**67**	**68**

…/cont'd

TABLE 2 PREDICTED SOUND LEVELS – TRANSPORTATION SOURCES (continued)

Location	Source	Distance (m)[1]	$L_{eq\ Day}$ (dBA)	$L_{eq\ Night}$ (dBA)
B[2] Building A Southwest Corner (South Facade)	Hurontario Street	231	56	49
	Kirwin Avenue	145	53	46
	TOTAL	–	**58**	**51**
C[2] Buildings B & C 8-storey Podium Amenity Terrace (OLA)	Milton GO Line/CP Galt Subdivision	60	59	–
D[3] Building A Outdoor Amenity on Grade (OLA)	Milton GO Line/CP Galt Subdivision	47	49	–
E[3] Building A West Side Ground Patio (OLA)	Milton GO Line/CP Galt Subdivision	69	49	–
F[3] Building C Outdoor Amenity on Grade (OLA)	Milton GO Line/CP Galt Subdivision	49	54	–
G[3] Building C North Side Ground Patio (OLA)	Milton GO Line/CP Galt Subdivision	74	55	–
H[4] Building A North Side Level 2 Patio (OLA)	Milton GO Line/CP Galt Subdivision	41	63	–
I[4] Building A Outdoor Amenity Parking Rooftop (OLA)	Milton GO Line/CP Galt Subdivision	39	63	–
J[5] Building B-C North Side Level 6 Terrace (OLA)	Milton GO Line/CP Galt Subdivision	51	71	–

…/cont'd

TABLE 2 PREDICTED SOUND LEVELS – TRANSPORTATION SOURCES (continued)

K(6) Building A West Side Level 7 Terrace (OLA)	Milton GO Line/CP Galt Subdivision	68	67	–
L(6) Building C North Side Level 7 Terrace (OLA)	Milton GO Line/CP Galt Subdivision	53	71	

Notes:

(1) Distance is from the centreline of the roadway/railway.
(2) Locations A to C are shown on Figure 2.
(3) Locations D to G are shown on Figure 3.
(4) Locations H and I are shown on Figure 4.
(5) Location J is shown on Figure 5.
(6) Locations K and L is shown on Figure 6.

4.3 NOISE CONTROL MEASURES

The noise control measures can generally be classified into two categories which are interrelated, but which can be treated separately for the most part:

a) Architectural elements to achieve acceptable indoor noise guidelines for transportation sources; and

b) Design features to protect the OLAs.

Noise abatement requirements are summarised in Table 3 and notes to Table 3.

4.3.1 Indoors

4.3.1.1 Exterior Wall and Window Construction

Floor plans showing the suite layouts have not yet been developed. The STC requirements were therefore calculated assuming exterior walls and windows to have surface areas equalling 20% and 80% of the associated floor area, respectively, on the facade of a top-floor bedroom (worst case) exposed directly to or at an angle to the road or rail traffic noise sources.

Our analysis indicates that exterior wall construction meeting STC 54 (e.g., brick veneer) or higher is required. Moreover, the MECP/FCM requires brick veneer exterior wall construction or masonry equivalent construction for the first row of dwellings (i.e. all the development including proposed Buildings A, B and C) as they are within 100 m of the rail line and the $L_{eq\ 24}$ is greater than 60 dBA.

Upgraded windows are also required:

- North facade: Up to STC 49; and
- West and east facades: Up to STC 46.

For south facade, the analysis shows that exterior wall and window construction meeting the minimum non-acoustical requirements of the Ontario Building Code will be sufficient to meet the indoor noise criteria.

Note, the required window STC ratings can be up to 3 points higher at corner locations if windows are provided on both facades.

The window STC requirements outlined above are quite stringent and may be reduced through proper space design. Consideration should be given to:

- Reducing the size of the windows or ensuring that the exterior window area is small relative to the floor area of the associated space.
- Designing the spaces so that the rooms at the corners of the building have windows on only one facade.
- Having non-noise sensitive spaces, such as walk-in closets or washrooms, at the corners of the building.
- Upgrade the exterior wall construction to have an STC rating greater than STC 54.

Note, the window frames themselves must also be designed to ensure that the overall sound isolation performance for the entire window assembly meets the sound isolation requirement. This must be confirmed by the window manufacturer through the submission of acoustical test data.

The assessment should be updated, and the sound isolation requirements confirmed once more detailed plans, suite layout drawings and elevation drawings become available.

4.3.1.2 Ventilation Requirements

All dwelling units in the development require central air conditioning to allow windows to be closed for noise control purposes.

4.3.2 Outdoors

The unmitigated daytime OLA sound levels at the Level 2 patios and the parking rooftop outdoor amenity space on the north side of the buildings, as well as the Level 6 and Level 7 roof terraces, are predicted to exceed the 60 dBA upper limit of the MECP noise guidelines. Therefore, sound barriers are typically required.

To reduce the OLA sound levels to 60 dBA, following sound barriers would be required:

- For Level 2 patios and the parking rooftop outdoor amenity space on the north side of the buildings, a 1.8 m high sound barrier is required along the perimeter of the proposed underground parking structure. The location of the sound barrier is shown on Figures 2 and 4.

- For two of the Level 6 roof terraces on the north side of the podium, each requires a minimum 2.3 m high sound barrier. The locations of the sound barriers are shown on Figure 5.

- For Level 7 roof terrace on the west side of Building A, a minimum 1.7 m high sound barrier is required. The location of the sound barrier is shown on Figure 6.

- For Level 7 roof terrace on the north side of Building C, a minimum 2.2 m high sound barrier is required. The location of the sound barrier is shown on Figure 6.

Alternatively, if the elevated terraces on Level 6 and Level 7 can be re-designed to have depths less than 4 m, they would not be considered as OLA's and noise mitigation would not be required. Note that there are common amenity areas on the building rooftops meeting the MECP noise guidelines and thus, these elevated terraces are not the only OLAs provided for the units. Permanent planters are often used when terrace depths need to be reduced by a small amount.

The unmitigated daytime OLA sound levels at all other OLAs are all below the 60 dBA upper limit of the MECP noise guidelines. Therefore, sound barriers are not required for these OLAs. Note that there are a number of common OLA areas with sound levels well below 55 dBA where occupants can pursue quiet outdoor enjoyment. Therefore, it is acceptable to exercise the 60 dBA upper limit for some OLAs.

The sound barriers must be of solid construction with no gaps, cracks or holes (except for small openings required for water drainage) and must have a minimum surface weight of 20 kg/m². A variety of materials may be used, including concrete, masonry, glass, wood, specialty composite materials, or a combination of these.

Sound barrier requirements should be reviewed once grading plans and cross-sections are finalized.

In addition to the sound barrier requirements, a safety berm/crash wall has been provided along the rail right-of-way. Note that rail safety is outside the purview of our expertise and safety berm/crash wall design is not within the scope of the noise study.

4.3.3 Warning clauses

Warning clauses are a tool to inform prospective owners/occupants of potential annoyance due to existing noise sources. Where the guideline sound level limits are exceeded, appropriate warning clauses should be registered on title or included in the development agreement that is registered on title. The warning clauses should also be included in agreements of Offers of

Purchase and Sale and lease/rental agreements to make future occupants aware of the potential noise situation.

Table 3 and the notes to Table 3 summarize the warning clauses for the site.

TABLE 3 MINIMUM NOISE ABATEMENT MEASURES

Location	Air Conditioning(1)	Exterior Wall(2)	Window STC Rating(2)	Sound Barrier(3)	Warning Clauses(4)
Units along north facade of development including Buildings A, B and C	Mandatory	brick veneer or masonry equivalent (STC 54)	STC 49	See Section 4.3.2	A + B + C
Units along west and east facades of development including Buildings A, B and C	Mandatory	brick veneer or masonry equivalent (STC 54)	STC 46	See Section 4.3.2	A + B + C
Units along south facade of development including Buildings A, B and C	Mandatory	No specifical acoustical requirement			A + B + C

Notes:

(1) Where methods must be provided to allow windows to remain closed for noise control purposes, a commonly used technique for is the use of air conditioning. Provision for adding air conditioning typically takes the form of a ducted ventilation system suitably sized to permit the addition of central air conditioning by the occupant.

(2) STC - Sound Transmission Class Rating (Reference ASTM-E413). Analyses were based upon the assumption that wall and window areas are as indicated in Section 4.3.1.1 of this report. Requirements should be checked once floor plans have been finalized and exterior wall construction details are defined.

(3) Sound barriers must be of solid construction with no gaps, cracks, or holes, and must meet a minimum surface density of 20 kg/m². Suitable material can include wood, concrete metal sandwich panel, glazing or a combination of these.

(4) The warning clauses to be registered on title and be included in Offers of Purchase and Sale for designated lots:

A. "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 and rail 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, Conservation and Parks."

B. "This dwelling 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 noise criteria of the municipality and the Ministry of the Environment."

C. "Purchasers/occupants are advised Canadian Pacific Limited (CP)/Metrolinx or its affiliated railway companies has or have a railway right-of-way within 300 m from this dwelling unit. There may be alterations to or expansions of the railway facilities of such right-of-way in the future, including the possibility that CP/Metrolinx or its affiliated railway companies as aforesaid, or their assigns or successors may expand their business operations. Such expansion may affect the living and business environment of the residents, tenants and their visitors, employees, customers and patients in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating features in the design of the development. CP/Metrolinx, its affiliated railway companies and their successors and assigns will not be responsible or any complaints or claims arising from use of such facilities and/or operations on, over or under the aforesaid right of-way."

(5) All exterior doors shall be fully weather-stripped.

5.0 THE EFFECT OF THE PROJECT ON THE NEIGHBOURHOOD

The main source of noise associated with this development, with the potential for significant impact on surrounding buildings, is the mechanical equipment.

Mechanical equipment interfacing to the outdoors must comply with the MECP noise guideline limits in NPC-300. By proper engineering design, all requirements can be met, and no significant noise impact would be created for surrounding uses. Appropriate choice of location, equipment type, and noise control features should be considered during detailed design for such items as rooftop equipment and air intakes and exhausts, including underground parking garage ventilation systems. The noise emissions from parking garage air shafts located immediately adjacent to residential uses can be designed to comply with the noise guideline limits by acoustically lining the shaft and/or providing silencers.

For any emergency generators, appropriate steps should be taken to ensure that the equipment placement, treatment, and the routine testing schedule will not generate significant noise impact on neighbouring properties. The generator will require silencers on the intake and exhaust cooling air paths, as well as a muffler on the combustion exhaust.

The additional road traffic generated by this project will be small relative to existing traffic volumes within the general area and is not expected to create significant additional noise impact.

The noise impact of the project on the neighbourhood should be reviewed as design progresses and mechanical details are known. This typically occurs prior to the issuance of building permit.

6.0 CONCLUSIONS

With the incorporation of the recommended noise mitigation measures, the indoor and outdoor transportation noise guidelines can be met. Future occupants will be made aware of potential noise situation through warning clauses, as per MECP guidelines.

The approvals and administrative procedures are available to ensure that the noise requirements are implemented.

7.0 REFERENCES

1. PC STAMSON 5.04, “Computer Program for Road Traffic Noise Assessment”, Ontario Ministry of the Environment.

2. Building Practice Note No. 56: “Controlling Sound Transmission into Buildings”, by J. D. Quirt, Division of Building Research, National Council of Canada, September 1985.

3. “Sound Level Limits for Stationary Sources in Class 1 and 2 Areas (URBAN)”, Ontario Ministry of the Environment, Publication NPC-205, October 1995.

4. “Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning”, Ontario Ministry of the Environment, Publication NPC-300, August 2013

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Title: **Key Plan**		Date: **Sept. 30, 2024**	Figure: **1**
Project Name: **69 & 117 John St, Mississauga**		Project No.: **1220393.000**	

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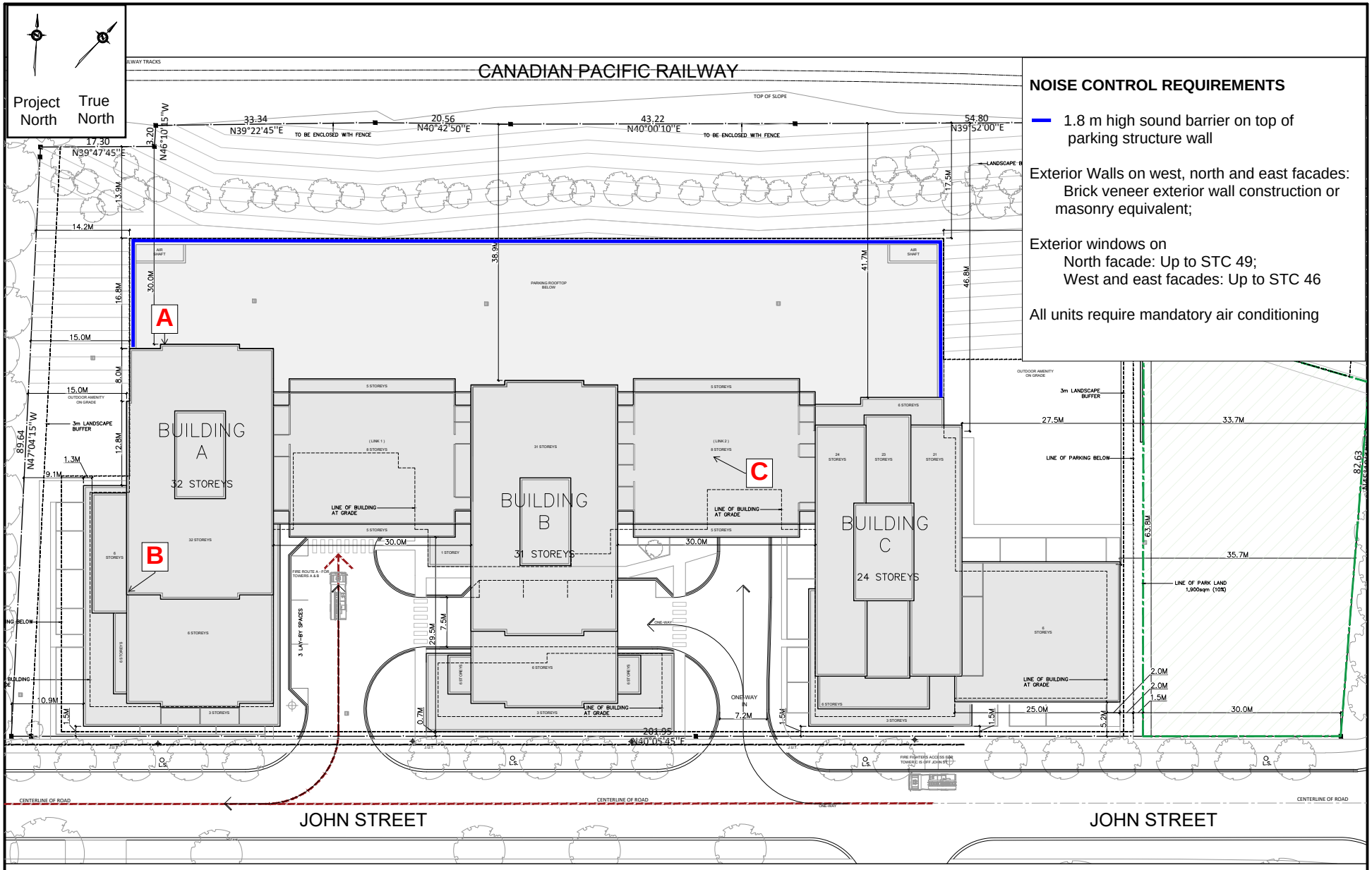
Date Plotted: 02.10.24



NOISE CONTROL REQUIREMENTS

- 1.8 m high sound barrier on top of parking structure wall

Exterior Walls on west, north and east facades:
Brick veneer exterior wall construction or masonry equivalent;

Exterior windows on
North facade: Up to STC 49;
West and east facades: Up to STC 46

All units require mandatory air conditioning

Base drawing prepared by Tregebov Cogan Architect

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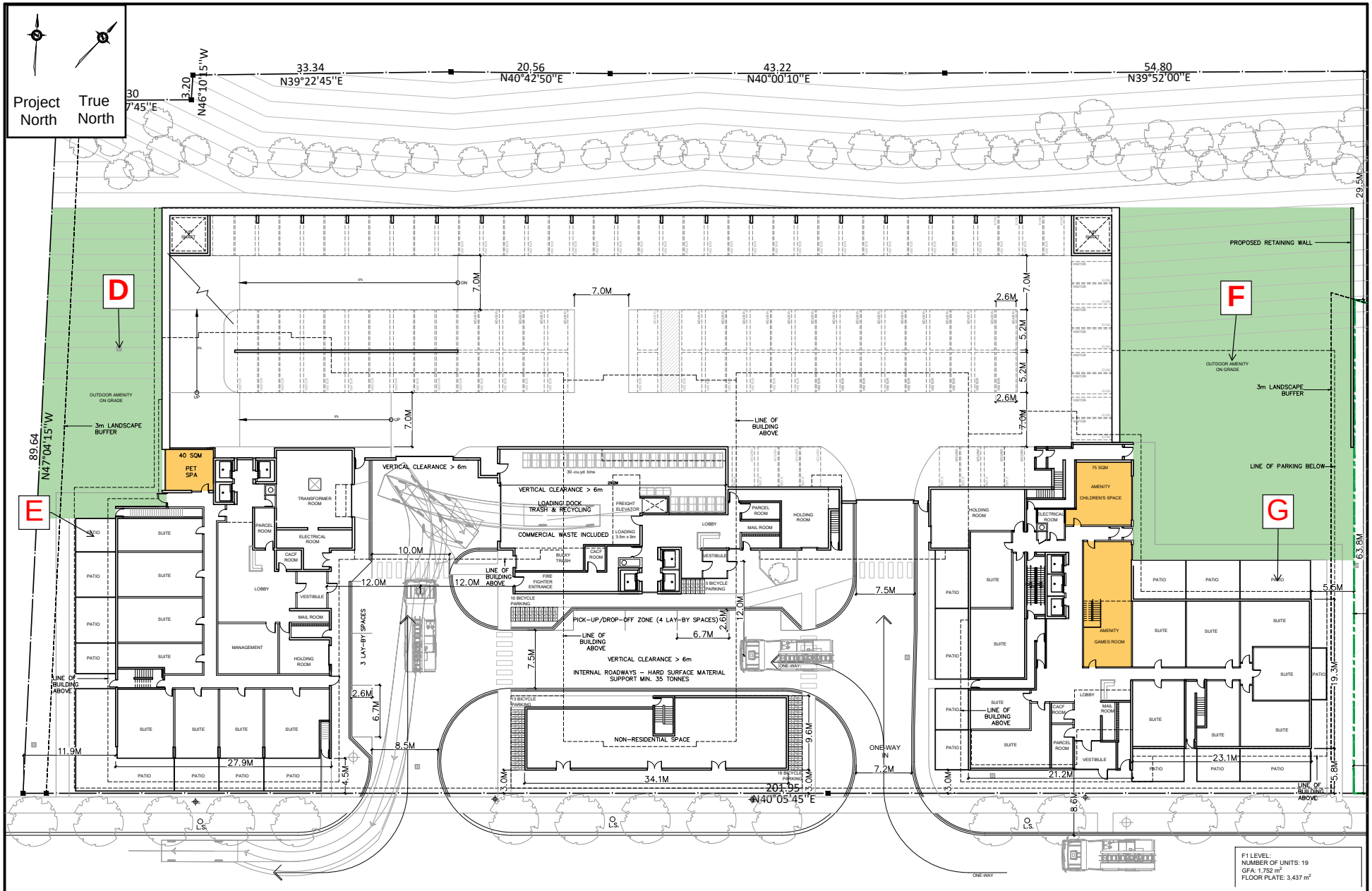
Title
Site Plan

Date
Oct. 2, 2025

Figure
2

Project Name
69 & 117 John Street, Mississauga

Project No.
1220393.000



Base drawing prepared by Tregebov Cogan Architect

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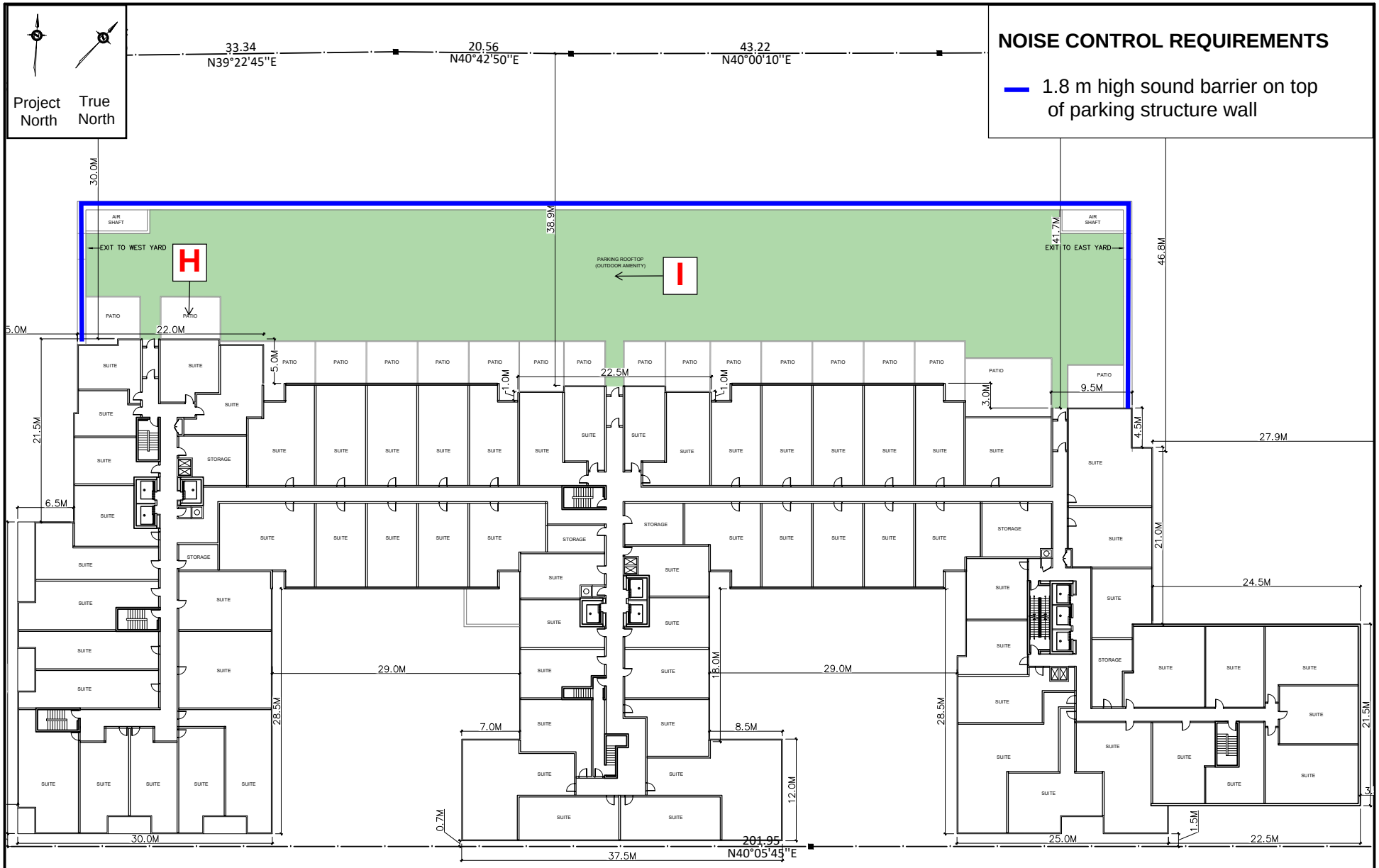
Title	Date	Figure
Ground Floor Plan / Site Plan	**Oct. 1, 2025**	**3**
Project Name: **69 & 117 John Street, Mississauga**	Project No.: **1220393.000**	



Base drawing prepared by Tregebov Cogan Architect

VALCOUSTICS Canada Ltd.
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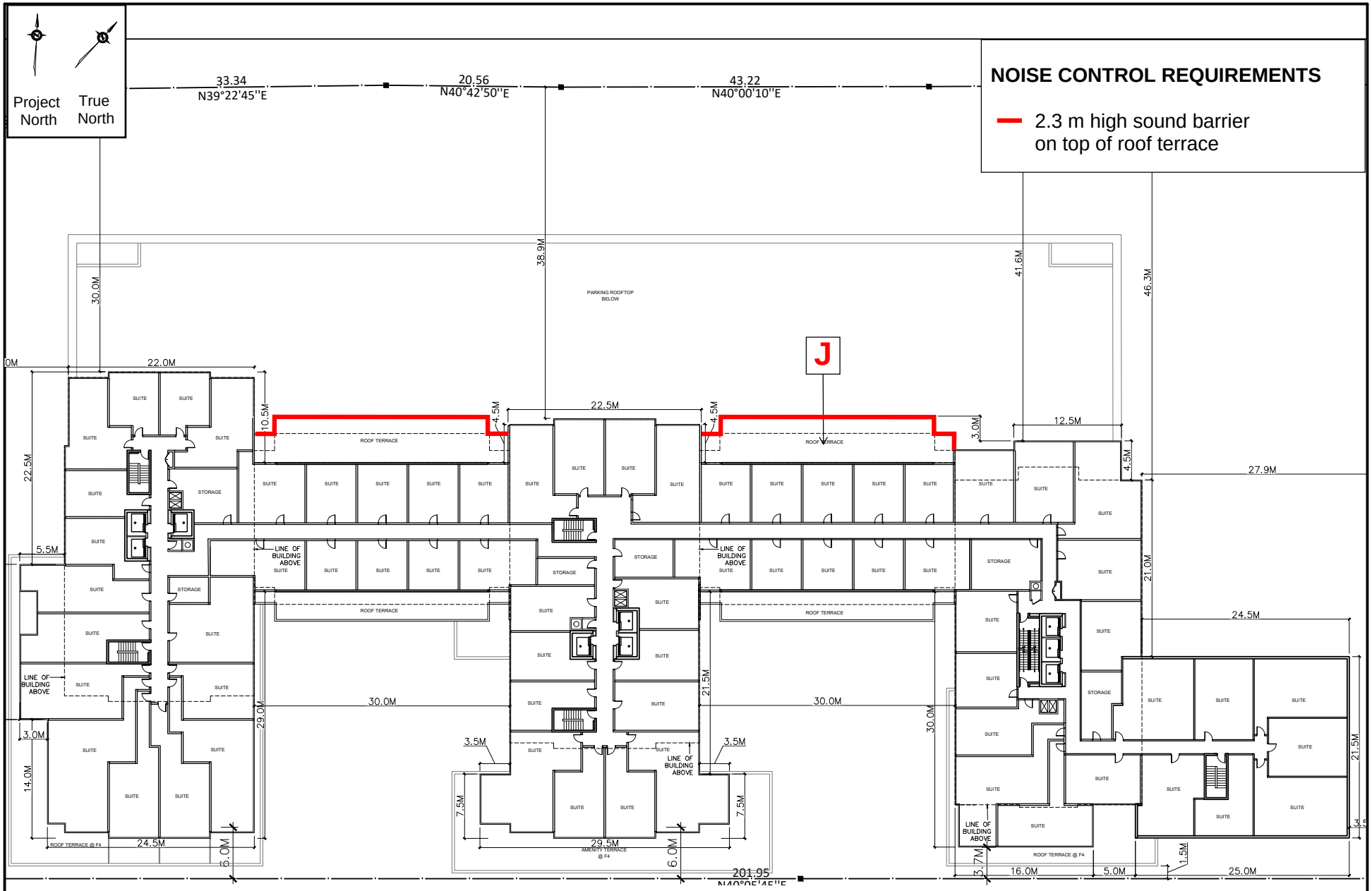
Title
Level 2 Floor Plan

Date
Oct.1, 2025

Figure
4

Project Name
69 & 117 John Street, Mississauga

Project No.
1220393.000



Base drawing prepared by Tregebov Cogan Architect

VALCOUSTICS Canada Ltd.
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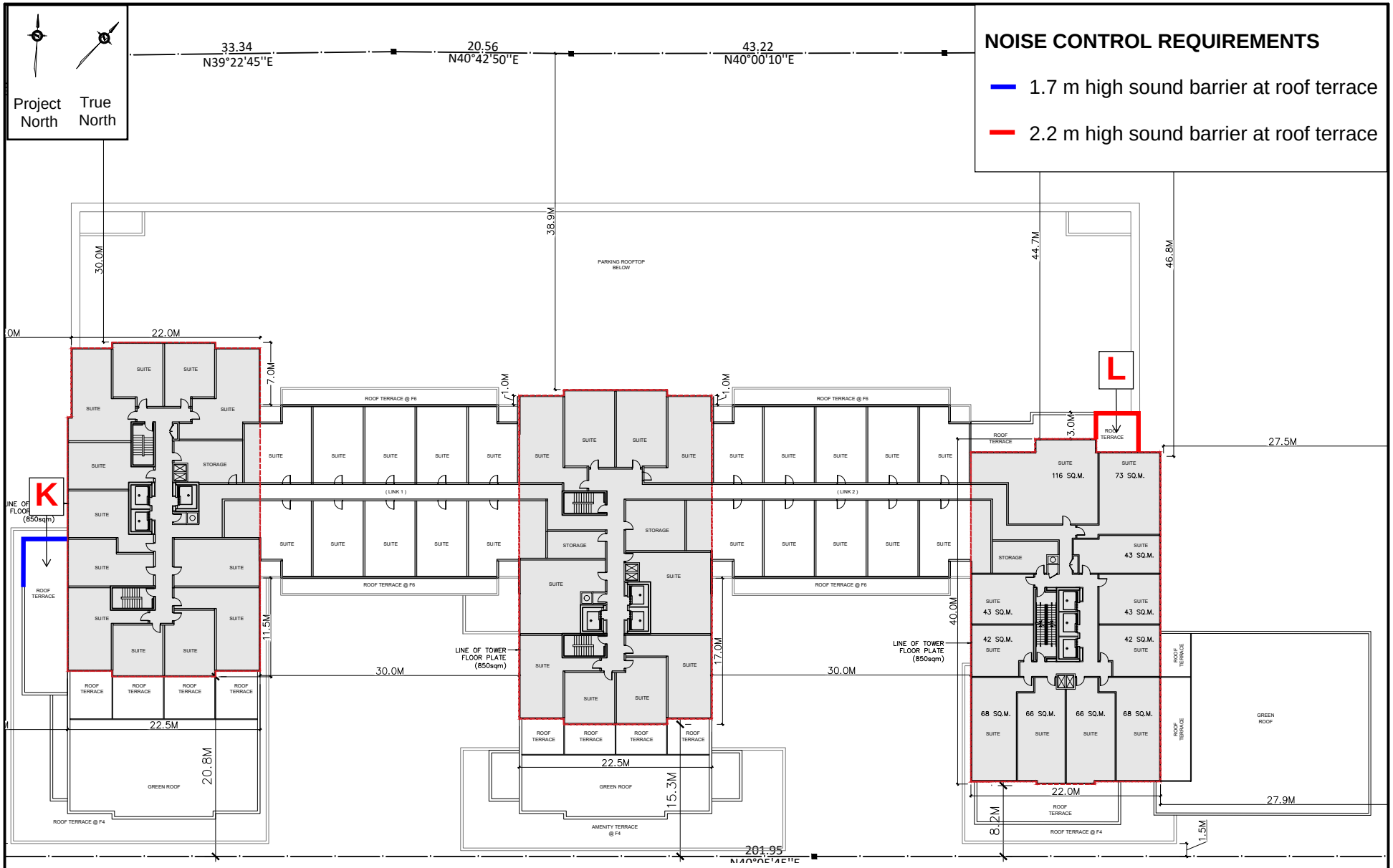
Title
Level 6 Floor Plan

Date
Oct. 1, 2025

Figure
5

Project Name
69 & 117 John Street, Mississauga

Project No.
1220393.000



Base drawing prepared by Tregebov Cogan Architect

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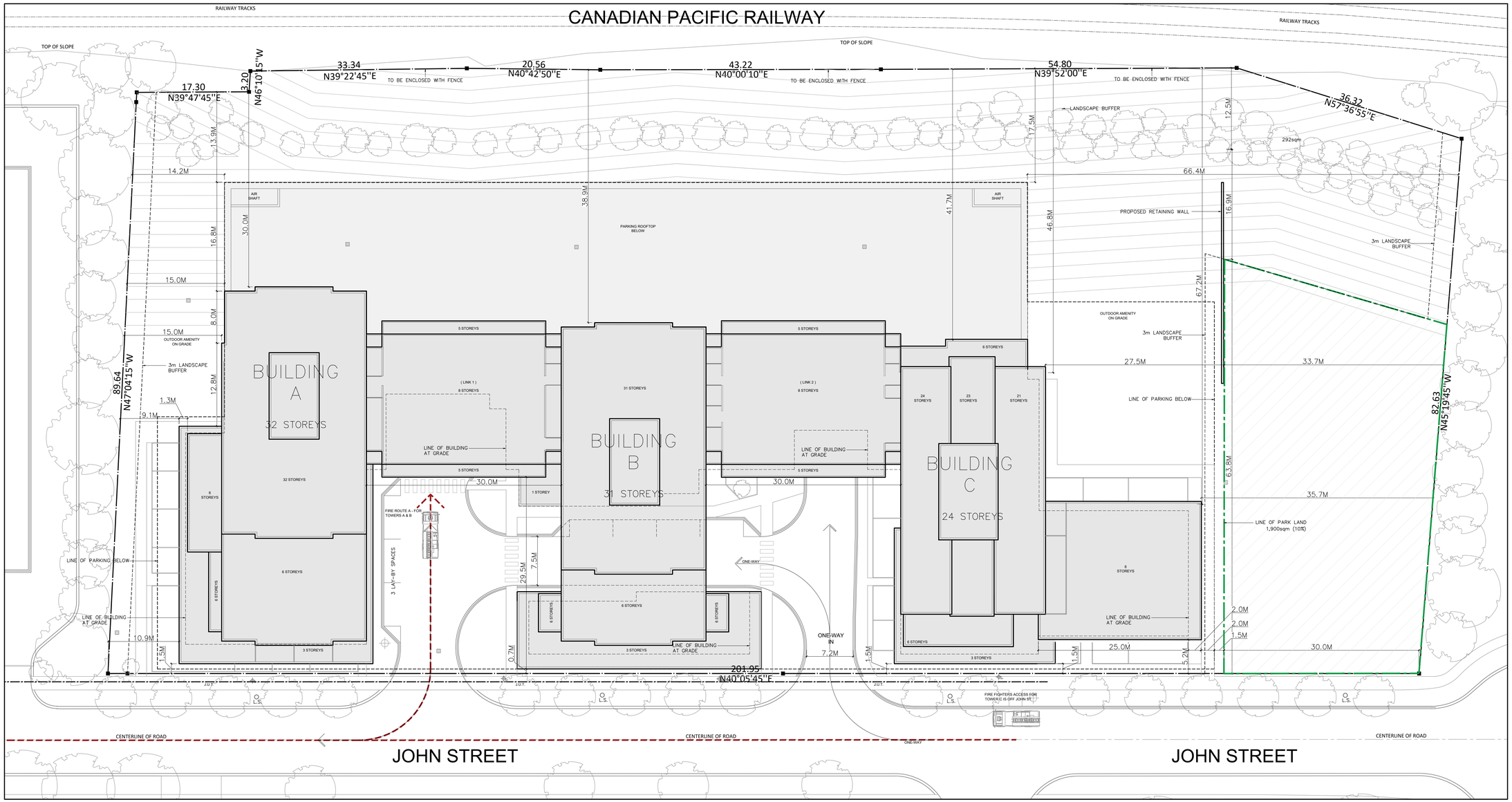
Title: **Level 7 Floor Plan**		Date: **Oct. 1, 2025**	Figure: **6**
Project Name: **69 & 117 John Street, Mississauga**		Project No.: **1220393.000**	

APPENDIX A
ARCHITECTURAL PLANS



3 SITE PLAN

Scale: 1:300

2 CONTEXT PLAN

Scale: 1:5000

LEGAL DESCRIPTION

PART OF LOT 15 CONCESSION 1. NORTH OF DUNDAS STREET
(GEOGRAPHIC TOWNSHIP OF TORONTO)

CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

SITE DATA

LOT AREA	**18,685 sq.m (1.87 hectare)**
PARKLAND AREA	1,900 sq.m (0.19 hectare)
NET LOT AREA	**16,785 sq.m (1.68hectare)**
BUILDING AREA (GROUND FLOOR)	7,201 sq.m (43% of LOT AREA)
GROSS FLOOR AREA	77,230 sq.m
FLOOR SPACE INDEX (F.S.I)	4.6

FLOOR AREAS AND SUITES

TYPE	STOREYS	FLOOR PLATE* (m²)	AREA (GFA)(m²)				
COMMERCIAL	-		300				
			AREAS (m²)	1 BEDROOM	2 BEDROOM	3 BEDROOM	TOTAL UNITS
PODIUM (F1-F6)	-	INCL. LINKS @ F7/F8	28,912	300	20	60	380
TOWER A (F7+)	32	850	18,590	230	70	0	300
TOWER B (F7+)	31	850	17,875	220	75	0	295
TOWER C (F7+)	24	850	11,853	300	35	0	335
TOTAL			**77,230**	1,050	200	60	**1,310**

NOTES:
3.5% OF TOTAL UNITS DEDICATED TO RENTAL TENANCY AND 7% OF TOTAL UNITS DEDICATED TO AFFORDABLE HOUSING
*FLOOR PLATE AREAS FOR TOWERS ARE BASED ON FLOORS F9 AND ABOVE. FLOOR PLATE AREAS INDICATE TYPICAL PLAN IN EACH TOWER UPPER FLOORS OF TOWER C HAS DRASTICALLY REDUCED FLOOR PLATE AREAS DUE TO TAPERING MASSING/FORM ON TOP OF TOWER

MIN. SUITE AREA	50 sq.m
AVERAGE AREA/SUITE (net)	60 sq.m
UNITS PER HECTARE (U.P.H)	780

LAND USE AT GRADE

PAVED AREA	2,150 sq.m	12%
LANDSCAPED AREA	7,394 sq.m	40%
AREA OF BLDG. AT GRADE	7,241 sq.m	38%
PARKLAND	1,900 sq.m	10%
	18,685 sq.m	**100%**

SETBACKS

PROVIDED

SOUTH SIDE (JOHN STREET)	VARIES 1.5 m – 31.0 m
WEST SIDE	VARIES 9.1 m – 15.0 m
NORTH SIDE (C.P.R RAILWAY)	VARIES 30.0 m – 67.2 m
EAST SIDE	VARIES 35.0 m – 66.4 m
EAST SIDE (TO PARKLAND)	VARIES 3.5 m – 27.5 m

BUILDING HEIGHTS

TOWER A HEIGHT TO TOP OF FLAT ROOF (TAKEN FROM ESTABLISHED GRADE LINE)	99 m
TOWER B HEIGHT TO TOP OF FLAT ROOF (TAKEN FROM ESTABLISHED GRADE LINE)	96 m
TOWER C HEIGHT TO TOP OF FLAT ROOF (TAKEN FROM ESTABLISHED GRADE LINE)	75 m

PARKING

REQUIRED

TYPE OF UNIT	NO. OF UNITS	PARKING RATIO	PARKING REQUIRED
1 BEDROOM	1,050	0.00	0
2 BEDROOM	200	0.00	0
3 BEDROOM	60	0.00	0
TOTAL RESIDENTIAL PARKING			**0**
VISITOR PARKING	1,310	0.00	0
TOTAL PARKING REQUIRED			**0**

PROVIDED

PARKING LEVEL	TOTAL PARKING SPACES *(0.61 PARKING RATIO)*
SURFACE	7
P+1 LEVEL	116
P+2 LEVEL	114
P1 LEVEL	284
P2 LEVEL	304
TOTAL	**825**

PARKING SPACE TYPICAL DIMENSIONS: 2.6 m X 5.2 m
BARRIER-FREE: 4.5 m X 5.7 m
DRIVEWAY: 7.00 m MIN. WIDTH

NOTES:
INCLUDES 18 BARRIER-FREE PARKING SPACES, 807 RESIDENTIAL SPACES
SURFACE LEVEL PARKING SPACES ARE INCLUDED IN TOTAL PARKING PROVIDED
PARKING RATIOS ARE BASED ON NEW REQUIREMENTS SUPPORTED BY MISSISSAUGA CITY COUNCIL
INCLUDES 165 RESIDENTIAL EV SPACES (20% OF TOTAL)

BICYCLE PARKING PROVIDED

SURFACE LEVEL	44 SPACES
BASEMENT LEVELS	805 SPACES
TOTAL ON SITE	**849 SPACES**

NOTES:
SURFACE LEVEL SPOTS ARE SHORT-TERM VISITOR SPACES

AMENITY/OPEN SPACE

REAR YARD OPEN SPACE (BERM AREA)	4,000 sq.m	
COMMON OUTDOOR SIDEYARD AMENITY	1,958 sq.m	
OUTDOOR REAR TERRACE AMENITY (AT FLOOR 2)	2,427 sq.m	
PROVIDED SHARED OUTDOOR AMENITY (AT FLOORS 4 AND 9)	1,270 sq.m	(**F4**- 216 sq.m) **F9**- 1,054 sq.m)
INDOOR AMENITY (TOTAL OF FLOORS 1, 4 AND 9)	1,150 sq.m	(**F1**- 115 sq.m) **F4**- 610 sq.m) **F9**- 425 sq.m)
TOTAL	**6,805 sq.m***	

NOTES:
OUTDOOR REAR YARD AMENITY SPACE EXCLUDES PRIVATE PATIOS AND RAILWAY BERM AREAS
* COMBINED PROGRAMMED INDOOR/OUTDOOR AMENITY IS APPROX. **5.8 sq.m/unit**

LANDSCAPE AREAS

REAR YARD (BERM AREA)	4,000 sq.m	
FRONT YARD LANDSCAPING (ISLAND AND MISC. AREAS)	3,394 sq.m	
OUTDOOR AMENITY (TOTAL OF FLOORS 1, 2, 4 AND 9)	5,655 sq.m	
TOTAL	**9,049 sq.m***	

NOTES:
OUTDOOR AMENITY SPACE EXCLUDES PRIVATE PATIOS
*DOES NOT INCLUDE ANY PART OF PARKLAND AREA, BERM AREAS OR PAVED AREAS
REAR YARD BERM + FRONT YARD LANDSCAPING EQUALS LANDSCAPE PORTION OF LAND USE ON GRADE (7,394 sq.m)

1 STATISTICS

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:
TREGEBOV COGAN *ARCHITECT*
40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

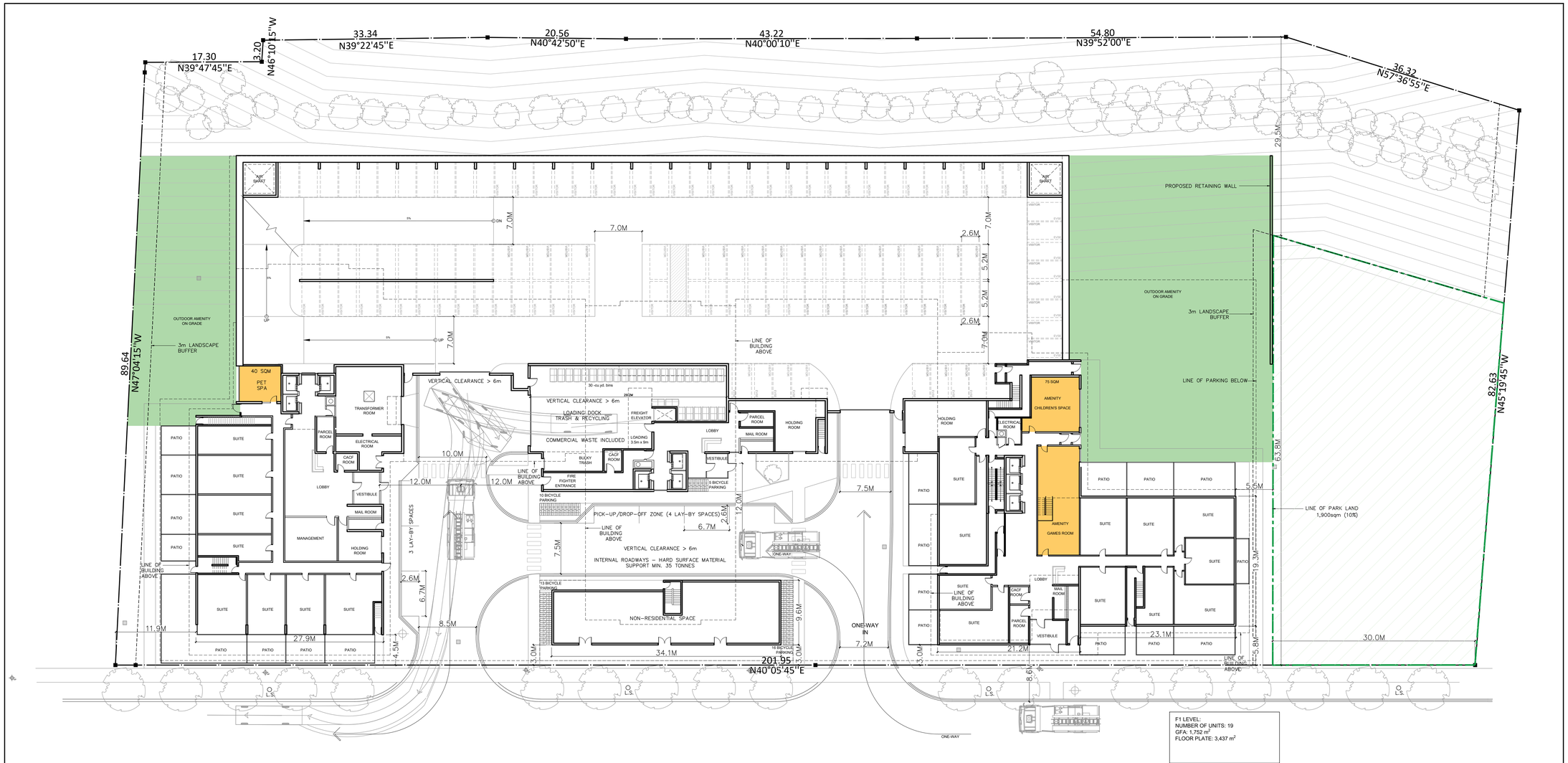
PROJECT NAME:
69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:
SITE STATISTICS, CONTEXT PLAN AND ROOF PLAN

PRINT DATE: 25-SEPT 2025

NORTH

PROJ. No.: 1101
DEV APPLICATION NO:
SCALE: AS NOTED
DRAWN BY: KT,AJ
DWG NO. **A1.0a**



1 F1/SITE PLAN
Scale: 1:300

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:

TREGEBOV COGAN *ARCHITECT*

40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

PROJECT NAME:

69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:

F1/SITE PLAN

PRINT DATE: 25-SEPT 2025

NORTH

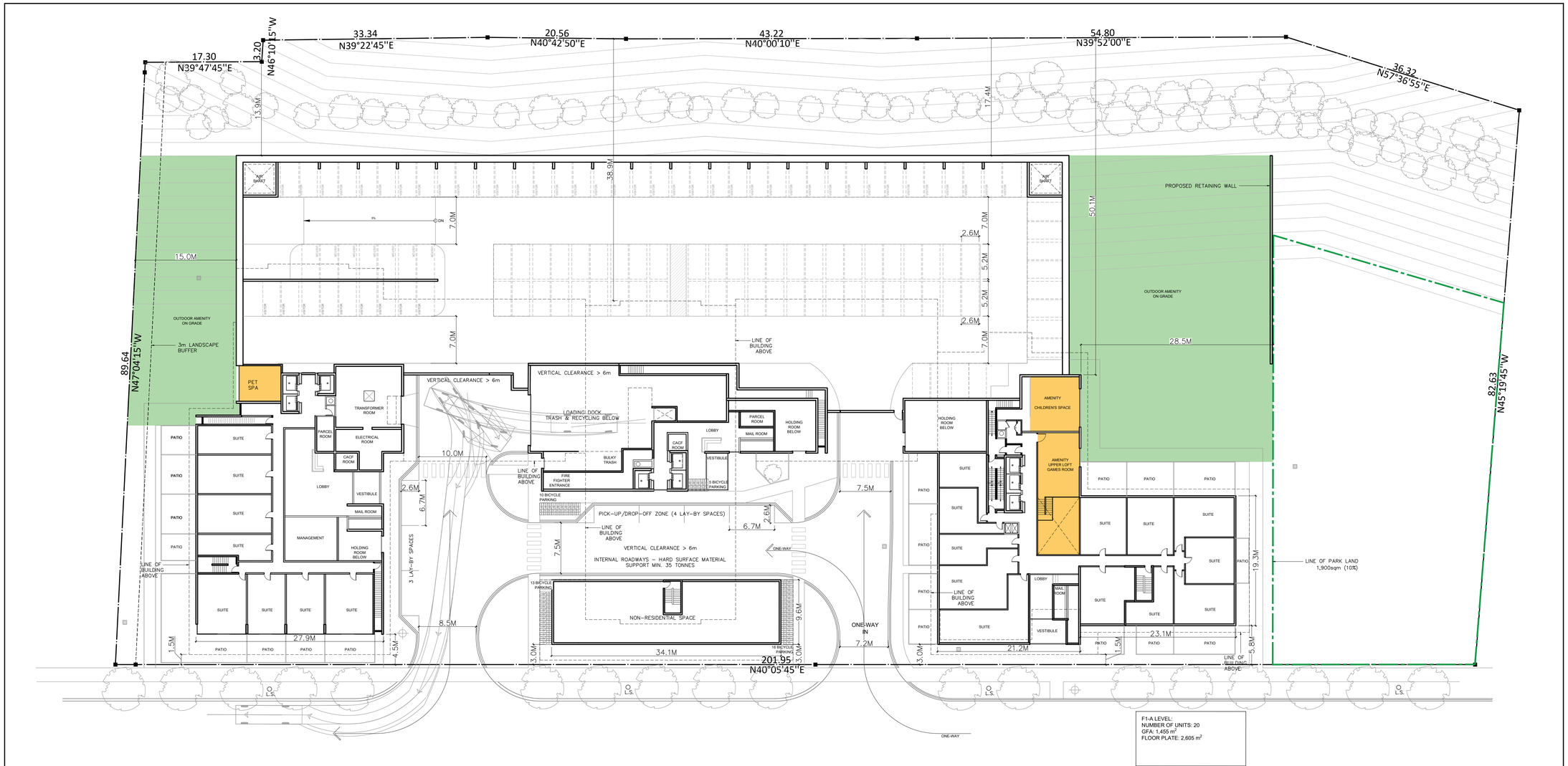
PROJ. No.: 1101

DEV APPLICATION NO:

SCALE: AS NOTED

DWG NO. **A2.3**

DRAWN BY: KT,AJ



F1-A LEVEL:
NUMBER OF UNITS: 20
GFA: 1,455 m²
FLOOR PLATE: 2,605 m²

1 F1a FLOOR PLAN
Scale: 1:300

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:
TREGEBOV COGAN *ARCHITECT*
40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

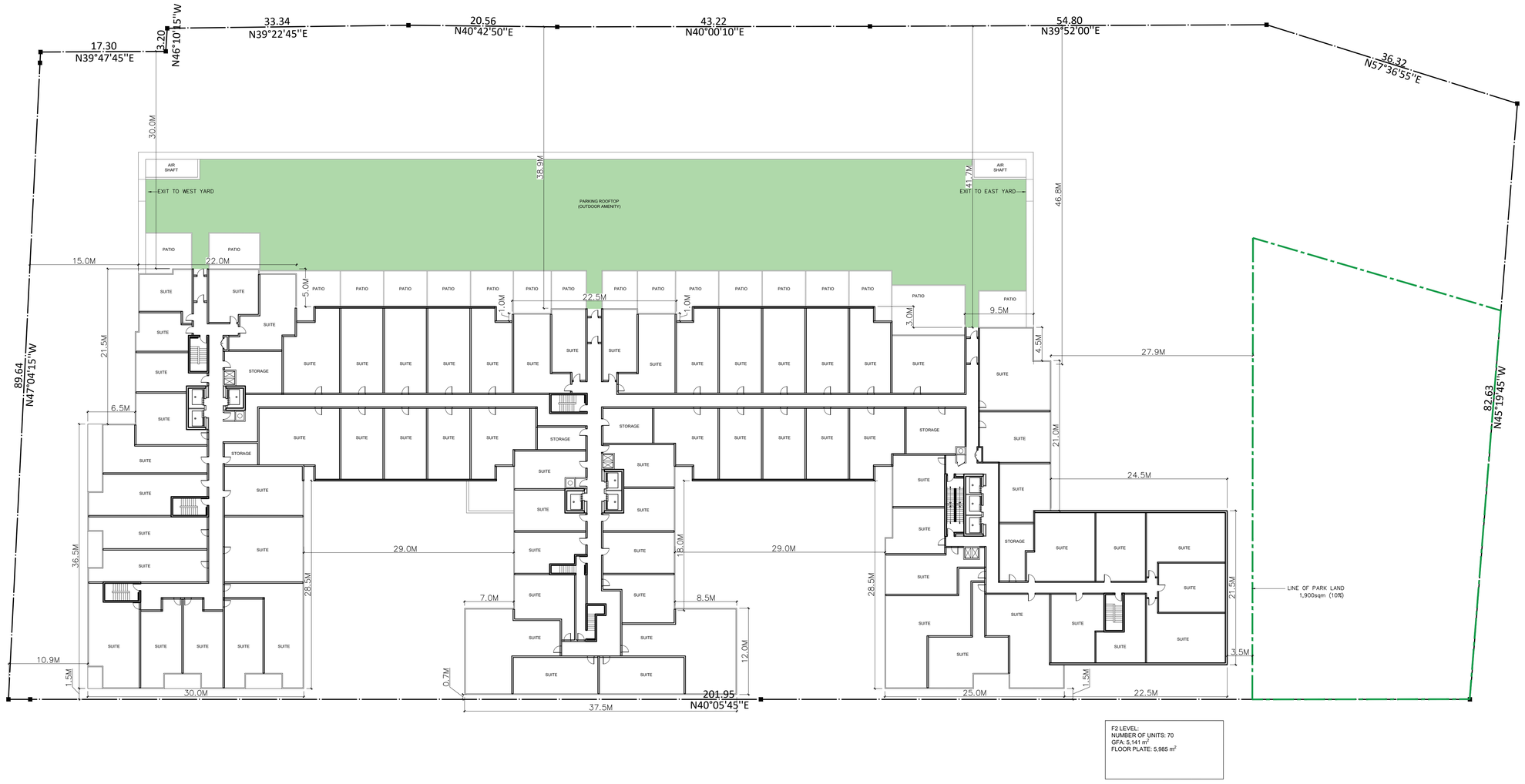
PROJECT NAME:
69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:
F1a FLOOR PLAN

PRINT DATE: 25-SEPT 2025

NORTH

PROJ. No.: 1101
DEV APPLICATION NO:
SCALE: AS NOTED
DWG NO. **A2.4**
DRAWN BY: KT,AJ



1 F2 FLOOR PLAN
Scale: 1:300

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:
TREGEBOV COGAN *ARCHITECT*
40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

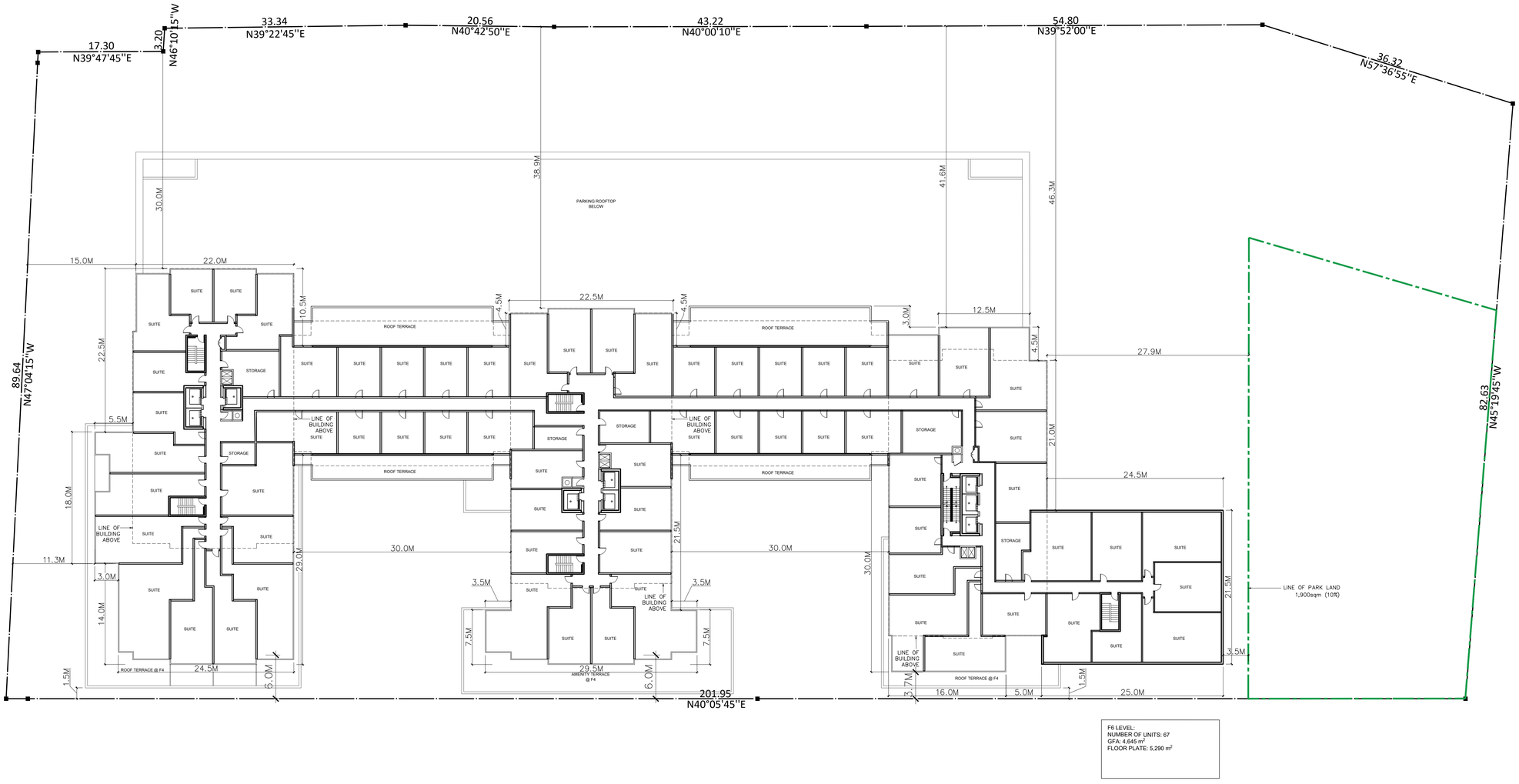
PROJECT NAME:
69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:
F2 FLOOR PLAN

PRINT DATE: 25-SEPT 2025

NORTH

PROJ. No.: 1101
DEV APPLICATION NO:
SCALE: AS NOTED
DWG NO. **A2.5**
DRAWN BY: KT,AJ



F6 LEVEL:
NUMBER OF UNITS: 67
GFA: 4,645 m²
FLOOR PLATE: 5,290 m²

1 F6 FLOOR PLAN
Scale: 1:300

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:
TREGEBOV COGAN *ARCHITECT*
40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

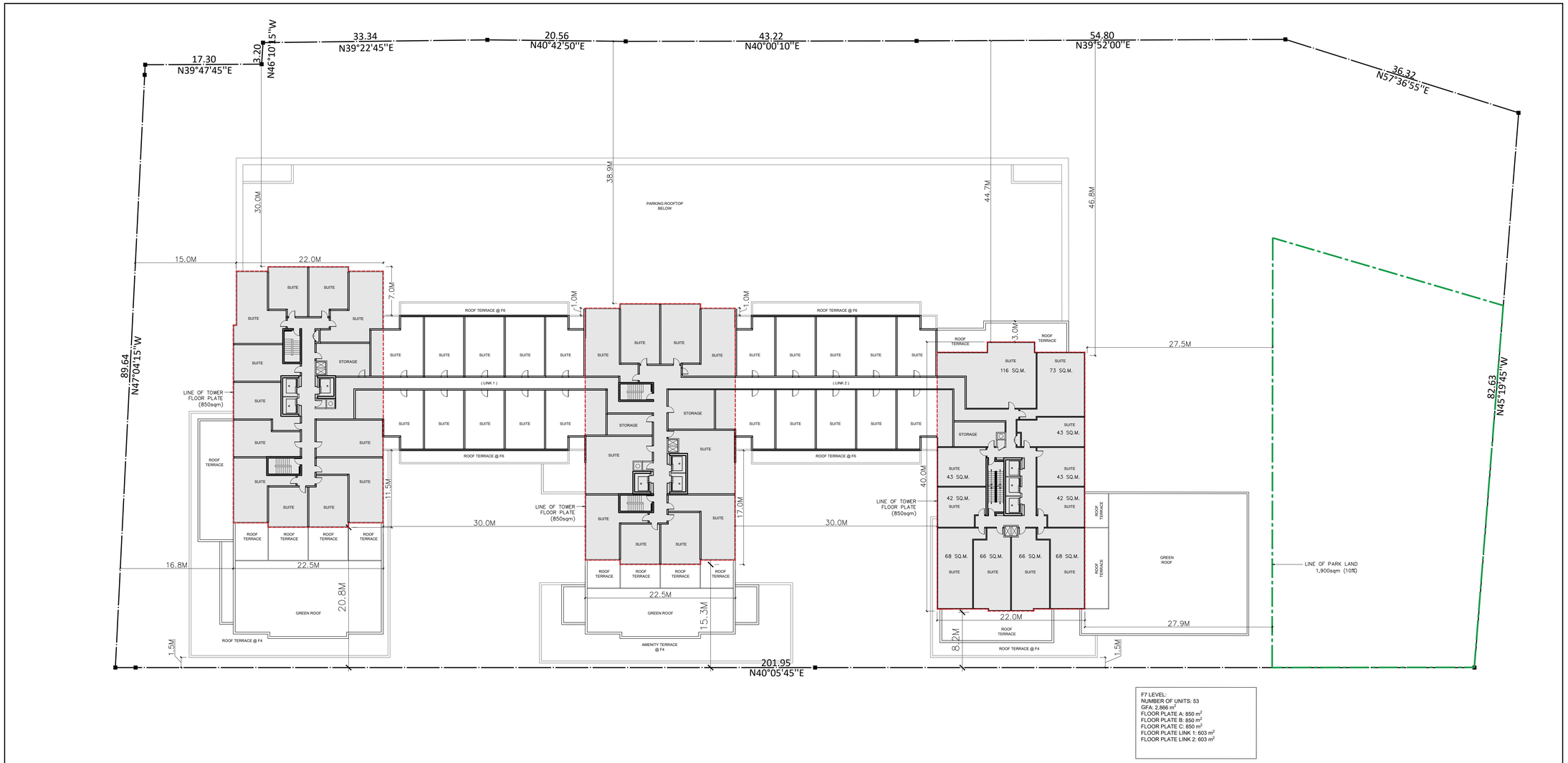
PROJECT NAME:
69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:
F6 FLOOR PLAN

PRINT DATE: 25-SEPT 2025

NORTH

PROJ. No.: 1101
DEV APPLICATION NO:
SCALE: AS NOTED
DWG NO. **A2.9**
DRAWN BY: KT,AJ



F7 LEVEL:
NUMBER OF UNITS: 53
GFA: 2,866 m²
FLOOR PLATE A: 850 m²
FLOOR PLATE B: 850 m²
FLOOR PLATE C: 850 m²
FLOOR PLATE LINK 1: 603 m²
FLOOR PLATE LINK 2: 603 m²

1 F7 FLOOR PLAN
Scale: 1:300

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:
TREGEBOV COGAN *ARCHITECT*
40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

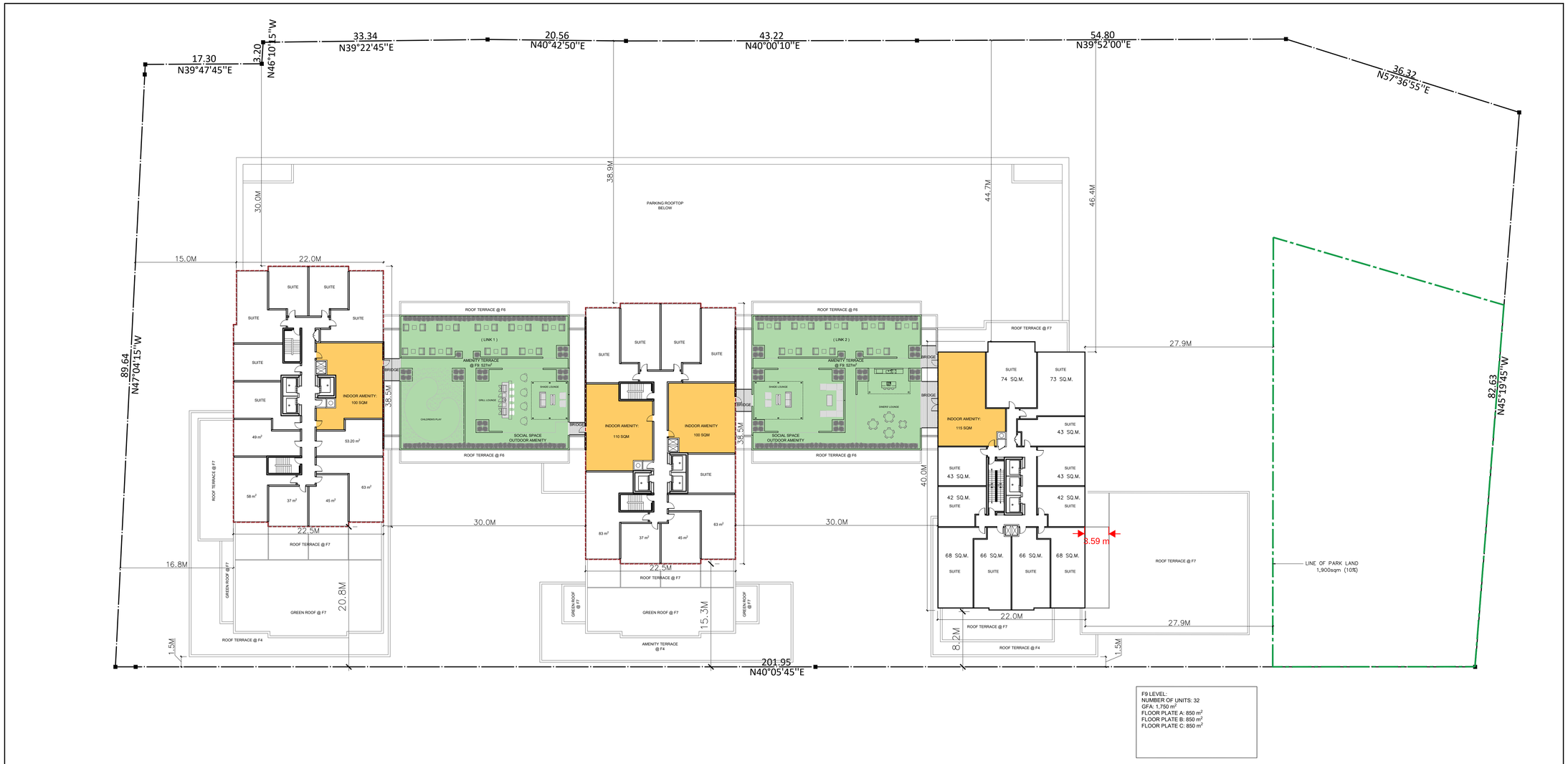
PROJECT NAME:
69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:
F7 FLOOR PLAN

PRINT DATE: 25-SEPT 2025

NORTH

PROJ. No.: 1101
DEV APPLICATION NO:
SCALE: AS NOTED
DWG NO. **A2.10**
DRAWN BY: KT,AJ



F9 LEVEL:
NUMBER OF UNITS: 32
GFA: 1,750 m²
FLOOR PLATE A: 850 m²
FLOOR PLATE B: 850 m²
FLOOR PLATE C: 850 m²

1 F9 FLOOR PLAN
Scale: 1:300

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:
TREGEBOV COGAN *ARCHITECT*
40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

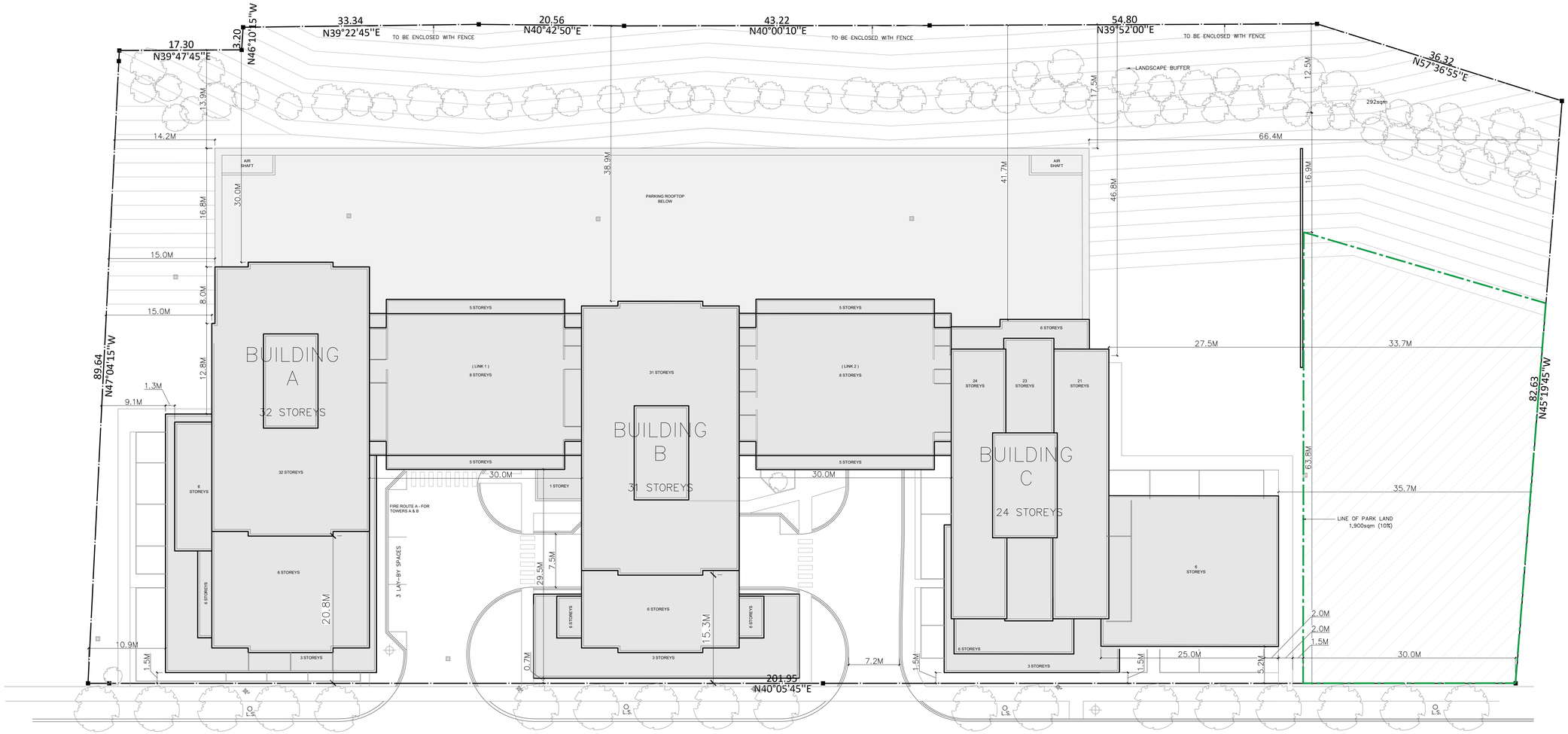
PROJECT NAME:
69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:
F9 FLOOR PLAN

PRINT DATE: 25-SEPT 2025

NORTH

PROJ. No.: 1101
DEV APPLICATION NO:
SCALE: AS NOTED
DWG NO. **A2.12**
DRAWN BY: KT,AJ



1 ROOF PLAN
Scale: 1:300

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:

TREGEBOV COGAN *ARCHITECT*

40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

PROJECT NAME:

69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:

ROOF PLAN

PRINT DATE: 25-SEPT 2025

NORTH

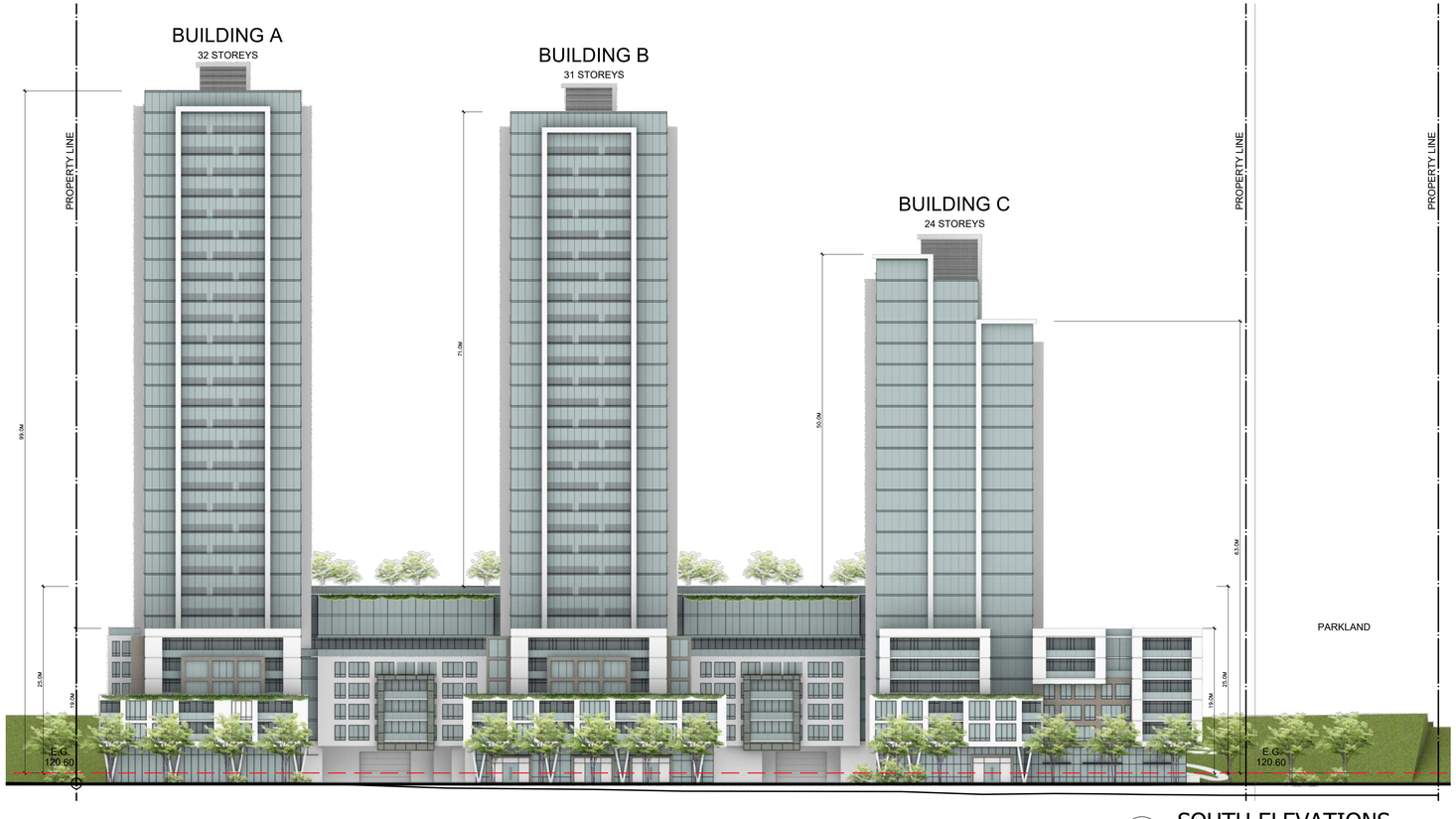
PROJ. No.: 1101

DEV APPLICATION NO:

SCALE: AS NOTED

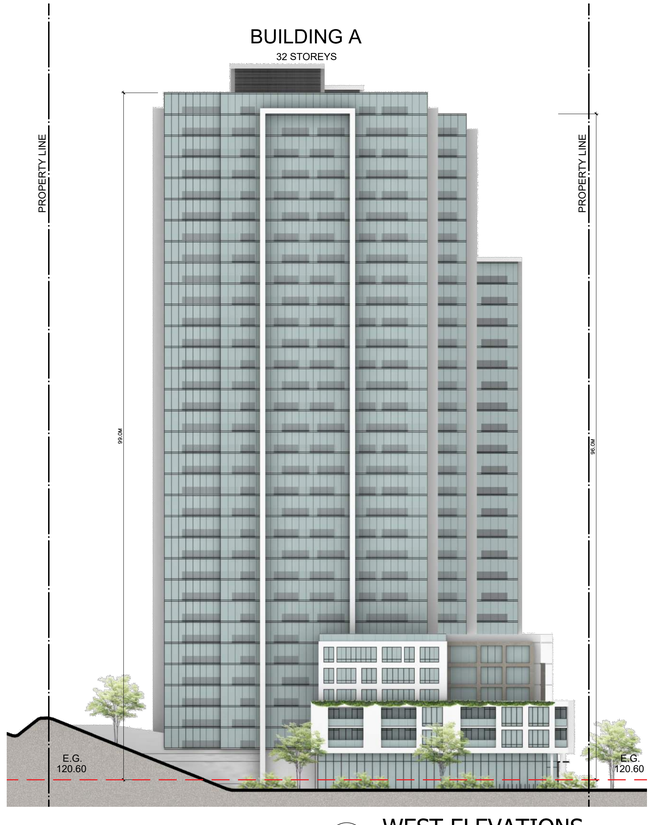
DWG NO. **A2.18**

DRAWN BY: KT,AJ



2 SOUTH ELEVATIONS

Scale: 1:400



1 WEST ELEVATIONS

Scale: 1:400

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:

TREGEBOV COGAN *ARCHITECT*

40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

PROJECT NAME:

69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:

SOUTH AND WEST ELEVATIONS

PRINT DATE: 25-SEPT 2025

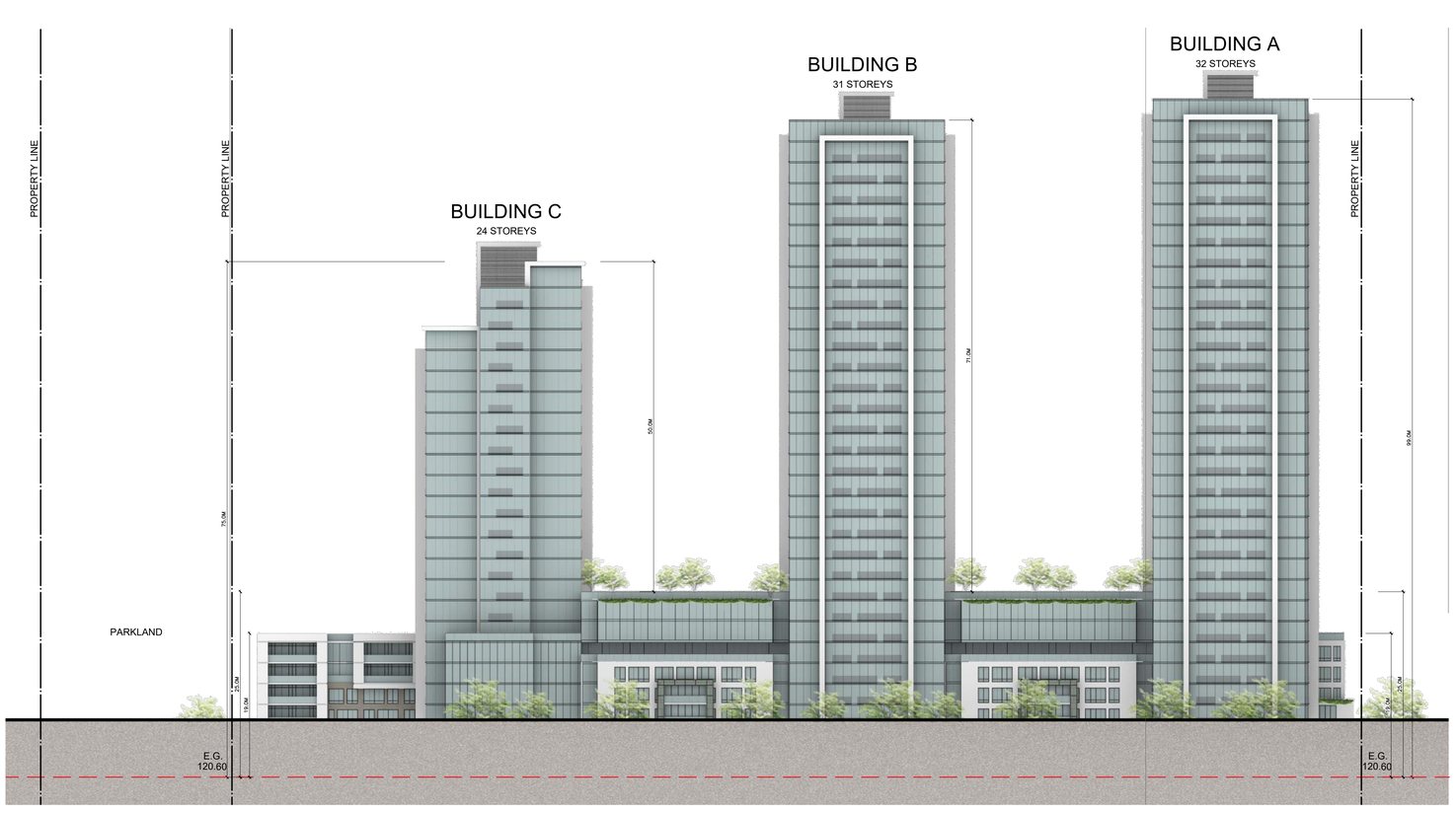
PROJ. No.: 1101

DEV APPLICATION NO:

SCALE: AS NOTED

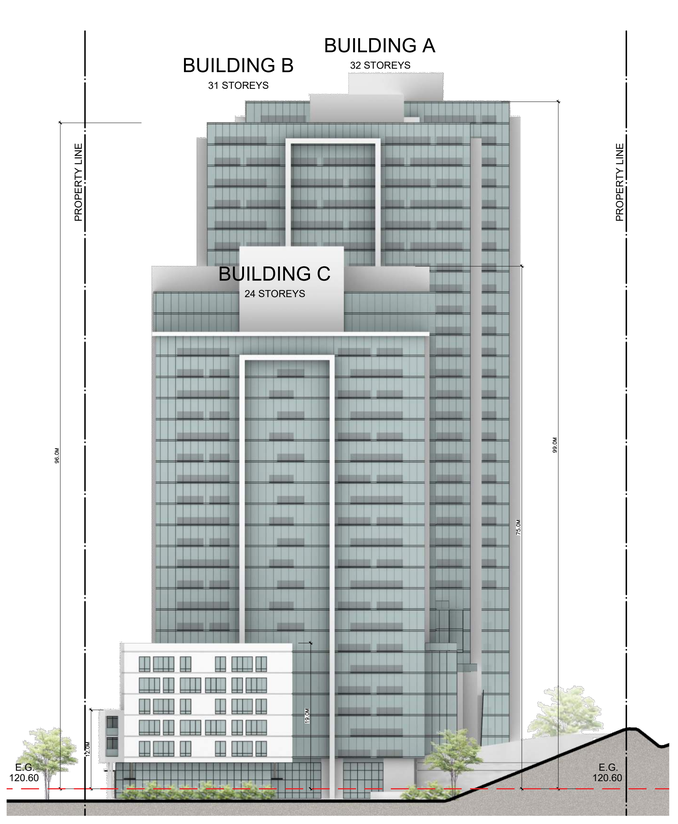
DRAWN BY: KT,AJ

DWG NO. **A5.0**



2 NORTH ELEVATIONS

Scale: 1:400



1 EAST ELEVATIONS

Scale: 1:400

CONSULTANTS:

DATE	No.	ISSUE
2025-09-17	01	FOR REVIEW

ARCHITECT:

TREGEBOV COGAN *ARCHITECT*

40 Saint Clair Avenue East, Suite 303
Toronto, ON M4T 1M9
PHONE: 647.352.3350

OWNER:

PROJECT NAME:

69 & 117 JOHN ST.
MISSISSAUGA

DRAWING TITLE:

NORTH AND EAST ELEVATIONS

PRINT DATE: 25-SEPT 2025

PROJ. No.: 1101

DEV APPLICATION NO:

SCALE: AS NOTED

DWG NO. **A5.1**

DRAWN BY: KT,AJ

APPENDIX B
TRAFFIC DATA

Richard Li

From: Rail Data Requests <RailDataRequests@metrolinx.com>
Sent: October 2, 2025 12:18 PM
To: Richard Li
Cc: Kathy Katsiroumpas
Subject: RE: GO Traffic Data Request: 69 & 117 John St, Mississauga (VCL#1220393.000)

Good afternoon,

Further to your request dated September 22, 2025, the subject lands (69 & 117 John Street, Mississauga) are located within 300 metres of the Canadian Pacific Galt Subdivision (which carries Milton GO rail service).

It's anticipated that GO rail service on this Subdivision will be comprised of diesel trains only. The GO rail fleet combination on this Subdivision will consist of up to 1 locomotive and 10 passenger cars. The typical GO rail weekday train volume forecast near the subject lands, including both revenue and equipment trips is in the order of 22 trains. The planned detailed trip breakdown is listed below:

	1 Diesel Locomotive		1 Diesel Locomotive
Day (0700-2300)	20	Night (2300-0700)	2

The current track design speed near the subject lands is 65 mph (105 km/h).

There are *anti-whistling by-laws* in affect near the subject lands at Haines Road at railway crossing.

Operational information is subject to change and may be influenced by, among other factors, service planning priorities, operational considerations, funding availability and passenger demand.

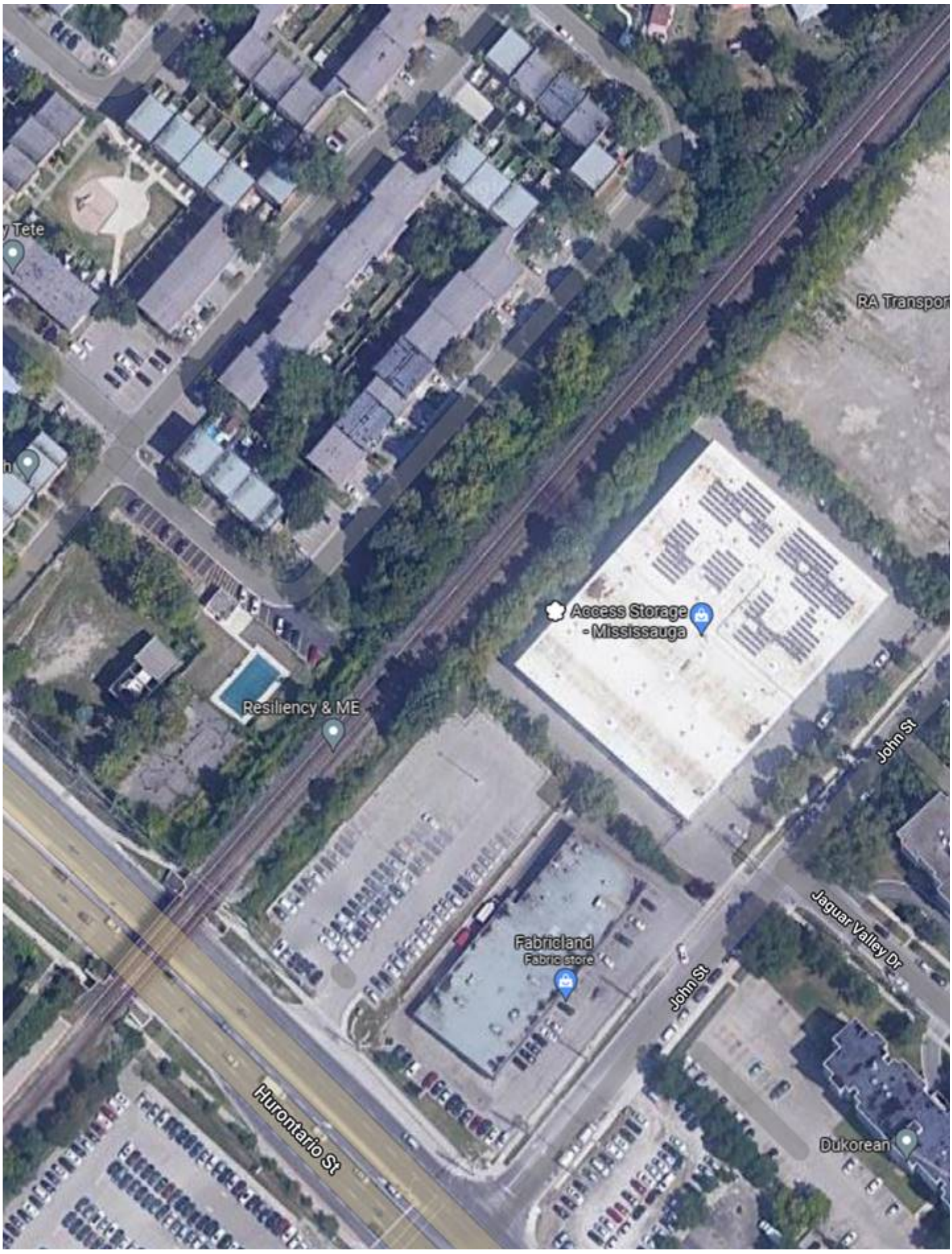
It should be noted that this information only pertains to Metrolinx rail service. It would be prudent to contact other rail operators in the area directly for rail traffic information pertaining to non-Metrolinx rail service.

I trust this information is useful. Should you have any questions or concerns, please do not hesitate to contact me.

Best Regards,

Jenna Auger (She/Her)
Project Analyst, Adjacent Construction Review (ACR)
Development & Real Estate Management
T: (416)-881-0579
20 Bay Street | Toronto | Ontario | M5J 2W3

METROLINX


RA Transport
Access Storage - Mississauga
Resiliency & ME
John St
Jaguar Valley Dr
Fabricland
Fabric store
John St
Hurontario St
Dukorean

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800 - 1290 Central Parkway
West
Mississauga, Ontario
Canada L5C 4R3

T 905 803 3429
E josie_tomei@cpr.ca

April 12, 2018

Via email: seema@valcoustics.com

Seema Nagaraj
Valcoustics
30 Wertheim Court
Unit 25
Richmond Hill, ON L4B 1B9

Dear Sir/Madam:

Re: Rail Traffic Volumes, CP Mileage 14.15, Galt Subdivision,
473 Hensall Circle

This is in reference to your request for rail traffic data in the vicinity of 473 Hensall Circle in the City of Mississauga. The study area is located at mile 14.15 of our Galt Subdivision, which is classified as a Prinicipal Main line.

The information requested is as follows:

1. Number of freight trains between 0700 & 2300: 9
   Number of freight trains between 2300 & 0700: 8

2. Average number of cars per train: 67
   Maximum cars per train freight: 151

3. Number of locomotives per train: 2 (4 max)

4. Maximum permissible train speed: 50 mph freight

5. The whistle signal is prohibited approaching public grade crossings through the study area, however, the whistle may be sounded if deemed necessary by the train crew for safety reasons at any time.

6. There are 2 mainline tracks with continuously welded rail at this location along with a cross connection between these rails which may cause more than normal noise.

The information provided is based on recent rail traffic. Variations of the above may exist on a day-to-day basis. Specific measurements may also vary significantly depending on customer needs.

Yours truly,

Josie Tomei SR/WA
Specialist Real Estate Sales & Acquisitions – Ontario

NOISE REPORT FOR PROPOSED DEVELOPMENT

Date:	11-Oct-22

REQUESTED BY:

Name:	Richard Li
Company:	Valcoustics Canada Ltd.

PREPARED BY:

Name	Loudel Uy
Tel#:	(905) 615- 3200

MISSISSAUGA

Location: Hurontario Street from Dundas Street to CPR

ID# 564

ON SITE TRAFFIC DATA

Specific	*Street Names*				
[redacted]	Hurontario Street	Kirwin Avenue			
AADT:	53,200	12,500			
# of Lanes:	4 lanes	2 lanes			
% Trucks:	4%	2%			
Medium/Heavy Trucks Ratio:	55/45	55/45			
Day/Night Split:	90/10	90/10			
Posted Speed Limit:	50km/h	50km/h			
Gradient Of Road:	<2%	<2%			
Ultimate R.O.W:	35m	26m			

Comments:

Ultimate Traffic Data Only (2041)

-There is a proposed LRT line along Hurontario Street. Existing lanes may be converted from 6 lanes to 4 lanes with 2 LRT lines in the middle.

Please contact Farhad Shala @ (905) 615-3200 ext. 3377 or farhad.shala@mississauga.ca for more info regarding LRT.

- There's no available Ultimate AADT for John Street.

APPENDIX C
ENVIRONMENTAL NOISE GUIDELINES

APPENDIX C

ENVIRONMENTAL NOISE GUIDELINES

MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP)

Reference: MECP Publication NPC-300, October 2013: *"Environmental Noise Guideline, Stationary and Transportation Source – Approval and Planning"*.

SPACE	SOURCE	TIME PERIOD	CRITERION
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	Road	07:00 to 23:00	45 dBA
	Rail	07:00 to 23:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 5
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	Road	23:00 to 07:00	45 dBA
	Rail	23:00 to 07:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 5
Sleeping quarters	Road	07:00 to 23:00	45 dBA
	Rail	07:00 to 23:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 0
Sleeping quarters	Road	23:00 to 07:00	40 dBA
	Rail	23:00 to 07:00	35 dBA
	Aircraft	24-hour period	NEF/NEP 0
Outdoor Living Areas	Road and Rail	07:00 to 23:00	55 dBA
Outdoor Point of Reception	Aircraft	24-hour period	NEF/NEP 30#
	Stationary Source		
	Class 1 Area	07:00 to 19:00(1)	50* dBA
		19:00 to 23:00(1)	50* dBA
	Class 2 Area	07:00 to 19:00(2)	50* dBA
		19:00 to 23:00(2)	45* dBA
	Class 3 Area	07:00 to 19:00(3)	45* dBA
		19:00 to 23:00(3)	40* dBA
	Class 4 Area	07:00 to 19:00(4)	55* dBA
		19:00 to 23:00(4)	55* dBA

…./cont'd

SPACE	SOURCE	TIME PERIOD	CRITERION
Plane of a Window of Noise Sensitive Spaces	Stationary Source		
	Class 1 Area	07:00 to 19:00(1)	50* dBA
		19:00 to 23:00(1)	50* dBA
		23:00 to 07:00(1)	45* dBA
	Class 2 Area	07:00 to 19:00(2)	50* dBA
		19:00 to 23:00(2)	50* dBA
		23:00 to 07:00(2)	45* dBA
	Class 3 Area	07:00 to 19:00(3)	45* dBA
		19:00 to 23:00(3)	45* dBA
		23:00 to 07:00(3)	40* dBA
	Class 4 Area	07:00 to 19:00(4)	60* dBA
		19:00 to 23:00(4)	60* dBA
		23:00 to 07:00(4)	55* dBA

\# may not apply to in-fill or re-development.
* or the minimum hourly background sound exposure $L_{eq(1)}$, due to road traffic, if higher.
(1) Class 1 Area: Urban.
(2) Class 2 Area: Urban during day; rural-like evening and night.
(3) Class 3 Area: Rural.
(4) Class 4 Area: Subject to land use planning authority's approval.

Reference: MECP Publication ISBN 0-7729-2804-5, 1987: *"Environmental Noise Assessment in Land-Use Planning"*.

EXCESS ABOVE RECOMMENDED SOUND LEVEL LIMITS (dBA)	CHANGE IN SUBJECTIVE LOUDNESS ABOVE	MAGNITUDE OF THE NOISE PROBLEM	NOISE CONTROL MEASURES (OR ACTION TO BE TAKEN)
No excess (<55 dBA)	—	No expected noise problem	None
1 to 5 inclusive (56 to 60 dBA)	Noticeably louder	Slight noise impact	If no physical measures are taken, then prospective purchasers or tenants should be made aware by suitable warning clauses.
6 to 10 inclusive (61 - 65 dBA)	Almost twice as loud	Definite noise impact	Recommended.
11 to 15 inclusive (66 - 70 dBA)	Almost three times as loud	Serious noise impact	Strongly Recommended.
16 and over (>70 dBA)	Almost four times as loud	Very serious noise impact	Strongly Recommended (may be mandatory).

APPENDIX D

SAMPLE SOUND LEVEL CALCULATION

```
STAMSON 5.04        NORMAL REPORT        Date: 02-10-2025 20:34:38
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: a_nf.te              Time Period: Day/Night 16/8 hours
Description: Predicted Sound Levels - Building A, North Facade

Rail data, segment # 1: CPR&GO (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CPR         !  13.7/12.2  !  80.0 !  4.0 !151.0 !Diesel! Yes
* 2. GO          !  20.0/2.0   ! 105.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
-------------------+--------+----------+----------+
  1. CPR            !   9.0/8.0   !    2.50  !   17.00  !
  2. GO             !  20.0/2.0   !    0.00  !   10.00  !

Data for Segment # 1: CPR&GO (day/night)
----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  43.00 / 43.00  m
Receiver height           :  90.00 / 90.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Results segment # 1: CPR&GO (day)
---------------------------------

LOCOMOTIVE (0.00 + 70.93 + 0.00) = 70.93 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------
   -90     90   0.00  75.50  -4.57   0.00   0.00   0.00   0.00  70.93
-------------------------------------------------------------------

WHEEL (0.00 + 64.08 + 0.00) = 64.08 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------
   -90     90   0.00  68.65  -4.57   0.00   0.00   0.00   0.00  64.08
-------------------------------------------------------------------

Segment Leq : 71.75 dBA

Total Leq All Segments: 71.75 dBA
```

```
Results segment # 1: CPR&GO (night)
-----------------------------------

LOCOMOTIVE (0.00 + 72.73 + 0.00) = 72.73 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.00  77.31  -4.57   0.00   0.00   0.00   0.00  72.73
-------------------------------------------------------------------------

WHEEL (0.00 + 66.02 + 0.00) = 66.02 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.00  70.59  -4.57   0.00   0.00   0.00   0.00  66.02
-------------------------------------------------------------------------

Segment Leq : 73.57 dBA

Total Leq All Segments: 73.57 dBA

Road data, segment # 1: Hurontario (day/night)
----------------------------------------------
Car traffic volume  : 45965/5107  veh/TimePeriod  *
Medium truck volume :  1053/117   veh/TimePeriod  *
Heavy truck volume  :   862/96    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):  53200
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.20
    Heavy Truck  % of Total Volume     :   1.80
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 1: Hurontario (day/night)
--------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 233.00 / 233.00 m
Receiver height           :  90.00 / 90.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Results segment # 1: Hurontario (day)
-------------------------------------

Source height = 1.16 m

ROAD (0.00 + 55.76 + 0.00) = 55.76 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  70.68   0.00 -11.91  -3.01   0.00   0.00   0.00  55.76
-------------------------------------------------------------------------------

Segment Leq : 55.76 dBA

Total Leq All Segments: 55.76 dBA

Results segment # 1: Hurontario (night)
---------------------------------------

Source height = 1.16 m

ROAD (0.00 + 49.23 + 0.00) = 49.23 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  64.15   0.00 -11.91  -3.01   0.00   0.00   0.00  49.23
-------------------------------------------------------------------------------

Segment Leq : 49.23 dBA

Total Leq All Segments: 49.23 dBA



TOTAL Leq FROM ALL SOURCES (DAY): 71.86
                           (NIGHT): 73.59
```

STAMSON 5.04 NORMAL REPORT Date: 02-10-2025 20:23:20
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: l_cl7_o.te Time Period: Day/Night 16/8 hours
Description: **Predicted Sound Levels - Building C, L7 Terrace**

Rail data, segment # 1: CPR&GO (day/night)

Train Type	Trains	Speed (km/h)	# loc /Train	# Cars /Train	Eng type	Cont weld
* 1. CPR	13.7/12.2	80.0	4.0	151.0	Diesel	Yes
* 2. GO	20.0/2.0	105.0	1.0	10.0	Diesel	Yes

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

Train type: No	Name	Unadj. Trains	Annual % Increase	Years of Growth
1.	CPR	9.0/8.0	2.50	17.00
2.	GO	20.0/2.0	0.00	10.00

Data for Segment # 1: CPR&GO (day/night)

Angle1 Angle2	-82.00 deg	90.00 deg
Wood depth	0	(No woods.)
No of house rows	0 / 0	
Surface	1	(Absorptive ground surface)
Receiver source distance	53.00 / 53.00	m
Receiver height	1.50 / 87.00	m
Topography	4	(Elevated; with barrier)
No Whistle		
Barrier angle1	-82.00 deg	Angle2 : 90.00 deg
Barrier height	0.00	m
Elevation	23.00	m
Barrier receiver distance	2.80 / 2.80	m
Source elevation	8.40	m
Receiver elevation	23.00	m
Barrier elevation	23.00	m
Reference angle	0.00	

Results segment # 1: CPR&GO (day)

```
Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       4.00 !        1.50 !        0.86 !        23.86
       0.50 !        1.50 !        0.68 !        23.68

LOCOMOTIVE (0.00 + 69.82 + 0.00) = 69.82 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------
   -82     90   0.00  75.50  -5.48  -0.20   0.00   0.00  -0.65  69.17*
   -82     90   0.00  75.50  -5.48  -0.20   0.00   0.00   0.00  69.82
--------------------------------------------------------------------------

 * Bright Zone !

WHEEL (0.00 + 62.97 + 0.00) = 62.97 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------
   -82     90   0.00  68.65  -5.48  -0.20   0.00   0.00  -1.45  61.52*
   -82     90   0.00  68.65  -5.48  -0.20   0.00   0.00   0.00  62.97
--------------------------------------------------------------------------

 * Bright Zone !

Segment Leq : 70.64 dBA

Total Leq All Segments: 70.64 dBA


Results segment # 1: CPR&GO (night)
-----------------------------------

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       4.00 !       87.00 !       81.84 !       104.84
       0.50 !       87.00 !       81.66 !       104.66

LOCOMOTIVE (0.00 + 71.63 + 0.00) = 71.63 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------
   -82     90   0.00  77.31  -5.48  -0.20   0.00   0.00  -0.00  71.63*
   -82     90   0.00  77.31  -5.48  -0.20   0.00   0.00   0.00  71.63
--------------------------------------------------------------------------

 * Bright Zone !

WHEEL (0.00 + 64.91 + 0.00) = 64.91 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------
   -82     90   0.00  70.59  -5.48  -0.20   0.00   0.00  -0.00  64.91*
   -82     90   0.00  70.59  -5.48  -0.20   0.00   0.00   0.00  64.91
--------------------------------------------------------------------------

 * Bright Zone !

Segment Leq : 72.47 dBA

Total Leq All Segments: 72.47 dBA


TOTAL Leq FROM ALL SOURCES (DAY): 70.64
                           (NIGHT): 72.47
```