Environmental Noise Assessment

1315 Silver Spear Road, Mississauga

Starlight Investments

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Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
BPN	Building Practice Note 56
dBA	Decibels (A-weighted)
FCM	Federation of Canadian Municipalities
FTA	Federal Transit Administration
ISO	International Organization for Standardization
L_{eq}	Energy Equivalent Sound Level
m	Metres
MPH	Mechanical Penthouse
MECP	Ministry of Environment Conservation and Parks
NEF	Noise Exposure Forecast
NPC-216	MECP Publication NPC-216
NPC-300	MECP Publication NPC-300
OBC	Ontario Building Code
OLA	Outdoor Living Area
OPA	Official Plan Amendment
ORNAMENT	Ontario Road Noise Analysis Method for Environment and Transportation
POR	Points of Reception
RAC	Railway Association of Canada
SLR	SLR Consulting (Canada) Ltd.
STC	Sound Transmission Class
ZBA	Zoning By-law Amendment

1.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by Starlight Investments to prepare an environmental noise assessment for the proposed development at 1315 Silver Spear Road in Mississauga, Ontario ("the Project site"). This report is in support of the proposed Site Plan Approval (SPA) application for the proposed development.

1.1 Focus of Report

In keeping with the Ministry of Environment, Conservation and Parks (MECP), City of Mississauga and the Peel Region requirements, this report examines the potential for:

- Impacts of the environment on the proposed development;
- Impacts of the proposed development on the environment; and
- Impacts of the proposed development on itself.

The architectural information received from Architecture Unfolded on February 6, 2025, dated February 5, 2025, was used in this assessment.

Mechanical systems associated with the development (e.g., cooling and ventilation equipment) have not been sufficiently designed at this stage and can be assessed at a future date, if required. A general discussion has been included in this report to address the impacts of the proposed development on the environment and on itself.

1.2 Nature of the Surroundings

The Project site is surrounded by the following:

- Burnhamthorpe Road East, residential dwellings/townhouses, a gas station/car wash, and low- and high-rise commercial buildings beyond to the north;
- The Burnhamthorpe Library, high-rise residential buildings and low-rise commercial buildings along Dixie Road to the east;
- Mid-rise residential buildings, Silver Spear Road, and detached residential dwellings to the south; and
- A mid-rise residential building and detached residential homes to the west.

A context plan is shown in **Figure 1**.

1.3 Description of Proposed Development

The proposed development is located approximately 140 m west of the intersection of Burnhamthorpe Road East and Dixie Road. There is an existing 8-storey apartment building (1315 Silver Spear Road Apartments) on the Project site adjacent to Silver Spear Road that will remain. A parking lot is located north of the existing apartment building and south of Burnhamthorpe Road. The parking lot will be partially removed to accommodate the proposed development.

The proposed development will consist of a 14-storey residential building with 4 levels of underground parking. The ground floor will have the lobby, indoor amenities spaces, as well as residential dwelling units. Levels 2 to 14 will contain residential dwelling units. Access to the Project site will be via Burnhamthorpe Road East and from Silver Spear Road.

Development drawings are provided for reference in **Appendix A**.

Part 1: Impacts of the Environment on the Development

In evaluating potential impacts of the environment on the proposed development, the focus of this report is assessment of:

- Transportation noise from surrounding roadways; and
- Stationary noise from surrounding industries/facilities on the development.

The nearest railway is located more than 2.5 km south of the proposed development. Based on guidance outlined in the document entitled “Guidelines for New Development in Proximity to Railway Operations” prepared for the Railway Association of Canada and the Federation of Canadian Municipalities (RAC/FCM), the proposed development is outside of the recommended minimum noise influence area for Principal Main Lines (i.e., 300m). Therefore, rail traffic noise has not been considered further in this assessment.

The proposed development is also located outside of the Noise Exposure Forecast (NEF) 25 contour for Toronto Pearson International Airport; therefore, an assessment of aircraft noise is not required.

2.0 Transportation Noise Impacts

2.1 Transportation Noise Sources

Transportation sources with the potential to produce road traffic noise at the proposed development include:

- Burnhamthorpe Road East; and
- Dixie Road.

Road traffic sound levels from Burnhamthorpe Road East and Dixie Road have been predicted, and this information has been used to identify façade, ventilation, and warning clause recommendations/ requirements for the proposed development.

2.2 Surface Transportation Noise Criteria

2.2.1 Ministry of Environment Publication NPC-300

Noise-Sensitive Development

Ministry of the Environment, Conservation and Parks (MECP) Publication NPC-300 provides sound level criteria for noise-sensitive developments. The applicable portions of NPC-300 are Part C – Land Use Planning and the associated definitions outlined in Part A – Background. **Tables 1** to **4** summarize the applicable surface transportation (road and rail) criteria.

Location-Specific Criteria

Table 1 summarizes criteria in terms of energy equivalent sound levels (L_{eq}) for specific noise-sensitive locations. Both outdoor and indoor locations are identified, with the focus of outdoor areas being amenity spaces. Indoor criteria vary with sensitivity of the space. As a result, Sleeping Quarters have more stringent criteria than Living/Dining room spaces.

Table 1: NPC-300 Sound Level Criteria for Road and Rail Noise

Type of Space	Time Period	Energy Equivalent Sound Level L_{eq} [5] (dBA)		Assessment Location
		Road	Rail [1]	
Outdoor Amenity Area	Daytime (0700-2300h)	55	55	Outdoors [2]
Living/Dining Room [3]	Daytime (0700-2300h)	45	40	Indoors [4]
	Night-time (2300-0700h)	45	40	Indoors [4]
Sleeping Quarters	Daytime (0700-2300h)	45	40	Indoors [4]
	Night-time (2300-0700h)	40	35	Indoors [4]

Notes: [1] Whistle noise is excluded for OLA noise assessments and included for Living/Dining Room and Sleeping Quarter assessments, where applicable.

[2] Road and Rail noise impacts are to be combined for assessment of OLA impacts.

[3] Residence area Dens, Hospitals, Nursing Homes, Schools, Daycares are also included. During the nighttime period, Schools and Daycares are excluded.

[4] An assessment of indoor noise levels is required only if the criteria in **Table 4** are exceeded.

[5] L_{eq} – the energy equivalent sound level, integrated over the time period shown.

Outdoor Living Areas

Table 2 summarizes the noise mitigation requirements for communal outdoor amenity areas ("Outdoor Living Areas" or "OLAs").

For the assessment of outdoor sound levels, total surface transportation noise is determined by combining road and rail traffic sound levels. Whistle noise from trains is not included in the determination of outdoor sound levels.

Table 2: NPC-300 OLA Sound Level Criteria for Road and Rail Noise

Time Period	OLA Energy Equivalent Sound Level L_{eq} (dBA)	Mitigation Requirements/Warning Clause Recommendations
Daytime (0700-2300h)	≤ 55	• None
	56 to 60 inc.	• Noise barrier OR Type A Warning Clause
	> 60	• Noise barrier to reduce noise to 55 dBA OR • Noise barrier to reduce noise to 60 dBA and Type B Warning Clause

Ventilation and Warning Clauses

Table 3 summarizes recommendations for ventilation where windows would potentially have to remain closed as a means of noise control. Despite implementation of ventilation measures where recommended, if sound levels exceed the guideline limits in **Table 1**, warning clauses advising future occupants of the potential excesses are also recommended. Warning clauses also apply to OLAs.

Table 3: NPC-300 Ventilation and Warning Clause Recommendations

Assessment Location	Time Period	Energy Equivalent Sound Level – L_{eq} (dBA)		Ventilation and Warning Clause Recommendations [2]
		Road	Rail [1]	
Outdoor Living Area	Daytime (0700-2300h)	56 to 60 incl.		Type A Warning Clause
Plane of Window	Daytime (0700-2300h)	≤ 55		None
		56 to 65 incl.		Forced Air Heating with provision to add air conditioning + Type C Warning Clause
		> 65		Central Air Conditioning + Type D Warning Clause
	Night-time (2300-0700h)	51 to 60 incl.		Forced Air Heating with provision to add air conditioning + Type C Warning Clause
		> 60		Central Air Conditioning + Type D Warning Clause

Notes: [1] Whistle noise is excluded from assessment.
[2] Road and Rail noise is combined for determining Ventilation and Warning Clause requirements

Building Component Requirements

Table 4 provides sound level thresholds which, if exceeded, trigger a requirement for the building shell components (i.e., exterior walls, windows) to be designed accordingly to meet the applicable indoor sound criteria.

Table 4: NPC-300 Building Component Assessment Requirements

Assessment Location	Time Period	Energy Equivalent Sound Level – L_{eq} (dBA)		Component Requirements
		Road	Rail [1]	
Plane of Window	Daytime (0700-2300h)	> 65	> 60	Designed/ Selected to Meet Indoor Requirements [2]
	Night-time (2300-0700h)	> 60	> 55	

Notes: [1] Whistle noise is included in assessment.
[2] Building component requirements are assessed separately for Road and Rail and then combined for a resultant sound isolation parameter.

2.2.2 Region of Peel

The Region of Peel Guidelines include the General Guidelines for the Preparation of Acoustical Reports in the Region of Peel, dated November 2012 (ROP Guidelines). In general, the region of Peel Guidelines are consistent with the MECP NPC-300 guidelines. Therefore, the guidelines have not been re-iterated.

2.2.3 City of Mississauga

Mississauga Official Plan provides policies pertaining to stationary and transportation noise sources, noise mitigation through site and building design, and rail safety setbacks dated August 2024. The applicable portion of the Mississauga Official Plan is Chapter 6 – Value the Environment. In general, the City of Mississauga's road and rail noise guidelines are consistent with the MECP NPC-300 guidelines. Notable differences include a requirement to make every effort to meet the OLA guideline suggested sound level of 55 dBA.

2.3 Traffic Data and Future Projections

2.3.1 Road Traffic Data

Ultimate annual average daily traffic (AADT) volumes and details (daytime/night-time splits, medium/heavy truck percentages and speed limits) for Burnhamthorpe Road East were obtained from the traffic data provided by the City of Mississauga Transportation and Works Department on September 8, 2023.

The Peel Region Public Works Transportation Division provided ultimate AADT volumes and details (daytime/night-time splits, medium/heavy truck percentages and speed limits) for Dixie Road on September 7, 2023.

Copies of traffic data and calculations are provided for reference in **Appendix B**. **Table 5** summarizes the road traffic data used in the analysis.

Table 5: Summary of Road Traffic Data Used in Transportation Analysis

Roadway	Ultimate Traffic Volumes AADT	% Day/Night Volume Split		Commercial Vehicle Breakdown		Vehicle Speed (km/hr)
		Daytime	Night-time	% Medium Trucks	% Heavy Trucks	
Burnhamthorpe Road East [1]	35,500	90	10	2.75	2.25	60
Dixie Road [2]	48,600	90	10	1.35 (Day) 2.00 (Night)	6.89 (Day) 4.82 (Night)	60
Notes: [1] Based on data provided by City of Mississauga. [2] Based on data provided by Peel Region.						

2.4 Predicted Sound Levels

Future road traffic sound levels at the proposed development were predicted using Cadna/A, a commercially available noise propagation modelling software package. Roadways were modelled as line sources of sound, with sound emission rates calculated using the ORNAMENT algorithms, the road traffic noise model of the MECP. These predictions were validated and are equivalent to those made using the MECP's ORNAMENT or STAMSON v5.04 road traffic noise models. A STAMSON validation file and output are included for reference in **Appendix C**.

Sound levels were predicted along the facades of the proposed development using the "building evaluation" feature of Cadna/A. This feature allows for noise levels to be predicted across the entire façade of a structure. OLA sound levels were assessed at the centre of the rooftop amenity spaces at a height of 1.5 m above the rooftop. The at-grade OLAs were also assessed at a standing height of 1.5 m above grade.

Global ground absorption was conservatively considered to be reflective (G = 0.0), and 1 m topographic contours for the Project site and surrounding area were included in the model.

It was determined that Burnhamthorpe Road East has a 2.9% change in grade between Golden Orchard Drive and Dixie Road. This was considered in the road traffic analysis in accordance with the guidance in the ORNAMENT document.

2.4.1 Façade Sound Levels

Predicted worst-case façade sound levels due to road traffic are presented in **Table 6**.

The predicted daytime and night-time road traffic sound levels along all building facades associated with the proposed development are shown in **Figure 2** (daytime) and **Figure 3** (night-time).

Table 6: Summary of Predicted Worst-Case Transportation Façade Sound Levels

Building	Façade[1]	Maximum Predicted Road Traffic Sound Levels[2]	
		L_{eq} Daytime (dBA)	L_{eq} Night-time (dBA)
Proposed Development – 14 Storeys	North	71	64
	East	68	61
	South	60	53
	West	68	61

Notes: [1] Building façade roadway sound levels are shown in **Figure 2** (daytime) and **Figure 3** (night-time).
[2] Sound levels presented above are the highest for the identified building facade.

The façade road traffic sound levels are predicted to exceed 65 dBA and 60 dBA during the daytime and night-time periods, respectively (i.e., the thresholds described in **Table 4**) at some locations within the proposed development. Therefore, an assessment of building components is required. Refer to **Section 2.5.1**.

2.4.2 Outdoor Living Area Sound Levels

The Outdoor Living Areas (OLAs) of the proposed development are located at the rooftop amenity on the east and west side of the mechanical penthouse (MPH), and at grade, southeast and southwest of the proposed development building. The assessment locations are shown in **Figure 4**.

The assessment includes the effects of the parapet around the rooftop, as shown in the elevation drawing. Predicted OLA sound levels from the surrounding roadways are presented in **Table 7** and shown in **Figure 4**.

Table 7: Summary of Predicted Transportation Outdoor Living Area Sound Levels

OLA Assessment Location	Assessment Location Description	Predicted Sound Level, L_{eq} Daytime (dBA)
OLA-1[1]	Rooftop Amenity (West of MPH)	53
OLA-2[1]	Rooftop Amenity (East of MPH)	56
OLA-3	At-Grade Amenity (Southeast of the proposed development building)	60
OLA-4	At-Grade Amenity (Southwest of the proposed development building)	51
Notes:[1] Rooftop parapet is included for these predicted values.		

The predicted roadway sound levels at the OLAs are 60 dBA or lower, which is at or below the MECP criteria. Predicted roadway sound levels at the OLA-2 and OLA-3 are predicted to be above the City of Mississauga suggested guideline. Therefore, mitigation and warning clauses will be required. Refer to **Section 2.5.2**.

2.5 Noise Control Measures

2.5.1 Façade Assessment

2.5.1.1 Building Components

An assessment of indoor noise levels is required because façade sound levels due to road traffic exceed 65 dBA and 60 dBA during the daytime and night-time periods, respectively, on the north, east and west building façade of the proposed development.

Indoor sound levels and required facade Sound Transmission Classes (STCs) were estimated using the procedures outlined in National Research Council Building Practice Note 56 (BPN-56). Detailed floor plans and elevation drawings were not available at the time of the assessment. The preliminary façade requirements analysis is therefore based on the following assumptions.

- Non-glazing portions of the exterior walls are assumed to have a rating of STC 45 (i.e., representing a spandrel panel construction);
- For living/dining rooms, 70% of the exterior facade is vision glass/patio doors and rooms have intermediate absorption; and
- For bedrooms, 70% of the exterior wall is vision glass and rooms have intermediate absorption.

The building façade requirements based on the road traffic façade sound levels and assumptions listed above are outlined in **Table 8** for residential units with one exposed façade, and in **Table 9** for corner units with two exposed facades.

Table 8: Summary of Façade Glazing Requirements for Proposed Development – One Exposed Facade

Building	Applicable Façade(s)/ Location(s)	STC Rating of Non-Glazing Components[1]	Glazing STC Requirements[1]	
			Living/Dining Room	Bedroom
Proposed Development – 14 Storeys	North	45	30	33
	East	45	OBC	30
	South	45	OBC	OBC
	West	45	OBC	30
Notes: [1] OBC = meeting the minimum non-acoustical requirements of the Ontario Building Code, with a rating of STC 29 for windows and STC 45 for exterior walls.				

Table 9: Summary of Façade Glazing Requirements for Proposed Development – Corner Units

Building	Applicable Corner	STC Rating of Non-Glazing Components[1]	Glazing STC Requirements[1]	
			Living/Dining Rooms	Bedrooms
Proposed Development – 14 Storeys	Northeast	45	32	35
	Southeast	45	OBC	31
	Southwest	45	OBC	31
	Northwest	45	32	35
Notes: [1] OBC = meeting the minimum non-acoustical requirements of the Ontario Building Code, with a rating of STC 29 for windows.				

At locations with requirements noted as ‘OBC’, wall and window construction meeting the minimum non-acoustical requirements of the Ontario Building Code (OBC) are predicted to be sufficient to meet the indoor noise guidelines.

Where upgraded glazing is required, the combined glazing and frame assembly must be constructed to ensure the overall sound isolation performance of the entire window unit meets the specified STC rating. It is recommended that the window manufacturer’s test data be reviewed to confirm the required acoustical performance is achieved.

As the requirements in **Table 8** and **Table 9** are based on assumed dimensions as noted above, the STC requirements should be reviewed by an Acoustical Consultant when detailed suite layouts and elevations are available.

2.5.1.2 Ventilation and Warning Clause Recommendations

The sound level triggers for warning clauses are summarized in **Table 3**. Where recommended, the warning clauses should be included in agreements registered on Title for the residential units and included in all agreements of purchase and sale or lease and all rental agreements.

Based on the predicted façade sound levels, an MECP Type D warning clause and central air conditioning are recommended for all residential units in the development.

Ventilation and warning clause recommendations are summarized in **Appendix D**.

2.5.2 Outdoor Living Area Assessment

2.5.2.1 OLA Mitigation Recommendations

Predicted roadway sound levels at OLA-2 and OLA-3 are predicted to be above the City of Mississauga suggested sound level but meet the MECP limits.

Table 10 shows the predicted sound level at each of the OLAs with the inclusion of various barrier heights. **Figure 5** shows the locations of the modified barriers.

Table 10: Predicted OLA Sound Level as Height of Acoustic Barrier Increases

Barrier Height (m)	Predicted Sound Level, L_{eq} Day (dBA)	
	OLA-2	OLA-3
1.3	56	60
1.5	55	59
1.7	--	56
2.0	--	55

City of Mississauga Suggested Sound Level

The results presented in **Table 10** show that the following barrier heights are required for compliance with City of Mississauga suggested sound level (55 dBA suggested limit):

- Rooftop outdoor amenity space (OLA-2) – 1.5 m high sound barrier along the edge of the rooftop; and
- At-grade outdoor amenity (OLA-3) – 2.0 m high sound barrier along the northern, eastern and southern portion of the outdoor amenity.

The barriers can be composed of solid walls or other materials such as glass/plexiglass panels. The materials used to construct the barriers should be selected so that they have sufficient mass to adequately attenuate the road traffic noise (generally, a minimum surface density of 20 kg/m^2).

The barriers should be free of gaps and cracks on the sides and bottom, except for small, localized openings required for drainage purposes. The system should also be designed to withstand appropriate wind loading.

2.5.2.2 Warning Clause Recommendations

MECP NPC-300 Criteria

The predicted OLA sound levels associated with the proposed development are 60 dBA or lower. Based on an MECP NPC-300 criteria, Type A warning clause is therefore recommended for all residential units in the development.

City of Mississauga Suggested Sound Level

The acoustic barrier is recommended for rooftop outdoor amenity space (OLA-2) and at-grade outdoor amenity (OLA-3) to comply with the City of Mississauga suggested sound level (55 dBA criteria). Therefore, an MECP Type B warning clause is recommended for all residential units in the development based on the City of Mississauga suggested sound level.

OLA warning clause recommendations are summarized in **Appendix D**.

3.0 Stationary Source Noise Assessment

A site visit to the Project site and surrounding area was completed by SLR personnel on September 22, 2023. Based on information obtained from site visit and detailed review of recently available aerial imagery, the significant sources of noise in proximity to the Project site with the potential for stationary source noise impacts at the proposed development have been identified. The site was found to be primarily surrounded by institutional and residential land uses.

Noise sources in the area requiring assessment were determined primarily based on the MECP Guideline D-6 Potential Influence Areas. The library and gas station near the proposed development are considered to be Class I industries, in which a 70 m area of influence is typically applied for assessing stationary sources. There are no Class II industries within 300 m of the Project site, or Class III industries within 1000 m. Therefore, no Class II or III industries have been considered in this assessment.

The Burnhamthorpe Library was identified on current aerial photography and during the site visit as a potential source of stationary noise, and it is located within 70 m of the Project site (shown in **Figure 6**). Therefore, stationary noise from the facility was assessed. Additionally, SLR identified a Shell car wash/gas station/Jiffy Lube auto shop at 1349 Burnhamthorpe Road east, west of Dixie Road. Although this facility is more than 70 m away, assessment of noise from the facility was included for completeness due to the observed south-facing car wash exit.

No other stationary sources of noise were identified in proximity to the proposed development that require further assessment.

3.1 Stationary Source Modelling

Based on information obtained during the site visit, and a review of aerial photography, the sources of noise with the potential to produce noise at the proposed development have been identified. Sound levels for the sources were determined based on at-grade measurements collected during the site visit on September 22, 2023, and information contained in the SLR in-house database.

Modelled facilities and sources of noise include:

- Burnhamthorpe Library – 3650 Dixie Road # 101
  - 12 rooftop HVAC units, ranging in size from 5 tons to 30 tons; and
- Shell Gas Station/Jiffy Lube – 1349 Burnhamthorpe Road East
  - Car wash entrance;
  - Car wash exit dryer;
  - Two vehicle vacuums;
  - Up to 10 vehicles idling in the car wash queue;
  - Two rooftop HVAC units associated with the Shell and Jiffy Lube; and
  - Breakout noise from the Jiffy Lube Bay doors (considering impact wrench and compressed air noise from the auto shop).

Sound levels from stationary sources were modelled using Cadna/A, a software implementation of the internationally recognized ISO-9613-2 environmental noise propagation algorithms. Cadna/A / ISO-9613 is the preferred noise model of the MECP. The ISO-9613 equations account for:

- Source to receiver geometry;
- Distance attenuation;
- Atmospheric absorption;
- Reflections off of the ground and ground absorption;
- Reflections off of vertical walls; and
- Screening effects of buildings, terrain, and purpose-built noise barriers (noise walls, berms, etc.).

The following additional parameters were used in the modelling, which are consistent with providing a conservative (predictable worst-case assessment of noise levels):

- Temperature: 10°C;
- Relative Humidity: 70%;
- Ground Absorption G: G = 0.0 (reflective) as the default global parameter;
- Reflection: One (1) order of reflection was used (accounts for noise reflecting from walls);
- Wall Absorption Coefficients: Set to 0.21 or 0.37 (21%/37% of energy is absorbed, 79%/63% reflected); and
- Terrain: 1 m topographical contours obtained from City of Mississauga Open Data Portal.

A summary of the sound levels used in the analysis and equipment operating conditions is included in **Appendix E**. All stationary sources modelled are shown in **Figure 6**.

3.2 Stationary Source Noise Criteria

MECP guidelines for stationary source noise impacting residential developments are given in MECP Publication NPC-300. The applicable portions of NPC-300 are Part C – Land Use Planning and the associated definitions outlined in Part A – Background.

The acoustic environment surrounding the proposed development is generally dominated by roadway noise from Burnhamthorpe Road East and Dixie Road during all periods of the day. Therefore, the proposed development is considered to be located in a Class 1 area.

The sound level limits for steady sound sources are expressed as a 1-hr equivalent sound level (L_{eq} (1 hr) values, in dBA) and is the higher of the NPC-300 exclusionary limits or the existing background sound level. The NPC-300 minimum exclusionary stationary source guidelines for a Class 1 Area are summarized in **Table 11** for continuous, steady sound sources.

Table 11: NPC-300 Class 1 Continuous, Steady Source Sound Level Limits

Point of Reception Category	Time Period	Minimum Exclusionary Sound Level Limit L_{eq}(1-hr), dBA[1]
Outdoors	Daytime (0700-1900h) Evening (1900-2300h) Night-time (2300-0700h)	50 50 N/A[3]
Plane of Window [2]	Daytime (0700-1900h) Evening (1900-2300h) Night-time (2300-0700h)	50 50 45

Notes: [1] Or minimum hourly L_{eq} of background noise; whichever is higher.
[2] Applicable for windows opening into “noise-sensitive spaces” as defined in NPC-300.
[3] Sound level limits during night-time hours are not applicable at outdoor points of reception.

Since ambient sound levels were anticipated to exceed the NPC-300 exclusionary limits for most facades and time periods, minimum hourly sound levels for daytime, evening and night-time hours from Burnhamthorpe Road East and Mississauga Road were assessed and the corresponding applicable guideline limits were determined.

Table 12 summarizes the current road traffic volumes and details applied in the ambient noise modelling.

Minimum hourly traffic volumes as a percentage of the AADT for Dixie Road were based on data from the SLR database for typical arterial roadways. Minimum hourly traffic volumes as a percentage of the 24-hour traffic volume for Burnhamthorpe Road East were based on year 2016 hourly traffic counts provided by the City of Mississauga. Copies of traffic data and calculations are provided for reference in **Appendix B**.

Table 12: Summary of Road Traffic Data Used to Determine Minimum 1-hr Ambient Sound Levels

Roadway Link	Current Traffic Volumes	Minimum Day/Evening/Night Hour Volume % of AADT			Commercial Vehicle Breakdown		Vehicle Speed (km/hr)
		Daytime	Evening	Night-time	% Medium Trucks	% Heavy Trucks	
Burnhamthorpe Road East [1]	26,346	4.6	2.3	0.2	2.75	2.25	60
Dixie Road [2]	22,100	4.3	3.1	0.4	1.35 (Day) 2.00 (Night)	6.89 (Day) 4.82 (Night)	60

Notes: [1] Year 2016 24-hour traffic volume provided by City of Mississauga.
[2] Year 2019 AADT data provided by Peel Region.

As with the transportation noise assessment, ambient roadway noise was modelled as line sources of sound using the Cadna/A computer model. The minimum hourly L_{eq} for the ambient sound levels were found to exceed the NPC-300 minimum exclusionary guideline limits during most periods of the day at most assessment locations on the facades of the proposed development.

Surrounding facility noise impacts were assessed against the higher of the modelled ambient noise levels and the exclusionary limits calculated using road traffic data summarized in **Table 12**. Ambient sound levels are shown in **Figure 7** (daytime), **Figure 8** (evening) and **Figure 9** (night-time).

3.3 Predicted Stationary Source Sound Levels

The “building evaluation” feature of Cadna/A was used to assess facade sound levels on the proposed development. This feature allows for noise levels to be predicted across the entire façade of a structure.

Outdoor sound levels were assessed at a height of 1.5 m above the rooftop and at-grade amenity area, at all usable locations within these amenity spaces.

3.3.1 Façade Sound Levels

A summary of the predicted sound levels on each façade due to simultaneous operation of all modelled stationary sources are shown in **Table 13** and summarized in **Figure 10** (daytime/evening) and **Figure 11** (night-time), respectively. Stationary source operating scenarios are provided for reference in **Appendix E**. The daytime and evening operating scenarios were considered to be the same.

The differences between the existing ambient sound levels and the stationary noise sound levels are shown in **Figure 12**, **Figure 13** and **Figure 14** for daytime, evening, and night-time periods, respectively.

Predicted stationary sound levels at all façade locations associated with proposed development were determined to be below ambient sound levels or NPC-300 Class 1 minimum exclusionary limits during worst-case daytime, evening and night-time hours.

Table 13: Summary of Predicted Stationary Source and Ambient Façade Sound Levels

Building	Façade	Predicted Stationary Source Sound Levels – L_{eq}(1-hr) (dBA)			Ambient Sound Levels L_{eq}(1-hr) (dBA)		
		L_{eq} Day (dBA)	L_{eq} Evening (dBA)	L_{eq} Night (dBA)	L_{eq} Day (dBA)	L_{eq} Evening (dBA)	L_{eq} Night (dBA)
Proposed Development – 14 Storeys	North	52	52	44	≤ 68	≤ 65	≤ 54
	East	55	55	48	≤ 66	≤ 63	≤ 52
	South	52	52	46	≤ 58	≤ 56	≤ 46
	West	30	30	23	≤ 65	≤ 62	≤ 51
Notes: [1] Façade locations are identified on **Figure 10** and **Figure 11**. [2] Sound levels shown represent the calculated worst-case impact along the identified facade.							

An MECP Type E warning clause is recommended for all residential units due to the proximity of the proposed development to nearby noise sources.

3.3.2 Outdoor Sound Levels

The predicted sound levels at outdoor points of reception (POR) are summarized in **Table 14** and shown in **Figure 15** for daytime and evening periods. The predicted sound levels at the outdoor points of reception are predicted to be below the minimum ambient daytime and evening sound levels due to road traffic at all outdoor amenity area locations. Therefore, mitigation is not required.

Table 14: Summary of Predicted Stationary Source Outdoor Sound Levels

Outdoor Assessment Location [1]	Stationary Source Sound Levels [2]		Ambient Sound Levels [3]	
	L_{eq} Daytime (dBA)	L_{eq} Evening (dBA)	L_{eq} Daytime (dBA)	L_{eq} Evening (dBA)
OPOR-1	40	40	54	52
OPOR-2	41	41	57	55
OPOR-3	43	43	57	55
OPOR-4	37	37	48	46
Notes: [1] Outdoor assessment locations are shown in **Figure 15**.				

Part 2: Impacts of the Development on Itself

4.0 Stationary Source Noise from the Development on Itself

At the time of this assessment, mechanical systems for the proposed development have not been sufficiently designed to complete a detailed assessment of stationary source noise from the development on itself.

For common mechanical systems that will be implemented as part of the proposed development, sound levels from all noise-generating equipment should comply with the guideline limits in MECP Publication NPC-300. The potential noise from mechanical equipment in the proposed development (such as from make-up air units, cooling towers, parking garage exhaust fans, emergency generators, etc.) should be assessed as part of the final building design. The applicable criteria can be met at all on-site receptors through appropriate selection of mechanical equipment, by locating equipment with sufficient setback from noise sensitive locations, and by incorporating control measures (e.g., silencers) into the design. This can be confirmed either later in the site plan approval process, or at the building permit approval stages.

If individual air conditioning systems are to be implemented for individual residential units within the proposed development, the sound levels from each unit should meet the requirements of MECP Publication NPC-216.

It is recommended that the mechanical systems be reviewed by an acoustical consultant prior to final equipment selection.

Part 3: Impacts of the Development on the Surrounding Area

5.0 Stationary Source Noise from the Development on the Surroundings

With respect to the acoustic environment of the area, it is expected that the proposed development will have a negligible effect on neighbouring noise-sensitive properties.

Traffic related to the proposed development will be small relative to the existing traffic volumes within the area and is not of concern with respect to potential transportation noise.

Other sources associated within the proposed development with the potential to generate noise are mechanical equipment (e.g., air conditioning units, make up air units, cooling units, and parking garage exhaust fans). Sound levels due to operation of these sources should meet MECP Publication NPC-300 noise guidelines at all off-site noise sensitive receptors.

Off-site sound levels are not expected to be of concern are not anticipated because systems will be designed to ensure that the applicable noise guidelines are met at on-site receptors.

Regardless, off-site sound levels from mechanical equipment should be assessed as part of the final building designs. The applicable criteria can be met at all surrounding receptors though the use of routine mitigation measures, including the appropriate selection of mechanical equipment, by locating equipment with sufficient setback from noise sensitive locations, and by incorporating control measures (e.g., silencers, barriers) into the designs.

If individual air conditioning systems are to be implemented for individual residential units within the proposed development, the sound levels from each unit should meet the requirements of MECP Publication NPC-216.

It is recommended that the mechanical systems be reviewed by an acoustical consultant prior to final selection of equipment.

6.0 Conclusions and Recommendations

The potential for noise impacts on and from the proposed development have been assessed. Impacts of the environment on the development, the development on itself, and the development on the surrounding area have been considered. Based on the results of this assessment, the following conclusions have been reached:

Transportation Noise

- An assessment of transportation sound levels from surrounding roadways has been completed.
- Based on transportation façade sound levels upgraded glazing is required within the development, as outlined in outlined in **Section 2.5.1**.
- Ventilation and warning clause recommendations are outlined in **Section 2.5.2**.
    - Mandatory air conditioning and MECP Type D warning clauses are required for all residential units in the development noted in **Section 2.5.1** and **Appendix D**.
- Transportation sound levels at the amenity areas are predicted to be 60 dBA or lower. Therefore, MECP Type A and/or Type B warning clause is recommended for all residential units based on MECP NPC-300 and City of Mississauga suggested sound level, respectively.
- A 1.5 m and 2.0 m acoustic barrier for rooftop amenity (OLA-2) and at-grade amenity (OLA-3), respectively is recommended, as outlined in **Section 2.5.2**.
- Warning clauses should be included in agreements registered on Title for the residential units and included in agreements of purchase and sale/rental agreements.
    - Warning clause recommendations are summarized in **Appendix D**.

Stationary Source Noise

- A review of the surrounding stationary noise sources was completed by SLR personnel during a site visit to the area and through available aerial photography.
- Stationary source noise impacts were assessed for Burnhamthorpe Library and a nearby Gas Station/Car Wash/Jiffy Lube.
- Stationary source sound levels were determined to be below the higher of the minimum hourly ambient sound levels or NPC-300 Class 1 minimum exclusionary limits at all locations within the proposed development.
- As the proposed development is located in proximity to stationary noise sources, a Type E warning clause is recommended for all residential units.

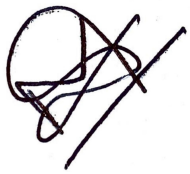
Overall Assessment

- Noise from the environment on the proposed development can be adequately controlled with the inclusion of upgraded glazing, ventilation and warning clause recommendations as detailed in **Part 1** of this report.
- Noise from the proposed development on itself is not expected to be of concern and can be adequately controlled by following the design guidance outlined in **Part 2** of this report.
- Noise from the proposed development on the surroundings is expected to meet the applicable guideline limits and can be adequately controlled by following the design guidance outlined in **Part 3** of this report.
- As the mechanical systems for the proposed development have not been designed in detail, the acoustical design should be reviewed by an acoustical consultant during site plan approval process, or as part of the final building design.

7.0 Closure

Regards,

SLR Consulting (Canada) Ltd.



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Principal, Acoustics Engineer
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8.0 References

City of Mississauga Official Plan, Chapter 6 - Value the Environment, August 2024.

Federation of Canadian Municipalities and the Railway Association of Canada, Guidelines for New Development in Proximity to Railway Operations, 2013.

International Organization for Standardization, ISO 9613-2: Acoustics – Attenuation of Sound During Propagation Outdoors Part 2: General Method of Calculation, Geneva, Switzerland, 1996.

Ontario Ministry of the Environment, Conservation and Parks, 1989, Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT).

Ontario Ministry of the Environment, Conservation and Parks, Publication NPC-300: Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, 2013.

Ontario Ministry of the Environment, Conservation and Park, STAMSON v5.04: Road, Rail and Rapid Transit Noise Prediction, 1996.

Ontario Ministry of the Environment and Energy, Publication NPC-216: Residential Air Conditioning Devices, 1993.

Region of Peel, General Guidelines for the Preparation of Acoustical Reports in the Region of Peel, 2020.

Figures

Environmental Noise Assessment

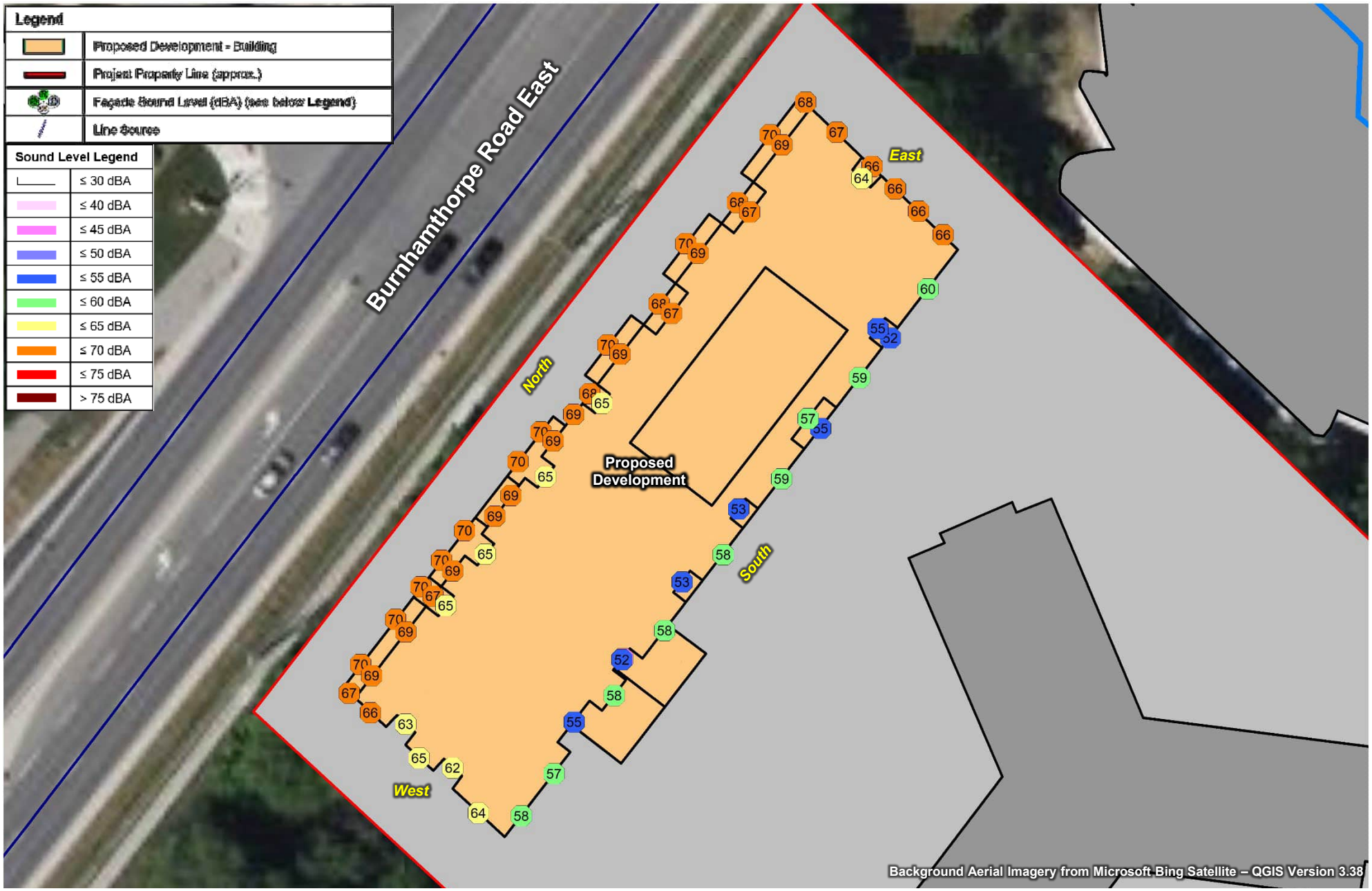
1315 Silver Spear Road, Mississauga

Starlight Investments

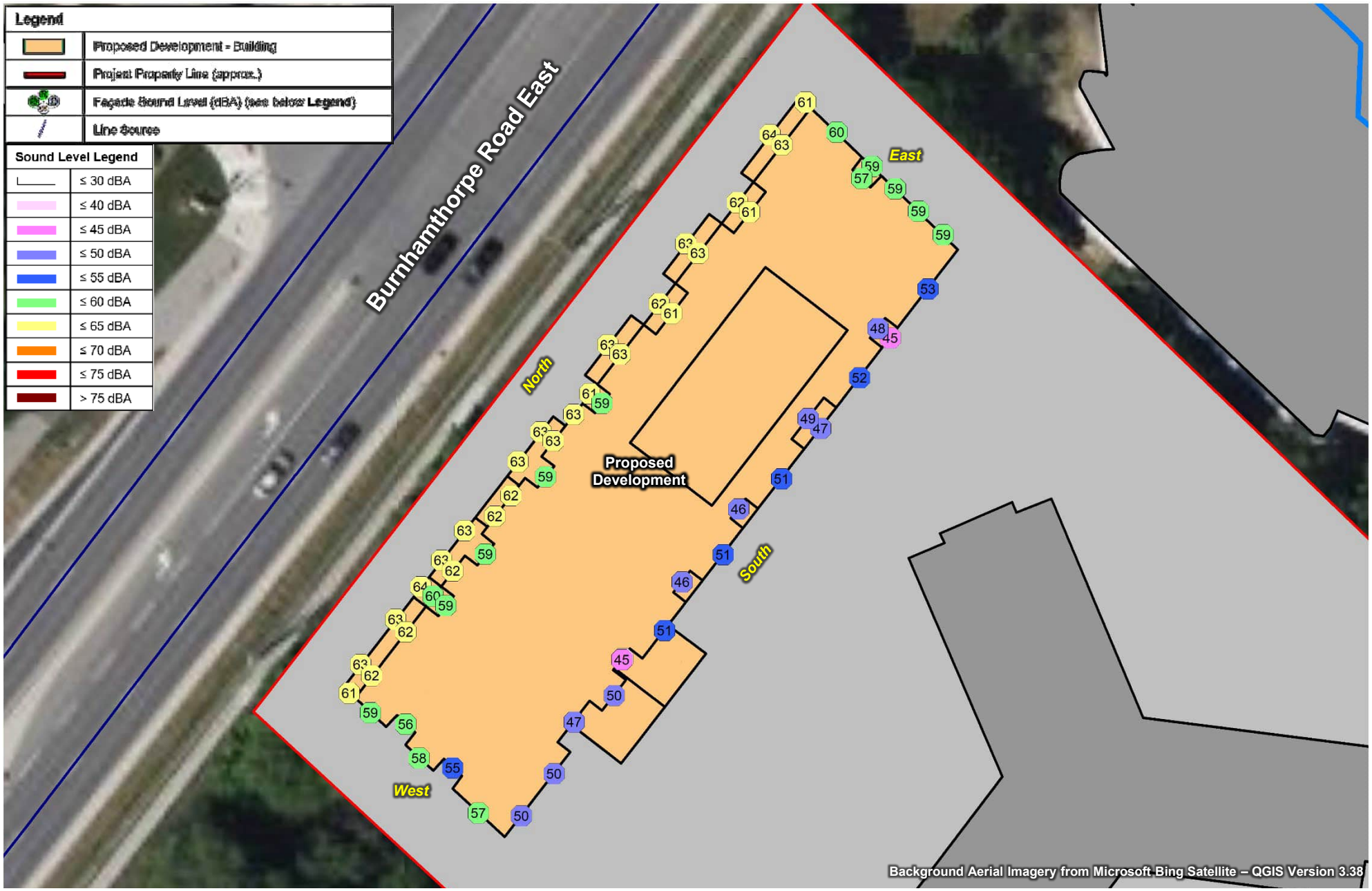
SLR Project No.: 241.031124.00001

February 19, 2025

STARLIGHT INVESTMENTS	True North	Scale: 1:5,000	METRES	SLR
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **1**	
CONTEXT PLAN		Project No. 241.031124.00001		



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES	SLR
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **2**	
PREDICTED FAÇADE SOUND LEVELS – ROAD TRAFFIC – DAYTIME		Project No. 241.031124.00001		



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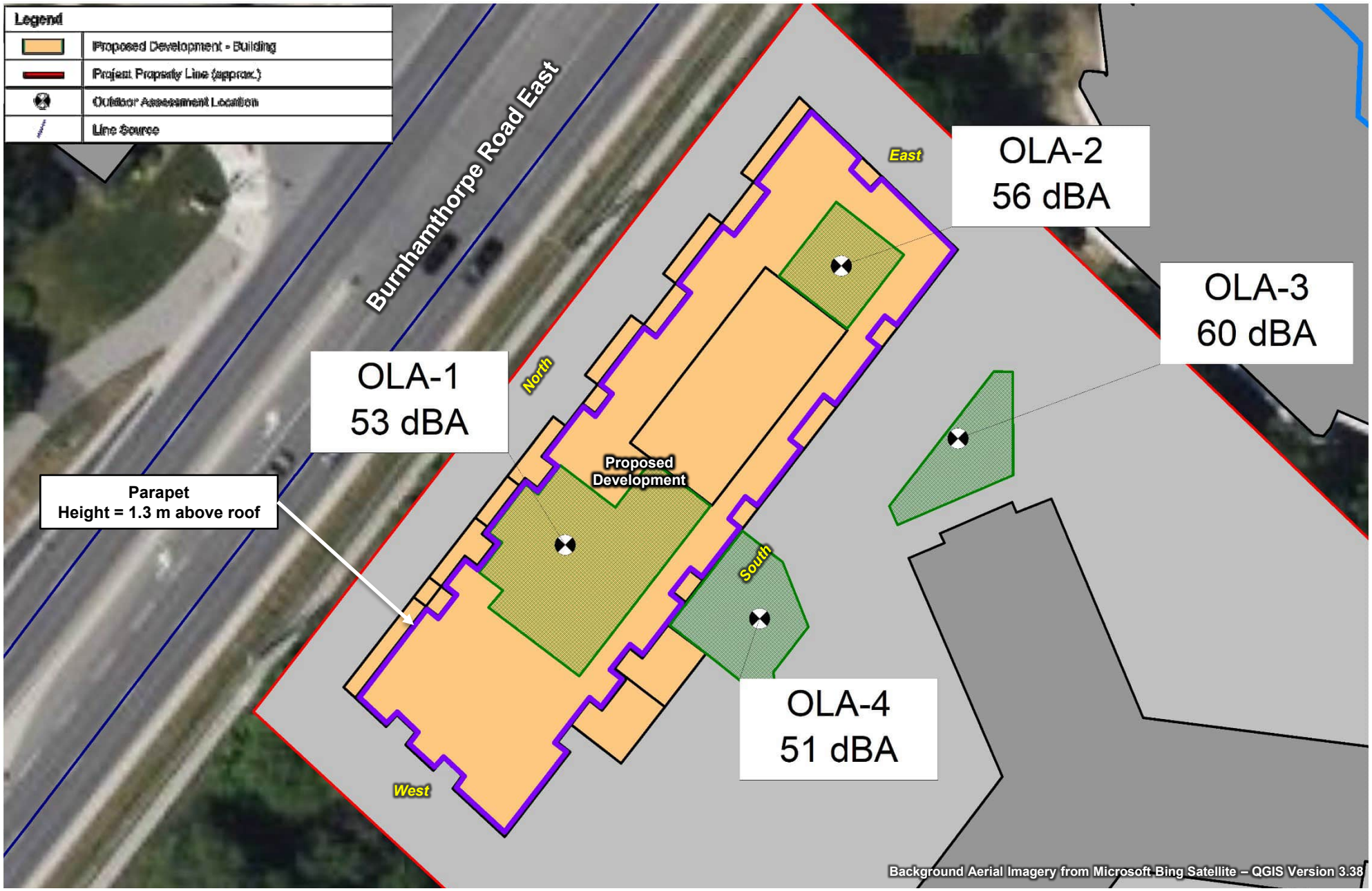
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **3**	
PREDICTED FAÇADE SOUND LEVELS – ROAD TRAFFIC – NIGHT-TIME		Project No. 241.031124.00001		



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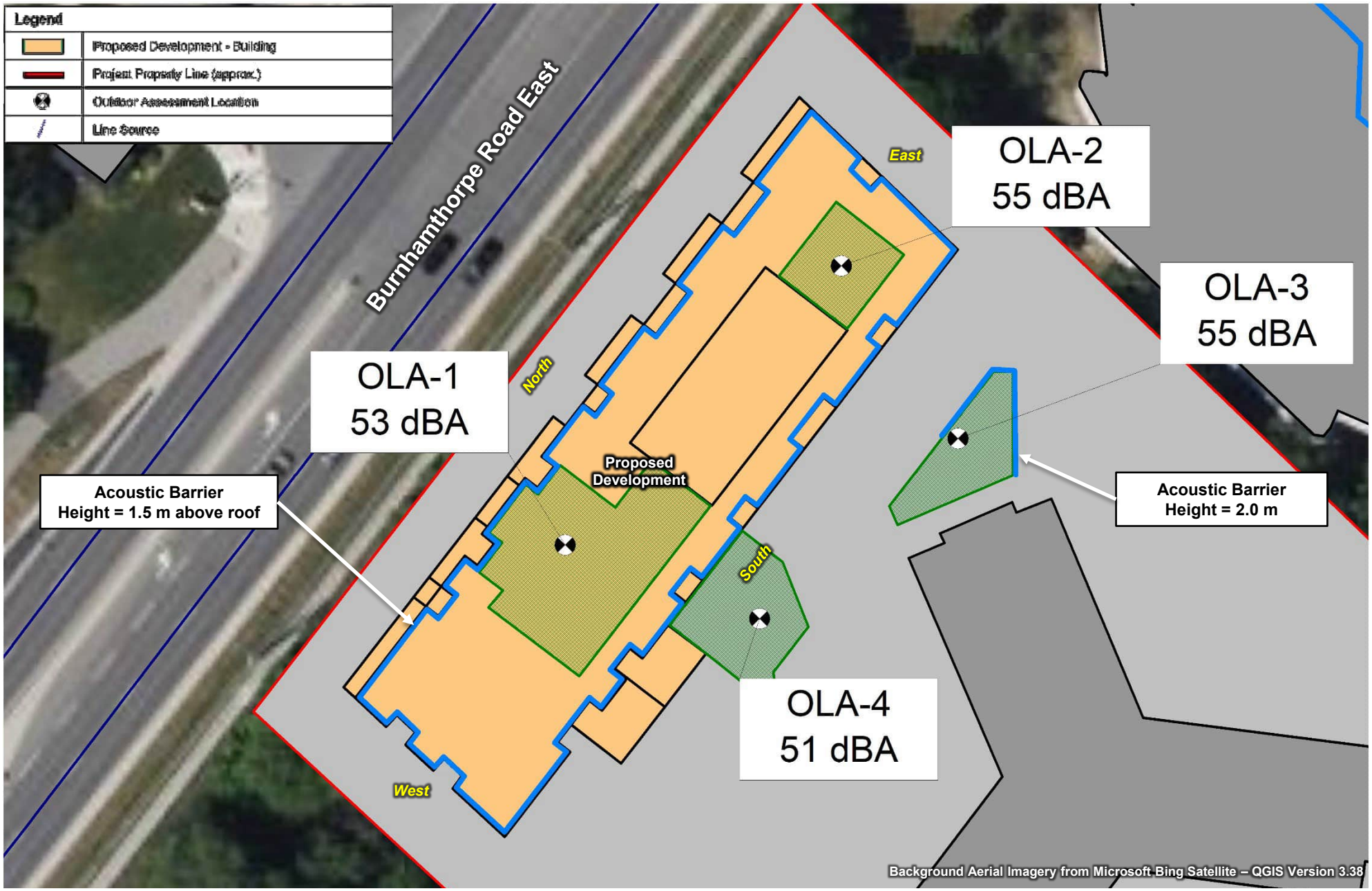
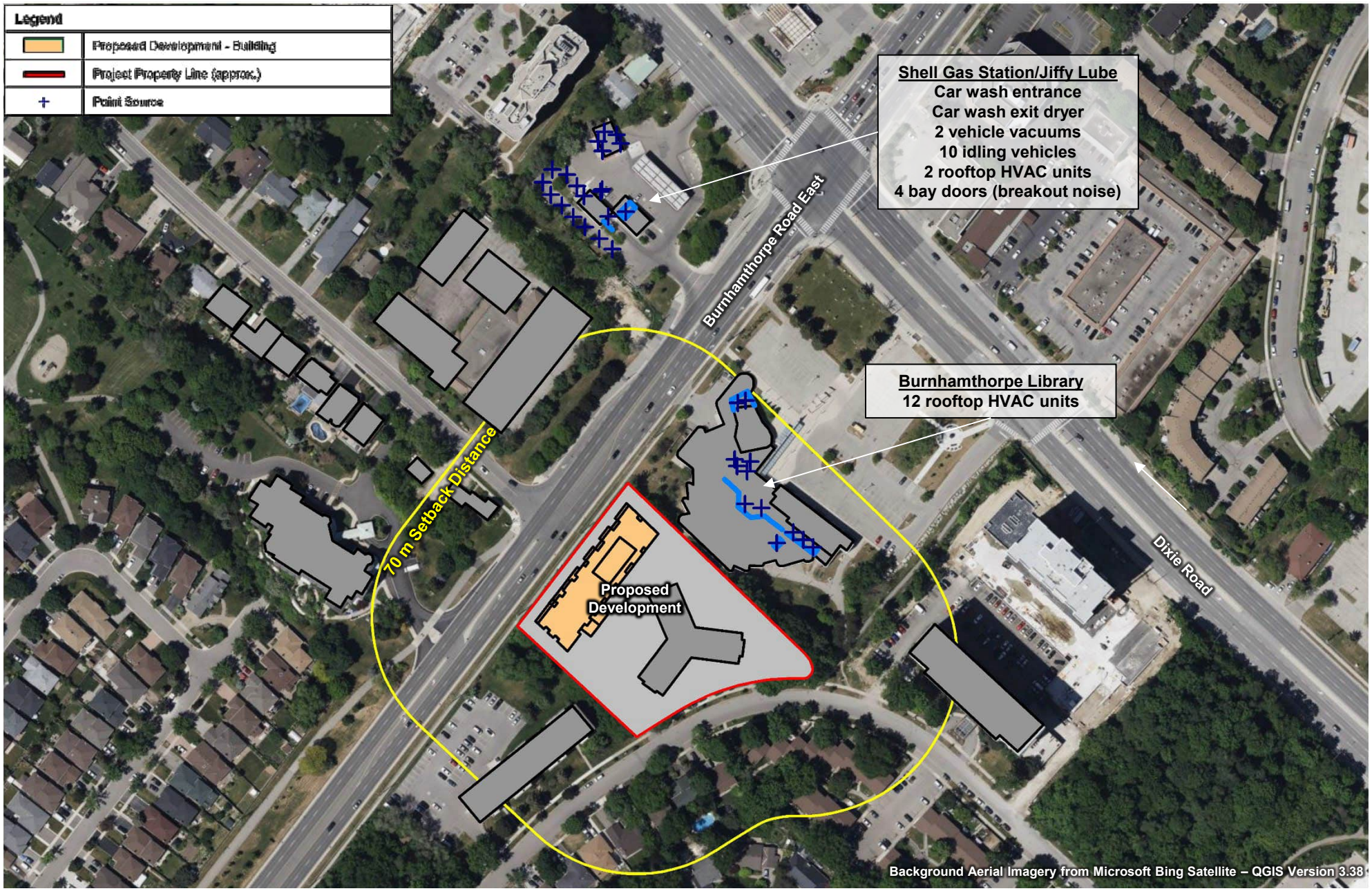
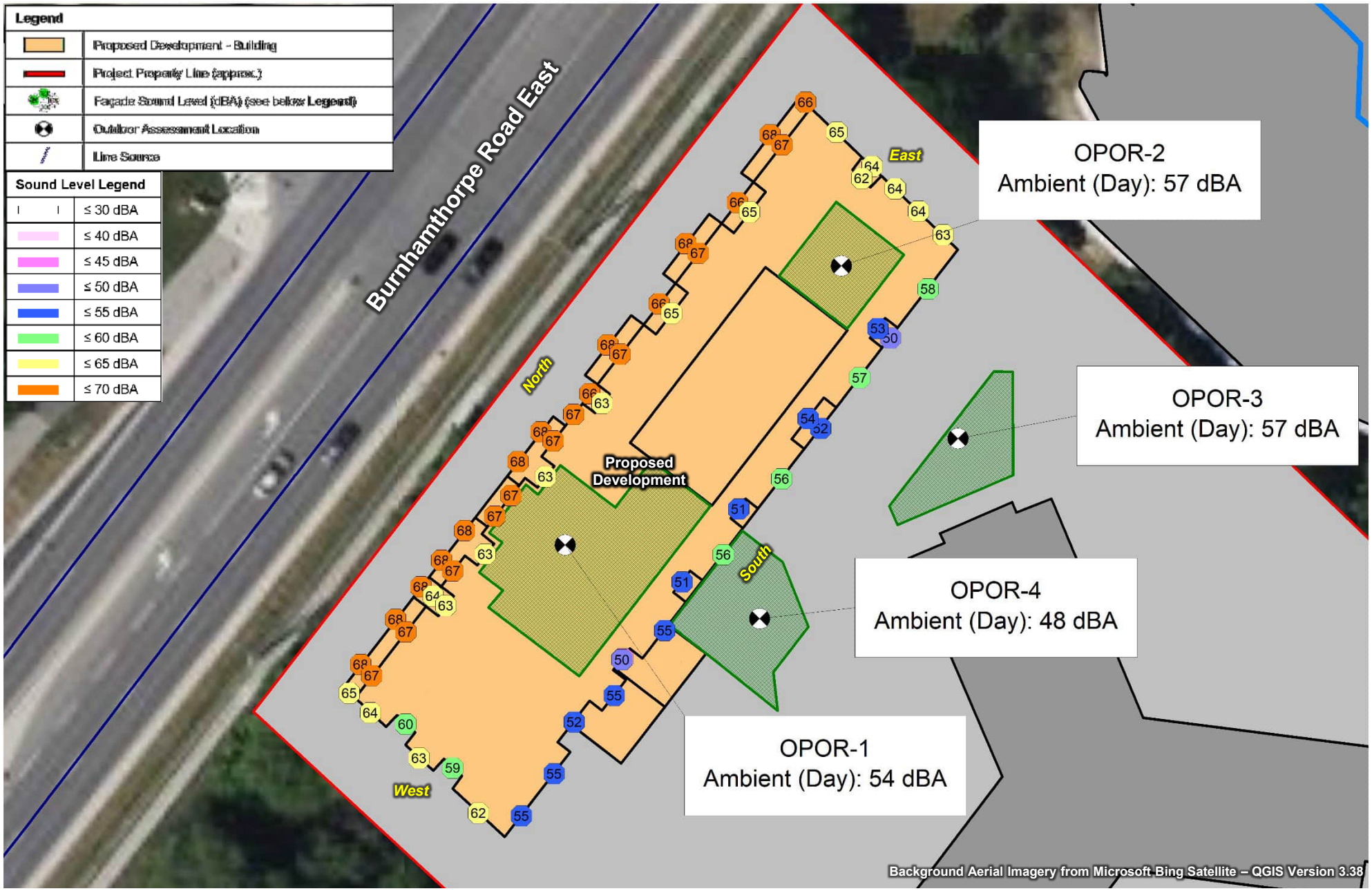
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **4**	
PREDICTED OUTDOOR LIVING AREA SOUND LEVELS – ROAD TRAFFIC – DAYTIME		Project No. 241.031124.00001		



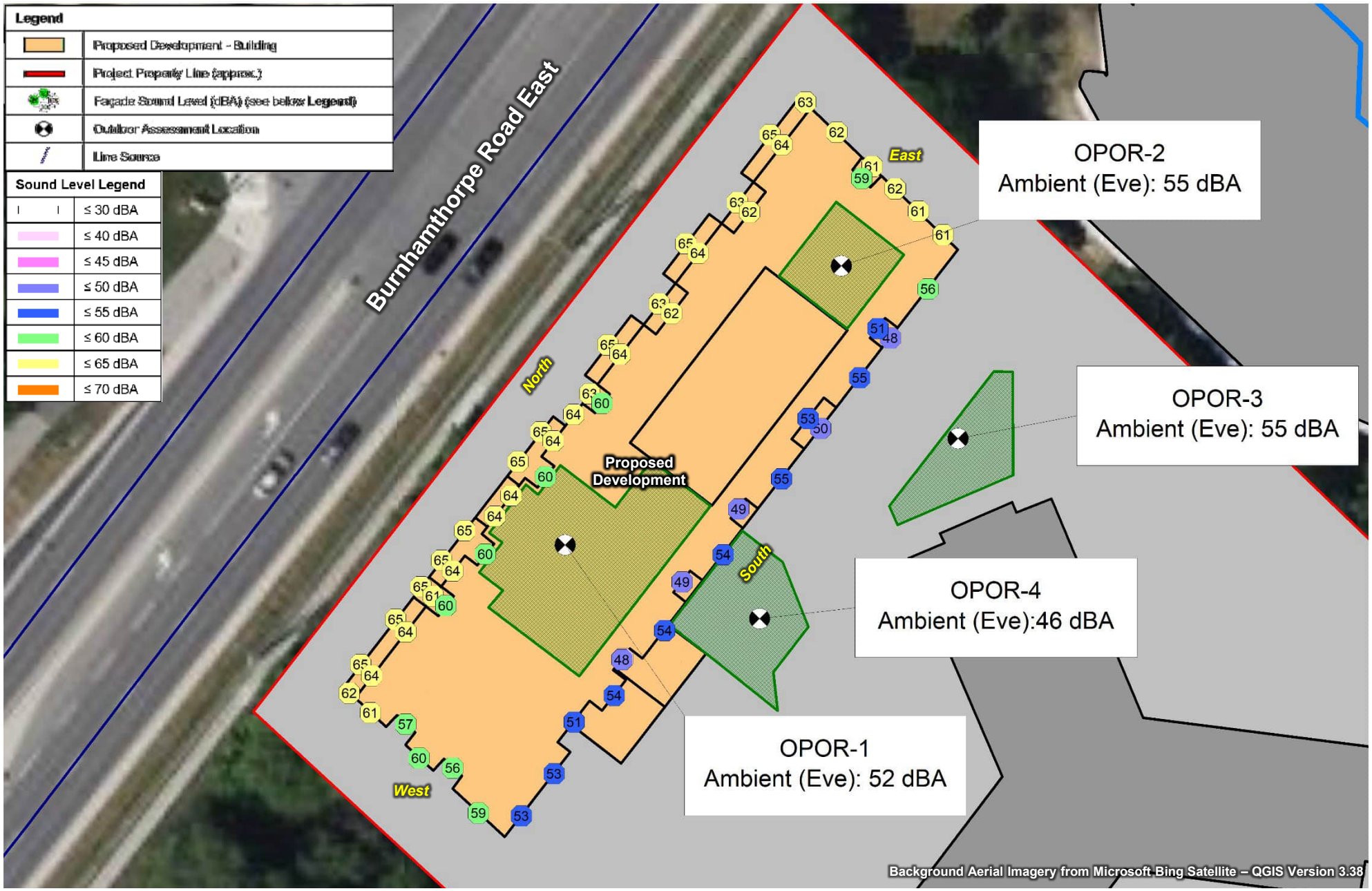
STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **5**
POTENTIAL BARRIER LOCATIONS		Project No. 241.031124.00001	SLR



STARLIGHT INVESTMENTS	True North	Scale: 1:2,500	METRES	SLR
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **6**	
SURROUNDING STATIONARY SOURCE LOCATIONS		Project No. 241.031124.00001		



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **7**
PREDICTED AMBIENT SOUND LEVELS – ROAD TRAFFIC – DAYTIME		Project No. 241.031124.00001	SLR



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **8**
PREDICTED AMBIENT SOUND LEVELS – ROAD TRAFFIC – EVENING		Project No. 241.031124.00001	

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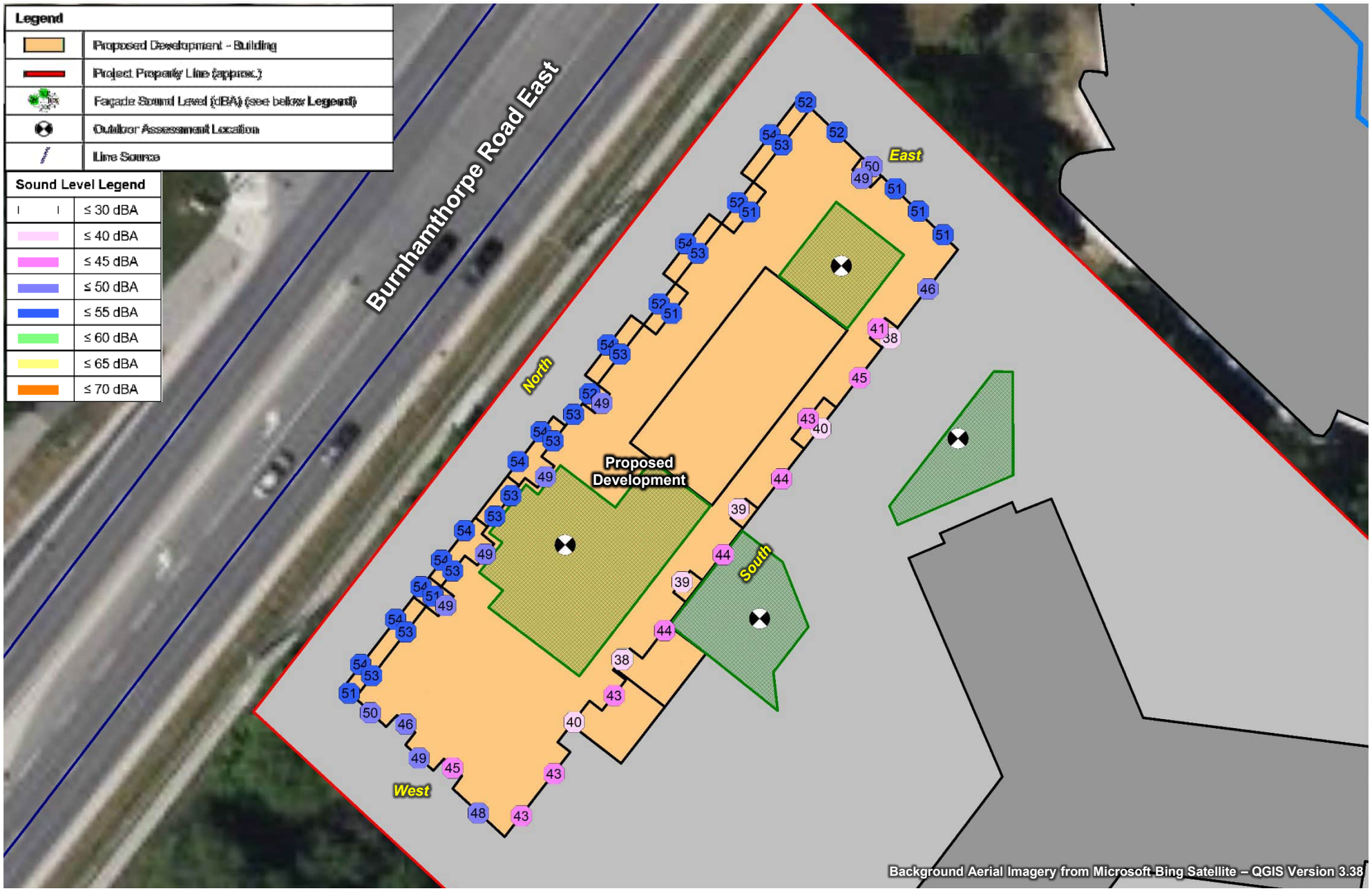
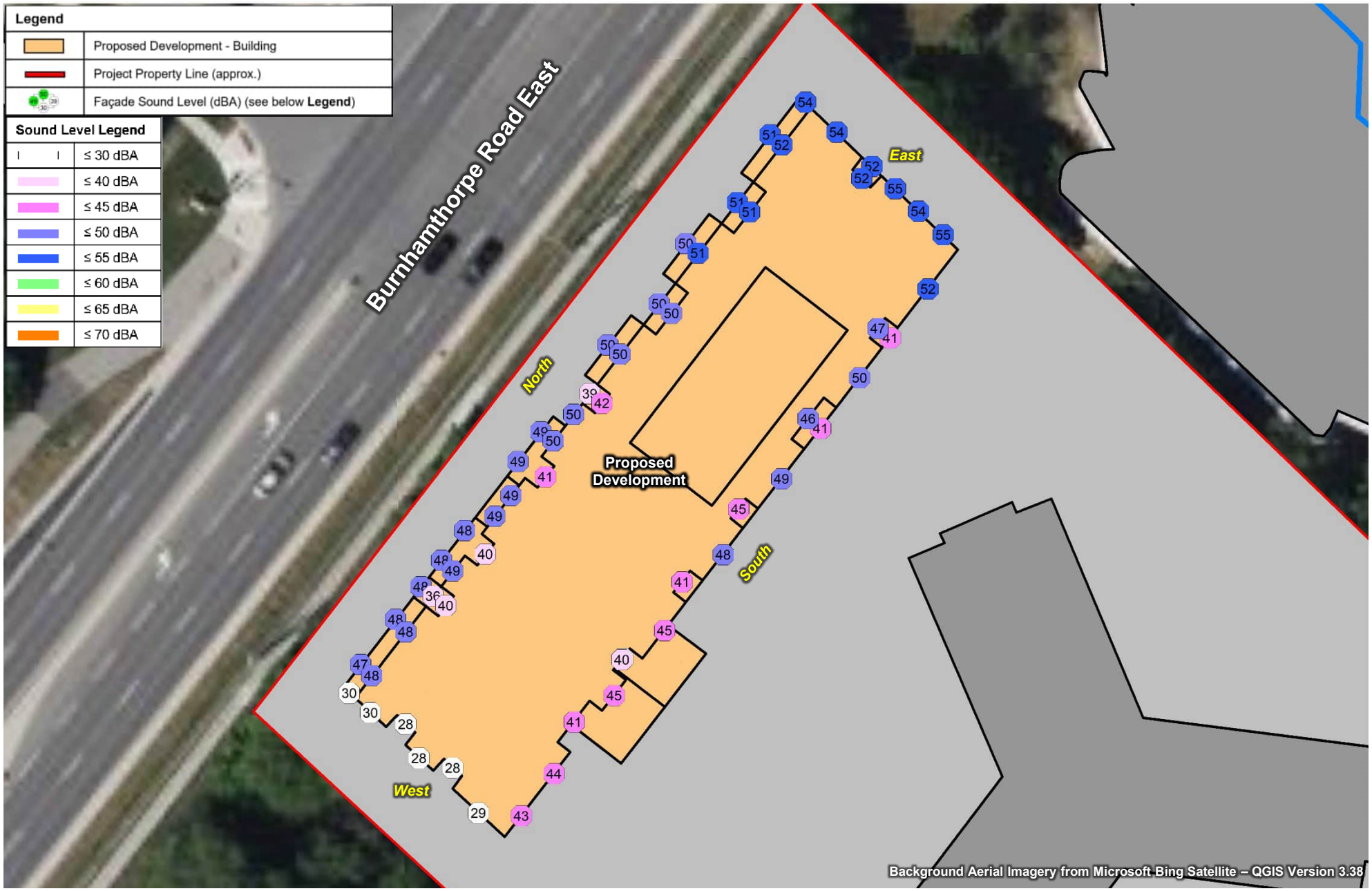
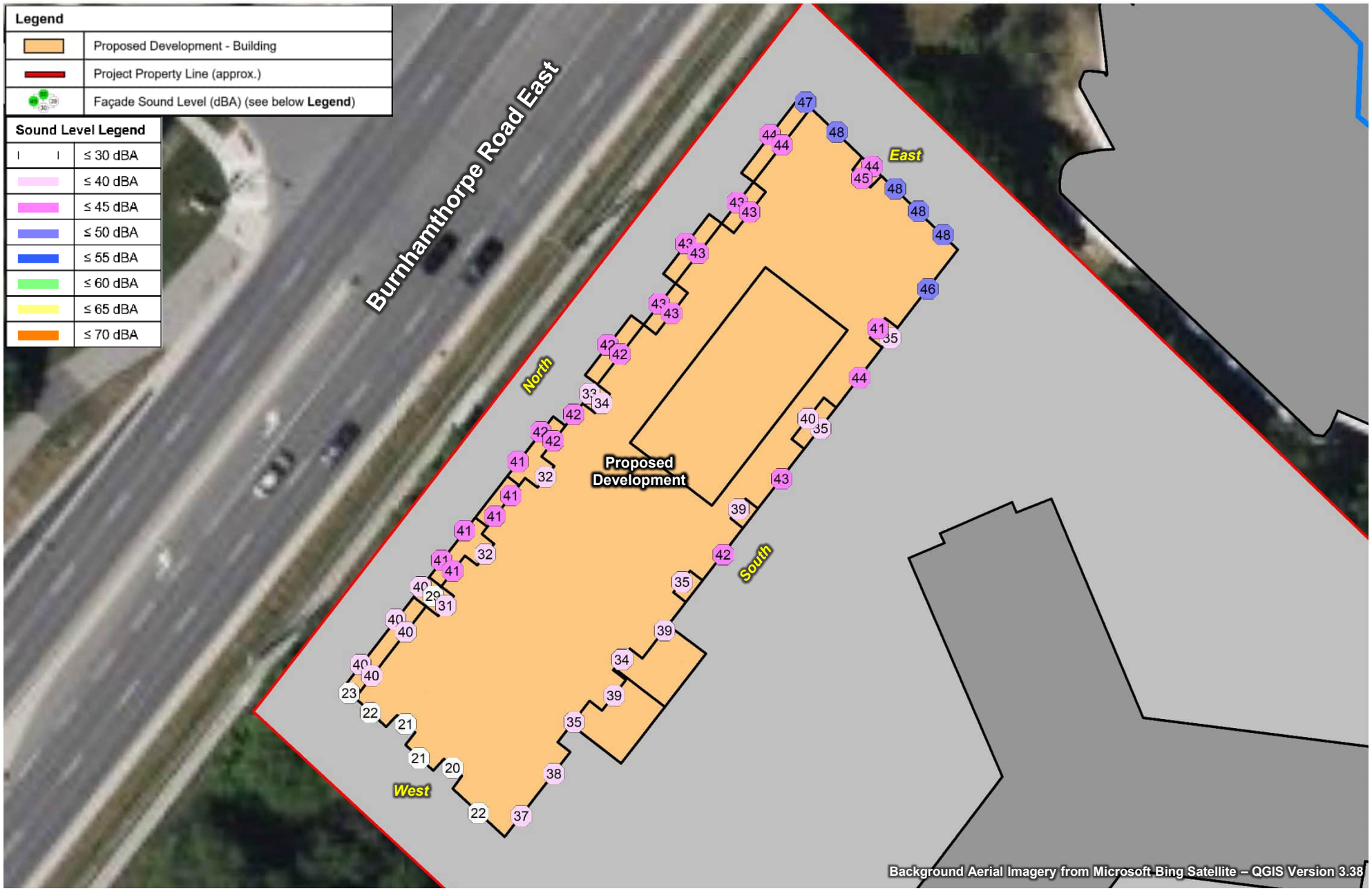


STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **9**
PREDICTED AMBIENT SOUND LEVELS – ROAD TRAFFIC – NIGHT-TIME		Project No. 241.031124.00001	

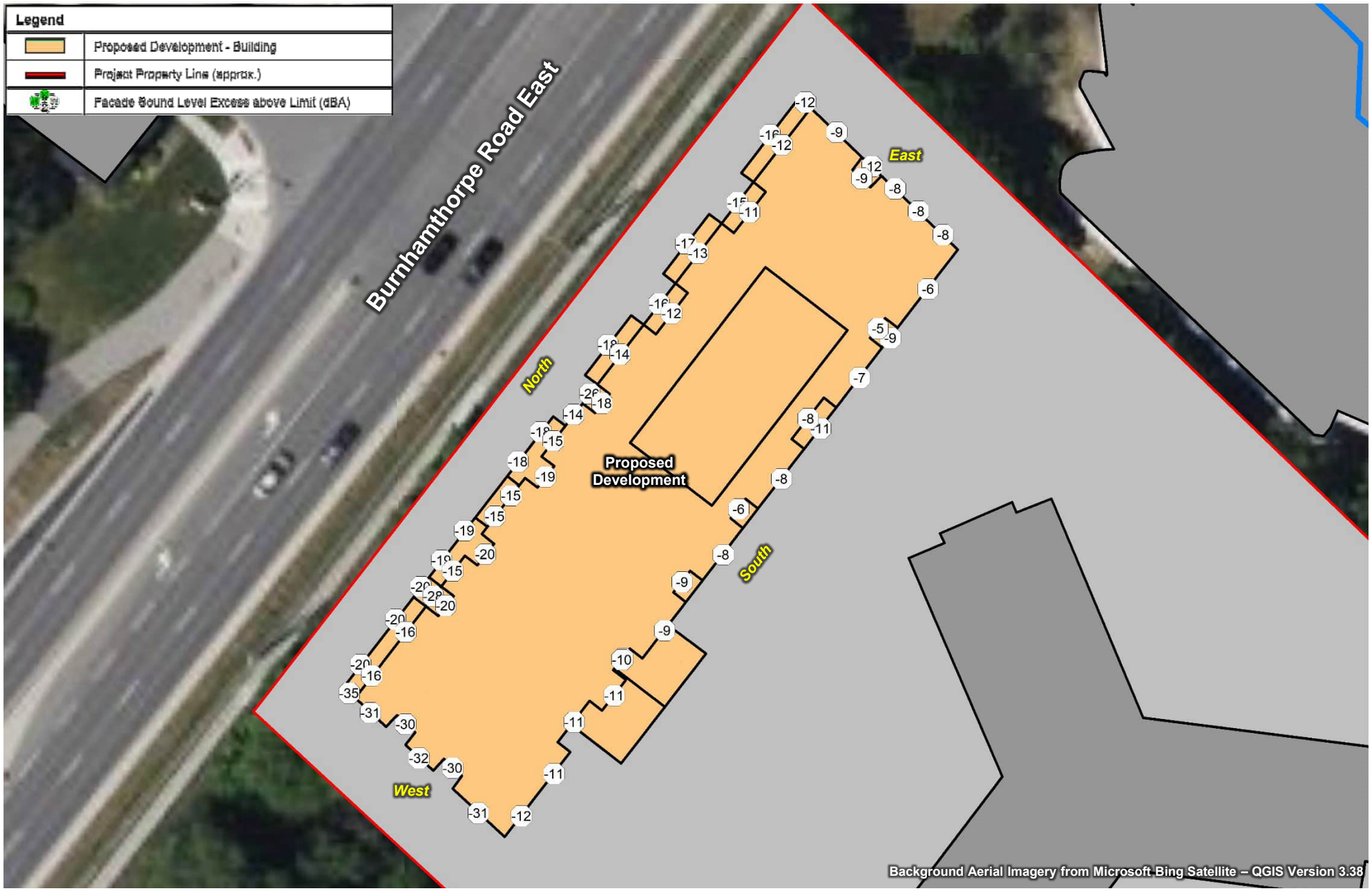
SLR



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES	SLR
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **10**	
PREDICTED FAÇADE SOUND LEVELS – STATIONARY SOURCES – DAYTIME/EVENING		Project No. 241.031124.00001		



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES	SLR
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **11**	
PREDICTED FAÇADE SOUND LEVELS – STATIONARY SOURCES – NIGHT-TIME		Project No. 241.031124.00001		



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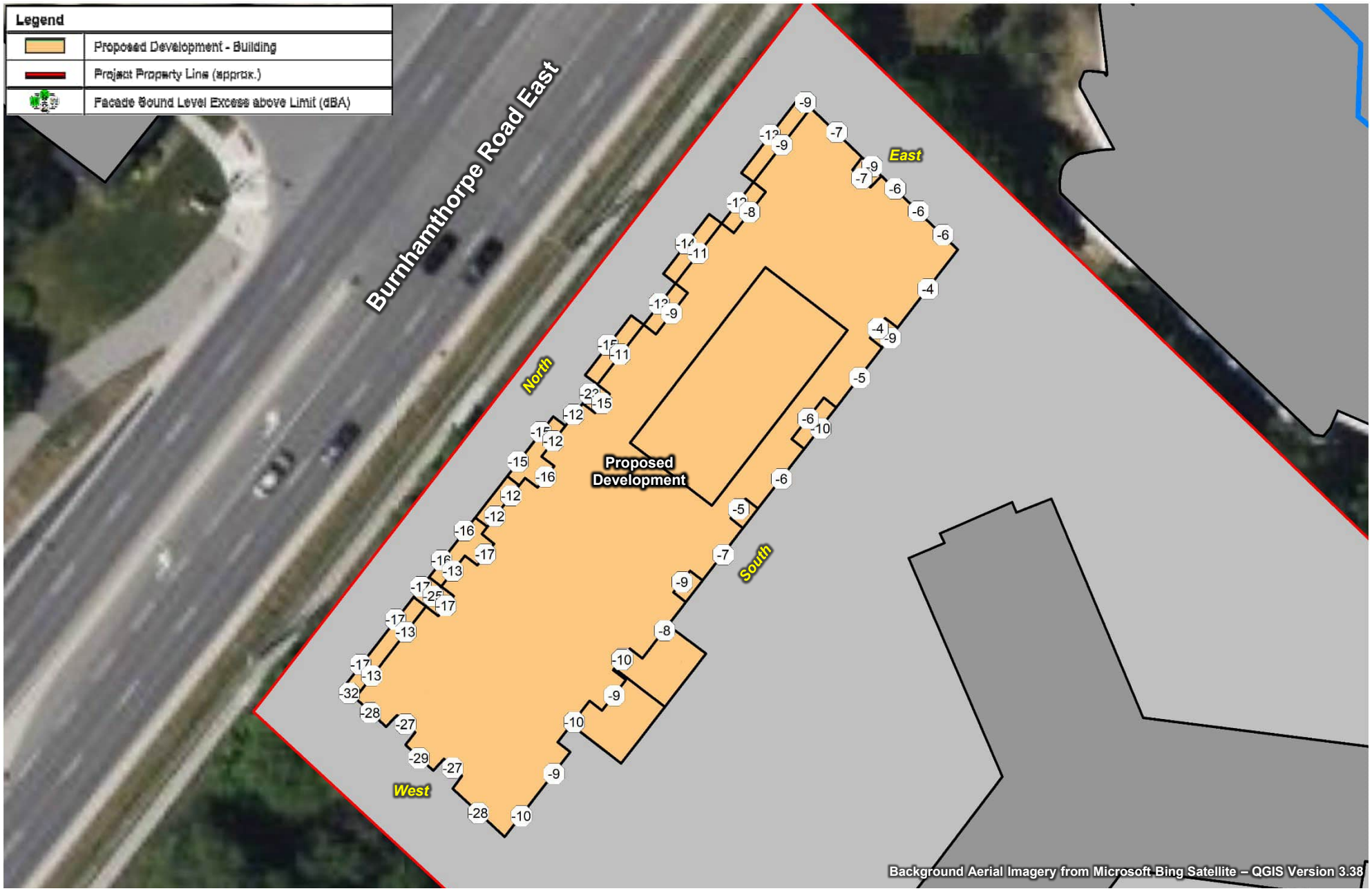
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **12**	
PREDICTED FAÇADE SOUND LEVELS EXCESSES – STATIONARY SOURCES – DAYTIME		Project No. 241.031124.00001		



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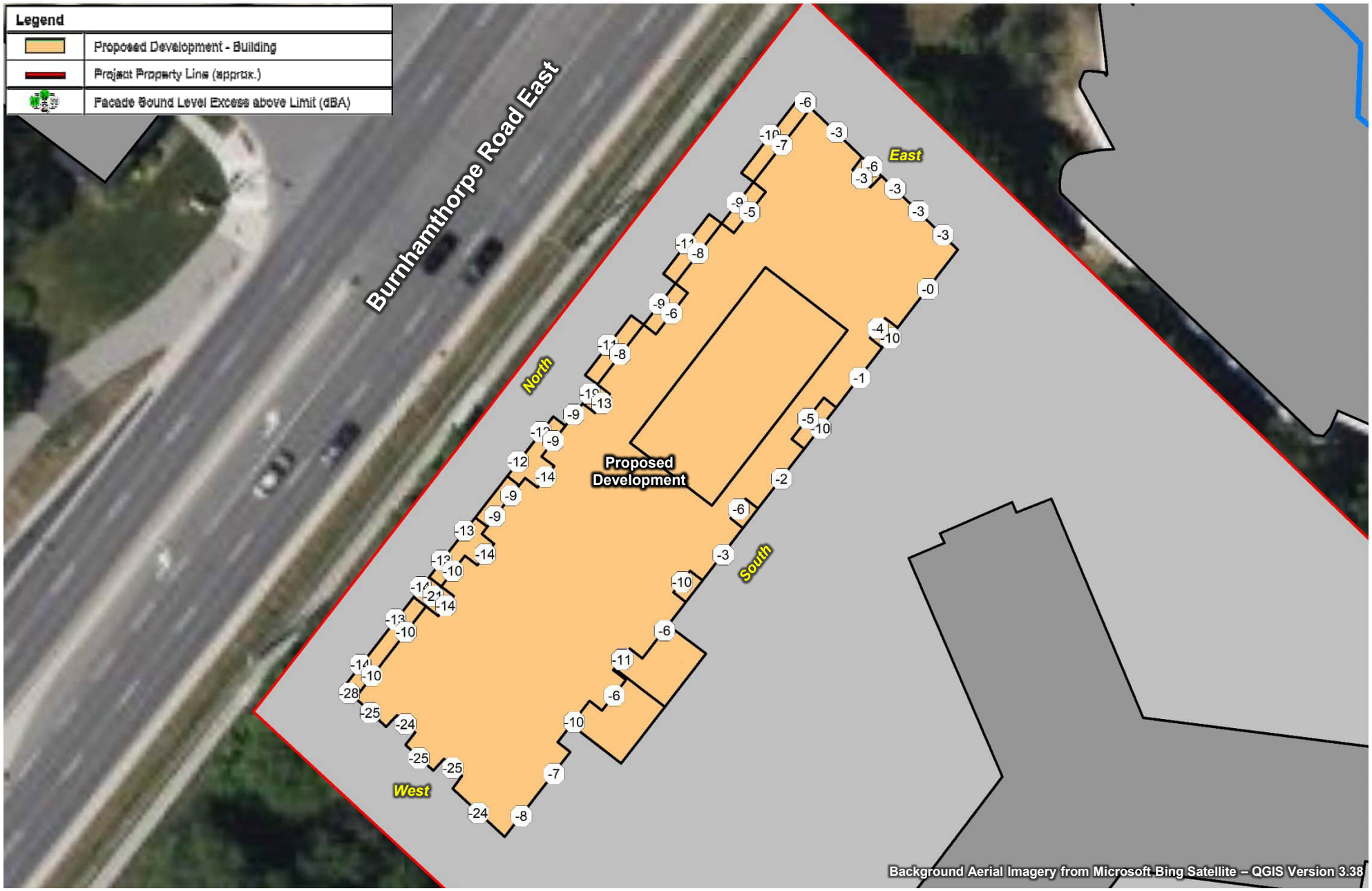
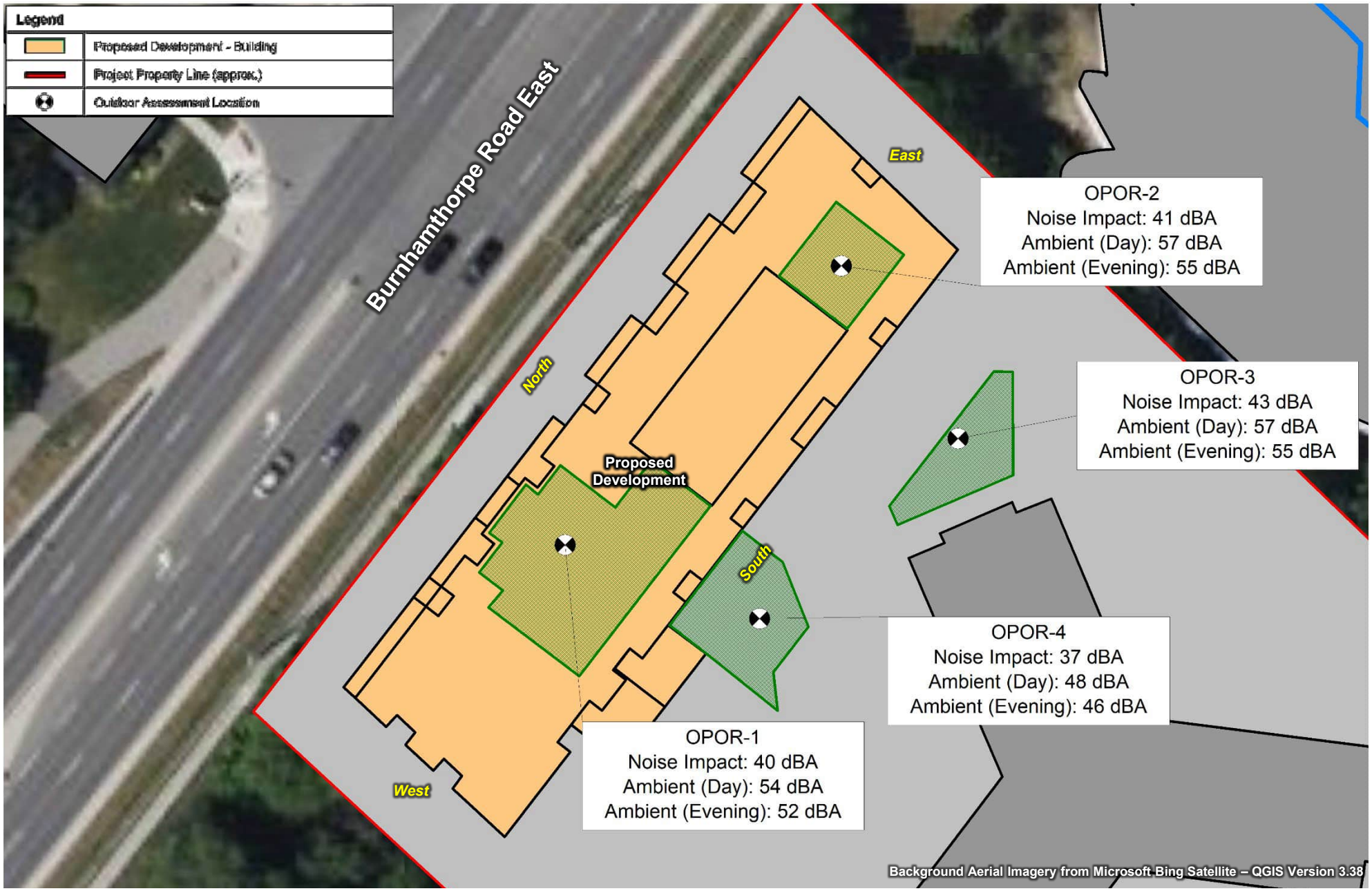
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **13**	
PREDICTED FAÇADE SOUND LEVELS EXCESSES – STATIONARY SOURCES – EVENING		Project No. 241.031124.00001		



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES	SLR
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **14**	
PREDICTED FAÇADE SOUND LEVELS EXCESSES – STATIONARY SOURCES – NIGHT-TIME		Project No. 241.031124.00001		



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **15**
PREDICTED OUTDOOR SOUND LEVELS – STATIONARY SOURCES – DAYTIME/EVENING		Project No. 241.031124.00001	

SLR

Appendix A Development Drawings

Environmental Noise Assessment

1315 Silver Spear Road, Mississauga

Starlight Investments

SLR Project No.: 241.031124.00001

February 19, 2025

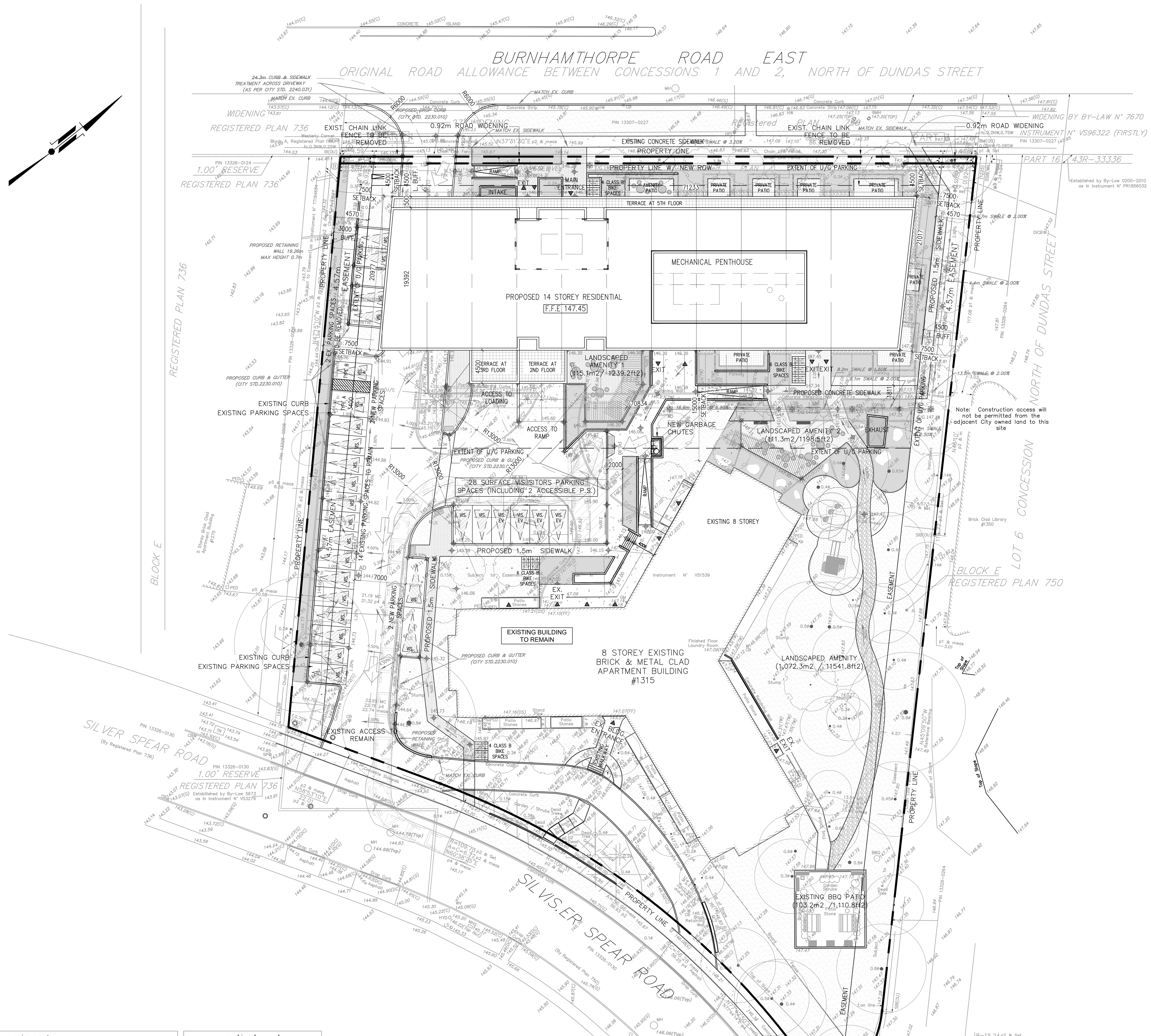
GENERAL NOTES

1. ALL SURFACE DRAINAGE WILL BE SELF-CONTAINED, COLLECTED AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
2. THE CITY OF MISSISSAUGA REQUIRES THAT ALL WORKING DRAWINGS BE SUBMITTED TO THE BUILDING DIVISION AS A PART OF AN APPLICATION OF THE ISSUANCE OF A BUILDING PERMIT, SHALL BE CERTIFIED BY THE ARCHITECT OR ENGINEER AS BEING IN CONFORMITY WITH THE SITE DEVELOPMENT PLAN AS APPROVED BY THE CITY OF MISSISSAUGA.
3. ALL EXTERIOR LIGHTING WILL BE DIRECTED ONTO THE SITE AND WILL NOT INFRINGE UPON THE ADJACENT PROPERTIES.
4. ALL ROOF TOP MECHANICAL UNITS SHALL BE SCREENED FROM VIEW BY THE APPLICANT.
5. AT THE ENTRANCES TO THE SITE, MUNICIPAL SIDEWALK AND CURBS WILL BE CONTINUOUS THROUGH THE DRIVEWAY. THE DRIVEWAY GRADE WILL BE COMPATIBLE WITH THE EXISTING OR FUTURE SIDEWALK AND CURB DEPRESSION WILL BE PROVIDED FOR EACH ENTRANCE.
6. ON SITE WASTE COLLECTION IS TO BE ARRANGED THROUGH A PRIVATE CONTRACTOR.
7. THE PORTIONS OF THE DRIVEWAYS WITHIN THE MUNICIPAL BOULEVARDS IS TO BE PAVED BY THE APPLICANT.
8. DRIVEWAYS ON THE MUNICIPAL RIGHT-OF-WAY SHALL BE PAVED BY THE APPLICANT.
9. FIRE AND EMERGENCY SERVICES ACCESS ROUTES SHALL BE DESIGNATED AS PER BY-LAW1036-81, AS AMENDED, PRIOR TO OCCUPANCY OF THE BUILDING. ALL FIRE AND EMERGENCY SERVICES ACCESS ROUTES SHALL BE CONSTRUCTED OF HARD SURFACE MATERIAL SUCH AS ASPHALT, CONCRETE OR LOCKSTONE AND DESIGNED TO SUPPORT A LOAD OF NOT LESS THAN 11,363 kg PER AXLE AND HAVE A CHANGE IN GRADIENT OF NOT MORE THAN 1 IN 12.5 OVER MINIMUM DISTANCE OF 15m.
10. THE TOPS OF ANY CURBS BORDERING DRIVEWAYS WITHIN THE MUNICIPAL BOULEVARD WILL BE FLUSH WITH THE MUNICIPAL SIDEWALK AND ROAD CURB.
11. PARKING SPACES RESERVED FOR PEOPLE WITH DISABILITIES MUST BE IDENTIFIED BY A SIGN INSTALLED AT THE APPLICANT'S EXPENSE, IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS OF SCHEDULE 2 & 3 OF BY-LAW 10-2016.
12. GRADES WILL BE MET WITHIN A 33% MAXIMUM SLOPE AT THE PROPERTY LINES AND WITHIN THE SITE.
13. ALL DAMAGED AREAS ARE TO BE REINSTATED WITH TOPSOIL AND SOD PRIOR TO THE RELEASE OF SECURITIES.
14. SIGNAGE SHOWN ON THE DEVELOPMENT PLANS IS FOR INFORMATION PURPOSES ONLY. ALL SIGNS WILL BE SUBJECT TO THE PROVISIONS OF SIGN BY-LAW0054-2002, AS AMENDED, AND A SEPARATE SIGN APPLICATION WILL BE REQUIRED THROUGH THE BUILDING DIVISION.
15. ALL SIGNAGE IS SUBJECT TO FURTHER REVIEW AND APPROVALS BY THE PLANNING AND BUILDING DEPARTMENT WHICH MAY INCLUDE A STAFF REVIEW THROUGH THE SIGN PERMIT PROCESS.
16. THE APPLICANT WILL BE RESPONSIBLE FOR ENSURING THAT ALL PLANS CONFORM TO TRANSPORT CANADA'S RESTRICTION.
17. THE APPLICANT IS RESPONSIBLE FOR ENSURING THAT TREE PROTECTION HOARDING IS MAINTAINED THROUGHOUT ALL PHASE OF DEMOLITION AND CONSTRUCTION, IN THE LOCATION AND CONDITION AS APPROVED BY THE PLANNING AND BUILDING DEPARTMENT. NO MATERIALS (BUILDING MATERIALS, SOIL, ETC.) MAY BE STOCKPILED WITHIN THE AREA OF HOARDING. FAILURE TO MAINTAIN THE HOARDING AS ORIGINALLY APPROVED FOR THE STORAGE OF MATERIALS WITHIN THE HOARDING WILL BE THE CAUSE FOR THE TREE PRESERVATION 'LETTER OF CREDIT' TO BE HELD FOR TWO (2) YEARS FOLLOWING COMPLETION OF ALL SITE WORKS.

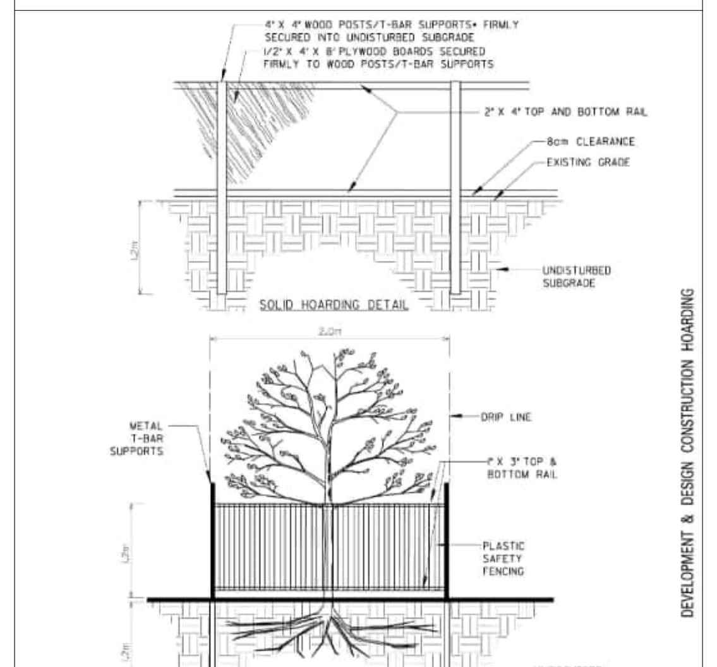
SIGNED BY PROPERTY OWNER .... DATED:.................

18. PLEASE BE ADVISED THAT THE DETAILED GRADING FOR THIS APPLICATION WILL BE FINALIZED AND APPROVED BY THE DEVELOPMENT SECTION OF THE TRANSPORTATION AND WORKS DEPARTMENT AS A REQUIREMENT FOR THE ISSUANCE OF A BUILDING PERMIT.
19. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COST OF AN UTILITY RELOCATIONS NECESSITATED BY THE SITE PLAN.
20. THE STRUCTURAL DESIGN OF AN RETAINING WALL OVER 0.6m IN HEIGHT OR AN RETAINING WALL LOCATED ON A PROPERTY LINE IS TO BE SHOWN ON THE SITE GRADING PLAN FOR THIS PROJECT AND TO BE APPROVED BY THE CONSULTING ENGINEER FOR THE PROJECT.
21. SITE GRADING PLAN AND SITE SERVICING PLAN ARE TO BE ASSOCIATED WITH THE SITE PLAN.
22. I HEREBY CERTIFY THAT THIS DRAWING CONFORMS IN ALL RESPECTS TO THE SITE DEVELOPMENT PLANS AS APPROVED BY THE CITY OF MISSISSAUGA UNDER FILE NUMBER ....
23. ALL PROPOSED CURBING WITHIN THE MUNICIPAL BOULEVARD AREA FOR THE SITE IS TO SUIT AS FOLLOWS: a) FOR ALL SINGLE FAMILY RESIDENTIAL PROPERTIES INCLUDING ON STREET TOWNHOUSES, ALL CURBING IS TO STOP AT THE PROPERTY LIMIT OR THE BACK OF THE MUNICIPAL SIDEWALK, WHICHEVER IS APPLICABLE, OR b) FOR ALL OTHER PROPOSALS INCLUDING INDUSTRIAL, COMMERCIAL AND CONDOMINIUM DEVELOPMENTS, ALL ENTRANCES TO THE SITE ARE TO BE IN ACCORDANCE WITH O.P.S.D. 350.010.
24. PRIOR TO ANY CONSTRUCTION TAKING PLACE,STRUCTURALLY CERTIFIED OVERHEAD HOARDING WITHIN THE RIGHT-OF-WAY AS SHOWN ON THE SITE PLAN (AS APPLICABLE), HOARDING ADJACENT TO EXISTING PROPERTIES TO PROTECT FROM CONSTRUCTION ACTMTY,AND ALL REQUIRED HOARDING IN ACCORDANCE WITH THE ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS MUST BE ERECTED AND MAINTAINED THROUGHOUT ALL PHASES OF CONSTRUCTION.
25. IF THE FINAL COURSE OF ASPHALT PAVING IS DELAYED,INSTALL A TEMPORARY LIFT OF ASPHALT AT RAMPS OR CURB CUTS TO BARRIER-FREE ACCESS.
26. ANY FENCING ADJACENT TO MUNICIPAL LANDS IS TO BE LOCATED 15cm (6.0in.) INSIDE THE PROPERTY LINE.
27. WE AGREE TO IMPLEMENT THE APPROVED SITE AND LANDSCAPED PLANS WITHIN 18 MONTHS AFTER THE EXECUTION OF THE SITE PLAN UNDERTAKING AND WILL RETAIN THE LANDSCAPE ARCHITECT TO MAKE PERIODIC INSPECTIONS. UPON COMPLETION OF THE WORKS WE WILL FORWARD TO THE CITY OF MISSISSAUGAA COPY OF THE COMPLETION CERTIFICATE FROM THE LANDSCAPE ARCHITECT AND THE APPLICABLE APPLICATION FEE THE LANDSCAPE ARCHITECT AND OR CONSULTING ENGINEER WILL ALSO PROVIDE CERTIFICATION TO INDICATE THAT THE BIOSWALE IN PARKING LOT, SWALE WITH OVERLAND FLOW AND RAINWATER HARVESTING SYSTEMS HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED SITE PLAN DRAWINGS. ANY REVISIONS TO THE SITE AND LANDSCAPE PLANS WILL BE SUBMITTED TO THE PLANNING AND BUILDING DEPARTMENT, CITY OF MISSISSAUGA FOR REVIEW AND APPROVAL. PRIOR TO THE COMMENCEMENT OF WORKS. WE HEREBY AUTHORIZE THE CITY. ITS AUTHORIZED AGENTS, SERVANTS OR EMPLOYEES TO ENTER UPON OUR LAND TO CARRY OUT INSPECTIONS FROM TIME TO TIME AND AGREE TO INDEMNIFY THE CITY, ITS AUTHORIZED AGENTS, SERVANTS OR EMPLOYEES TO ENTER UPON OUR LAND TO CARRY OUT INSPECTION FROM TIME TO TIME AND AGREE TO INDEMNIFY THE CITY,ITS AUTHORIZED AGENTS AND SAVE THEM HARMLESS FROM ANY AND ALL ACTIONS ARISING OUT OF THE EXCERSISE BY THE CITY, ITS AUTHORIZED AGENTS, SERVANTS OR EMPLOYEES OF THE RIGHTS HEREBY GIVEN THEM. WE UNDERTAKE TO NOTIFY THE CITY FORTHWITH OF ANY CHANGE OF OWNERSHIP OF THE SAID LANDS.

SIGNED BY PROPERTY OWNER .... DATED:.................



development and design construction hoarding

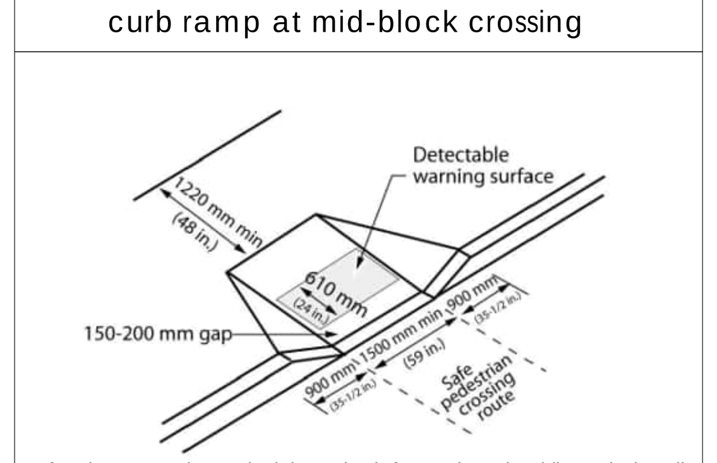


NOTES:
1. HOARDING DETAILS TO BE DETERMINED FOLLOWING INITIAL SITE INSPECTION.
2. HOARDING TO BE APPROVED BY DEVELOPMENT AND DESIGN.
3. HOARDING MUST BE SUPPLIED, INSTALLED AND MAINTAINED BY THE APPLICANT THROUGHOUT ALL PHASES OF CONSTRUCTION, UNTIL APPROVAL TO REMOVE HOARDING IS OBTAINED FROM DEVELOPMENT AND DESIGN.
4. DO NOT ALLOW WATER TO COLLECT AND POND BEHIND OR WITHIN HOARDING.
• T-BAR SUPPORTS FOR SOLID HOARDING WILL ONLY BE ALLOWED WITH PRE APPROVAL FROM DEVELOPMENT AND DESIGN.
5. OSB/CHIPBOARD WILL NOT BE ACCEPTED FOR SOLID HOARDING.

MISSISSAUGA Development and Design

SCALE: N.T.S.
DATE: JUNE, 2014

curb ramp at mid-block crossing



refer also to ontario provincial standards for roads and public works (opsd)

accessible parking sign requirement

ACCESSIBLE PARKING BY-LAW # 10-2016

Accessible Parking Signs shall be mounted on a level wall surface or mounted on a permanent post, pillar, or other suitable surface, conforming to the requirements or regulations made under the Highway Traffic Act and the Accessibility for Ontarians with Disabilities Act, and be located:

- At a height of 1200 mm (47 in.) from the ground/floor surface to the bottom edge of the sign;
- If mounted on a post, the post shall be colour contrasted with the background environment;
- For perpendicular parking centred on the parking space; and
- For parallel parking located toward the end of the parking space, on the opposite side from the access aisle.

Each **Type 'A' Parking Space** shall have two (2) 150 mm x 300 mm (6 inches x 11 ¾ inches) signs, on the same sign post/wall mount and located immediately below the sign described in sections 9 and 11, with the words "Van Accessible" followed underneath with "Maximum Fine $5,000.00", as illustrated in Schedule "C" of Accessible Parking By-law 10-2016.

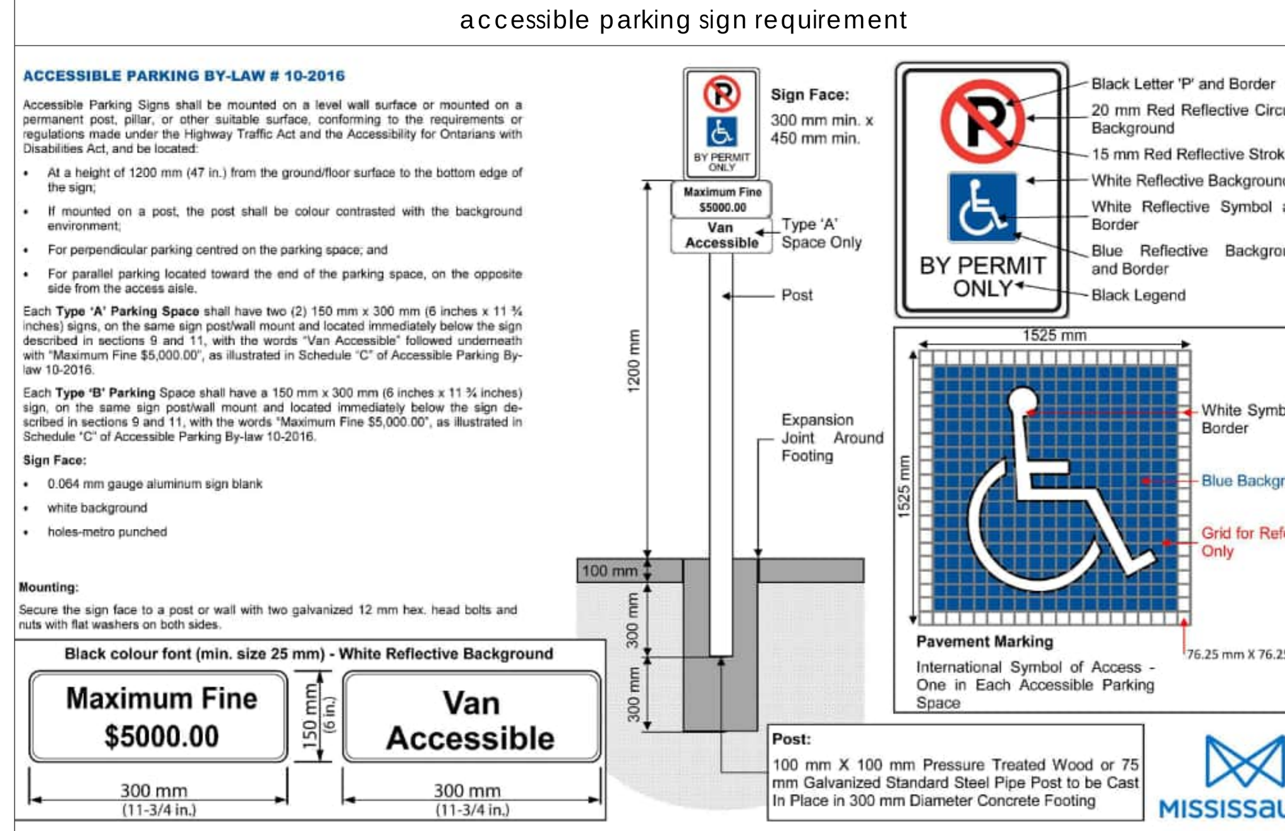
Each **Type 'B' Parking** Space shall have a 150 mm x 300 mm (6 inches x 11 ¾ inches) sign, on the same sign post/wall mount and located immediately below the sign described in sections 9 and 11, with the words "Maximum Fine $5,000.00", as illustrated in Schedule "C" of Accessible Parking By-law 10-2016.

Sign Face:

- 0.064 mm gauge aluminum sign blank
- white background
- holes-metro punched

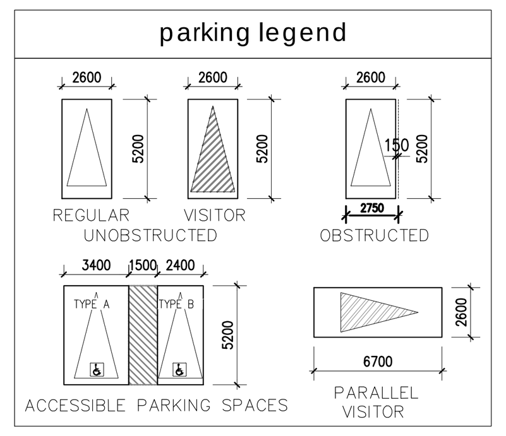
Mounting:

Secure the sign face to a post or wall with two galvanized 12 mm hex. head bolts and nuts with flat washers on both sides.



MISSISSAUGA

parking legend



survey information

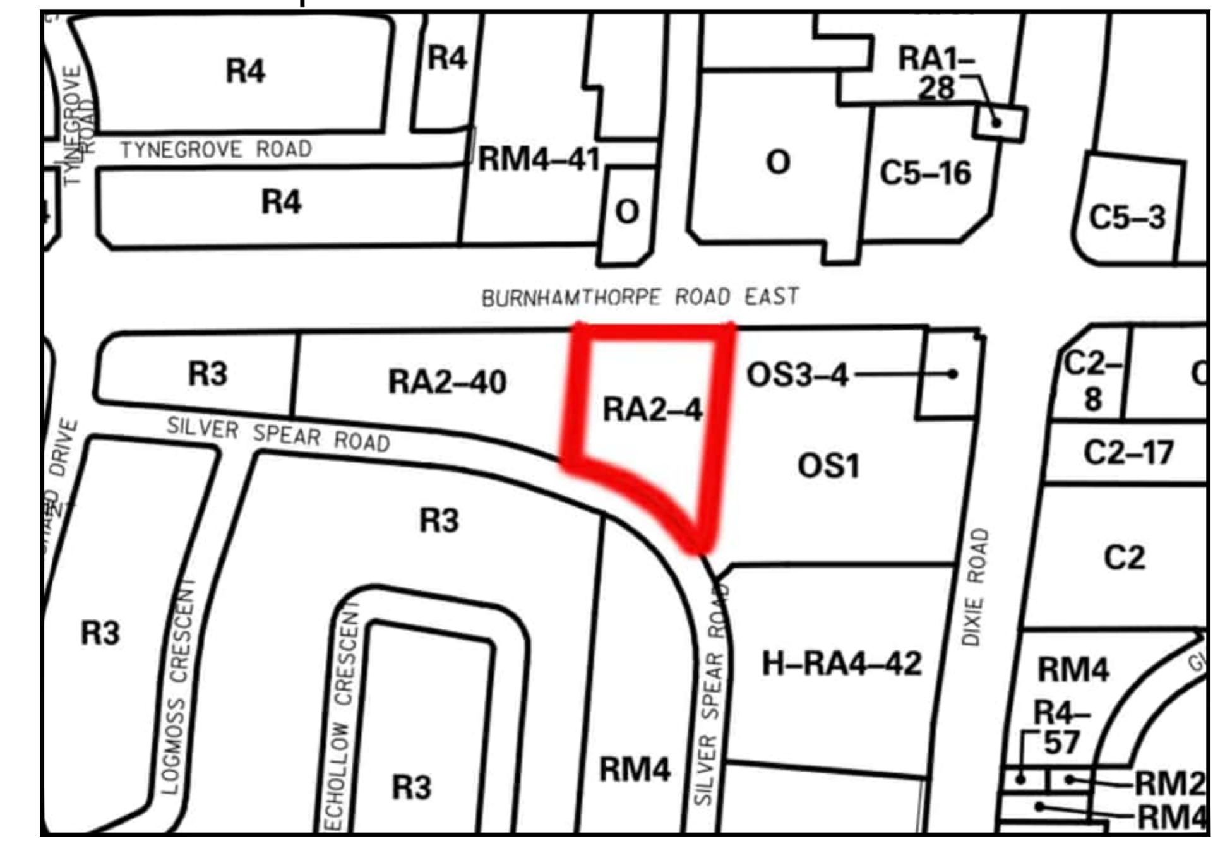
BOUNDARY AND TOPOGRAPHIC SURVEY OF
PART OF LOT 15
CONCESSION 1
SOUTH OF DUNDAS STREET
(GEOGRAPHIC TOWNSHIP OF TORONTO)
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

KRCMAR SURVEYORS LTD.
1137 CENTRE STREET,THORNHILL,ON, L4J3M6
PHONE: 905.738.0053
FAX: 905.738.9221
WWW.KRCMAR.CA
FILE NAME:14-137 BT01

Established Grade Calculation

Length no.	Begin Elev.	End Elev.	Length	(el. 1 +el. 2) x length /2
1	145.50	145.50	10.49	1526.08
2	145.50	145.50	10.49	1526.08
3	145.50	147.45	70.83	10375.41
4	147.45	147.60	10.51	1550.27
5	147.60	147.75	10.51	1551.84
6	147.75	145.50	71.23	10444.54
		Total:	184.06	26974.21
		EG:	26974.21 / 184.06	**146.5503908**

context plan



statistics

STATISTICS				January 31, 2025
1. ZONING	RA2-4			
2. GROSS SITE AREA	8,404.51 m2	90,465.31 ft2	2.08	ACRES
2. NET SITE AREA (DEVELOPABLE AREA)	8,325.02 m2	89,609.68 ft2	2.06	ACRES

3. SETBACKS	PERMITTED:		PROPOSED:	
	FRONT:	9.50 m	FRONT (PROPOSED):	4.50 m
	REAR (0 - 13m):	7.50 m	REAR (FROM EXISTING BUILDING):	15.00 m
	REAR (13 - 20m):	10.00 m		
	REAR (20 - 26m):	12.50 m		
	SIDE:	7.50 m	SIDE:	7.50 m

4. GROSS FLOOR AREA	PERMITTED:	12,487.53 m2	134,414.52 ft2
	EXISTING:	9,056.00 m2	97,477.88 ft2
	PROPOSED:	17,158.90 m2	184,696.68 ft2
	TOTAL:	26,214.90 m2	282,174.56 ft2
5. GROUND FLOOR AREA	EXISTING:	1,134.00 m2	12,206.26 ft2
	PROPOSED:	1,297.50 m2	13,966.16 ft2
	TOTAL:	2,431.50 m2	26,172.42 ft2
6. BUILDING DENSITY	PERMITTED:	1.50	FSI (GFA / SA)
	EXISTING:	1.08	FSI (GFA / SA)
	PROPOSED:	2.06	FSI (GFA / SA)
	TOTAL:	3.15	FSI (GFA / SA)
7. BUILDING COVERAGE	PERMITTED:	N/A	
	EXISTING:	13.6%	
	PROPOSED:	18.5%	
	TOTAL:	29.2%	
8. LANDSCAPED AREA	REQUIRED:	3,330.01 m2	40.0%
	EXISTING:	4,639.20 m2	55.2%
	PROPOSED:	5,893.52 m2	70.8%
		2,737.32 m2 SOFT	46.4%
		3,156.20 m2 HARD	53.6%

9. FLOOR AREA :

	TOTAL FL. AREA (TFA)		GROSS FLOOR AREA (GFA)	
EXISTING TOTAL	9,056.00 m2	97,477.88 ft2	9,056.00 m2	97,477.88 ft2

PROPOSED APARTMENTS	TOTAL FLOOR AREA (TFA)**		GROSS FLOOR AREA (GFA)*		LEASEABLE FLOOR AREA (LSA)	
P4	2,742.20 m2	29,516.77 ft2	2,742.20 m2	29,516.77 ft2	0.00 m2	0.00 ft2
P3	2,742.20 m2	29,516.77 ft2	0.00 m2	0.00 ft2	0.00 m2	0.00 ft2
P2	2,742.20 m2	29,516.77 ft2	0.00 m2	0.00 ft2	0.00 m2	0.00 ft2
P1	2,742.20 m2	29,516.77 ft2	0.00 m2	0.00 ft2	0.00 m2	0.00 ft2
GND	1,297.50 m2	13,966.16 ft2	747.60 m2	8,047.09 ft2	506.20 m2	5,448.69 ft2
2ND	1,088.00 m2	11,711.12 ft2	1,048.70 m2	11,288.10 ft2	975.60 m2	10,501.26 ft2
3RD - 4TH (2 FLOORS)	2,800.60 m2	30,145.38 ft2	2,697.60 m2	29,036.70 ft2	2,526.40 m2	27,193.92 ft2
5TH - 14TH (10 FLOORS)	13,059.00 m2	140,565.77 ft2	12,665.00 m2	136,324.79 ft2	11,818.00 m2	127,207.77 ft2
MECH. PH	196.60 m2	2,116.18 ft2	0.00 m2	0.00 ft2	0.00 m2	0.00 ft2
PROPOSED TOTAL	**18,441.70 m2**	**198,504.61 ft2**	**17,158.90 m2**	**184,696.68 ft2**	**15,826.20 m2**	**170,351.63 ft2**
GRAND TOTAL	**27,497.70 m2**	**295,982.49 ft2**	**26,214.90 m2**	**282,174.56 ft2**		

10. UNIT SUMMARY

	Studio	1B	1B+D	2B	3B	TOTAL
EXISTING APARTMENT	0	9	0	77	7	93

PROPOSED APARTMENT	Studio/B	1B	1B+D	2B	3B	TOTAL
1ST	0	4	0	1	2	7
2ND	1	10	0	4	1	16
3RD - 4TH (2 FLOORS)	2	26	0	10	4	42
5TH - 14TH (10 FLOORS)	30	70	0	80	10	190
APARTMENT TOTAL	33	110	0	95	17	255
	12.9%	43.1%	0.0%	37.3%	6.7%	100.0%
GRAND TOTAL	33	119	0	172	24	348
	9.5%	34.2%	0.0%	49.4%	6.9%	100.0%

11. ACCESSIBLE UNITS (PROPOSED APARTMENT)

	Studio	1B	1B+D	2B	3B	TOTAL
PROPOSED TOTAL	4	16	0	14	2	36
	0.0%	14.5%	0.0%	14.7%	11.8%	14.1%

12. HEIGHT	PERMITTED:	PROPOSED: ESTABLISHED GRADE = 146.55
	8 STOREYS (26.0m)	14 STOREYS
		14 STOREYS (46.08m)

13.EXISTING PARKING RATES	9 VISITOR SPACES	/	93 UNITS	=	0.10
	98 RESIDENTIAL SPACES	/	93 UNITS	=	1.05
14a. REQUIRED PARKING RATES FOR THE EXISTING BLDG	18 VISITOR SPACES	/	93 UNITS	=	0.20
	84 RESIDENTIAL SPACES	/	93 UNITS	=	0.90
	102 TOTAL REQUIRED EXISTING APARTMENT PARKING				
14b. REQUIRED PARKING RATES FOR THE PROPOSED BLDG	51 VISITOR SPACES	/	255 UNITS	=	0.20
	230 RESIDENTIAL SPACES	/	255 UNITS	=	0.90
	281 TOTAL REQUIRED PROPOSED APARTMENT PARKING				
14c. TOTAL REQUIRED PARKING RATES (EXISTING + PROPOSED)	69 VISITOR SPACES	/	348 UNITS	=	0.20
	314 RESIDENTIAL SPACES	/	348 UNITS	=	0.90
	383 TOTAL REQUIRED PROPOSED APARTMENT PARKING				

15. PARKING SUPPLY & DISTRIBUTION		
VISITOR		
	SURFACE (includes 4 EV parking spaces)	28
	P1	11
	(includes 1 Type A and 1 Type B Accessible p. spaces) VISITOR TOTAL	39
		0.11 sp/unit
RESIDENTIAL		
	P4	82
	P3	85
	P2	85
	P1 (includes 32 EV parking spaces)	63
	RESIDENTIAL TOTAL	315
		0.91 sp/unit
GRAND TOTAL		354

16. REQUIRED ACCESSIBLE PARKING RATES	REQUIRED PROPOSED:	
	VISITOR 2 (4% OF THE VISITOR PARKING SPACES)	
REQUIRED GRAND TOTAL	(1 TYPE A - 1 TYPE B)	2
17. REQUIRED BIKE PARKING RATES	REQUIRED PROPOSED:	
	CLASS B 0.05 PER UNIT (255) =	13
	CLASS A 0.6 PER UNIT (255) =	153
	REQUIRED PROPOSED TOTAL	166
18. PROPOSED BIKE SPACES	SURFACE CLASS B BIKE PARKING SPACES	13
	P3 CLASS A BIKE PARKING SPACES	68
	P2 CLASS A BIKE PARKING SPACES	68
	P1 CLASS A BIKE PARKING SPACES	29
GRAND TOTAL		178

19. AMENITY	REQUIRED:		PROPOSED:	
	5.6 m2 PER UNIT (348) =	1,948.8 m2	INDOOR AMENITY SPACE	
	10% of the Site Area =	832.50 m2	EXISTING BUILDING GYM	40.8 m2
	MINIMUM AMENITY IN ONE CONTIGUOUS SPACE:		INDOOR AMENITY 1	113.2 m2
		974.4 m2	INDOOR AMENITY 2	95.0 m2
				249.0 m2
	MINIMUM AMENITY SPACE AT GRADE:		OUTDOOR AMENITY SPACE	
		55.0 m2	EXISTING OUTDOOR BBQ PATIO	103.2 m2
			OUTDOOR AMENITY PATIO	14.4 m2
			LANDSCAPED AMENITY SPACE 1	115.1 m2

These Contract Documents are the property of the architect. The architect bears no responsibility for the interpretation of these documents by the Contractor. Upon written application the architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents. The architect will review Shop Drawings submitted by the Contractor for design conformance only.

Drawings are not to be scaled for construction. Contractor to verify all existing conditions and dimensions required to perform the work and report any discrepancies with the Contract Documents to the architect before commencing work.

Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on architectural drawings. The locations shown on the architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the architect.

These drawings are not to be used for construction unless noted below as "Issued for Construction"

All work to be carried out in conformance with the Code and bylaws of the authorities having jurisdiction.

The Designer of these plans and specifications gives no warranty or representation to any party about the constructability of the represented by them. all contractors or subcontractors must satisfy themselves when bidding and at all times that they can properly construct the work represented by these plans.

notes:

13. issued for SPA	10.01.25
12. issued for rezoning	11.10.23
11. issued for SPA	11.09.18
10. issued for rezoning	11.09.18
9. issued for client review	09.21.18
8. issued for client review	09.12.18
7. issued for rezoning	11.13.17
6. issued for client review	05.11.17
5. issued for client review	10.27.16
4. pre-submission meeting	10.12.16
3. issued for client review	10.06.16
2. issued for client review	04.04.16
1. pre-submission meeting	06.25.15

revisions:

architectureunfolded
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

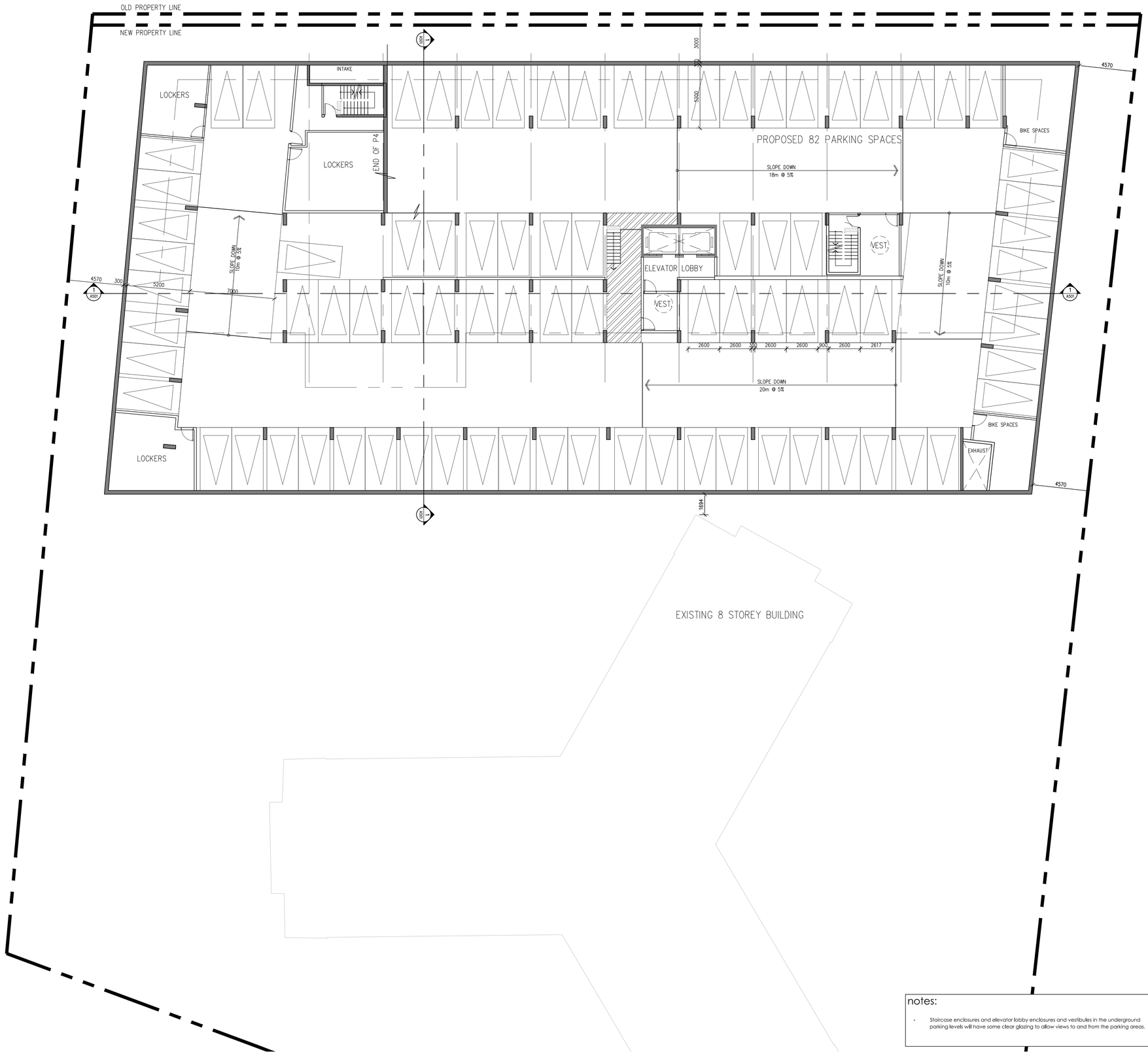
project:
1315 Silver Spear Road
mississauga, ontario

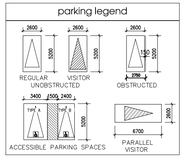
site plan, statistics & general notes

date: feb. 05, 2025
scale: 1:300
project: 14-40
drawn by: mma - es

north

drawing number: A101





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1. pre-submission meeting	06.25.15

revisions:

notes:

- Staircase enclosures and elevator lobby enclosures and vestibules in the underground parking levels will have some clear glazing to allow views to and from the parking areas.

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mechanical:
landscape:
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site services:
urbantech consulting

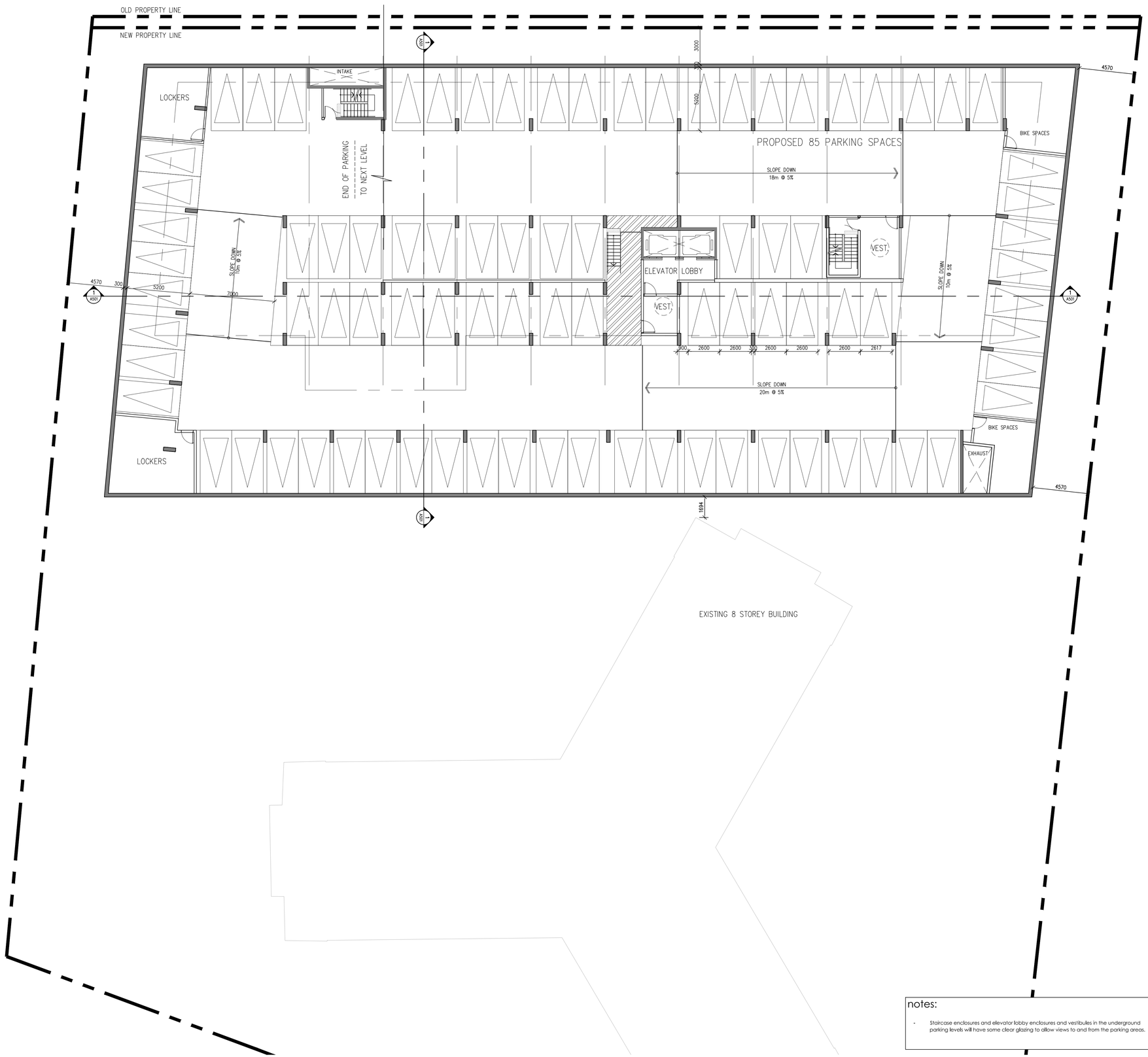
project:
1315 Silver Spear Road
mississauga, ontario

p4 parking floor plan

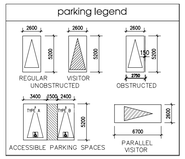
feb. 05, 2025	date:
1:150	scale:
14-40	project:
mma - es	drawn by:

north

drawing number:
A201



parking legend



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1. pre-submission meeting	06.25.15

revisions:

architecture**unfolded**
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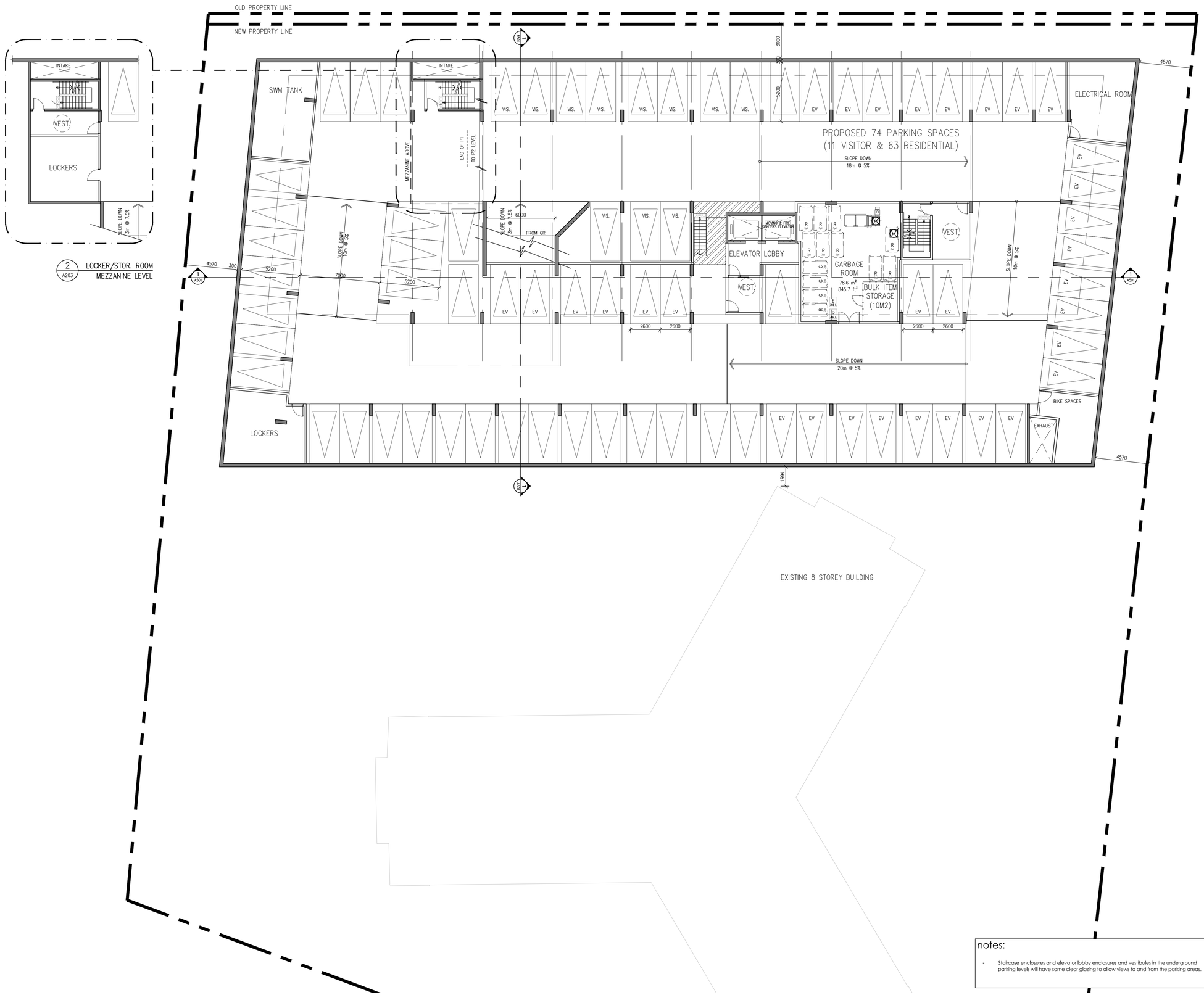
structural:
electrical:
mechanical:
landscape:
MBTW Group
site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

p2 & p3 parking floor plans

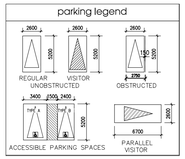
feb. 05, 2025	date:
1:150	scale:
14-40	project:
mma - es	drawn by:
north	drawing number: A202



2 / A203 LOCKER/STOR. ROOM MEZZANINE LEVEL

1 / A501

parking legend



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- Staircase enclosures and elevator lobby enclosures and vestibules in the underground parking levels will have some clear glazing to allow views to and from the parking areas.

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1. pre-submission meeting	06.25.15

revisions:

architecture**unfolded**
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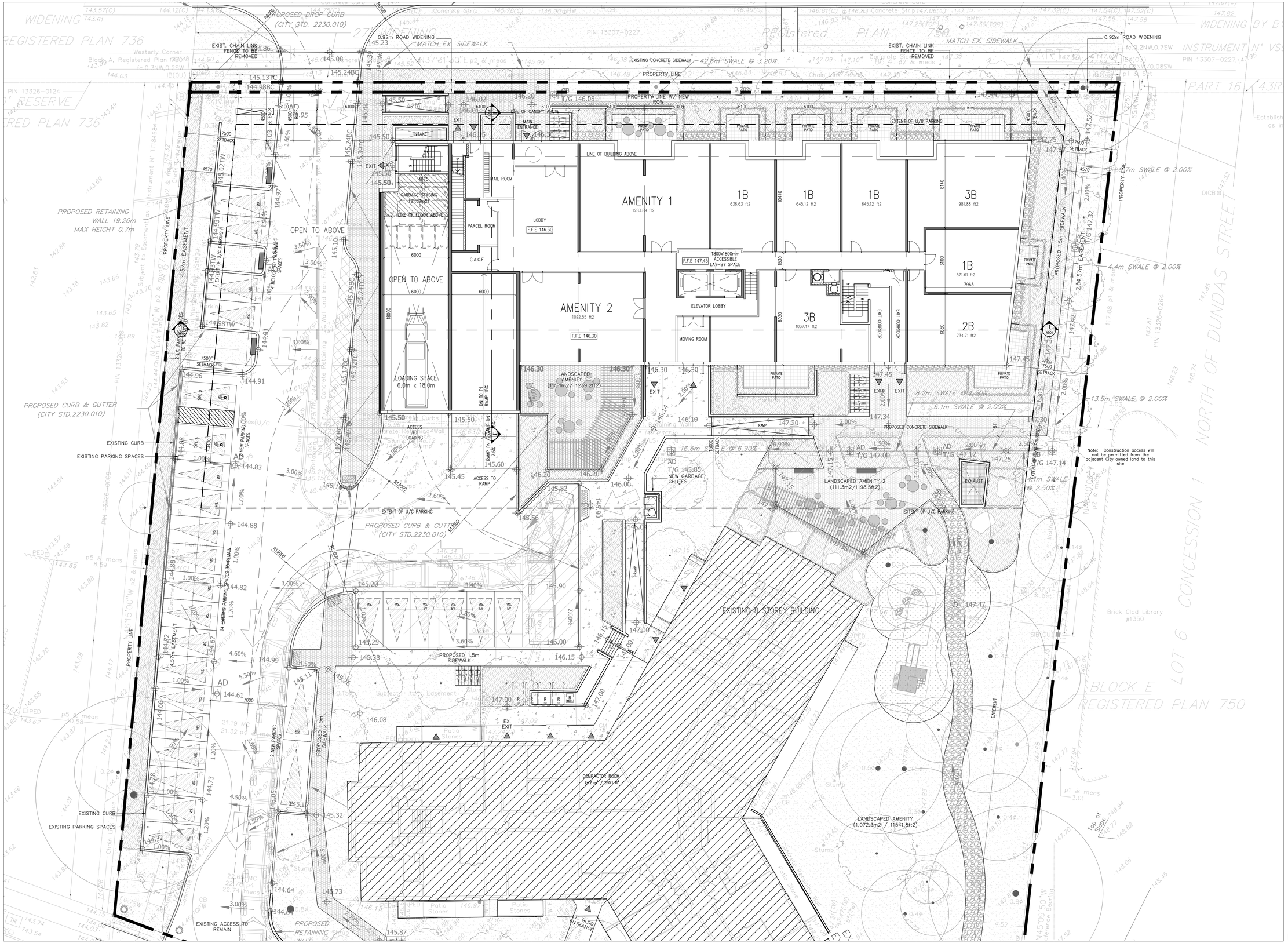
electrical:
mechanical:
landscape:
MBTW Group
site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

p1 parking floor plan

feb. 05, 2025	date:
1:150	scale:
14-40	project:
mma - es	drawn by:
north	drawing number: A203



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revisions:

architectural team :

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structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

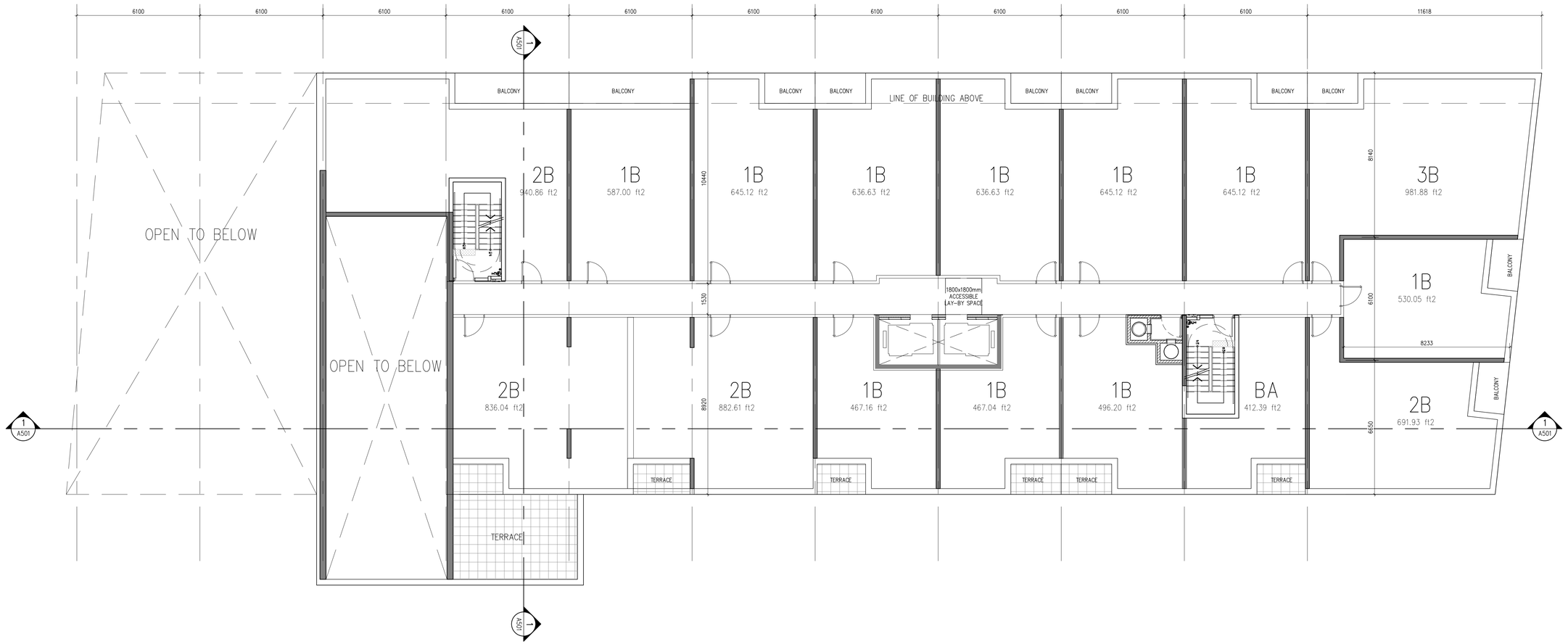
ground. fl. plan

feb. 05, 2025 — date:
1:150 — scale:
14-40 — project:
mma - es — drawn by:

north

drawing number:
A301

architectureunfolded
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca



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revisions:

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urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

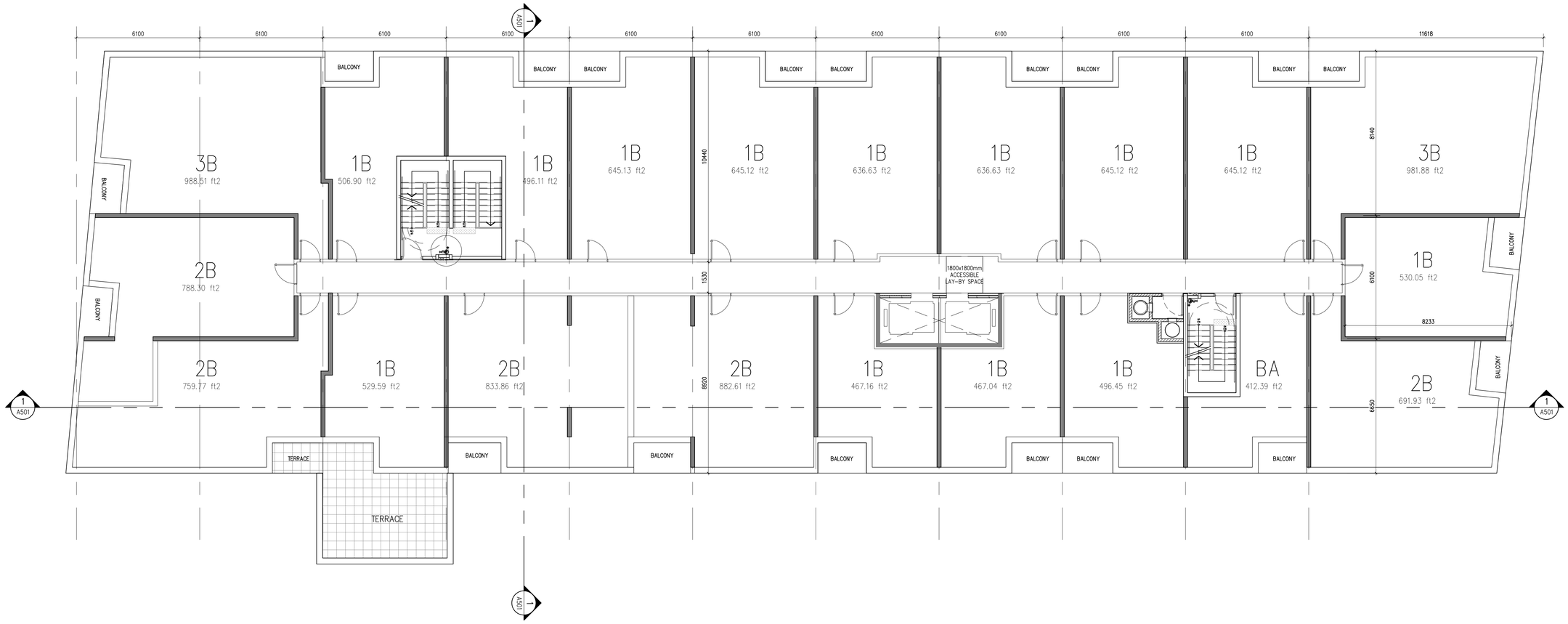
2nd fl. plan

feb. 05, 2025	date:
1:100	scale:
14-40	project:
mma - es	drawn by:

north

drawing number:
A302

architectureunfolded
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca



EXISTING 8 STOREY BUILDING

notes:

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7. issued for rezoning	11.13.17
6. issued for client review	05.11.17
5. issued for client review	10.27.16
4. pre-submission meeting	10.12.16
3. issued for client review	10.06.16
2. issued for client review	04.04.16
1. pre-submission meeting	06.25.15

revisions:

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

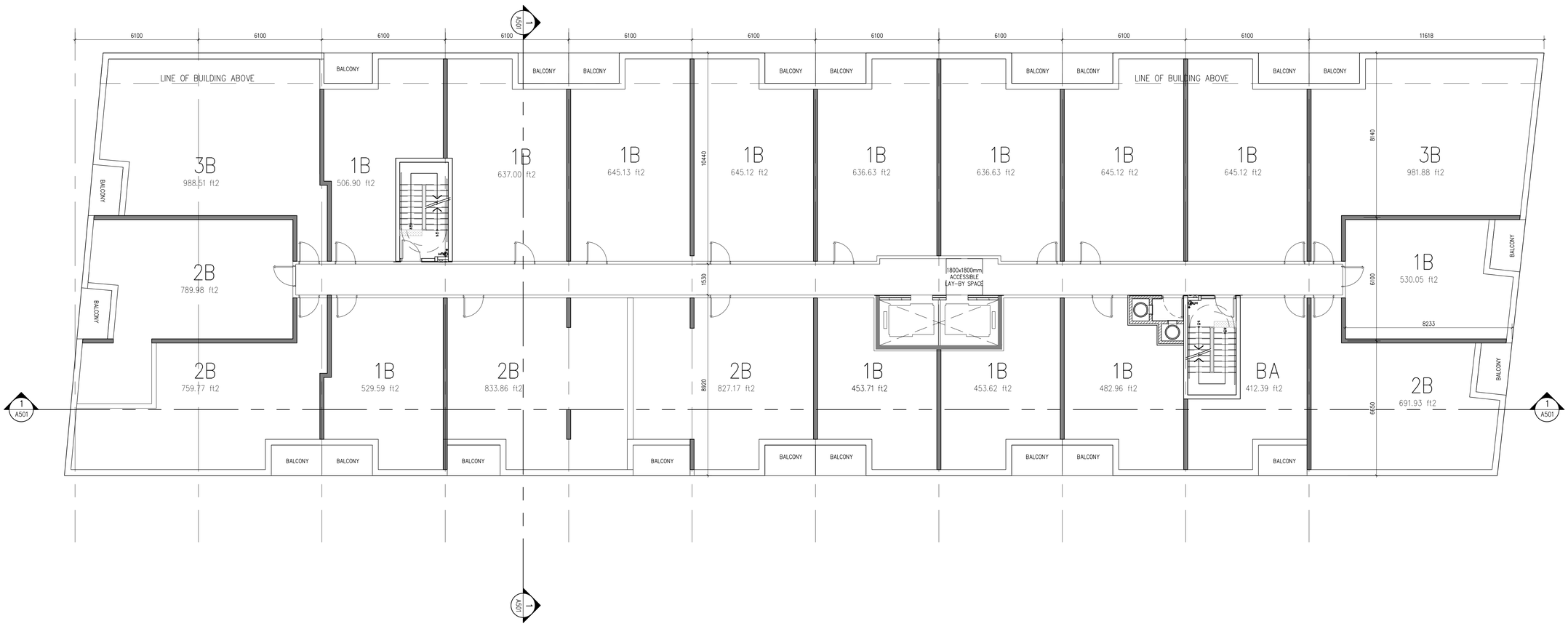
3rd fl. plan

feb. 05, 2025	date:
1:100	scale:
14-40	project:
mma - es	drawn by:

north

drawing number:
A303

architectureunfolded
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca



EXISTING 8 STOREY BUILDING

notes:

13. issued for SPA	10.01.25
12. issued for rezoning	11.10.23
11. issued for SPA	11.09.18
10. issued for rezoning	11.09.18
9. issued for client review	09.21.18
8. issued for client review	09.12.18
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4. pre-submission meeting	10.12.16
3. issued for client review	10.06.16
2. issued for client review	04.04.16
1. pre-submission meeting	06.25.15

revisions:

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

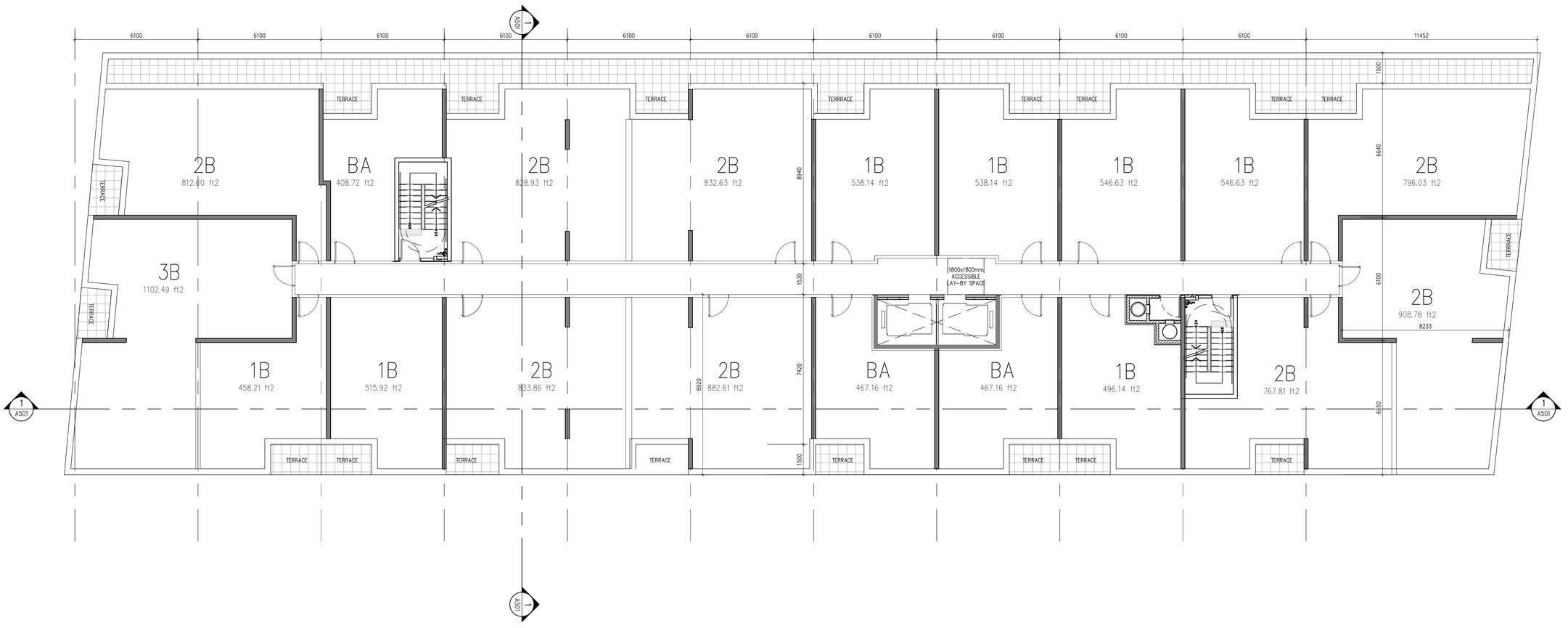
4th fl. plan

feb. 05, 2025	date:
1:100	scale:
14-40	project:
mma - es	drawn by:

north

drawing number:
A304

architectureunfolded
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca



EXISTING 8 STOREY BUILDING

notes:

13. issued for SPA	10.01.25
12. issued for rezoning	11.10.23
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2. issued for client review	04.04.16
1. pre-submission meeting	06.25.15

revisions:

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

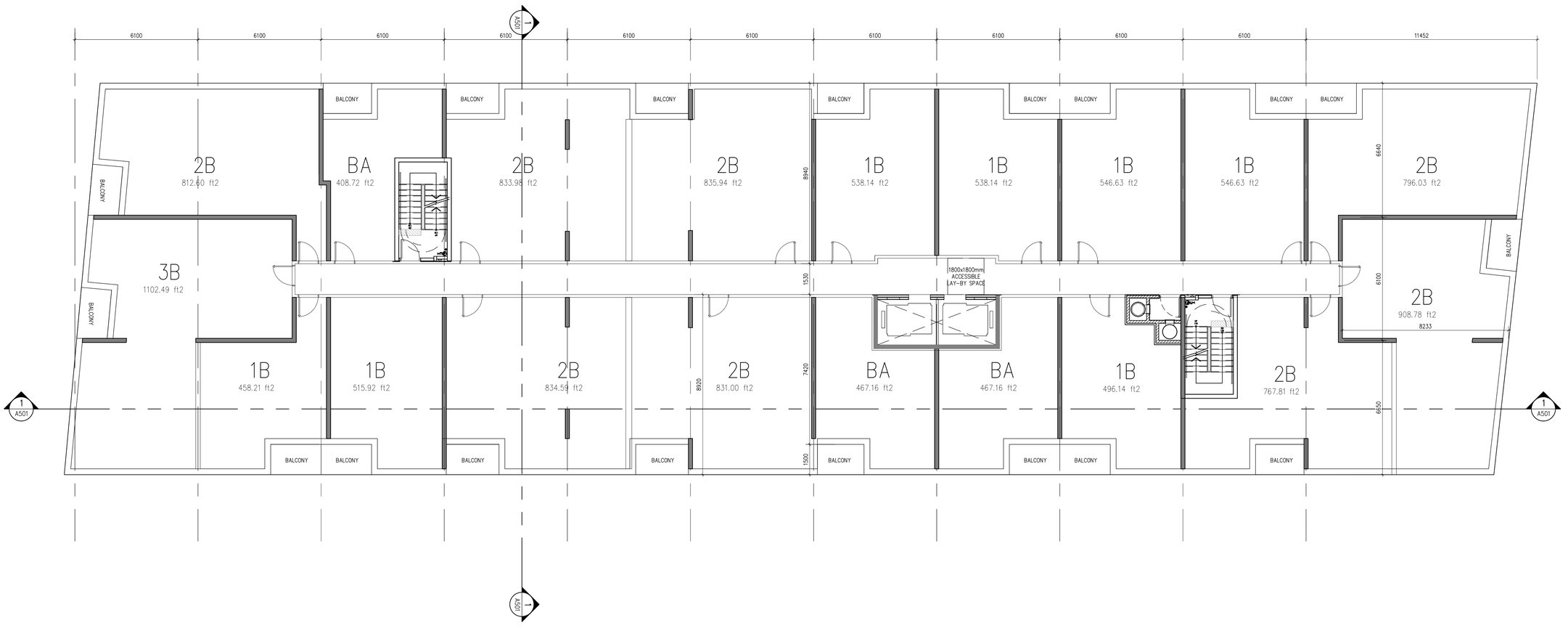
5th fl. plan

feb. 05, 2025	date:
1:100	scale:
14-40	project:
mma - es	drawn by:

north

drawing number:
A305

architectureunfolded
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca



EXISTING 8 STOREY BUILDING

notes:

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12. issued for rezoning	11.10.23
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1. pre-submission meeting	06.25.15

revisions:

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

6th - 14th fl. plan

feb. 05, 2025	date:
1:100	scale:
14-40	project:
mma - es	drawn by:

north

drawing number:
A306

architectureunfolded
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca

notes:

13. issued for SPA	10.01.25
12. issued for rezoning	11.10.23
11. issued for SPA	11.09.18
10. issued for rezoning	11.09.18
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4. pre-submission meeting	10.12.16
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2. issued for client review	04.04.16
1. pre-submission meeting	06.25.15

revisions:

architecture**unfolded**
219 dufferin street, suite 201b, toronto, on. m6k3j1 tel: (416)601.5416 info@unfolded.ca

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.
structural:
electrical:
mechanical:
landscape:
MBTW Group
site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

north elevation

feb. 05, 2025 — date:
1:125 — scale:
14-40 — project:
mma - es — drawn by:

north

drawing number:
A401

notes:

13. issued for SPA	10.01.25
12. issued for rezoning	11.10.23
11. issued for SPA	11.09.18
10. issued for rezoning	11.09.18
9. issued for client review	09.21.18
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2. issued for client review	04.04.16
1. pre-submission meeting	06.25.15

revisions:

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

south elevation

feb. 05, 2025 — date:
1:125 — scale:
14-40 — project:
mma - es — drawn by:

north

drawing number:
A402

architectureunfolded
219 dufferin street, suite 201b, toronto, on. m6k3j1 tel: (416)601.5416 info@unfolded.ca

notes:

13. issued for SPA	10.01.25
12. issued for rezoning	11.10.23
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1. pre-submission meeting	06.25.15

revisions:

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

east elevation

feb. 05, 2025 — date:
1:125 — scale:
14-40 — project:
mma - es — drawn by:

north

drawing number:
A403

architectureunfolded
219 dufferin street, suite 201b, toronto, on. m6k3j1 tel: (416)601.5416 info@unfolded.ca

notes:

13. issued for SPA	10.01.25
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revisions:

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

west elevation

feb. 05, 2025 — date:
1:125 — scale:
14-40 — project:
mma - es — drawn by:

north

drawing number:
A404

architecture**unfolded**
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca

notes:

revisions:

13. issued for SPA	10.01.25
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1. pre-submission meeting	06.25.15

architecture**unfolded**

219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca

architectural team :

mark zwicker
melina m. andretto
ernesto sosa

planning:
urban strategies inc.

structural:

electrical:

mechanical:

landscape:
MBTW Group

site services:
urbantech consulting

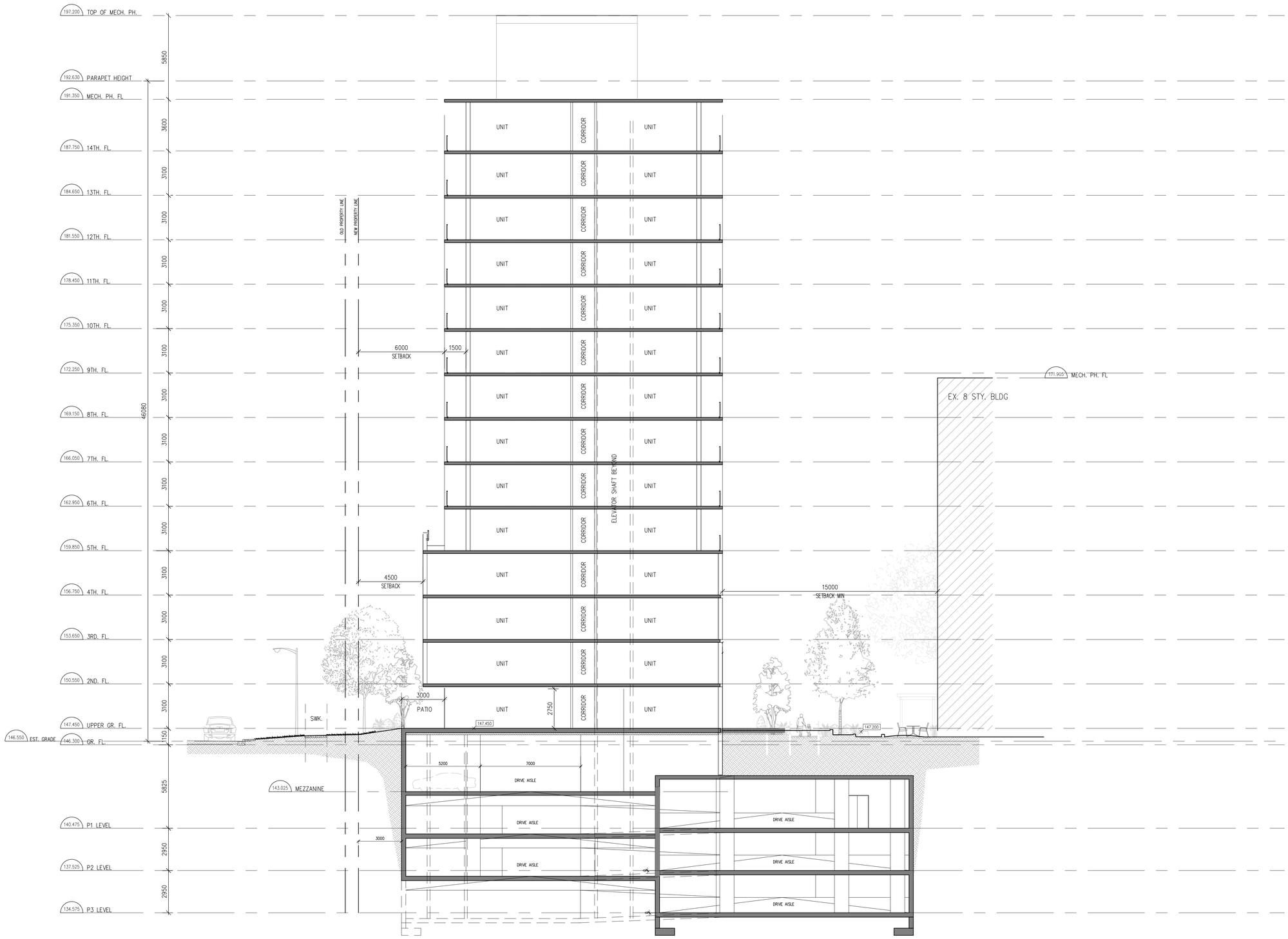
project:
1315 Silver Spear Road
mississauga, ontario

perspective view south-west

feb. 05, 2025	date:
1:125	scale:
14-40	project:
mma - es	drawn by:

drawing number:

A405



notes:

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1. pre-submission meeting	06.25.15

revisions:

architecture**unfolded**
219 dufferin street, suite 201b, toronto, on, m6k3j1 tel: (416)601.5416 info@unfolded.ca

architectural team :

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planning:
urban strategies inc.
structural:
electrical:
mechanical:
landscape:
MBTW Group
site services:
urbantech consulting

project:
1315 Silver Spear Road
mississauga, ontario

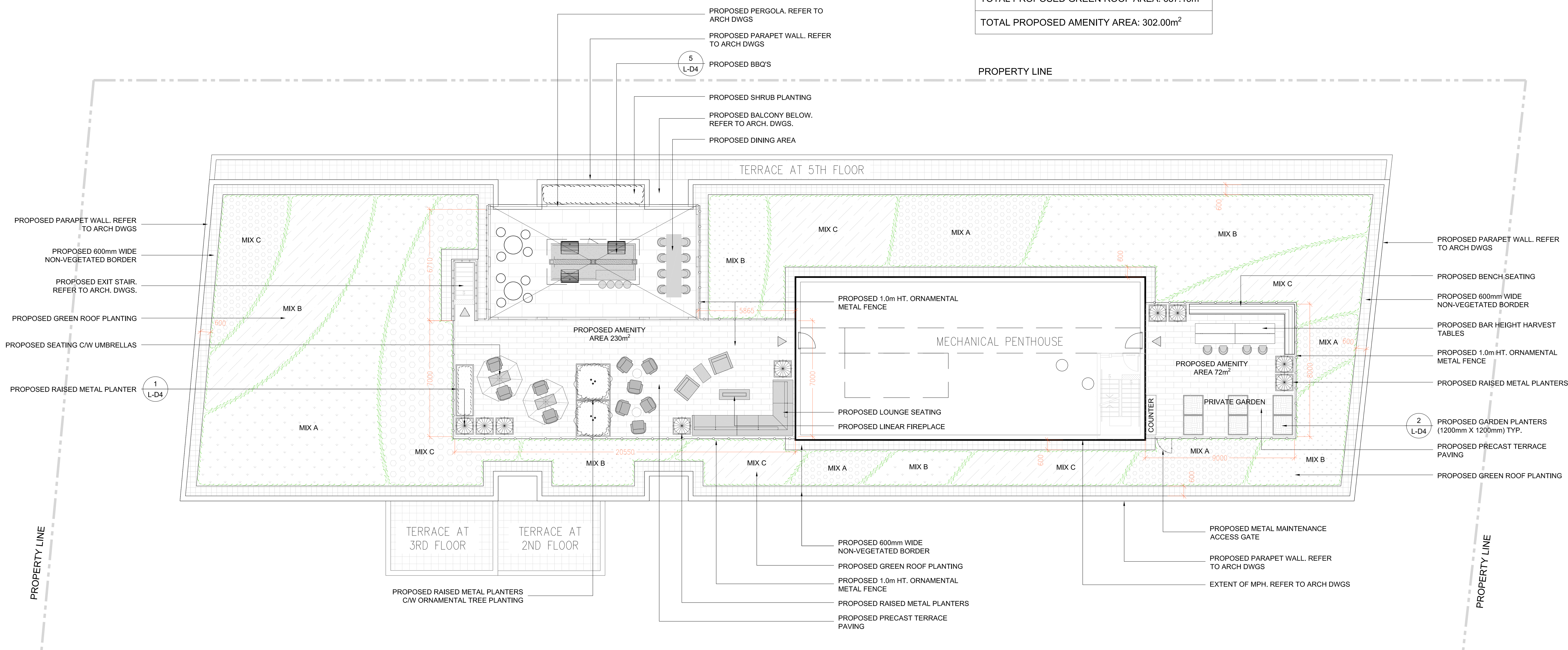
section

feb. 05, 2025 — date:
1:125 — scale:
14-40 — project:
mma - es — drawn by:

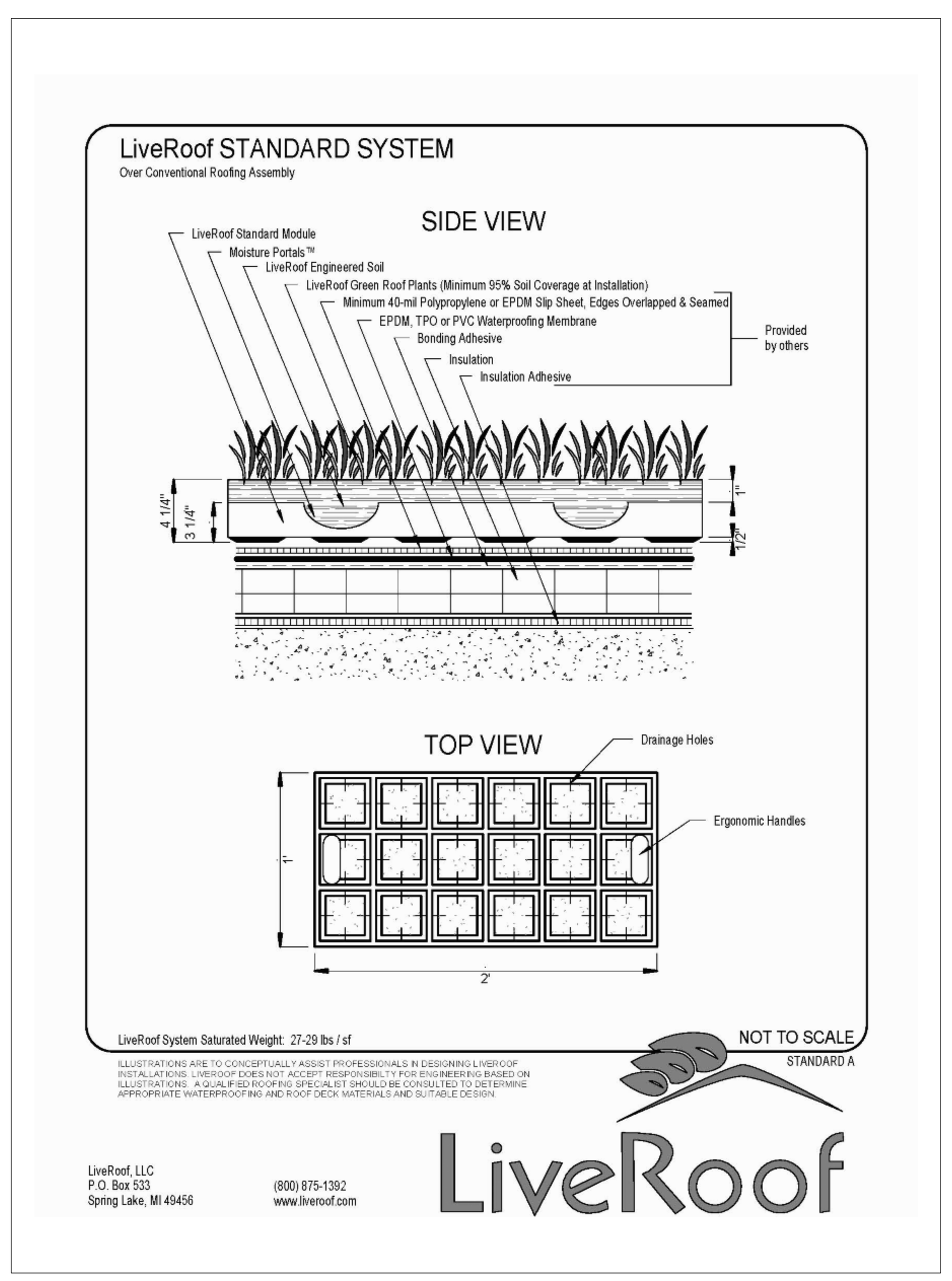
north

drawing number:
A501

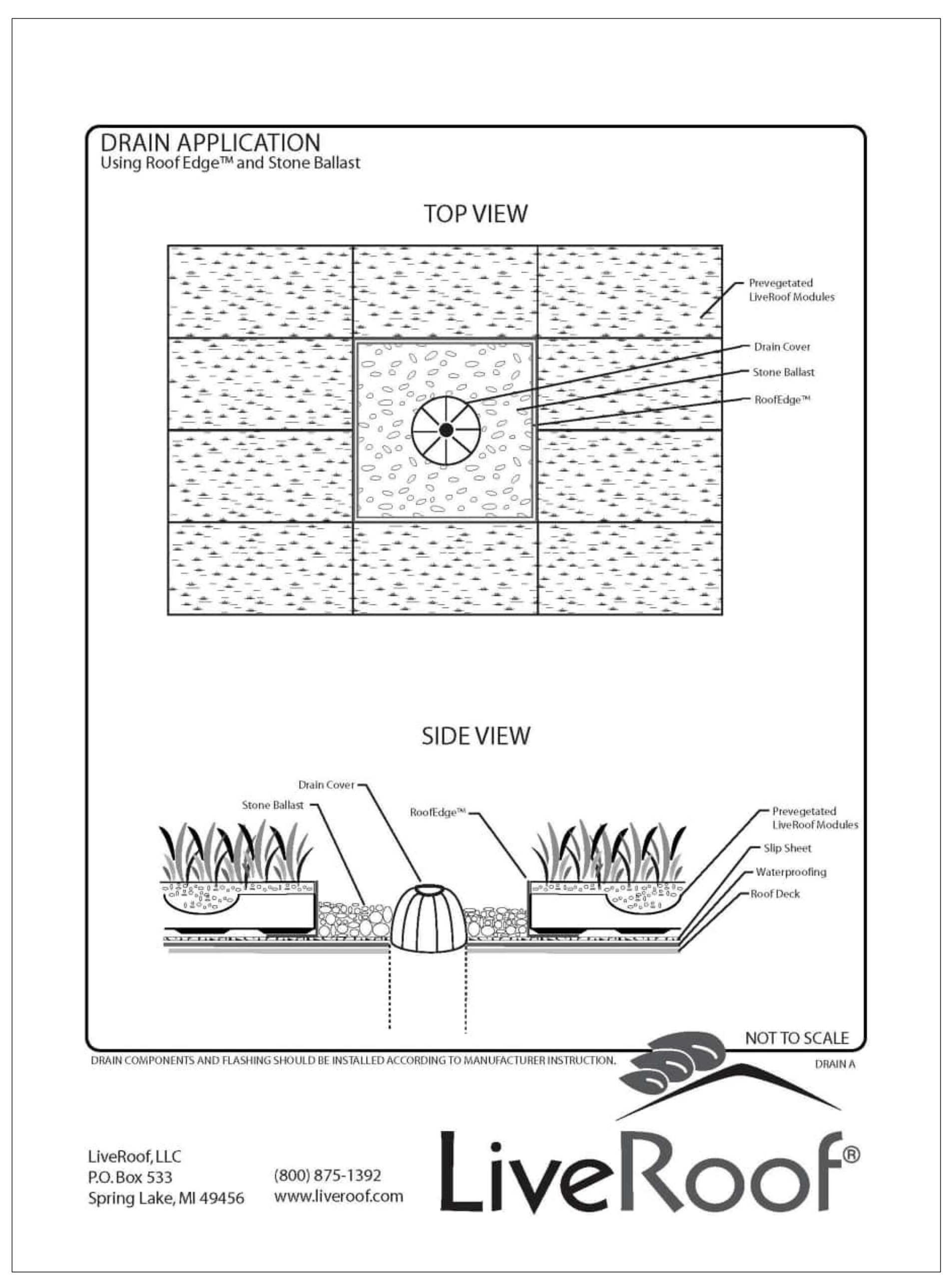
TOTAL PROPOSED GREEN ROOF AREA: 637.15m^2
TOTAL PROPOSED AMENITY AREA: 302.00m^2



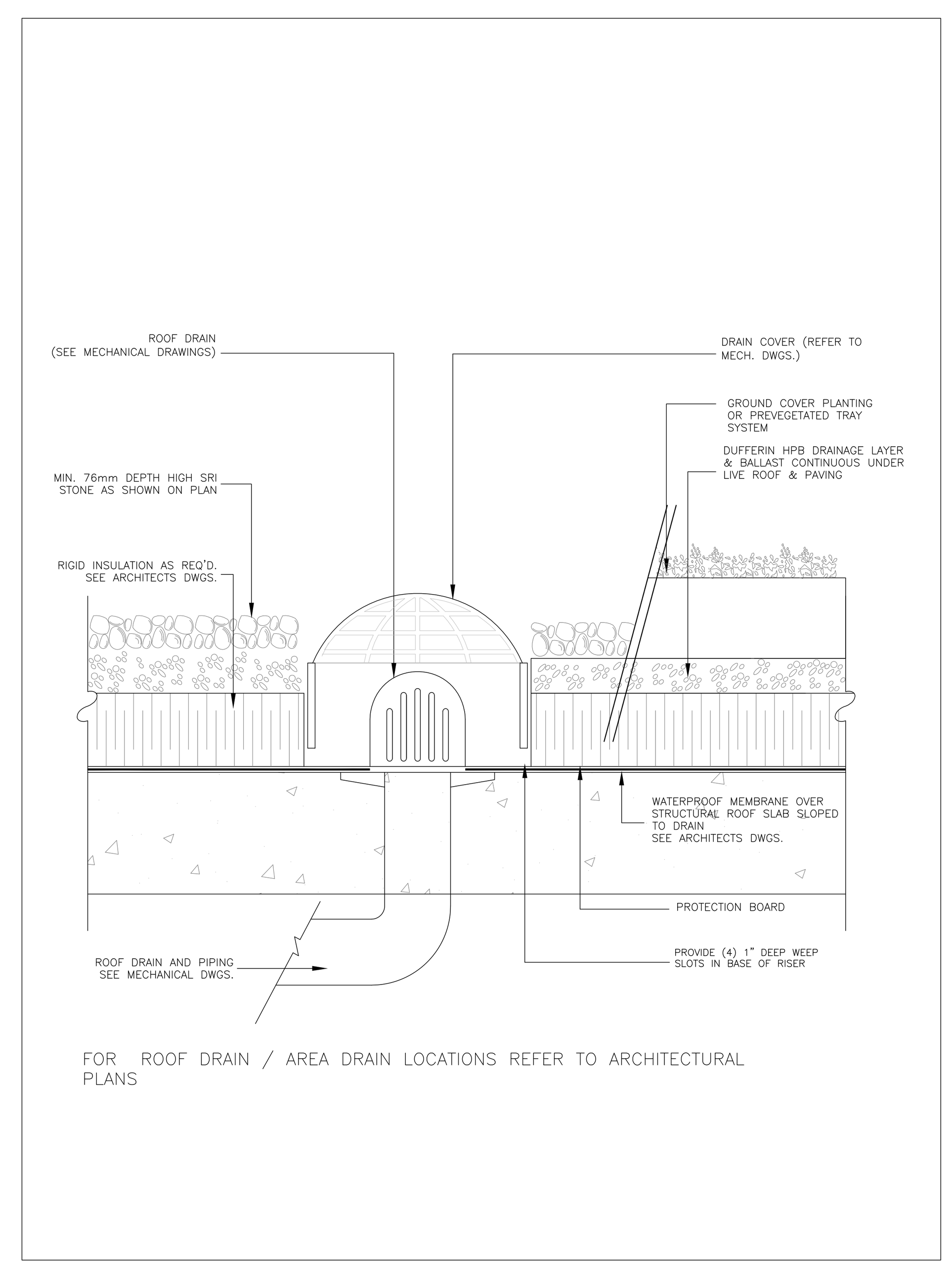
1 Green Roof and Amenity Plan 1:150



2 Standard Depth Green Roof Planting System - Typical N.T.S.
As Manufactured by: Live Roof (or Approved Equal)



3 Green Roof Area Drain Detail for Live Roof System N.T.S.
As Recommended by: Live Roof (or Approved Equal)



4 Green Roof Area Drain Detail N.T.S.

GENERAL PLANTING NOTES:

SEDUM MIX A – TOUGH EXTREME MIX (BASE PLANTS) AS SUPPLIED BY LIVE ROOF

SEDUM ALBUM 'CORAL CARPET'	16.70%
SEDUM MIDDENDORFFIANUM VAR. 'STRIATUM'	16.70%
SEDUM SPURIUM 'ALBUM SUPERBUM'	16.70%
SEDUM SPURIUM 'ROSEUM'	16.70%
SEDUM TAKESIMENSE 'GOLD CARPET'	16.60%
SEDUM TENELUM	16.60%

SEDUM MIX B – GIANTS MIX (BASE PLANTS) AS SUPPLIED BY LIVE ROOF

SEDUM AIZOOM 'EUPHORBIOIDES'	20.00%
SEDUM HYBRIDUM 'IMMERGRUNCHEN'	20.00%
SEDUM SPURIUM 'GREEN MANTLE'	20.00%
SEDUM SPURIUM 'PINK JEWEL'	20.00%
SEDUM TAKESIMENSE	20.00%

SEDUM MIX C – GIANTS MIX (BASE PLANTS & ACCENT PLANTS) AS SUPPLIED BY LIVE ROOF

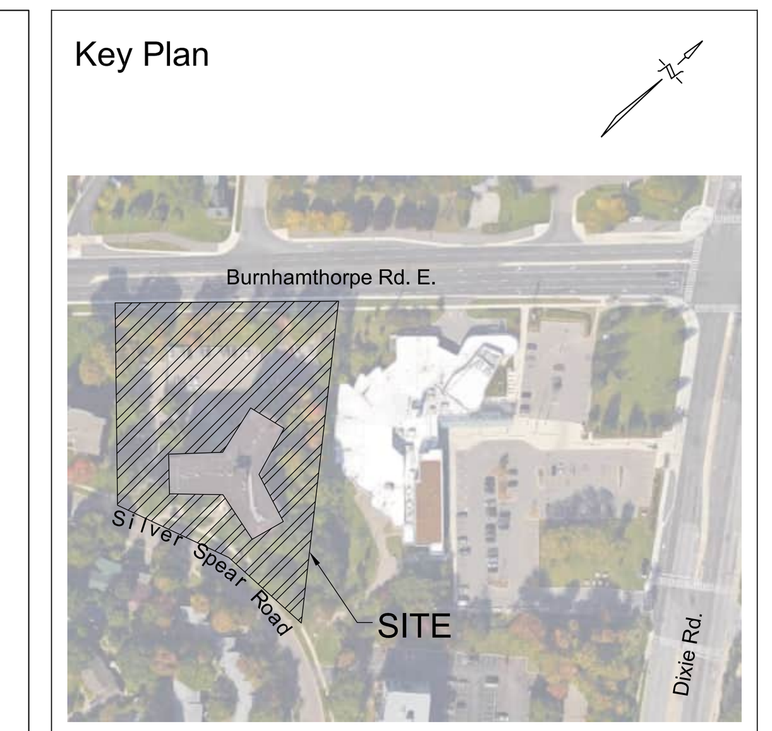
BASE PLANTS:

SEDUM AIZOOM 'EUPHORBIOIDES'	14.00%
SEDUM HYBRIDUM 'IMMERGRUNCHEN'	14.00%
SEDUM SPURIUM 'GREEN MANTLE'	14.00%
SEDUM SPURIUM 'PINK JEWEL'	14.00%
SEDUM TAKESIMENSE	14.00%

ACCENT PLANTS:

ALLIUM SCHOENOPRASUM VAR. SIBIRICUM 'PINK GIANT'	10.00%
SEDUM KAMTSCHATICUM 'TAKAHIRA DAKE'	10.00%
SEDUM SPURIUM 'CARL'	10.00%

Key Plan



Legend

No	Date	Revisions	By
3.0	02.14.2025	REISSUED FOR SPA	GM
2.0	11.09.23	REISSUED FOR RE-ZONING APPLICATION	GM
1.0	10.12.18	ISSUED FOR RE-ZONING APPLICATION	CKA

This drawing, as an instrument of service, is provided by, and is the property of The MBTW Group. The contractor shall check and verify all dimensions and report all errors and omissions to the Landscape Architect whose seal is affixed to this drawing before proceeding with the work. This drawing is not to be scaled.

Designed By

North Arrow

the mbtw group
landscape architecture | urban design | design guidance | architecture | golf design | leisure design
255 Wicksteed Ave., Unit 1A | Toronto, Ontario, Canada M4H 1G8
T: (416) 449-7767 | F: (416) 449-1803 | www.mbtw-wai.com

Project Name:

1315 Silver Spear Road

Starlight Investments

City of Mississauga

Sheet Title:

Green Roof and Amenity Plan

Designed:	Drawn:	Scale:	Drawing No.:
GM	DI	As Noted	L-1b
Date of Drawing:		Job No.:	
October 2018		SIS001	

C:\Users\GUS\Documents\MBTW\2025-Projects\SIS001_Wrk Dwgs\01-31-2025_IssuedForSPA-Progress\SIS001_L1b-GreenRoofPlan.dwg Feb. 12, 2025 - 12:13pm

Appendix B Traffic Data and Calculations

Environmental Noise Assessment

1315 Silver Spear Road, Mississauga

Starlight Investments

SLR Project No.: 241.031124.00001

February 19, 2025

Date: September 7, 2023
From: Sabah Ersum, SLR Consulting (Canada) Ltd
Re: Traffic Data Request – Dixie Road (280 m North of Bloor Street)

Sabah,
As per your request, we are providing the following 2019 traffic data:

	Existing	Ultimate
24 Hour Traffic Volume	35,158	48,600
# of Lanes	6	6
Day/Night Split	90/10	90/10
Day Trucks (% of Total Volume)	1.35% Medium 6.89% Heavy	1.35% Medium 6.89% Heavy
Night Trucks (% of Total Volume)	2.00% Medium 4.82% Heavy	2.00% Medium 4.82% Heavy
Right-of-Way Width	45 meters	
Posted Speed Limit	60 km/h	

Please note:

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

If you require further assistance, please contact at transportationplanningdata@peelregion.ca

Thank you,

Ucchas Saha, MASc
Transportation Planner, Transportation Planning
Transportation Division, Public Works
Region of Peel

Date:	08-Sep-23

NOISE REPORT FOR PROPOSED DEVELOPMENT

REQUESTED BY:

Name:	Sabah Ersum
Company:	SLR Consulting

PREPARED BY:

Name	Naveda Dukhan C.E.T
Tel#:	905-615-3200 ext. 8948

MISSISSAUGA

Location:	1. Burnhamthorpe Rd E (1315 Silver Spear Rd.)
ID#	601

ON SITE TRAFFIC DATA

Specific	Street Names				
	1. Burnhamthorpe Rd E				
AADT:	35500				
# of Lanes:	6 Lanes				
% Trucks:	5%				
Medium/Heavy Trucks Ratio:	55/45				
Day/Night Split:	90/10				
Posted Speed Limit:	60 km/hr				
Gradient Of Road:	2%				
Ultimate R.O.W:	50m				

Comments:	Ultimate Traffic Data Only (2041)

Volume Result Details by Hour Report

Location..... BURNHAMTHORPE RD E btwn BOUGH BEECHES BLVD & FIELDGATE DR

Municipality..... Mississauga

Count Station.....

Direction..... Both Directions

Date	Time Period		Count	Peak Hour
Thursday, May 05, 2016				
	12:00 AM	01:00 AM	171	☐
	01:00 AM	02:00 AM	97	☐
	02:00 AM	03:00 AM	79	☐
	03:00 AM	04:00 AM	48	☐
	04:00 AM	05:00 AM	58	☐
	05:00 AM	06:00 AM	196	☐
	06:00 AM	07:00 AM	804	☐
	07:00 AM	08:00 AM	1657	☐
	08:00 AM	09:00 AM	1991	☐
	09:00 AM	10:00 AM	1339	☐
	10:00 AM	11:00 AM	1200	☐
	11:00 AM	12:00 PM	1382	☐
	12:00 PM	01:00 PM	1428	☐
	01:00 PM	02:00 PM	1336	☐
	02:00 PM	03:00 PM	1504	☐
	03:00 PM	04:00 PM	1920	☐
	04:00 PM	05:00 PM	2295	☐
	05:00 PM	06:00 PM	2338	☑
	06:00 PM	07:00 PM	1875	☐
	07:00 PM	08:00 PM	1461	☐
	08:00 PM	09:00 PM	1162	☐
	09:00 PM	10:00 PM	886	☐
	10:00 PM	11:00 PM	603	☐
	11:00 PM	12:00 AM	516	☐
Total			**26,346**	

O R N A M E N T - Sound Power Emissions & Source Heights

Ontario Road Noise Analysis Method for Environment and Transportation

Road Segment ID	Roadway Name	Link Description	Speed (kph)	Period (h)	Total Traffic Volumes	Auto %	Med %	Hvy %	Auto	Med	Heavy	Road Gradient (%)	PWL (dBA)	Source Height, s (m)
DixieRdNB_avg	Dixie Road, Northbound	Daytime Impacts	60	16	21870	91.8%	1.4%	6.9%	20074	295	1500	0	**87.2**	**1.6**
	Dixie Road, Northbound	Night-time Impacts	60	8	2430	93.2%	2.0%	4.8%	2264	49	117	0	**79.7**	**1.5**
DixieRdNB_min	Dixie Road, Northbound	Daytime Impacts	60	1	757	91.8%	1.4%	6.9%	695	10	52	0	**84.7**	**1.6**
	Dixie Road, Northbound	Evening-time Impacts	60	1	541	91.8%	1.4%	6.9%	496	7	37	0	**83.2**	**1.6**
	Dixie Road, Northbound	Night-time Impacts	60	1	64	93.2%	2.0%	4.8%	59	1	3	0	**73.0**	**1.5**
DixieRdSB_avg	Dixie Road, Southbound	Daytime Impacts	60	16	21870	91.8%	1.4%	6.9%	20074	295	1500	0	**87.2**	**1.6**
	Dixie Road, Southbound	Night-time Impacts	60	8	2430	93.2%	2.0%	4.8%	2264	49	117	0	**79.7**	**1.5**
DixieRdSB_min	Dixie Road, Southbound	Daytime Impacts	60	1	757	91.8%	1.4%	6.9%	695	10	52	0	**84.7**	**1.6**
	Dixie Road, Southbound	Evening-time Impacts	60	1	541	91.8%	1.4%	6.9%	496	7	37	0	**83.2**	**1.6**
	Dixie Road, Southbound	Night-time Impacts	60	1	64	93.2%	2.0%	4.8%	59	1	3	0	**73.0**	**1.5**
BurnhamthorpeEB_UH_avg	Burnhamthorpe Rd E (1 dir, uphill)	Daytime Impacts	60	16	15975	95.0%	2.8%	2.3%	15176	439	359	2.9	**84.1**	**1.2**
	Burnhamthorpe Rd E (1 dir, uphill)	Night-time Impacts	60	8	1775	95.0%	2.8%	2.3%	1686	49	40	2.9	**77.6**	**1.2**
BurnhamthorpeWB_DH_avg	Burnhamthorpe Rd E (1 dir, downhill)	Daytime Impacts	60	16	15975	95.0%	2.8%	2.3%	15176	439	359	0	**83.2**	**1.2**
	Burnhamthorpe Rd E (1 dir, downhill)	Night-time Impacts	60	8	1775	95.0%	2.8%	2.3%	1686	49	40	0	**76.7**	**1.2**
BurnhamthorpeEB_avg	Burnhamthorpe Rd E, Eastbound	Daytime Impacts	60	16	15975	95.0%	2.8%	2.3%	15176	439	359	0	**83.2**	**1.2**
	Burnhamthorpe Rd E, Eastbound	Night-time Impacts	60	8	1775	95.0%	2.8%	2.3%	1686	49	40	0	**76.7**	**1.2**
BurnhamthorpeEB_UH_min	Burnhamthorpe Rd E (1 dir, uphill)	Daytime Impacts	60	1	600	95.0%	2.8%	2.3%	570	17	14	2.9	**81.9**	**1.2**
	Burnhamthorpe Rd E (1 dir, uphill)	Evening-time Impacts	60	1	302	95.0%	2.8%	2.3%	286	8	7	2.9	**78.9**	**1.2**
	Burnhamthorpe Rd E (1 dir, uphill)	Night-time Impacts	60	1	24	95.0%	2.8%	2.3%	23	1	1	2.9	**67.9**	**1.2**
BurnhamthorpeWB_avg	Burnhamthorpe Rd E, Westbound	Daytime Impacts	60	16	15975	95.0%	2.8%	2.3%	15176	439	359	0	**83.2**	**1.2**
	Burnhamthorpe Rd E, Westbound	Night-time Impacts	60	8	1775	95.0%	2.8%	2.3%	1686	49	40	0	**76.7**	**1.2**
BurnhamthorpeWB_DH_min	Burnhamthorpe Rd E (1 dir, downhill)	Daytime Impacts	60	1	600	95.0%	2.8%	2.3%	570	17	14	0	**81.0**	**1.2**
	Burnhamthorpe Rd E (1 dir, downhill)	Evening-time Impacts	60	1	302	95.0%	2.8%	2.3%	286	8	7	0	**78.0**	**1.2**
	Burnhamthorpe Rd E (1 dir, downhill)	Night-time Impacts	60	1	24	95.0%	2.8%	2.3%	23	1	1	0	**67.0**	**1.2**

Appendix C STAMSON Output File

Environmental Noise Assessment

1315 Silver Spear Road, Mississauga

Starlight Investments

SLR Project No.: 241.031124.00001

February 19, 2025

STAMSON 5.0 NORMAL REPORT Date: 10-02-2025 09:56:09
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: silver3.te Time Period: 16 hours
Description:

Road data, segment # 1: Burnham_UH

Car traffic volume : 15176 veh/TimePeriod
Medium truck volume : 439 veh/TimePeriod
Heavy truck volume : 359 veh/TimePeriod
Posted speed limit : 60 km/h
Road gradient : 3 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Burnham_UH

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 16.07 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Burnham_DH

Car traffic volume : 15176 veh/TimePeriod
Medium truck volume : 439 veh/TimePeriod
Heavy truck volume : 359 veh/TimePeriod
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: Burnham_DH

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 27.86 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 3: Dixie_NB

```
Car traffic volume  : 20074 veh/TimePeriod
Medium truck volume :   295 veh/TimePeriod
Heavy truck volume  :  1500 veh/TimePeriod
Posted speed limit  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 3: Dixie_NB
------------------------------
Angle1   Angle2          : -32.36 deg   0.00 deg
Wood depth               :      0       (No woods.)
No of house rows         :      0
Surface                  :      2       (Reflective ground surface)
Receiver source distance  : 241.06 m
Receiver height          :   1.50 m
Topography               :      1       (Flat/gentle slope; no barrier)
Reference angle          :   0.00

Road data, segment # 4: Dixie_SB
--------------------------------
Car traffic volume  : 20074 veh/TimePeriod
Medium truck volume :   295 veh/TimePeriod
Heavy truck volume  :  1500 veh/TimePeriod
Posted speed limit  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 4: Dixie_SB
------------------------------
Angle1   Angle2          : -32.36 deg   0.00 deg
Wood depth               :      0       (No woods.)
No of house rows         :      0
Surface                  :      2       (Reflective ground surface)
Receiver source distance  : 224.26 m
Receiver height          :   1.50 m
Topography               :      1       (Flat/gentle slope; no barrier)
Reference angle          :   0.00

Results segment # 1: Burnham_UH
------------------------------

Source height = 1.22 m

ROAD (0.00 + 68.75 + 0.00) = 68.75 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.00  69.05   0.00  -0.30   0.00   0.00   0.00   0.00  68.75
-------------------------------------------------------------------------------

Segment Leq : 68.75 dBA
```

Results segment # 2: Burnham_DH

Source height = 1.22 m

ROAD (0.00 + 65.47 + 0.00) = 65.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	68.16	0.00	-2.69	0.00	0.00	0.00	0.00	65.47

Segment Leq : 65.47 dBA

Results segment # 3: Dixie_NB

Source height = 1.62 m

ROAD (0.00 + 52.66 + 0.00) = 52.66 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	0	0.00	72.17	0.00	-12.06	-7.45	0.00	0.00	0.00	52.66

Segment Leq : 52.66 dBA

Results segment # 4: Dixie_SB

Source height = 1.62 m

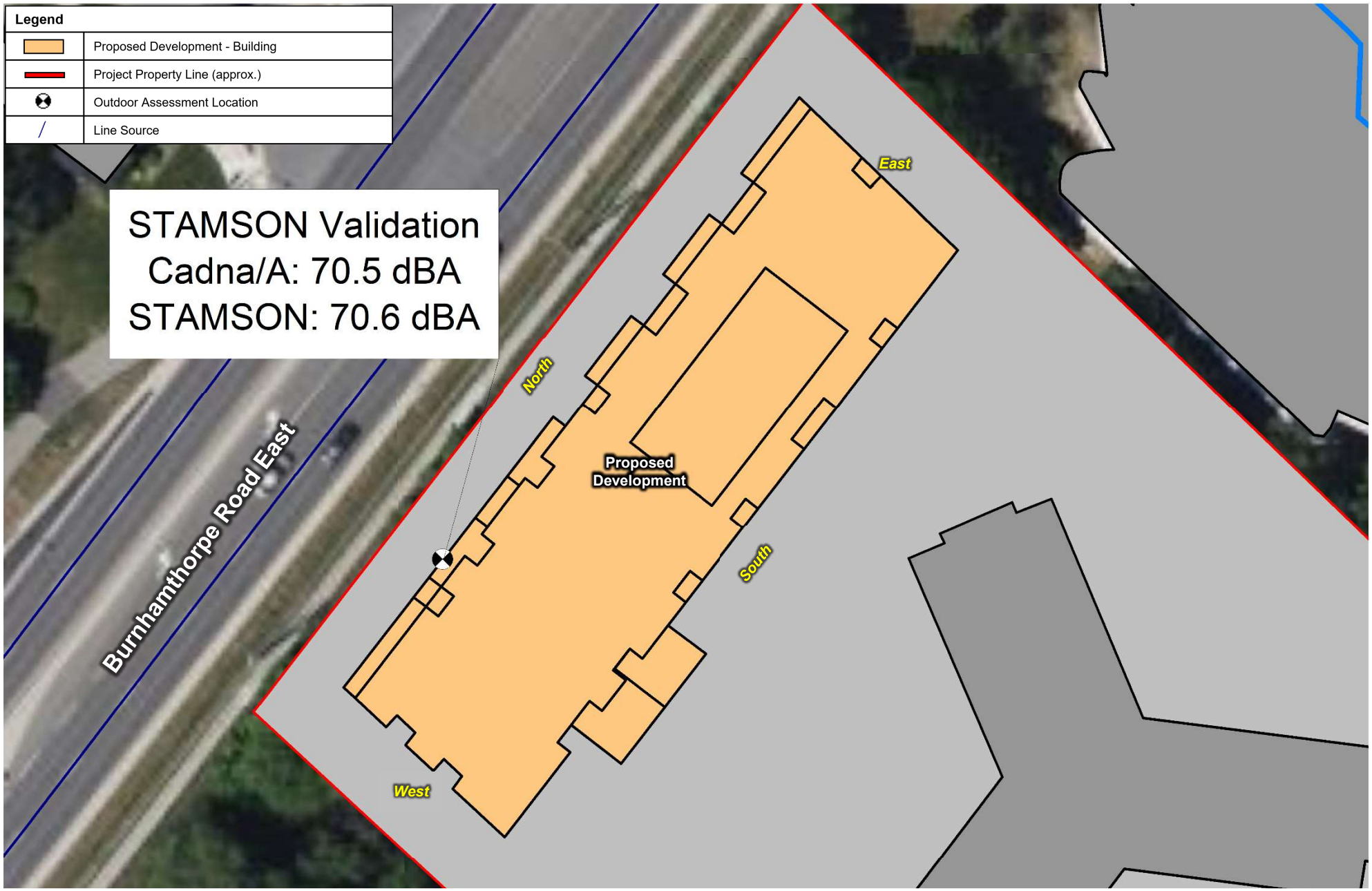
ROAD (0.00 + 52.97 + 0.00) = 52.97 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-32	0	0.00	72.17	0.00	-11.75	-7.45	0.00	0.00	0.00	52.97

Segment Leq : 52.97 dBA

Total Leq All Segments: 70.57 dBA

TOTAL Leq FROM ALL SOURCES: 70.57



STARLIGHT INVESTMENTS	True North	Scale: 1:500	METRES	SLR
1315 SILVER SPEAR ROAD, MISSISSAUGA		Date: Feb. 2025 Rev. 0	Figure No. **C1**	
COMPARISON OF CADNA/A AND STAMSON OUTPUT		Project No. 241.031153.00001		

Appendix D Ventilation, Warning Clause and Mitigation Summary

Environmental Noise Assessment

1315 Silver Spear Road, Mississauga

Starlight Investments

SLR Project No.: 241.031124.00001

February 19, 2025

Appendix D Ventilation, Warning Clause and Mitigation Summary

The following warning clauses are recommended for inclusion in agreements registered on Title for the residential units and included in all agreements of purchase and sale or lease, and all rental agreements.

A summary of the warning clause, ventilation and mitigation recommendations is included in **Table D.1**.

> **MECP 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.”
>
> **MECP 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."
>
> **MECP 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.”
>
> **MECP Type E:** “Purchasers/tenants are advised that due to the proximity of the adjacent institutional and commercial facilities, noise from the facilities may at times be audible.”

Table D.1: Summary of Ventilation, Warning Clause and Mitigation Recommendations

Development Location/Building	Barrier Recommendations	Ventilation Recommendations	Warning Clause Recommendations
Residential Building (14 Storeys)	Yes – refer to **Figure 5** and report **Section 2.5.2.1**.	Central AC	Type A [2], Type B [3], Type D, Type E

Notes: [1] Refer to **Figure 5** for required barrier locations.
[2] Based on an MECP NPC-300 criteria.
[3] Based on the City of Mississauga suggested sound level.

Appendix E Stationary Source Modelling Data

Environmental Noise Assessment

1315 Silver Spear Road, Mississauga

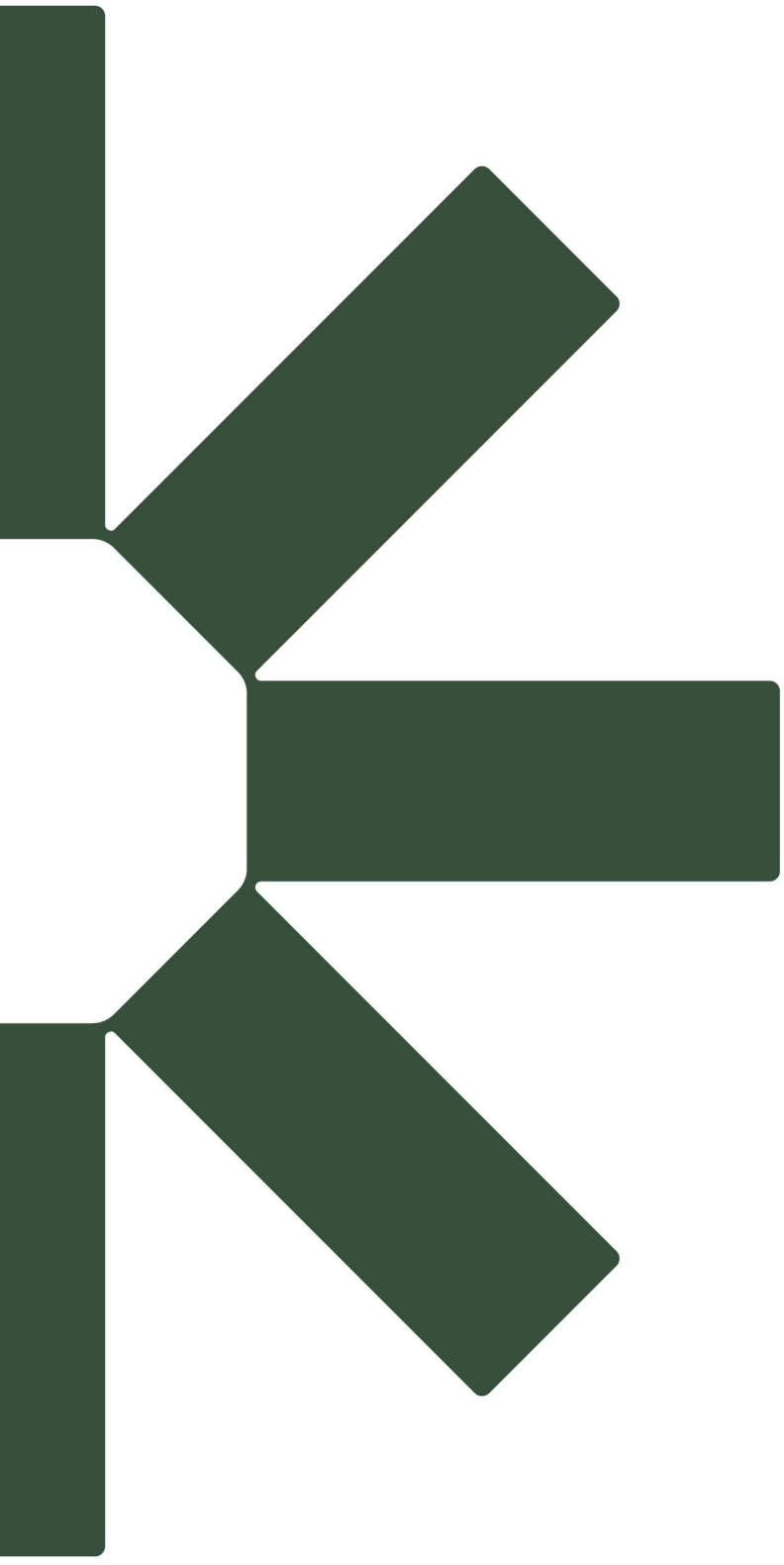
Starlight Investments

SLR Project No.: 241.031124.00001

February 19, 2025

STATIONARY SOURCE MODELLING DATA

Source Description	Maximum Sound Power Level (1/1 Octave Bands) (dB)									Modelled Sound Power Level (dBA)	Source Notes
	31.5	63	125	250	500	1000	2000	4000	8000		
Burnhamthorpe Library											
Rooftop HVAC - 5 ton - x4 units	77.0	80.0	81.0	81.0	80.0	78.0	74.0	70.0	64.0	82.5	Based on historical SLR data - Operates 60 minutes per hour during daytime/evening hours - Operates 15 minutes per hour during night-time hours
Rooftop HVAC - 10 ton - x8 units	80.0	83.0	84.0	84.0	83.0	81.0	77.0	73.0	67.0	85.5	Based on historical SLR data - Operates 60 minutes per hour during daytime/evening hours - Operates 15 minutes per hour during night-time hours
Rooftop HVAC - 30 ton - x1 unit	-	85.0	88.0	87.0	88.0	88.0	83.0	79.0	73.0	91.5	Based on historical SLR data - Operates 60 minutes per hour during daytime/evening hours - Operates 15 minutes per hour during night-time hours
Shell Gas Station & Car Wash/Jiffy Lube											
Rooftop HVAC - 5 ton - x1 unit	77.0	80.0	81.0	81.0	80.0	78.0	74.0	70.0	64.0	82.5	Based on historical SLR data - Operates 60 minutes per hour during daytime/evening hours - Operates 30 minutes per hour during night-time hours
Rooftop HVAC - 10 ton - x1 unit	80.0	83.0	84.0	84.0	83.0	81.0	77.0	73.0	67.0	85.5	Based on historical SLR data - Operates 60 minutes per hour during daytime/evening hours - Operates 30 minutes per hour during night-time hours
Car Wash (entrance) - x1 unit	86.2	88.3	84.5	84.2	85.8	82.1	82.1	80.9	76.8	89.0	Based on historical SLR data - Operates 6 minutes per hour during daytime/evening hours - Operates 1 minute per hour during night-time hours
Car Wash (exit) - x1 unit	102.1	109.7	106.2	107.2	104.3	103.1	100.7	95.2	89.2	107.9	Based on measurement by SLR staff conducted September 22, 2023 - Operates 12 minutes per hour during daytime/evening hours - Operates 2 minutes per hour during night-time hours
Bay Door Breakout Noise - Impact wrench - x4 unit	82.6	77.9	82.4	75.8	79.3	78.4	85.6	85.1	84.9	91.0	Based on historical SLR data - Operates 1 minutes per hour during daytime/evening hours - Additional +10 dB penalty applied in Cadna/A for quasi-steady impulsive sound quality
Bay Door Breakout Noise - Compressed Air - x2 unit	101.1	100.5	95.8	89.3	86.0	86.3	83.5	84.8	80.8	92.1	Based on historical SLR data - Operates 10 minutes per hour during daytime/evening hours - Additional +5 dB penalty applied in Cadna/A for tonal sound quality
Car vacuum - x2 unit	80.2	83.8	81.4	90.2	78.4	81.2	84.6	87.0	84.0	91.8	Based on historical SLR data - Operates 30 minutes per hour during daytime/evening hours - Operates 5 minutes per hour during night-time hours
Car Idling - x10 unit	-	85.0	80.0	75.0	72.0	70.0	69.0	65.0	55.0	76.0	Based on historical SLR data - Operates 60 minutes per hour during daytime/evening hours



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