REPORT

2077 & 2105 ROYAL WINDSOR DRIVE

MISSISSAUGA, ONTARIO

NOISE AND VIBRATION IMPACT STUDY

RWDI #2205822

October 1, 2024

SUBMITTED TO

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VERSION HISTORY

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1	October 3, 2022	Draft for ZBA	Lorenzo Carboni	Slavi Grozev
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4	October 1, 2024	Updated for OZA Resubmission and SPA submission	Lorenzo Carboni	Mihkel Toome

EXECUTIVE SUMMARY

RWDI was retained to prepare a Noise and Vibration Impact Study (NVIS) for the proposed 2077 & 2105 Royal Windsor Drive development located in Mississauga, Ontario. The proposed development site is located to the north of Royal Windsor Drive and to the west of Southdown Road, adjacent to the Clarkson GO Station. This assessment was completed to support a joint OZA resubmission and SPA submission as required by the City of Mississauga.

The following noise control measures are recommended for the proposed development:

1. Installation of central air-conditioning so that all suites' windows can remain closed.
2. Sound insulation design of the building façade components
3. Construction of perimeter noise barriers along the outdoor amenity areas if feasible, with the applicable warning clause.
4. The inclusion of noise warning clauses related to:
    a. Transportation sound levels at the building façade and in the outdoor amenity areas
    b. Proximity to commercial facilities
    c. Proximity to railway line

Due to the setback of the development from the rail corridor there is no concern for vibration from the rail traffic.

The potential noise impact from stationary sources of sound were evaluated. Based on the noise modeling results and setback distances, the land use compatibility of the proposed development with respect to the nearby industrial or commercial land-uses is considered acceptable from the noise impact perspective.

At this stage in design the impact of the development on itself and its surroundings could not be quantitatively assessed. However, the impact on both the building itself and its surroundings is expected to be feasible to meet the applicable criteria. We recommend that the building design is evaluated prior during detailed design to ensure that the acoustical design is adequately implemented in order to meet the applicable criteria.

Based on the results of the analysis including implementation of the recommendations included with this assessment, the proposed development is predicted to meet the applicable sound and vibration criteria.

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1 INTRODUCTION

RWDI was retained to prepare a Noise and Vibration Impact Study (NVIS) for the proposed 2077 & 2105 Royal Windsor Drive development located in Mississauga, Ontario. The proposed development site is located to the north of Royal Windsor Drive and to the west of Southdown Road, adjacent to the Clarkson GO Station.

The proposed development aims to revitalize the site with a complete mixed-use community including the provision of a range of housing forms, as well as an improved public realm providing pedestrian access to the adjacent proposed public park and Clarkson GO Rail Station. The context site plan is shown in **Figure 1**. Drawings are included in **Appendix E**.

The site is exposed to noise from road traffic on, Southdown Road to the east and Royal Windsor Drive to the south. Additionally, the site is exposed to noise from rail traffic on: the Metrolinx GO corridor and CN freight movements along the same corridor. Additionally, the small CN rail yard located approximately 400 meters to the north is included in the assessment.

Due to the setback of the development from the rail corridor there is no concern for vibration from the rail traffic.

A screening level assessment of nearby industrial and commercial facilities was conducted. Conservative assumptions for potential noise emissions from Class I facilities within 20-meters from the development property line were included in the stationary source assessment. No Class II or Class III facilities were identified within the potential 300-meter or 1000-meter zone of influence, respectively.

This assessment was completed to support a joint OZA resubmission and SPA submission as required by the City of Mississauga. This assessment was based on design drawings dated September 25, 2024.

2 APPLICABLE CRITERIA

Applicable criteria for transportation noise sources (road and rail), stationary noise sources and rail vibration are adopted from the Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300 Environmental Noise Guideline (MOE, 2013), with a summary of the applicable criteria included with **Appendix A**. The Region of Peel General Guidelines for the Preparation of Acoustical Reports in the Region of Peel (Peel, 2012), were also applied in this assessment.

The proposed development site would be characterized as a “Class 1 Area”, which is defined according to NPC-300 as an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as "urban hum."

3 IMPACT OF THE ENVIRONMENT ON THE PROPOSED DEVELOPMENT

3.1 Transportation Source Assessment

3.1.1 Road Traffic Volume Data

The ultimate capacity traffic volumes and breakdowns were obtained from the City of Mississauga. A summary of the traffic data used is included in **Table 1** below with more detailed information included in **Appendix D**.

Table 1: Road Traffic Volumes

Roadway	Ultimate Traffic Volumes (UADT)	% Day/Night	Speed Limit (km/hr)	% Trucks
Royal Windsor Drive	38,500	90% / 10%	60	8
Southdown Road	44,200	90% / 10%	60	11.5

3.1.2 Rail Traffic Volume Data

Future GO transit rail traffic through Clarkson GO station was obtained from Metrolinx. Specific freight rail volumes were not provided by CN. As such, typical volumes based on rail line type (e.g. principal main line, secondary line) have been assumed as a basis for the analysis.

The data used for the analysis is summarized in **Table 2**, with details of the data used included in **Appendix D**.

Table 2: Rail Volumes and Configuration

Train Type	Daytime	Nighttime	Type of Locomotive	No of Locomotives	No of Cars	Speed (km/h)
GO Lakeshore West[1]	161	29	Diesel	1	6	153
	53	12	Diesel	2	12	153
CN Freight[2]	8	4	Diesel	3	75	80
CN Yard[3]	7	3	Diesel	1	25	24

Note(s):
1. Modeling includes 3 minutes of idling at the station per locomotive.
2. Assumed secondary main line.
3. Assumed one movement per rail line each daytime, one movement per two rail lines each nighttime.

3.1.3 Representative Receptors

The selection of receptors affected by transportation noise sources was based on the drawings reviewed for this assessment. Using the "building evaluation" feature of Cadna/A, each façade of the residential buildings was assessed.

Outdoor Living Areas (OLAs) would include outdoor areas intended and designed for the quiet enjoyment of the outdoor environment and which are readily accessible from the building. OLAs may include any common outdoor amenity spaces associated with a multi-unit residential development (e.g. courtyards, roof-top terraces), and/or private backyards and terraces with a minimum depth of 4m provided they are the only outdoor living area for the occupant. Daytime sound levels were assessed at the following identified OLAs:

- OLA_P1A: Phase 1, level 7 rooftop amenity between towers
- OLA_P1B: Phase 1, level 7 rooftop amenity southwest of tower 2
- OLA_P1C: Phase 1, level 7 rooftop amenity southeast of tower 2
- OLA_P2A: Phase 2, level 7 rooftop amenity between towers
- OLA_P2B: Phase 2, level 7 rooftop amenity southeast of tower 4
- OLA_P2C: Phase 2, level 7 rooftop amenity northeast of tower 4

the OLAs are indicated in **Figure 2**. Note that the towers overhang significant portions of the level 7 outdoor amenity space, as such in the figure the OLAs appear to be inside the tower.

3.1.4 Transportation Source Assessment - Analysis and Results

Sound levels due to the adjacent transportation (road and rail) sources were predicted using the RLS-90 standard (RLS,1990), and FTA method (FTA, 2018) as implemented in the Cadna/A software package.

To assess the impact of transportation noise on suites, the maximum sound level on each façade was determined with the results summarized in **Table 3.** The recommendation presented are the worst-case on each façade of the major portions of the building.

Table 3: Predicted Ground Transportation Sound Levels at Façades

Building	Façade	Road		Rail		Road + Rail		Notes
		Day L_{EQ}, 16hr	Night L_{EQ}, 8hr	Day L_{EQ}, 16hr	Night L_{EQ}, 8hr	Day L_{EQ}, 16hr	Night L_{EQ}, 8hr	
Phase 1 Podium	NW	56	49	59	57	61	58	2, 3
	NE	68	61	58	56	68	62	2
	SE/S	71	65	51	48	71	65	2
	SW	65	59	55	53	66	60	2
Tower 1	NW	58	52	60	57	62	58	2, 3
	NE	62	55	58	56	63	58	2
	SE	62	56	53	51	63	57	1
	SW	61	55	57	55	62	57	1
Tower 2	NW	57	51	57	55	60	56	1
	NE	66	60	54	52	67	60	2
	SE/S	69	63	52	49	69	63	2
	SW	64	58	55	53	65	59	1
Phase 2 Podium	NW	63	56	60	58	65	60	2, 3
	NE	69	62	57	54	69	63	2
	SE	70	63	46	44	70	63	2
	SW	65	58	57	55	65	59	1
Tower 3	NW	63	56	60	58	65	60	2, 3
	NE	67	61	57	54	67	61	2
	SE	65	59	52	50	66	59	2
	SW	57	51	58	56	60	56	2
Tower 4	NW	63	56	56	54	64	58	1
	NE	69	62	54	52	69	62	2
	SE	69	63	45	42	69	63	2
	SW	64	58	54	52	65	59	1

Note(s):

1. Installation of air conditioning to allow for windows and doors to remain closed, warning clause "Type D". Refer to **Appendix C** for guidance regarding air-conditioning as a noise mitigation measure.
2. The acoustical performance of building components must be specified to meet the indoor sound level criteria, in addition requirements of note 1.
3. Minimum brick veneer or masonry equivalent for the first row of housing or adjacent façades with exposure to railway line.

To assess the impact of transportation noise on the qualifying OLAs for the development, predicted sound level results are summarized in **Table 4**.

Table 4: Predicted Ground Transportation Sound Levels in Outdoor Living Areas

Receptor	Description	Daytime L_{EQ}, 16hr	Notes
OLA_P1A	Phase 1, level 7 rooftop amenity between towers	59 dBA	1
OLA_P1B	Phase 1, level 7 rooftop amenity southwest of tower 2	60 dBA	1
OLA_P1C	Phase 1, level 7 rooftop amenity southest of tower 2	62 dBA	2
OLA_P2A	Phase 2, level 7 rooftop amenity between towers	62 dBA	2
OLA_P2B	Phase 2, level 7 rooftop amenity southeast of tower 4	62 dBA	2
OLA_P2C	Phase 2, level 7 rooftop amenity northeast of tower 4	67 dBA	2

Note(s):

1. For OLA sound levels >55 dBA and ≤60 dBA, noise controls may be applied to meet the 55 dBA criterion. If noise control measures are not provided, a warning clause "Type A" is recommended.
2. Noise mitigation is recommended to meet the ≤55 dBA OLA sound level criterion. If noise controls are not feasible to meet the 55 dBA criterion for technical, economic or administrative reasons, an exceedance of 5 dB may be acceptable (to a maximum sound level of 60 dBA). In this case, a warning clause "Type B" is recommended.

3.2 Stationary Source Assessment

Stationary sources could be grouped into two categories: Those that have a permit with the Ontario Ministry of the Environment, Conservation and Parks (MECP) through an Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR); and those that are exempt from ECA or EASR permit requirements.

In the case where a stationary source is included in an ECA or EASR permit, and would be put in a position where it is no longer in compliance with the applicable sound level criteria due to the encroachment of the proposed new development, source specific mitigation and/or formal classification of the proposed development lands as a "Class 4 Area" (refer to C.4.4.2 "Class 4 Area" in NPC-300) would be required. In this case, coordination and agreements between the stationary source owner, proposed new development owner, the land-use planning authority and potentially the MECP would be needed.

In the case where a stationary source is exempt from ECA or EASR permit requirements, the noise provisions of the applicable Municipal Code and guidance from NPC-300 would be applicable. In this case, mitigation of sound levels due to stationary sources would be from a due diligence perspective to avoid nuisance complaints from future occupants of the proposed new development. Mitigation could be in the form of mitigation at the source (with agreement from the stationary source owner) and/or mitigation at the receptor through site and building element design (building orientation, acoustical barriers, façade sound insulation design).

3.2.1 Land-Use Compatibility Review (D-6 Guideline Assessment)

The MECP Guideline D-6 (MOE, 1995) was used as a tool to classify the identified industries and asses their potential influence on the proposed development. The classifications and setback guidelines are summarized in **Appendix A**.

3.2.1.1 Class III Industries

No facilities within the 1000m radius of the proposed development were identified as Class III.

3.2.1.2 Class II Industries

There are two industries within the 1000 m area surrounding the proposed development that have been classified as Class II, Stackpole International Powder Metal (ECA# 7195-A7WSR5) and Stackpole Powertrain International (ECA# 4685-AVKMMY). However, none of the Class II industries are within the potential influence area of 300 m from the proposed development. Furthermore, there are existing residences north of both of these facilities that are closer than the proposed development where compliance has been demonstrated through secondary noise screening. As such, these are expected to comply at the proposed development, and the development itself will not encroach on the permits.

3.2.1.3 Class I Industries

There are several industries within the 300 m area surrounding the proposed development that have been classified as Class I. The following are beyond the 70 m potential influence area;

- Musket Transport Ltd, a logistics provider with no ECA or EASR permit;
- Caruso's Service Centre Inc, an auto shop with no ECA or EASR permit; and
- Royal Windsor, an auto shop with no ECA or EASR permit.

There were four facilities identified as Class I within 70 m potential influence area of the proposed development. These industries are summarized in **Table 5** below.

Table 5: Industries within the minimum recommended separation distance of the proposed development

Name	Address	Type of Operation	Industry Class	ECA or EASR Registration #
Way-Side Auto Service	2133 Royal Windsor Dr, Mississauga, ON L5J 1K5	Auto Shop	Class I	N/A
Mississauga BMW Repair	2133 Royal Windsor Dr, Mississauga, ON L5J 1K5	Auto Shop	Class I	N/A
M & M Auto	2133 Royal Windsor Dr, Mississauga, ON L5J 1K5	Auto Shop	Class I	N/A
Audi Repair Mississauga - Lorne Park Car Centre	2133 Royal Windsor Dr, Mississauga, ON L5J 1K5	Auto Shop	Class I	N/A

The four facilities described in **Table 5** currently do not have an environmental permit (ECA or EASR), and therefore the conversion of the lands is not anticipated impact any environmental approvals. Potential noise impacts were assessed as outlined in the following section.

3.2.2 Stationary Source Modeling

RWDI conducted a screening level land-use compatibility assessment based on the guidance of the Ministry of the Environment D-6 Guideline (MOE, 1995a). Stationary sources of noise surrounding the proposed development were identified using a combination publicly available aerial, street-level imagery, business listing and The Ministry of the Environments Access Environment database. Classes were assessed using the noise impact perspective, as an air quality review was not considered for this study.

The results of the D-6 assessment from a noise impact perspective are summarized in **Section 3.2.1**. The results of the D-6 assessment indicate that the nearby auto shops should be included in the assessment as due perspective, given they are not operating under permits issued by the MECP. Additionally, rooftop top HVAC equipment associated with the adjacent buildings are included in the assessment.

3.2.2.1 Representative Receptors

The representative receptor locations were assessed to evaluate the potential stationary source noise impact. Using the "building evaluation" feature of Cadna/A, each façade of the buildings was assessed. The outdoor points of reception for this assessment are in the same general areas as the OLAs, the worst-case location within the amenity space for each phase is reported. The location used for the stationary source assessment is shown in **Figure 3**.

3.2.2.2 Assumed Sources and Sound Power Levels

Proxy data on file at RWDI was used for the sound power levels of the HVAC units and auto shops included in the assessment. The assumed sound power levels are presented in **Table 6**. The locations of assessed stationary sources are shown in **Figure 3**. Auto shop proxy data includes average simultaneous measurements of various activities with the bay doors open at comparable businesses. These include use of pneumatic tools, air compressors and hammers. Closing the bay doors will reduce the sound levels.

Table 6: Stationary Source Sound Power Level Assumptions

Source	Proxy Data / Calculation	Sound Power Level (dBA)	Duty Cycle	
			Daytime and Evening (07:00h – 23:00h)	Nighttime (23:00h – 07:00h)
HVAC_1Fan	Proxy Data	82	Continuous	30min/hour
AutoShop	Proxy Data	90	30min/hour	Off Duty

The assumed sound power level values and duty-cycles for the stationary sources are based on reasonable assumptions for the source type. Continuous operation of the HVAC units is assumed during the daytime and a 50% duty cycle given some business do not operate into the nighttime hours. Partial daytime operation of the power equipment at the auto shops, given the power tools are generally not run continuously and the facilities listed business hours do not include nighttime hours.

3.2.2.3 Analysis and Results

Stationary source noise modelling was carried out using the Cadna/A software package, a commercially available implementation of the ISO 9613 (ISO, 1994 and ISO, 1996) algorithms. The predicted sound levels are assessed against the Class 1 limits (refer to **Appendix A**).

The predicted sound levels during the worst-case 1-hour from existing stationary sources are presented in **Table 7**. Also included with **Table 7** are the predicted sound level criteria, based on minimum road traffic sound levels (LAeq, 1hr) for the daytime and nighttime periods.

Table 7: Predicted Stationary Source Sound Levels at Facades and Outdoor Points of Reception

Building	Section	Stationary Source L_{EQ}, 1hr		Ambient Road Traffic L_{EQ}, 1hr	
		Daytime-Evening 0700-2300h	Nighttime[1] 2300-0700h	Daytime-Evening 0700-2300h	Nighttime[1] 2300-0700h
OPR_P1	Phase 1	47	-	53	-
OPR_P2	Phase 2	50	-	63	-
Phase 1 Podium	NW	36	14	51	42
	NE	26	21	64	53
	SE/S	44	18	65	57
	SW	49	10	57	40
Tower 1	NW	36	21	52	44
	NE	37	34	58	47
	SE	41	32	57	47
	SW	47	12	62	54
Tower 2	NW	44	30	55	42
	NE	37	31	58	47
	SE/S	43	19	58	46
	SW	46	11	58	43
Phase 2 Podium	NW	36	21	58	52
	NE	52	49	63	52
	SE	35	32	66	48
	SW	31	19	47	52
Tower 3	NW	32	21	55	44
	NE	45	42	58	53
	SE	45	42	61	53
	SW	37	28	58	47
Tower 4	NW	42	38	57	52

Building	Section	Stationary Source L_{EQ}, 1hr		Ambient Road Traffic L_{EQ}, 1hr	
		Daytime-Evening 0700-2300h	Nighttime[1] 2300-0700h	Daytime-Evening 0700-2300h	Nighttime[1] 2300-0700h
Tower 4	NE	48	45	64	53
	SE	37	33	58	47
	SW	39	18	58	48

Note(s):
1. Outdoor areas are not assessed during the nighttime period.
2. NPC-300 Class 1 default criteria is applicable

As shown in **Table 7**, due to the high traffic volumes in this area, the sound level criteria are met at all locations of the facade.

3.3 Recommendations

Based on the noise and vibration impact assessment results, the following recommendations were determined for the project. Recommendations are provided for both transportation sources and stationary sources.

3.3.1 Transportation Sources

The following recommendations are provided to address transportation sources.

3.3.1.1 Building Façade Components

Due to the elevated transportation sound levels in the area, acoustical design of the façade components including spandrel, window glazing, and exterior doors, are recommended to be specified for the proposed development.

To assess the development's feasibility, preliminary window glazing, and exterior balcony door sound isolation requirements were determined. These were based on following assumptions:

- Typical residential living room:
  - Glazing 60% of façade, Door: 20% of façade
  - 55% Façade to floor area Ratio
- Typical residential bedroom:
  - Glazing 80% of façade, Door: N/A
  - 81% Façade to floor area Ratio
- Acoustical character of rooms: High absorption finishes/furniture for bedrooms and intermediate absorption finishes/furniture for living rooms.

Based on the predicted plane of window sound levels and the assumptions listed above, recommendations for the minimum sound insulation ratings for the building components were determined using the National Research Council of Canada "BPN-56 method" (NRCC, 1985). The reported results are in terms of Sound Transmission Class (STC) ratings as summarized in **Table 8**.

Table 8: Recommended Façade Component Minimum Sound Insulation Rating

Building	Facade	Window Glazing	Exterior Door	Façade Wall
Phase 1 Podium	NW	STC-28	STC-30	STC-55
	NE	STC-29	STC-28	STC-45
	SE/S	STC-31	STC-28	STC-45
	SW	STC-26	STC-28	STC-45
Tower 1	NW	STC-29	STC-30	STC-55
	NE	STC-28	STC-28	STC-45
	SE	*OBC* [1]	*OBC* [1]	*OBC* [1]
	SW	*OBC* [1]	*OBC* [1]	*OBC* [1]
Tower 2	NW	*OBC* [1]	*OBC* [1]	*OBC* [1]
	NE	STC-27	STC-28	STC-45
	SE/S	STC-29	STC-28	STC-45
	SW	*OBC* [1]	*OBC* [1]	*OBC* [1]
Phase 2 Podium	NW	STC-29	STC-30	STC-55
	NE	STC-29	STC-28	STC-45
	SE	STC-29	STC-28	STC-45
	SW	*OBC* [1]	*OBC* [1]	*OBC* [1]
Tower 3	NW	STC-29	STC-30	STC-55
	NE	STC-28	STC-28	STC-45
	SE	STC-25	STC-28	STC-45
	SW	STC-27	STC-28	STC-45
Tower 4	NW	*OBC* [1]	*OBC* [1]	*OBC* [1]
	NE	STC-28	STC-28	STC-45
	SE	STC-28	STC-28	STC-45
	SW	*OBC* [1]	*OBC* [1]	*OBC* [1]

Note(s):
1. Building envelope assemblies meeting the minimum Ontario Building Code requirements will exhibit sufficient noise reduction to meet the interior sound level criteria.

The maximum requirement of STC-31 and STC-30 for the window glazing and exterior door, respectively, is considered feasible as this can be achieved by typical insulated glazing units.

Taking into account the assumptions used as a basis to determine the glazing requirements, the applicable indoor transportation source sound level criteria are predicted to be achieved.

We recommend that the façade construction is reviewed during detailed design to ensure that the indoor sound level limits will be met, and that the window/door supplier is requested to provide STC laboratory test reports as part of shop drawing submittal to confirm that the glazing/door components will meet the minimum STC requirements.

3.3.1.2 Ventilation Recommendations

Due to the transportation sound levels at the plane of the façade, central air conditioning is recommended for the proposed development to allow for windows and doors to remain closed as a noise mitigation measure. Further, prospective purchasers or tenants should be informed by a warning clause "Type D".

3.3.1.3 Outdoor Living Areas

Due to exposure to transportation sources along Southdown Road to the east, Royal Windsor Drive to the south, and rail corridor to the north, sound levels in the OLAs are predicted to be elevated. The combined (rail and road) daytime average sound levels for the OLAs included in the assessment are in the range of 59 to 67 dBA. To reduce the transportation sound levels in OLAs to meet the applicable criteria, noise barriers are recommended.

The recommended geometry of the noise barriers are shown in **Figure 4**. The barrier heights are summarized in **Table 9**. General guidance with respect to noise barrier design is included with **Appendix C**.

Table 9: Barrier Height Recommendations for Outdoor Living Areas

Receptor	Description	Predicted OLA Sound Level	Barrier Height (m) to Meet Sound Level Criterion	
		Daytime L_{EQ}, 16hr	≤ 55 dBA[1]	≤ 60 dBA[2]
OLA_P1A	Phase 1, level 7 rooftop amenity between towers	59 dBA	1.8 m[3]	-
OLA_P1B	Phase 1, level 7 rooftop amenity southwest of tower 2	60 dBA	1.8 m[3]	-
OLA_P1C	Phase 1, level 7 rooftop amenity southwest of tower 2	62 dBA	2.2 m	1.1 m
OLA_P2A	Phase 2, level 7 rooftop amenity between towers	62 dBA	2.5 m	1.1 m
OLA_P2B	Phase 2, level 7 rooftop amenity southeast of tower 4	62 dBA	2.0 m	1.5 m
OLA_P2C	Phase 2, level 7 rooftop amenity northeast of tower 4	67 dBA	2.5 m	1.1 m

Note(s):

1. Refer to Figure 4.1 for barrier geometry to meet 55 dBA.
2. Refer to Figure 4.2 for barrier geometry to meet 60 dBA. A warning clause "Type B" is recommended in cases where the OLA sound level is >55 dBA (to a maximum of 60 dBA).
3. If noise control measures are not provided, a warning clause "Type A" is recommended.

3.3.2 Stationary Sources

Based on the noise modeling results and setback distances, the proposed development is not anticipated to infringe on the compliance of any commercial or industrial operations with environmental noise permits (ECA or EASR), nor cause infractions against the local noise by-law (By-Law 0360-1979). As such, the land use compatibility of the proposed development with respect to the nearby industries is considered acceptable from the noise impact perspective.

No exceedances of the applicable stationary source criteria are expected at façade or outdoor points of reception.

3.3.3 Warning Clauses

The following warning clauses are recommended for the proposed development:

1. NPC-300 Type A to address transportation sound levels in Outdoor Living Areas as applicable
2. NPC-300 Type D to address transportation sound levels at the plane of window
3. Proximity to Railway Line Warning Clause
4. NPC-300 Type E to address proximity to commercial facilities

Warning clauses are recommended to be included on all development agreements, offers of purchase and agreements of purchase and sale or lease. The wording of the recommended warning clauses is included with **Appendix B**.

4 IMPACT OF THE PROPOSED DEVELOPMENT ON ITS SURROUNDINGS AND ON ITSELF

On-site stationary sources for the development are expected to consist of HVAC related equipment in the roof-top mechanical penthouse as well as various exhaust fans. Further, consideration should be given to control airborne and structure-borne noise generated within the proposed development.

Within the development itself the main sources of noise that are likely to affect the uses of the building are the mechanical systems. The potential noise impact of the commercial component of the development is recommended to be reviewed during detailed design, to ensure the applicable criteria will be met.

Provided that best practices for the acoustical design of the building are followed, noise from building services equipment associated with the development are expected to be feasible to meet the applicable sound level criteria due to the nature (residential/mixed-use) of the proposed development.

We recommend that the potential noise impact of the proposed development is reviewed during detailed design to ensure the applicable sound level criteria will be achieved.

5 CONCLUSIONS

RWDI was retained to prepare a Noise and Vibration Impact Study (NVIS) for the proposed 2077 & 2105 Royal Windsor Drive development located in Mississauga, Ontario.

The following noise control measures are recommended for the proposed development:

1. Installation of central air-conditioning so that all suites' windows can remain closed.
2. Sound insulation design of the building façade components
3. Construction of perimeter noise barriers along the outdoor amenity areas if feasible, with the applicable warning clause.
4. The inclusion of noise warning clauses related to:
    a. Transportation sound levels at the building façade and in the outdoor amenity areas
    b. Proximity to commercial facilities
    c. Proximity to railway line

The potential noise impact from stationary sources of sound were evaluated. Nighttime continuous sound levels at the sound levels at the façade of the East Block due to existing stationary sources may exceed the applicable Class 1 sound level criteria. All other areas are expected to meet the criteria. It is expected that façade component and ventilation requirements to address transportation noise will provide an acoustically comfortable interior space where stationary source noise exceeds the criteria.

At this stage in design the impact of the development on itself and its surroundings could not be quantitatively assessed. However, the impact on both the building itself and its surroundings is expected to be feasible to meet the applicable criteria. We recommend that the building design is evaluated prior to building permit to ensure that the acoustical design is adequately implemented in order to meet the applicable criteria.

Based on the results of the analysis including implementation of the recommendations included with this assessment, the proposed development is predicted to meet the applicable sound and vibration criteria.

6 REFERENCES

1. Ontario Ministry of the Environment (MOE), August 2013, Publication NPC-300, Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning (MOE, 2013).
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4. Controlling Sound Transmission into Buildings (BPN-56), National Research Council Canada (NRCC, 1985).
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7. Institute of Transportation Engineers (ITE), 2010, *Traffic Engineering Handbook, 6th Edition* (ITE, 2010)
8. International Organization for Standardization (ISO), 1994b, International Standard ISO 9613-1:1994, Acoustics – Attenuation of Sound during propagation outdoors. Part 1: Calculation of the absorption of sound by the atmosphere. (ISO, 1994)
9. International Organization for Standardization (ISO), 1996, International Standard ISO 9613-2:1996, Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation (ISO, 1996)
10. City of Mississauga, 1980, Noise Control By-Law 0360-1979.
11. Region of Peel, General Guidelines for the Preparation of Acoustical Reports in The Region of Peel (Peel, 2012)

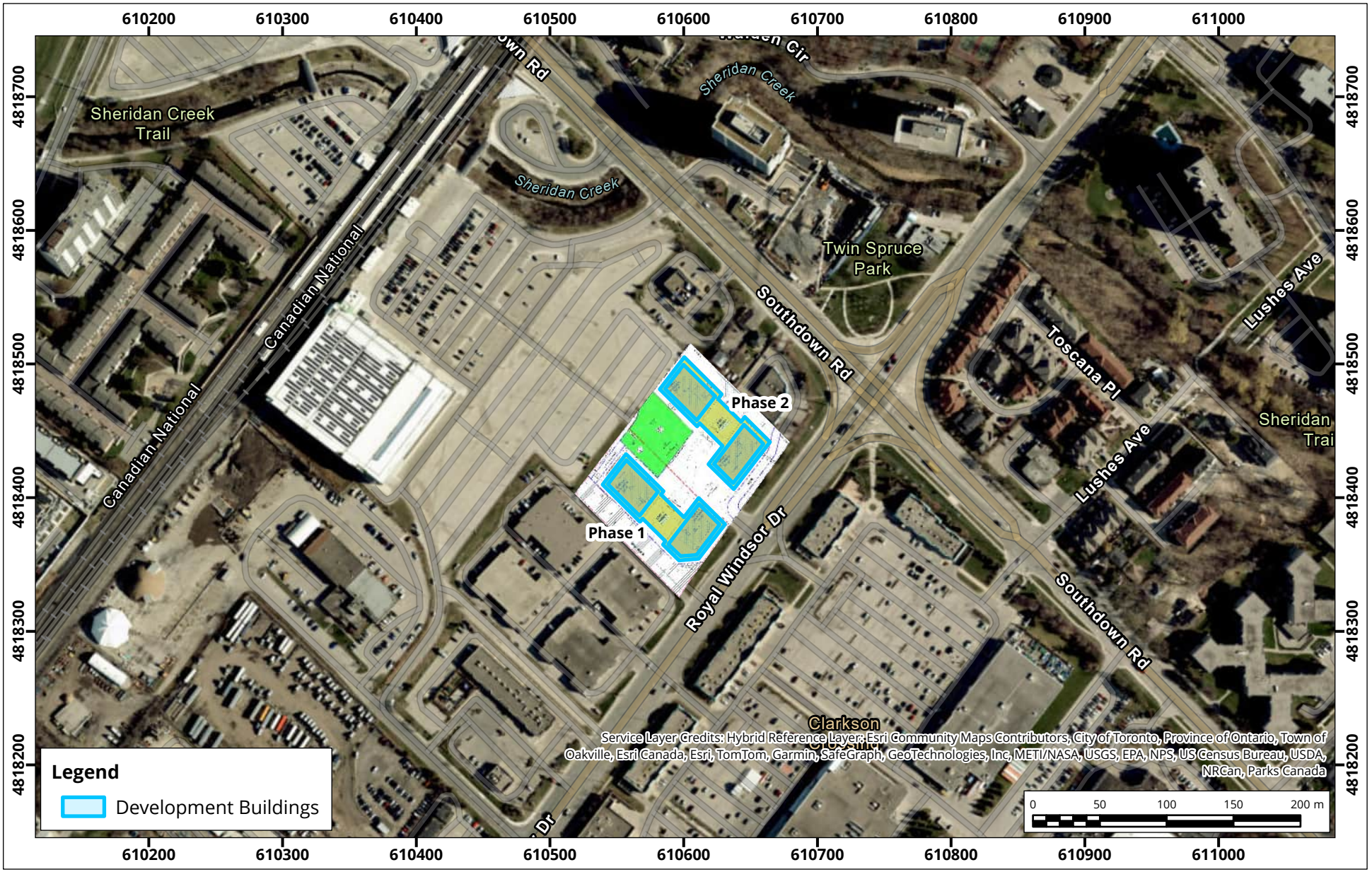
7 STATEMENT OF LIMITATIONS

This report entitled "2077 & 2105 Royal Windsor Drive, Noise and Vibration Impact Study " dated October 1, 2024, was prepared by Rowan Williams Davies & Irwin Inc. ("RWDI") for Slate Asset Management ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared. Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

FIGURES



Site Context Plan

True North

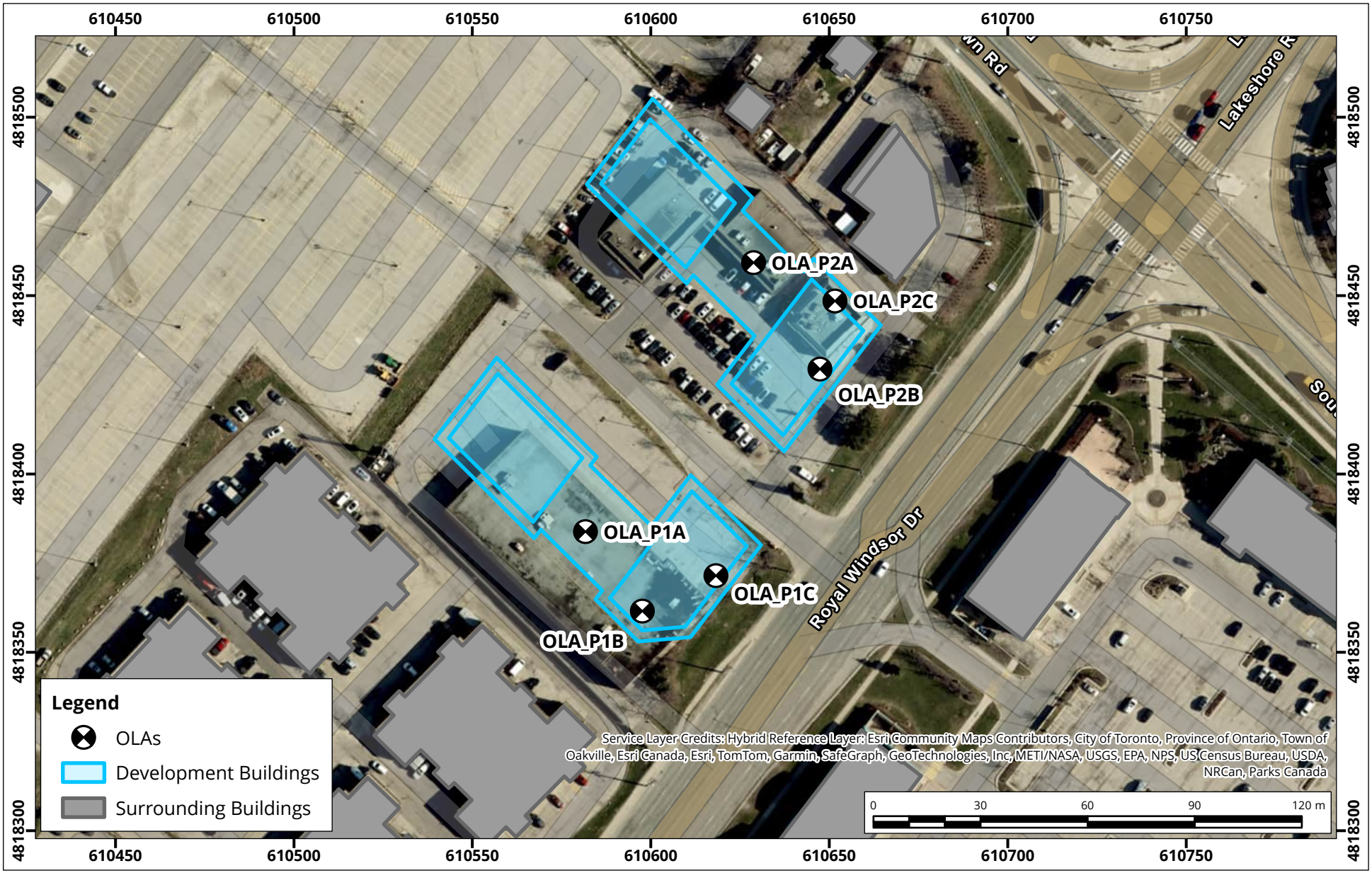
Drawn by: LRC	Figure: 1
Approx. Scale:	1:4,000
Date Revised:	Aug 30, 2024

Map Projection: NAD 1983 UTM Zone 17N

2077 & 2105 Royal Windsor Drive - Mississauga, Ontario

Project #: 2205822

Map Document: J:\2022\2205822\03Worktems\20EnvironmentalNoiseAnalysis\RoyalWindsorDr_2077to2105.aprx



Outdoor Living Areas (OLAs) Locations

Location of Common Outdoor Amenity Areas

Map Projection: NAD 1983 UTM Zone 17N

2077 & 2105 Royal Windsor Drive - Mississauga, Ontario

True North

Project #: 2205822

Drawn by: LRC	Figure: 2
Approx. Scale:	1:1,500
Date Revised:	Aug 30, 2024

Map Document: J:\2022\2205822\03Worktems\20EnvironmentalNoiseAnalysis\RoyalWindsorDr_2077to2105\RoyalWindsorDr_2077to2105.aprx

Stationary Sources and Outdoor Points of Reception

Location of Stationary Sources in Relation to the Proposed Development

True North

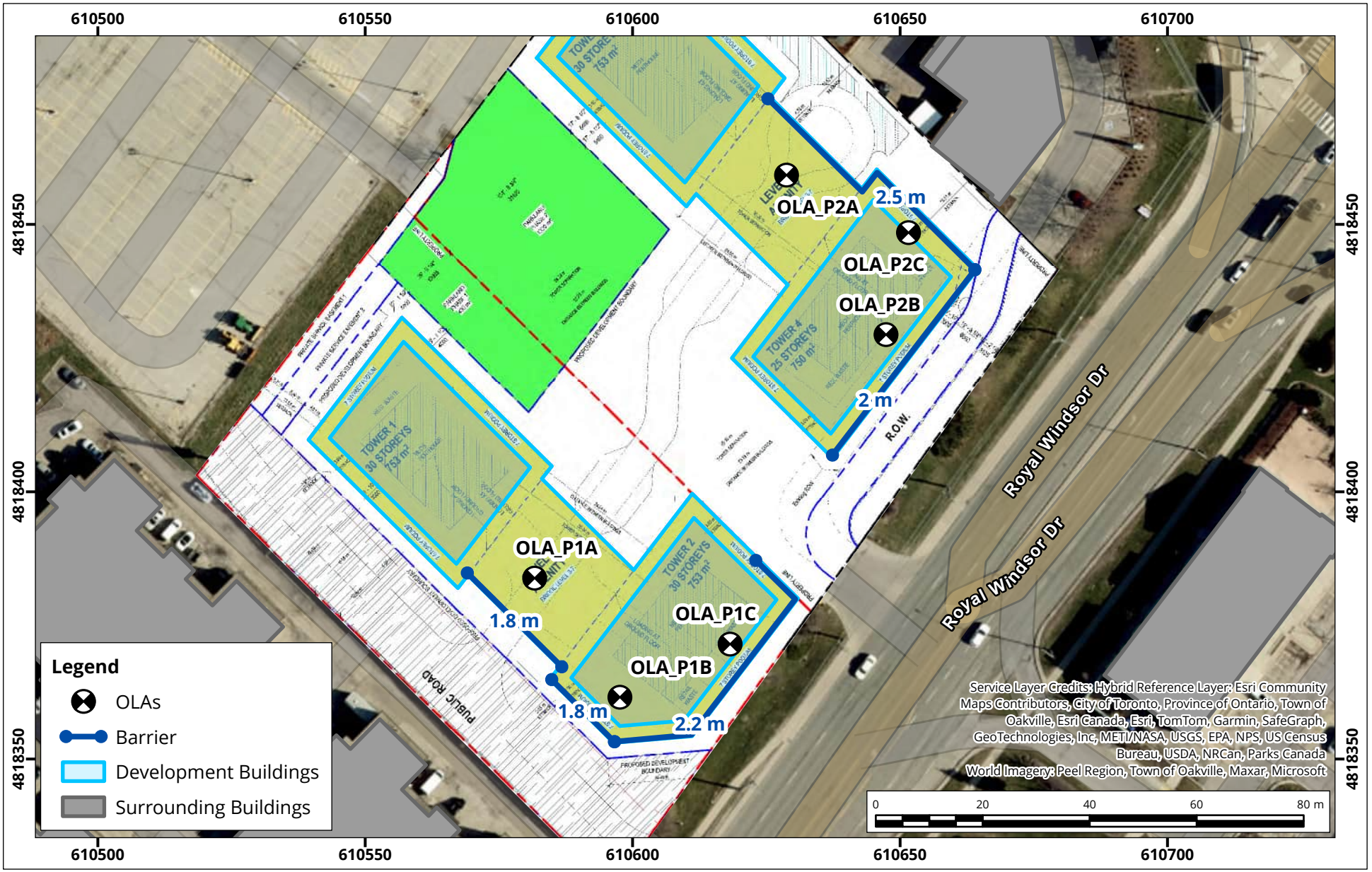
Drawn by: LRC	Figure: 3
Approx. Scale:	1:1,500
Date Revised:	Aug 30, 2024

Map Projection: NAD 1983 UTM Zone 17N

2077 & 2105 Royal Windsor Drive - Mississauga, Ontario

Project #: 2205822

Map Document: J:\2022\2205822\03Worktems\20EnvironmentalNoise\Analysis\RoyalWindsorDr_2077to2105\RoyalWindsorDr_2077to2105.aprx



Outdoor Living Areas Mitigation to 55 dBA

Recommended Barrier Geometry and Height to meet 55 dBA

True North

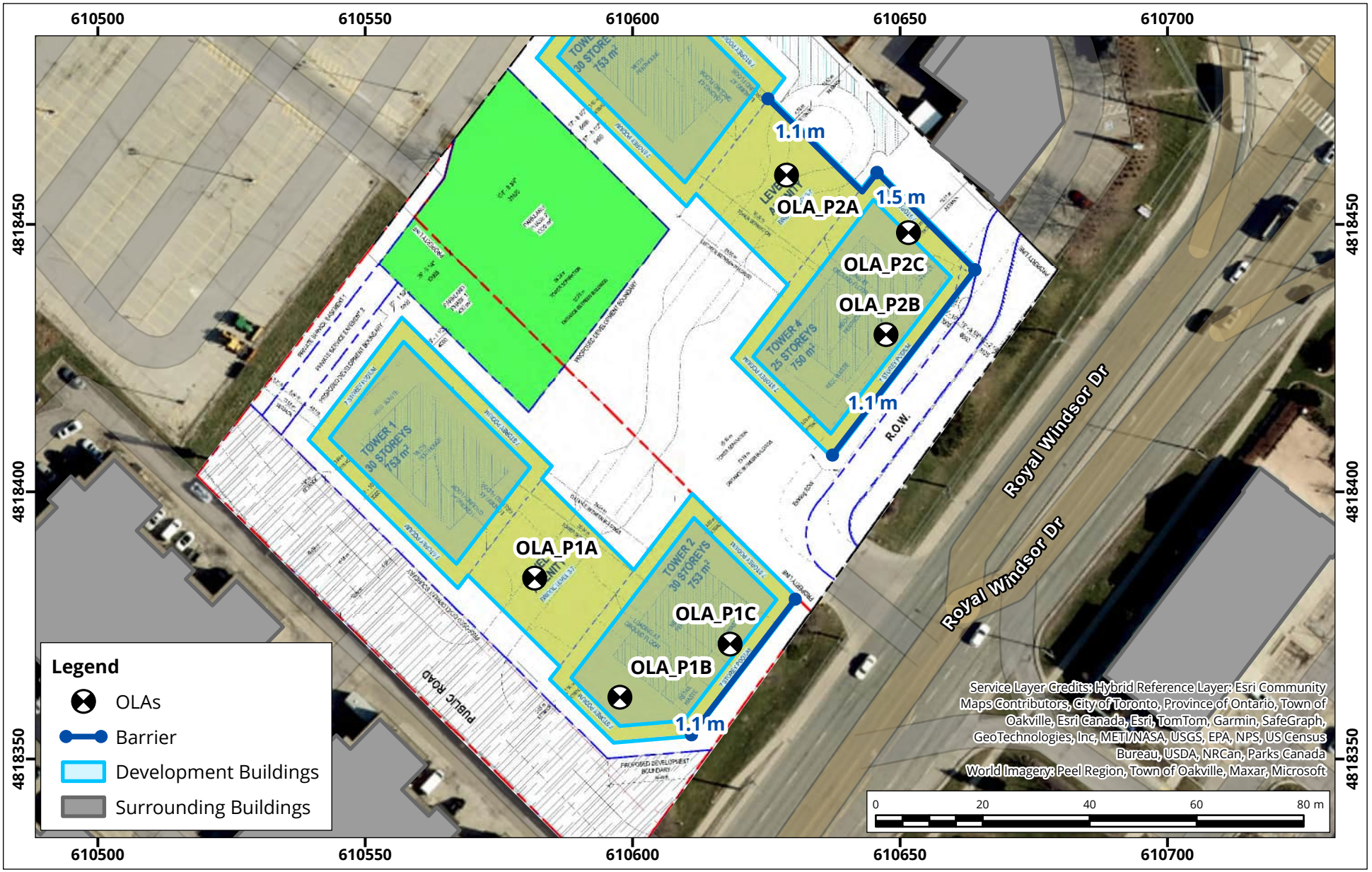
Drawn by: LRC	Figure: 4.1
Approx. Scale:	1:1,000
Date Revised:	Sep 5, 2024

Map Projection: NAD 1983 UTM Zone 17N

2077 & 2105 Royal Windsor Drive - Mississauga, Ontario

Project #: 2205822

Map Document: J:\2022\2205822\03Worktems\20EnvironmentalNoiseAnalysis\RoyalWindsorDr_2077to2105\RoyalWindsorDr_2077to2105.aprx



Outdoor Living Areas Mitigation to 60 dBA

Recommended Barrier Geometry and Height to meet 60 dBA

True North

Drawn by: LRC	Figure: 4.2
Approx. Scale:	1:1,000
Date Revised:	Sep 5, 2024

Map Projection: NAD 1983 UTM Zone 17N

2077 & 2105 Royal Windsor Drive - Mississauga, Ontario

Project #: 2205822

Map Document: J:\2022\2205822\03Worktems\20EnvironmentalNoiseAnalysis\RoyalWindsorDr_2077to2105\RoyalWindsorDr_2077to2105.aprx

APPENDIX A

APPENDIX A: CRITERIA

Warning clauses are recommended to be included on all development agreements, offers of purchase and agreements of purchase and sale or lease. Warning clauses may be used individually or in combination.

The following warning clauses are recommended based on the applicable guidelines; however, wording may be modified/customized during consultation with the planning authority to best suit the proposed development:

A.1 Transportation Sources

Guidance from the Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300 Environmental Noise Guideline was used to assess environmental noise generated by transportation-related sources. There are three aspects to consider, which include the following:

i. Transportation source sound levels in indoor living areas (living rooms and sleeping quarters), which determines building façade elements (windows, exterior walls, doors) sound insulation design recommendations.
ii. Transportation source sound levels at the plane of the window, which determines air-conditioning and ventilation system recommendations and associated warning clauses which inform the future occupants that windows and doors must be closed in order to meet the indoor sound level criteria.
iii. Transportation source sound levels in Outdoor Living Areas (OLAs), which determines OLA noise mitigation and related warning clause recommendations.

A.1.1 Road and Rail

A.1.1.1 Indoor Sound Level Criteria

For assessing sound originating from transportation sources, NPC-300 defines sound level criteria as summarized in **Table 1** for indoor areas of sensitive uses. The specified values are maximum sound levels and apply to the indicated indoor spaces with the windows and doors closed.

Table 1: Indoor Sound Level Criteria for Road and Rail Sources

Type of Space	Source	Sound Level Criteria (Indoors)	
		Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
Living Quarters Examples: Living, dining and den areas of residences, hospitals, nursing homes, schools and daycare centres	**Road**	45 dBA	
	Rail	40 dBA	
Sleeping Quarters	**Road**	45 dBA	40 dBA
	Rail	40 dBA	35 dBA

NPC-300 also provides guidelines for acceptable indoor sound levels that are extended to land uses and developments which are not normally considered noise sensitive. The guideline sound level criteria presented in **Table 2** are provided to inform good-practice design objectives.

Table 2: Supplementary Indoor Sound Level Criteria for Road and Rail Sources

Type of Space	Source	Sound Level Criteria (Indoors)	
		Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
General offices, reception areas, retail stores, etc.	**Road**	50 dBA	-
	Rail	45 dBA	-
Theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc.	**Road**	45 dBA	-
	Rail	40 dBA	-
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	**Road**	-	40 dBA
	Rail	-	35 dBA
Sleeping quarters of hotels/motels	**Road**	-	45 dBA
	Rail	-	40 dBA

A.1.1.2 Outdoor Living Areas (OLAs)

Outdoor Living Areas (OLAs) would include outdoor areas intended and designed for the quiet enjoyment of the outdoor environment and which are readily accessible from the building.

OLAs may include any common outdoor amenity spaces associated with a multi-unit residential development (e.g. courtyards, roof-top terraces), and/or private backyards and terraces with a minimum depth of 4m provided they are the only outdoor living area for the occupant. The sound level criteria for outdoor living areas is summarized in **Table 3**.

Table 3: Sound Level Criteria – Outdoor Living Area

Assessment Location	Sound Level Criteria (Outdoors)	
	Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
Outdoor Living Area (OLA) (Combined Road and Rail)	55 dBA	-

A.1.1.3 Outdoor and Plane of Window Sound Levels

In addition to the sound level criteria, noise control measures and requirements for ventilation and warning clauses requirements are recommended for residential land-uses based on predicted transportation source sound levels incident in the plane of window at bedrooms and living/dining rooms, and/or at outdoor living areas. These recommendations are summarized in **Table 4** below.

Table 4: Ventilation, Building Component, and Warning Clauses Recommendations for Road/Rail Sources

Assessment Location	Transportation Sound Level (Outdoors)		Recommendations
	Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h	
Plane of Window (Road)	> 65 dBA	> 60 dBA	Installation of air conditioning to allow windows to remained closed. The sound insulation performance of building components must be specified and designed to meet the indoor sound level criteria. Warning clause "Type D" is recommended.
	> 55 dBA	> 50 dBA	Applicable for low and medium density development: Forced-air ventilation system to allow for the future installation of air-conditioning. Warning clause "Type C" is recommended. Applicable for high density development: Air conditioning to allow windows to remained closed. Warning clause "Type D" is recommended.
Plane of Window (Rail [1, 2])	> 60 dBA	> 55 dBA	The acoustical performance of building façade components should be specified such that the indoor sound level limits are predicted to be achieved. Warning clause "Type D" is recommended.
	> 60 dBA ($L_{eq,\ 24hr}$) and < 100m from tracks		Exterior walls consisting of a brick veneer or masonry equivalent for the first row of dwellings. Warning clause "Type D" is recommended.
OLAs (Combined Road and Rail [3])	≤ 60 dBA > 55 dBA	-	If sound levels are predicted to exceed 55 dBA, but are less than 60 dBA, noise controls may be applied to reduce the sound level to 55 dBA. If noise control measures are not provided, a warning clause "Type A" is recommended.
	> 60 dBA	-	Noise controls (barriers) should be implemented to meet the 55 dBA criterion. If mitigation is not feasible to meet the 55 dBA criterion for technical, economic or administrative reasons, an exceedance of 5 dB may be acceptable (to a maximum sound level of 60 dBA). In this case a warning clause "Type B" would be recommended.

Notes:

1. Whistle noise is included (if applicable) in the determination of the sound level at the plane of window.
2. Some railway companies (e.g. CN, CP) may require that the exterior walls include a brick veneer or masonry equivalent for the façade facing the railway line, regardless of the sound level.
3. Whistle noise is not included in the determination of the sound level at the OLA.

A.1.1.4 Rail Layover Sites

NPC-300 provides a sound level limit for rail layover sites to be the higher of the background sound level or 55 dBA $L_{eq,1\text{-}hr,}$ for any one-hour period.

A.2 Stationary Sources

A.2.1 NPC-300 Sound Level Criteria – Stationary Sources

Guidance from the MECP NPC-300 Environmental Noise Guideline is used to assess environmental noise generated by stationary sources, for example industrial and commercial facilities.

Noise from stationary sources is treated differently from transportation sources and requires sound levels be assessed for the predictable worst-case one-hour average sound level (L_{eq}) for each period of the day. For assessing sound originating from stationary sources, NPC-300 defines sound level criteria for two types of Points of Reception (PORs): outdoor and plane of window.

The assessment criteria for all PORs is the higher of either the exclusion limit per NPC-300 or the minimum background sound level that occurs or is likely to occur at a POR. The applicable exclusion limit is determined based on the level of urbanization or "Class" of the area. The NPC-300 exclusion limits for continuously operating stationary sources are summarized in **Table 5**.

Table 5: NPC-300 Exclusion Limits – Continuous and Quasi-Steady Impulsive Stationary Sources (LAeq-1hr)

Time Period	Class 1 Area		Class 2 Area		Class 3 Area		Class 4 Area	
	Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window
Daytime 0700-1900h	50 dBA	50 dBA	50 dBA	50 dBA	45 dBA	45 dBA	55 dBA	60 dBA
Evening 1900-2300h	50 dBA	50 dBA	45 dBA	50 dBA	40 dBA	40 dBA	55 dBA	60 dBA
Nighttime 2300-0700h	--	45 dBA	--	45 dBA	--	40 dBA	--	55 dBA

Notes:

1. The applicable sound level criterion is the background sound level or the exclusion limit, whichever is higher.
2. Class 1, 2 and 3 sound level criteria apply to a window that is assumed to be open.
3. Class 4 area criteria apply to a window that is assumed closed. Class 4 area requires formal designation by the land-use planning authority.
4. Sound level criteria for emergency backup equipment (e.g. generators) operating in non-emergency situations such as testing or maintenance are 5 dB greater than the applicable sound level criteria for stationary sources.

For impulsive sound, other than quasi-steady impulsive sound, from a stationary source, the sound level criteria at a POR is expressed in terms of the Logarithmic Mean Impulse Sound Level (L_{LM}), and is summarized in **Table 6**.

Table 6: NPC-300 Exclusion Limits – Impulsive Stationary Sources (L_{LM})

Time Period	Number of Impulses in Period of One-Hour	Class 1 and 2 Areas		Class 3 Areas		Class 4 Areas	
		Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window
Daytime (0700-2300h)	9 or more	50 dBAI	50 dBAI	45 dBAI	45 dBAI	55 dBAI	60 dBAI
Nighttime (2300–0700h)		-	45 dBAI	-	40 dBAI	-	55 dBAI
Daytime (0700-2300h)	7 to 8	55 dBAI	55 dBAI	50 dBAI	50 dBAI	60dBAI	65 dBAI
Nighttime (2300–0700h)		-	50 dBAI	-	45 dBAI	-	60 dBAI
Daytime (0700-2300h)	5 to 6	60 dBAI	60 dBAI	55 dBAI	55 dBAI	65 dBAI	70 dBAI
Nighttime (2300–0700h)		-	55 dBAI	-	50 dBAI	-	65 dBAI
Daytime (0700-2300h)	4	65 dBAI	65 dBAI	60 dBAI	60 dBAI	70 dBAI	75 dBAI
Nighttime (2300–0700h)		-	60 dBAI	-	55 dBAI	-	70 dBAI
Daytime (0700-2300h)	3	70 dBAI	70 dBAI	65 dBAI	65 dBAI	75 dBAI	80 dBAI
Nighttime (2300–0700h)		-	65 dBAI	-	60 dBAI	-	75 dBAI
Daytime (0700-2300h)	2	75 dBAI	75 dBAI	70 dBAI	70 dBAI	80 dBAI	85 dBAI
Nighttime (2300–0700h)		-	70 dBAI	-	65 dBAI	-	80 dBAI
Daytime (0700-2300h)	1	80 dBAI	80 dBAI	75 dBAI	75 dBAI	85 dBAI	90 dBAI
Nighttime (2300–0700h)		-	75 dBAI	-	70 dBAI	-	85 dBAI

Notes:

1. The applicable sound level criterion is the background sound level or the exclusion limit, whichever is higher.

A.2.2 D-Series Guidelines

The MECP D-series guidelines (MOE, 1995) provide direction for land use planning to maximize compatibility of industrial uses with adjacent land uses. The goal of Guideline D-6 is to minimize encroachment of sensitive land uses on industrial facilities and vice versa, in order to address potential incompatibility due to adverse effects such as noise, odour and dust.

For each class of industry, the guideline provides an estimate of potential influence area and states that this influence area shall be used in the absence of the recommended technical studies. Guideline D-6 also recommends a minimum separation distance between each class of industry and sensitive land uses (see **Table 7**). Section 4.10 of D-6 identifies exceptional circumstances with respect to redevelopment, infill and mixed-use areas. In these cases, the guideline suggests that separation distances at, or less than, the recommended minimum separation distance may be acceptable if a justifying impact assessment is provided.

Table 7: Summary of Guideline D-6

Industry Class	Definition	Potential Influence Area	Recommended Minimum Separation Distance (property line to property line)
Class I	Small scale, self-contained, daytime only, infrequent heavy vehicle movements, no outside storage.	70 m	20 m
Class II	Medium scale, outdoor storage of wastes or materials, shift operations and frequent heavy equipment movement during the daytime.	300 m	70 m
Class III	Large scale, outdoor storage of raw and finished products, large production volume, continuous movement of products and employees during daily shift operations.	1000 m	300 m

Guideline D-6 provides criteria for classifying industrial land uses, based on their outputs, scale of operations, processes, schedule, and intensity of operations. **Table 8** provides the classification criteria and examples.

Table 8: Guideline D-6 Industrial Categorization Criteria

Criteria	Class I	Class II	Class III
Outputs	• Sound not audible off property • Infrequent dust and/ or odour emissions and not intense • No ground-borne vibration	• Sound occasionally audible off property • Frequent dust and/ or odour emissions and occasionally intense • Possible ground-borne vibration	• Sound frequently audible off property • Persistent and intense dust and/ or odour emissions • Frequent ground-borne vibration
Scale	• No outside storage • Small scale plant or scale is irrelevant in relation to all other criteria	• Outside storage permitted • Medium level of production	• Outside storage of raw and finished products • Large production levels
Process	• Self-contained plant or building which produces / stores a packaged product • Low probability of fugitive emissions	• Open process • Periodic outputs of minor annoyance • Low probability of fugitive emissions	• Open process • Frequent outputs of major annoyances • High probability of fugitive emissions
Operation / Intensity	• Daytime operations only • Infrequent movement of products and/or heavy trucks	• Shift operations permitted • Frequent movements of products and/or heavy trucks with majority of movements during daytime hours	• Continuous movement of products and employees • Daily shift operations permitted
Examples	• Electronics Manufacturing • Furniture refinishing • Beverage bottling • Auto parts • Packaging services • Dairy distribution • Laundry and linen supply	• Magazine printing • Paint spray booths • Metal command • Electrical production • Dairy product manufacturing • Feed packing plant	• Paint and varnish manufacturing • Organic chemicals manufacturing • Breweries • Solvent recovery plant • Soap manufacturing • Metal manufacturing

APPENDIX B

APPENDIX B: WARNING CLAUSES

B.1 Transportation Sources

NPC-300 Type A: Recommended to address surface transportation sound levels in OLAs if sound level is in the range of >55 dBA but ≤ 60 dBA, and noise controls have not been provided.

"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."

NPC-300 Type B: Recommended to address surface transportation sound levels in OLAs if the sound level is in the range of >55 dBA but ≤ 60 dBA, and noise controls have been provided. Recommended to address outdoor aircraft sound levels ≥NEF 30.

"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."

NPC-300 Type C: Applicable for low and medium density developments only, recommended to address transportation sound levels at the plane of window.

"This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."

NPC-300 Type D: Recommended to address transportation sound levels at the plane of window.

"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."

Proximity to Railway Line: Metrolinx/CN/CP/VIA Warning Clause for developments that are within 300 metres of the right-of-way

"Warning: [Canadian National Railway Company] [Metrolinx / GO] [Canadian Pacific Railway Company] [VIA Rail Canada Inc.] or its assigns or successors in interest has or have a right-of-way within 300 metres from the land the subject hereof. There may be alterations to or expansions of the rail facilities on such right-of-way in the future including the possibility that the railway or its assigns or successors as aforesaid may expand its operations, which expansion may affect the living environment of the residents in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating measures in the design of the development and individual dwelling(s). CNR/Metrolinx/GO/CPR/VIA will not responsible for any complaints or claims arising from use of such facilities and/or operations on, over or under the aforesaid right-of-way."

B.2 Stationary Sources

NPC-300 Type E: Recommended to address proximity to commercial/industrial land-use

"Purchasers/tenants are advised that due to the proximity of the adjacent industrial/commercial land-uses, noise from the industrial/commercial land-uses may at times be audible."

NPC-300 Type F: Recommended to for Class 4 Area Notification

"Purchasers/tenants are advised that sound levels due to the adjacent industry (facility) (utility) are required to comply with sound level limits that are protective of indoor areas and are based on the assumption that windows and exterior doors are closed. This dwelling unit has been supplied with a ventilation/air conditioning system which will allow windows and exterior doors to remain closed."

APPENDIX C

APPENDIX C: NOISE MITIGATION GUIDANCE

C.1 Acoustic/Noise Barrier

Generally, noise controls to attenuate transportation sound levels at Outdoor Living Areas (OLAs) would consist of the implementation of acoustic/noise barriers with materials that would meet the guidance included in NPC-300, for example:

- A wall, berm, wall/berm combination or similar structure, used as a noise control measure, and high enough to break the line-of-sight between the source and the receptor.
- The minimum surface density (face weight) is 20 kg/m^2
    - Many materials could satisfy the surface density requirement, e.g. wood, glass, concrete, Plexiglas, Acrylite.
    - The required thickness can be determined by dividing the 20 kg/m^2 face weight by the material density (kg/m^3). Typically, this would imply:
        - 50 mm (2”) thickness of wood
        - 13 mm (0.5") thickness of lighter plastic (like Plexiglas or PVC)
        - 6 mm (0.25") thickness of heavier material (like aluminum, glass, concrete)
- The barrier should be structurally sound, appropriately designed to withstand wind and snow load, and constructed without cracks or surface gaps. Joints between panels may need to be overlapped to ensure surfaces are free of gaps, particularly for wood construction.
- Any gaps under the barrier that are necessary for drainage purposes should be minimized and localized, so that the acoustical performance of the barrier is maintained.
- If a sound absorptive face is to be included in the barrier design, the minimum noise reduction coefficient is recommended to be NRC 0.7.

C.2 Building Ventilation and Air Conditioning

The use of air conditioning itself is not a noise control measure; however, it allows for windows and doors to remain closed, thereby reducing the indoor sound levels.

NPC-300 provides the following guidance with respect to implementation of building ventilation and air conditioning:

a. the noise produced by the proposed ventilation system in the space served does not exceed 40 dBA. In practice, this condition usually implies that window air conditioning units are not acceptable;
b. the ventilation system complies with all national, provincial and municipal standards and codes;
c. the ventilation system is designed by a heating and ventilation professional; and
d. the ventilation system enables the windows and exterior doors to remain closed.

Air conditioning systems also need to comply with Publication NPC-216, and/or any local municipal noise by-law that has provisions relating to air conditioning equipment.

APPENDIX D

APPENDIX D: TRANSPORATION SOURCE VOLUMES

D.1 Rail Volumes

Freight Rail Line Class	Characteristics	Freight Train Modelling Assumptions
Principal Main Line	• Traffic volume generally exceeds 10 trains per day • High speeds, usually exceeding 80 kph (50 mph) • Includes heavy trains with 3 or 4 locomotives per train, commuter and passenger trains	• Assume one freight train per hour, or 16 trains per 16-hour day and 8 trains per 8-hour night (24 total per 24 hours) • Continuously welded rail • 100 kph speed • Assume 4 locomotives per train
Secondary Main Line	• Traffic volume generally exceeds 10 trains per day • High speeds, usually exceeding 80 kph (50 mph) • Trains generally of light to moderate weight with 3 or 4 locomotives per train • Majority of traffic may be commuter and passenger trains	• Assume one freight train per 2 hours, or 8 trains per 16-hour day and 4 trains per 8-hour night (12 total per 24 hours) • Continuously welded rail • 80 kph speed • Assume 3 locomotives per train
Principal Branch Line	• Regular scheduled traffic, usually less than 5 trains per day • Low speeds, generally limited to 50 kph (30 mph) • Trains generally of light to moderate weight with 1 or 2 locomotives per train but may include heavier trains with more units	• Assume one freight train per 4 hours, or 4 trains per 16-hour day and 2 trains per 8-hour night (6 total per 24 hours) • Continuously welded rail • 50 kph speed • Assume 2 locomotives per train
Secondary Branch Line	• Intermittent, unscheduled traffic, usually less than 1 train per day • Low speeds, generally limited to 50 kph (30 mph) • Trains generally of light to moderate weight with 1 locomotive per train	• Assume one freight train per 8 hours, or 2 trains per 16-hour day and 1 train per 8-hour night (3 total per 24 hours) • Continuously welded rail • 50 kph speed • Assume 1 locomotive per train
Spur Line	• Unscheduled traffic on a demand basis • Low speeds, limited to 24kph (15 mph) • Trains generally of light to moderate weight with 1 locomotive per train	• Assume one freight train per 12 hours, or 1 train per 16-hour day and 1 train per 8-hour night (2 total per 24 hours) • Jointed rail • 24 kph speed • Assume 1 locomotive per train
NOTES:	1. Canadian Rail Atlas has been used to determine rail line classification and ownership (i.e., CN/CP/other) 2. Commuter (GO) and passenger (VIA) rail volumes are based on data received from the responsible authority.	

Lorenzo Carboni

From: Amy Patenaude
Sent: Thursday, September 1, 2022 12:01 PM
To: Lorenzo Carboni
Subject: FW: 2077 & 2105 Royal Windsor Drive - Traffic Data Request RWDI Project #2205822

SUMMER HOURS: Our organization is moving to summer hours from May 30 through September 2. I will be finished work at 12:30 most Friday afternoons during this time. Enjoy your summer.

Amy Patenaude | Senior Technical/Administrative Assistant
Americas Noise/Acoustics/Vibration
RWDI
Direct Line: 226-314-1280

From: Rail Data Requests <RailDataRequests@metrolinx.com>
Sent: September 1, 2022 11:51 AM
To: Amy Patenaude <Amy.Patenaude@rwdi.com>
Subject: RE: 2077 & 2105 Royal Windsor Drive - Traffic Data Request RWDI Project #2205822

Hi Amy,

Further to your request dated August 31, 2022, the subject lands (2077 & 2105 Royal Windsor Drive, Toronto) are located within 300 metres of the Metrolinx Oakville Subdivision (which carries Lakeshore West GO rail service).

It's anticipated that GO rail service on this Subdivision will be comprised of diesel and electric trains. The GO rail fleet combination on this Subdivision will consist of up to 2 locomotives and 12 passenger cars. The typical GO rail weekday train volume forecast near the subject lands, including both revenue and equipment trips is in the order of 255 trains. The planned detailed trip breakdown is listed below:

	1 Diesel Locomotive	2 Diesel Locomotives	1 Electric Locomotive	2 Electric Locomotives		1 Diesel Locomotive	2 Diesel Locomotives	1 Electric Locomotive	2 Electric Locomotives
Day (0700-2300)	60	11	101	42	Night (2300-0700)	8	4	21	8

The current track design speed near the subject lands is 95 mph (153 km/h).

There are no *anti-whistling by-laws* in affect near the subject lands.
With respect to future electrified rail service, Metrolinx is committed to finding the most sustainable solution for electrifying the GO rail network and we are currently working towards the next phase.
Options have been studied as part of the Transit Project Assessment Process (TPAP) for the GO Expansion program, currently in the procurement phase. The successful proponent team will be responsible for selecting and delivering the right trains and infrastructure to unlock the benefits of GO Expansion. The contract is in a multi-year procurement process and teams have submitted their bids to Infrastructure Ontario and Metrolinx for evaluation and contract award. GO Expansion construction will get underway in late 2022 or 2023.
However, we can advise that train noise is dominated by the powertrain at lower speeds and by the wheel- track interaction at higher speeds. Hence, the noise level and spectrum of electric trains is expected to be very similar at higher speeds, if not identical, to those of equivalent diesel trains.
Given the above considerations, it would be prudent at this time, for the purposes of acoustical analyses for development in proximity to Metrolinx corridors, to assume that the acoustical characteristics of electrified and diesel trains are equivalent. In light of the aforementioned information, acoustical models should employ diesel train parameters as the basis for analyses. We

anticipate that additional information regarding specific operational parameters for electrified trains will become available in the future once the proponent team is selected.
Operational information is subject to change and may be influenced by, among other factors, service planning priorities, operational considerations, funding availability and passenger demand.

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

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

Regards,
Tara

Tara Kamal Ahmadi
Junior Analyst
Third Party Projects Review, Capital Projects Group
Metrolinx | 20 Bay Street | Suite 600 | Toronto | Ontario | M5J 2W3

METROLINX

From: Amy Patenaude <Amy.Patenaude@rwdi.com>
Sent: August 31, 2022 2:06 PM
To: Rail Data Requests <RailDataRequests@metrolinx.com>
Cc: Lorenzo Carboni <Lorenzo.Carboni@rwdi.com>
Subject: FW: 2077 & 2105 Royal Windsor Drive - Traffic Data Request RWDI Project #2205822

Good Day,

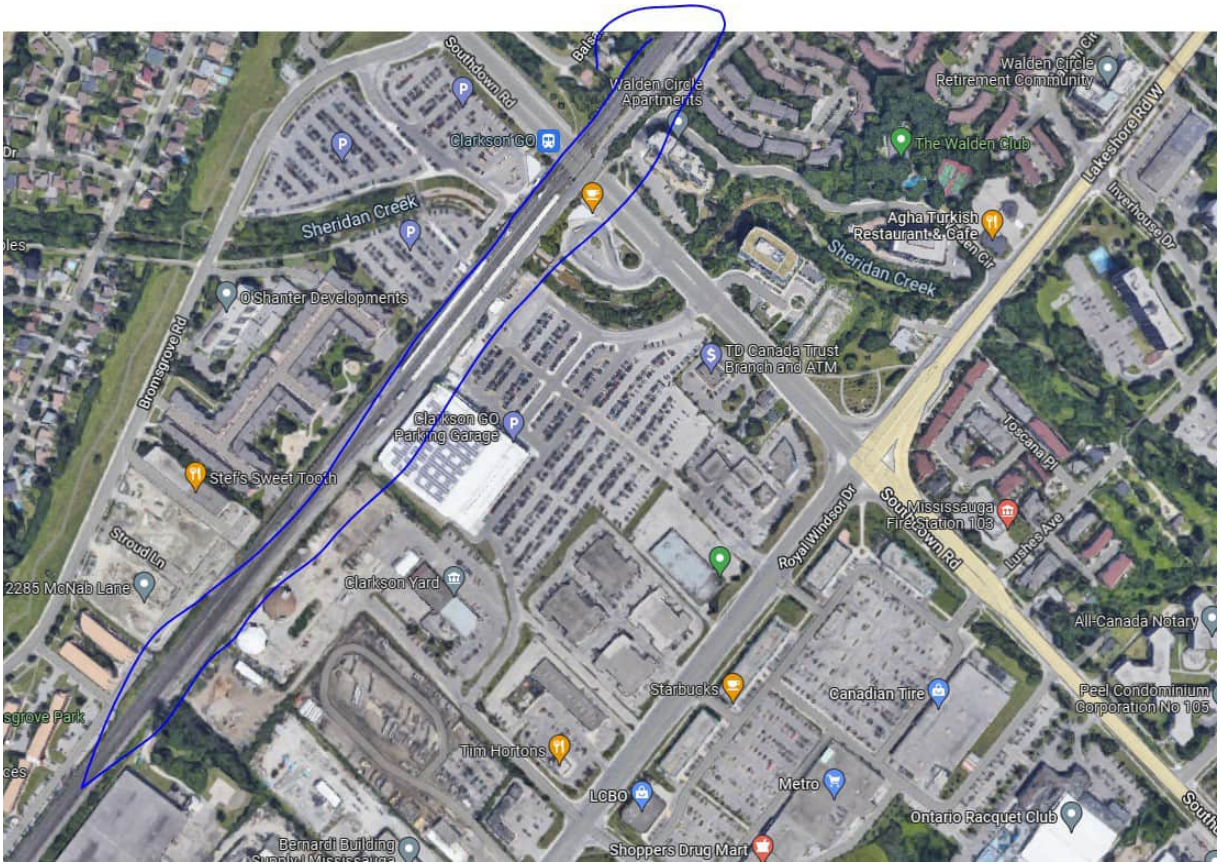
We are a noise study for the above-referenced address and require rail data.

We are looking for:

- Growth rate per annum for a 10-year period
- Day and night train volumes
- Average number of cars per train
- Number of Locomotives per train
- Maximum permissible speed
- Whistles used at crossings in the area
- Type of track (continuously welded, or jointed)
- Any idling of locomotive in the vicinity, and approximate duration of idling

The station involved is Clarkson.

I believe CN also runs freight on this line. If you have any information on that, it would be greatly appreciated.



Thank you.
Amy

SUMMER HOURS: Our organization is moving to summer hours from May 30 through September 2. I will be finished work at 12:30 most Friday afternoons during this time. Enjoy your summer.

Amy Patenaude | Senior Technical/Administrative Assistant
Americas Noise/Acoustics/Vibration
RWDI
600 Southgate Drive, Guelph, ON N1G 4P6 Canada

Direct Line: 226-314-1280 | Fax: (519) 823-1316
rwdi.com

Celebrating 50 years of engineering for the environment

Date:	01-Sep-22

NOISE REPORT FOR PROPOSED DEVELOPMENT

REQUESTED BY:

Name:	Amy Patenaude
Company:	RWDI

PREPARED BY:

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

MISSISSAUGA

Location:	Royal Windsor Dr between Southdown Road and Winston Churchill Blvd. Southdown Road (South Section) between Royal Windsor Dr to Lakeshore Road Southdown Road (North Section) between Royal Windsor Dr to Truscott Dr
ID#	561

ON SITE TRAFFIC DATA

Specific	Street Names				
	Royal Windsor Dr	Southdown Rd (South)	Southdown Rd (North)		
AADT:	38,500	8,200	44,200		
# of Lanes:	4 lanes	2 lanes	4 lanes		
% Trucks:	8%	13%	11.5%		
Medium/Heavy Trucks Ratio:	55/45	55/45	55/45		
Day/Night Split:	90/10	90/10	90/10		
Posted Speed Limit:		60 km/h	60 km/h		
Gradient Of Road:	<2%	<2%	<2%		
Ultimate R.O.W:	35m	35m	35m		

Comments:	Ultimate Traffic Data Only (2041)

APPENDIX E

CLARKSON GO

CRW 2 L.P., CRW 2 G.P. INC.
(c/o Slate Asset Management)

2077 & 2105 Royal Windsor drive
Mississauga ON L5J 1K5

OPA/ZBA SUBMISSION

2024-09-25

Gensler
Architect
150 King Street West
Suite 1400
Toronto ON M5H 1J9
Canada
Tel. 416.601.3890

Lithos
Civil Engineering
150 Bermondsey Rd
Unit 200
Toronto ON M4A 1Y1
Canada
Tel. 416-750-7769

Goodmans
Planning Legal
333 Bay St.
#3400
Toronto ON M5H 2S7
Canada
Tel. 416-979-2211

Janet Rosenberg & Studio Inc.
Landscape Architect
148 Kenwood Ave.
Toronto ON M6C 2S3
Canada
Tel. 416-656-6665

Theakston
Wind Consultant
Glengarry Crescent
Fergus ON N1M 3E2
Canada
Tel. 519-787-2910

LEA
Traffic Consultant
425 University Avenue
Suite 400
Toronto ON M5G 1T6
Canada
Tel. 905-470-0015

Pinchin
Geotechnical Consultant
2360 Meadowpine Blvd
Unit 2
Mississauga ON L5N 6S2
Canada
Tel. 905-363-0678

GSAI
Urban Planners
10 Kingsbridge Garden Circle
Suite 700
Mississauga ON L5R 3K6
Canada
Tel. 905-568-8888

WSP
Air Consultant
2300 Yonge St
Toronto ON M4P 1E4
Canada
Tel. 416-487-5256

Kuntz
Arborist Consultant
1267 Lakeshore W
Oakville ON L6K 0B3
Canada
Tel. 289-837-1871

STATISTICS SUMMARY

STATISTICS - SUMMARY
2024-09-25

GENSLER

	Ratio phase 1	Ratio phase 2	PHASE 1 West Block	Notes	PHASE 2 East Block	Notes	Total		Notes
Site Area							15,148 m²	163,058 SF	related to area number 1 as indicated on diagram below
New Public Road			1,920 m²		N/A		1,920 m²	20,666 SF	
% of Site Area							12.67%		
Proposed development area (Net Site Area)			4,178 m²	related to area number 3 as indicated on diagram below	6,164 m²	related to area number 4 as indicated on diagram below	10,342 m²	111,321 SF	related to area number 2 as indicated on diagram below
Services development area			4,535 m²	related to area number 5 as indicated on diagram below	6,164 m²	related to area number 4 as indicated on diagram below	10,699 m²	115,164 SF	
Parkland Dedication			430 m²		1,320 m²		1,750 m²	18,837 SF	
% of Site Area			2.84%		8.71%		11.55%		
% Net Site Area			10.29%		21.41%		16.92%		
Landscape Open space			1,334 m²		2,704 m²	Sidewalks and paving surfaces	4,038 m²	43,465 SF	
Total GBA			72,527 m²		68,705 m²		141,232 m²	1,520,208 SF	
Gross Building Area (Above ground)			57,152 m²		53,082 m²		110,234 m²	1,186,560 SF	
Gross Building Area (Underground)			15,375 m²		15,623 m²		30,998 m²	333,661 SF	
GFA Total			**49,870 m²**		**45,973 m²**		**95,843 m²**	**1,031,654 SF**	
GFA Residential			48,725 m²		44,728 m²		93,453 m²	1,005,929 SF	
Residential Saleable			45,262 m²		41,616 m²		86,878 m²	935,155 SF	
GFA Non-Residential, "Commercial/Industrial"			723 m²		569 m²		1,292 m²	13,902 SF	
Retail Saleable			669 m²		276 m²		945 m²	10,172 SF	
GFA Live / Work units - "Work"			54 m²		293 m²		347 m²	3,730 SF	
Gross FSI (GFA / Site Area)							6.33		related to area number 1 as indicated on diagram below
Net FSI (GFA / Proposed dev. area)			11.94	related to area number 3 as indicated on diagram below	7.46	related to area number 4 as indicated on diagram below	9.27		related to area number 2 as indicated on diagram below
TOTAL RES + LIVE WORK UNITS			738 UNITS		681 UNITS		1,419 UNITS		
Residential Units			735 UNITS		668 UNITS		1,403 UNITS		
Live / Work Units			3 UNITS		13 UNITS		16 UNITS		
Average unit size			662 SF		667 SF		664 SF		
TOTAL Required Amenity			**4,133 m²**		**3,814 m²**		7,946 m²	85,535 SF	
Contiguous Amenity			**2,066 m²**		**1,907 m²**		3,973 m²	42,768 SF	
Indoor Amenity Required			1,033 m²		953 m²		1,987 m²	21,384 SF	
Outdoor Amenity Required			1,033 m²		953 m²		1,987 m²	21,384 SF	
At grade Required			**2,066 m²**		**1,907 m²**		3,973 m²	42,768 SF	
TOTAL Proposed Contiguous Amenity			**2,716 m²**		**2,798 m²**		5,514 m²	59,353 SF	
Indoor Amenity Proposed			864 m²		849 m²		1,713 m²	18,439 SF	
Outdoor Amenity Proposed			1,852 m²		1,949 m²		3,801 m²	40,914 SF	
TOTAL Proposed at Grade Amenity			0 m²		0 m²		0 m²	0 SF	
Net Retail Area			669 m²		276 m²		945 m²	10,172 SF	
Below Ground Parking Breakdown	Ratio phase 1	Ratio phase 2							
TOTAL Required Parking	n/a	n/a	0		0		0		
TOTAL Proposed Parking	0.36	0.44	**269**		**298**		**567**		
Residential	0.34	0.41	248	4 levels UG	280	approx. 2 1/2 levels UG	528		
Resi. Visitor	0.02	0.02	15	Located on P1	12	Located on P1	27		
Retail	1 per 100 sm	2 per 100 sm	6	Located on P1	6	Located on P1	12		
Per zoning by-law no accessible parking is required.									
The below are included in above totals									
Resi. Accessible Parking			7		8		15		
Resi. Accessible Visitor Parking			1		1		2		
Retail Accessible Parking									
ESVE Residential (20% of resi total)			50		56		106		
ESVE Residential Visitor (10% of resi visitor total)			2		1		3		
Bike Parking									
TOTAL Required Long Term Bike Parking			**444**		**410**		**854**		
Residential		0.6	443		409		852		
Retail		0.1 per 100 sm	1		1		2		
TOTAL Required Short Term Bike Parking			**39**		**37**		**76**		
Residential		0.05	37		35		72		
Retail		0.2 per 100 sm	2		2		4		
TOTAL Proposed Long Term Bike Parking			**444**		**410**		**854**		
Residential			443		409		852		
Retail			1		1		2		
TOTAL Proposed Short Term Bike Parking			**58**		**37**		**95**		
Residential			56		36		92		
Retail			2		1		3		

Notes: GBA includes all above grade construction
Interior Amenity is provided on podium roof
Exterior amenity is provided on podium roof

SITE AREA DIAGRAM

AREA STATISTICS

STATISTICS - AREAS
2024-09-25

GENSLER

PHASE 1 (WEST BLOCK)

LEVEL	PROGRAM	TOWER 1 GBA (SF)	TOWER 1 GBA (m2)	TOWER 1 GFA (SF)	TOWER 1 GFA (m2)	TOWER 1 SALEABLE (SF)	TOWER 1 SALEABLE (m2)	RETAIL RENTABLE	LIVE / WORK	TOWER 2 GBA (SF)	TOWER 2 GBA (m2)	TOWER 2 GFA (SF)	TOWER 2 GFA (m2)	TOWER 2 SALEABLE (SF)	TOWER 2 SALEABLE (m2)
L36	MECH PENTHOUSE	8,115 SF	754 m²												
L35	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²								
L34	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²								
L33	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²								
L32	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²								
L31	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²				
L30	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L29	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L28	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L27	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L26	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L25	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L24	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L23	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L22	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L21	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L20	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L19	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L18	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L17	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L16	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L15	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L14	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L13	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L12	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L11	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L10	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L9	RESIDENTIAL	8,115 SF	754 m²	7,575 SF	704 m²	7,068 SF	657 m²			8,349 SF	776 m²	7,791 SF	724 m²	7,249 SF	673 m²
L8	RESIDENTIAL	7,548 SF	701 m²	7,008 SF	651 m²	6,503 SF	604 m²			5,785 SF	537 m²	5,200 SF	483 m²	4,340 SF	403 m²
SUBTOTAL		**234,768 SF**	**21,811 m²**	**211,533 SF**	**19,652 m²**	**197,339 SF**	**18,333 m²**			**197,812 SF**	**18,377 m²**	**176,602 SF**	**16,407 m²**	**163,818 SF**	**15,219 m²**
L7	AMENITY	10,441 SF	970 m²												
L6	RESIDENTIAL (w/ juliet balcony)	29,536 SF	2,744 m²	26,323 SF	2,445 m²	24,262 SF	2,254 m²								
L5	RESIDENTIAL (w/ balcony)	29,536 SF	2,744 m²	27,504 SF	2,555 m²	25,443 SF	2,364 m²								
L4	RESIDENTIAL (w/ juliet balcony)	29,536 SF	2,744 m²	27,504 SF	2,555 m²	25,443 SF	2,364 m²								
L3	RESIDENTIAL (w/ balcony)	29,536 SF	2,744 m²	27,504 SF	2,555 m²	25,443 SF	2,364 m²								
L2	RESIDENTIAL (w/ juliet balcony)	29,536 SF	2,744 m²	27,504 SF	2,555 m²	25,443 SF	2,364 m²								
L1	RETAIL / LOBBY	24,477 SF	2,274 m²	12,320 SF	1,145 m²	1,163 SF	108 m²	7,201 SF	1,163 SF						
SUBTOTAL		**182,598 SF**	**16,964 m²**	**148,658 SF**	**13,811 m²**	**127,197 SF**	**11,817 m²**	**7,201 SF**	**1,163 SF**						
Subtotal residential only		158,121 SF	14,690 m²	136,339 SF	12,666 m²	126,034 SF	11,709 m²								

	GBA	GFA TOTAL	SALEABLE	RETAIL RENTABLE	LIVE / WORK
PHASE 1 TOTAL (ABOVE GRADE)	**615,178 SF** 57,152 m²	**536,793 SF** 49,870 m²	**488,354 SF** 45,370 m²	**7,201 SF** 669 m²	**1,163 SF** 108 m²
DEVELOPMENT TOTAL (ABOVE GRADE)	**1,186,550 SF** 110,234 m²	**1,031,646 SF** 95,843 m²	**942,607 SF** 87,571 m²	**10,172 SF** 945 m²	**7,459 SF** 693 m²

BELOW GRADE	PROGRAM	GBA (SF)	GBA (m2)
LL1	PARKING / LOCKERS	41,373 SF	3,844 m²
LL2	PARKING / LOCKERS	41,373 SF	3,844 m²
LL3	PARKING / LOCKERS	41,373 SF	3,844 m²
LL4	PARKING / LOCKERS	41,373 SF	3,844 m²
SUBTOTAL		**165,493 SF**	**15,375 m²**

PHASE 1 TOTAL (ABOVE + BELOW GRADE)	**780,671 SF** 72,527 m²
DEVELOPMENT TOTAL (BELOW GRADE)	**333,658 SF** 30,998 m²
DEVELOPMENT TOTAL (ABOVE + BELOW GRADE GBA)	**1,520,208 SF** 141,232 m²

Calculation Definitions

GFA	The sum of the areas of each storey of a building above or below establised grade, measured from the exterior of outside walls of the biulding including floor area occupied by interior walls but excluding any part of the building used for mechanical floor area, stairwells, elevators, motor vehicle parking, bicycle parking, storage lockers, below grade storage, any enclosed area used for the collection or storage of disposable or recyclable waste generated within the building, common facilities for the use of the residents of the building, a day care and amenity area.
GBA	Entire floor Plate to the exterior of the outside wall
Saleable	Area of residental units and Live / Work Units
Retail Rentable	Area of retail space
Efficiency	Saleable area / GBA
Efficiency Podium	Saleable area + Retail area / GBA
AVG unit size	Saleable area / Total unit count

PHASE 2 (EAST BLOCK)

LEVEL	PROGRAM	TOWER 3 GBA (SF)	TOWER 3 GBA (m2)	TOWER 3 GFA (SF)	TOWER 3 GFA (m2)	TOWER 3 SALEABLE (SF)	TOWER 3 SALEABLE (m2)	RETAIL RENTABLE	LIVE / WORK	TOWER 4 GBA (SF)	TOWER 4 GBA (m2)	TOWER 4 GFA (SF)	TOWER 4 GFA (m2)	TOWER 4 SALEABLE (SF)	TOWER 4 SALEABLE (m2)
L36	MECH PENTHOUSE	8,115 SF	754 m²												
L35	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L34	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L33	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L32	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L31	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L30	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L29	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L28	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L27	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²								
L26	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²				
L25	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L24	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L23	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L22	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L21	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L20	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L19	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L18	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L17	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L16	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L15	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L14	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L13	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L12	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L11	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L10	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L9	RESIDENTIAL	8,115 SF	754 m²	7,572 SF	703 m²	7,068 SF	657 m²			8,080 SF	751 m²	7,530 SF	700 m²	6,950 SF	646 m²
L8	RESIDENTIAL	7,144 SF	664 m²	6,601 SF	613 m²	6,095 SF	566 m²			3,892 SF	362 m²	3,322 SF	309 m²	2,617 SF	243 m²
SUBTOTAL		**234,364 SF**	**21,773 m²**	**211,045 SF**	**19,607 m²**	**196,931 SF**	**18,295 m²**			**149,332 SF**	**13,873 m²**	**131,332 SF**	**12,201 m²**	**120,767 SF**	**11,220 m²**
L7	AMENITY	10,280 SF	955 m²												
L6	RESIDENTIAL (w/ juliet balcony)	30,433 SF	2,827 m²	25,117 SF	2,333 m²	25,026 SF	2,325 m²								
L5	RESIDENTIAL (w/ balcony)	30,433 SF	2,827 m²	28,517 SF	2,649 m²	26,308 SF	2,444 m²								
L4	RESIDENTIAL (w/ juliet balcony)	30,433 SF	2,827 m²	28,517 SF	2,649 m²	26,308 SF	2,444 m²								
L3	RESIDENTIAL (w/ balcony)	30,433 SF	2,827 m²	28,460 SF	2,644 m²	26,308 SF	2,444 m²								
L2	RESIDENTIAL (w/ juliet balcony)	30,433 SF	2,827 m²	28,460 SF	2,644 m²	26,308 SF	2,444 m²								
L1	RETAIL / LOBBY	25,231 SF	2,344 m²	13,405 SF	1,245 m²	6,297 SF	585 m²	2,971 SF	6,297 SF						
SUBTOTAL		**187,676 SF**	**17,436 m²**	**152,476 SF**	**14,165 m²**	**136,555 SF**	**12,686 m²**	**2,971 SF**	**6,297 SF**						
Subtotal residential only		162,445 SF	15,092 m²	139,071 SF	12,920 m²	130,258 SF	12,101 m²								

	GBA	GFA	SALEABLE	RETAIL RENTABLE	LIVE / WORK
PHASE 2 TOTAL (ABOVE GRADE)	**571,372 SF** 53,082 m²	**494,853 SF** 45,973 m²	**454,253 SF** 42,201 m²	**2,971 SF** 276 m²	**6,297 SF** 585 m²

BELOW GRADE	PROGRAM	GBA (SF)	GBA (m2)
LL1	PARKING / LOCKERS	65,614 SF	6,096 m²
LL2	PARKING / LOCKERS	65,614 SF	6,096 m²
LL3	PARKING / LOCKERS	36,937 SF	3,432 m²
LL4	PARKING / LOCKERS		
SUBTOTAL		**168,165 SF**	**15,623 m²**

PHASE 2 TOTAL (ABOVE + BELOW GRADE)	**739,537 SF** 68,705 m²

UNIT COUNT

UNIT COUNT
2024-09-25

GENSLER

PHASE 1 (WEST BLOCK)

LEVEL	TOWER 1 STUDIO	TOWER 1 1 BED	TOWER 1 1 BED + DEN	TOWER 1 2 BED	TOWER 1 2 BED + DEN	TOWER 1 3 BED	TOWER 1 LIVE / WORK	TOWER 1 TOTAL	TOWER 2 1 BED	TOWER 2 1 BED + DEN	TOWER 2 2 BED	TOWER 2 3 BED	TOWER 2 TOTAL
L36 MECH													
L35	1	3	3	3	0	1		11					
L34	1	3	3	3	0	1		11					
L33	1	3	3	3	0	1		11					
L32	1	3	3	3	0	1		11					
L31	1	3	3	3	0	1		11	5	3	2	1	11
L30	1	3	3	3	0	1		11	5	3	2	1	11
L29	1	3	3	3	0	1		11	5	3	2	1	11
L28	1	3	3	3	0	1		11	5	3	2	1	11
L27	1	3	3	3	0	1		11	5	3	2	1	11
L26	1	3	3	3	0	1		11	5	3	2	1	11
L25	1	3	3	3	0	1		11	5	3	2	1	11
L24	1	3	3	3	0	1		11	5	3	2	1	11
L23	1	3	3	3	0	1		11	5	3	2	1	11
L22	1	3	3	3	0	1		11	5	3	2	1	11
L21	1	3	3	3	0	1		11	5	3	2	1	11
L20	1	3	3	3	0	1		11	5	3	2	1	11
L19	1	3	3	3	0	1		11	5	3	2	1	11
L18	1	3	3	3	0	1		11	5	3	2	1	11
L17	1	3	3	3	0	1		11	5	3	2	1	11
L16	1	3	3	3	0	1		11	5	3	2	1	11
L15	1	3	3	3	0	1		11	5	3	2	1	11
L14	1	3	3	3	0	1		11	5	3	2	1	11
L13	1	3	3	3	0	1		11	5	3	2	1	11
L12	1	3	3	3	0	1		11	5	3	2	1	11
L11	1	3	3	3	0	1		11	5	3	2	1	11
L10	1	3	3	3	0	1		11	5	3	2	1	11
L9	1	3	3	3	0	1		11	5	3	2	1	11
L8	3	3	3	2	0	0		11	1	3	1	1	6
SUBTOTAL	**30**	**84**	**84**	**83**	**0**	**27**	**0**	**308**	**116**	**72**	**47**	**24**	**259**
PERCENTAGE	**10%**	**27%**	**27%**	**27%**	**0%**	**9%**	**0%**		**45%**	**28%**	**18%**	**9%**	
L7	AMENITY + OUTDOOR TERRACE												
L6	0	7	9	11	3	2		32					
L5	0	9	9	11	3	2		34					
L4	0	9	9	11	3	2		34					
L3	0	9	9	11	3	2		34					
L2	0	9	9	11	3	2		34					
L1	LOBBY + RETAIL + LOADING						3	3					
SUBTOTAL	**0**	**43**	**45**	**55**	**15**	**10**	**3**	**171**					
PERCENTAGE	**0%**	**25%**	**26%**	**32%**	**9%**	**6%**	**2%**						

	STUDIO	1 BED	1 BED + DEN	2 BED	2 BED + DEN	3 BED	LIVE / WORK	TOTAL
PHASE 1 TOTAL	30	243	201	185	15	61	3	738
PERCENTAGE	4%	33%	27%	25%	2%	8%	0%	
Target	1%	35%	25%	20%	9%	10%		
DEVELOPMENT TOTAL	60	448	388	368	15	124	16	1419
PERCENTAGE	4%	32%	27%	26%	1%	9%	1%	

PHASE 2 (EAST BLOCK)

LEVEL	TOWER 3 STUDIO	TOWER 3 1 BED	TOWER 3 1 BED + DEN	TOWER 3 2 BED	TOWER 3 2 BED + DEN	TOWER 3 3 BED	TOWER 3 LIVE / WORK	TOWER 3 TOTAL	TOWER 4 1 BED	TOWER 4 1 BED + DEN	TOWER 4 2 BED	TOWER 4 3 BED	TOWER 4 TOTAL
L36 MECH													
L35	1	3	3	3	0	1		11					
L34	1	3	3	3	0	1		11					
L33	1	3	3	3	0	1		11					
L32	1	3	3	3	0	1		11					
L31	1	3	3	3	0	1		11					
L30	1	3	3	3	0	1		11					
L29	1	3	3	3	0	1		11					
L28	1	3	3	3	0	1		11					
L27	1	3	3	3	0	1		11					
L26	1	3	3	3	0	1		11					
L25	1	3	3	3	0	1		11	5	2	3	1	11
L24	1	3	3	3	0	1		11	5	2	3	1	11
L23	1	3	3	3	0	1		11	5	2	3	1	11
L22	1	3	3	3	0	1		11	5	2	3	1	11
L21	1	3	3	3	0	1		11	5	2	3	1	11
L20	1	3	3	3	0	1		11	5	2	3	1	11
L19	1	3	3	3	0	1		11	5	2	3	1	11
L18	1	3	3	3	0	1		11	5	2	3	1	11
L17	1	3	3	3	0	1		11	5	2	3	1	11
L16	1	3	3	3	0	1		11	5	2	3	1	11
L15	1	3	3	3	0	1		11	5	2	3	1	11
L14	1	3	3	3	0	1		11	5	2	3	1	11
L13	1	3	3	3	0	1		11	5	2	3	1	11
L12	1	3	3	3	0	1		11	5	2	3	1	11
L11	1	3	3	3	0	1		11	5	2	3	1	11
L10	1	3	3	3	0	1		11	5	2	3	1	11
L9	1	3	3	3	0	1		11	3	1	2	0	11
L8	3	4	3	1	0	0		11	4	0	1	0	6
SUBTOTAL	**30**	**85**	**84**	**82**	**0**	**27**	**0**	**308**	**87**	**33**	**51**	**16**	**193**
PERCENTAGE	**10%**	**28%**	**27%**	**27%**	**0%**	**9%**	**0%**		**45%**	**17%**	**26%**	**8%**	
L7	AMENITY + OUTDOOR TERRACE												
L6	0	5	14	10	0	4		33					
L5	0	7	14	10	0	4		35					
L4	0	7	14	10	0	4		35					
L3	0	7	14	10	0	4		35					
L2	0	7	14	10	0	4		35					
L1	LOBBY + RETAIL + LOADING						13	13					
SUBTOTAL	**0**	**33**	**70**	**50**	**0**	**20**	**13**	**186**					
PERCENTAGE	**0%**	**18%**	**38%**	**27%**	**0%**	**11%**	**7%**						

	STUDIO	1 BED	1 BED + DEN	2 BED	2 BED + DEN	3 BED	LIVE / WORK	TOTAL
PHASE 2 TOTAL	30	205	187	183	0	63	13	681
PERCENTAGE	4%	30%	27%	27%	0%	9%	2%	
Target	1%	35%	25%	20%	9%	10%		

UNIT MIX

UNIT MIX
2024-09-25

GENSLER

UNIT MIX TOTAL

PHASE 1 (WEST BLOCK)

PHASE 1 TOTAL		STUDIO	1 BED	1 BED + DEN	2 BED	2 BED + DEN	3 BED	LIVE / WORK	TOTAL
	PHASE 1 TOTAL	30	243	201	185	15	61	3	738
	PERCENTAGE	4%	33%	27%	25%	2%	8%	0%	
	TARGET COUNT	7	258	185	148	66	74	0	738
	TARGET PERCENTAGE	1%	35%	25%	20%	9%	10%	0%	100%
	COUNT DIFF	23	-15	16	37	-51	-13	3	
	PERCENTAGE DIFF	3%	-2%	2%	5%	-7%	-2%	0%	

PHASE 2 (EAST BLOCK)

PHASE 2 TOTAL		STUDIO	1 BED	1 BED + DEN	2 BED	2 BED + DEN	3 BED	LIVE / WORK	TOTAL
	PHASE 2 TOTAL	30	205	187	183	0	63	13	681
	PERCENTAGE	4%	30%	27%	27%	0%	9%	2%	
	TARGET COUNT	7	238	170	136	61	68	0	680
	TARGET PERCENTAGE	1%	35%	25%	20%	9%	10%	0%	100%
	COUNT DIFF	23	-33	17	47	-61	-5	13	
	PERCENTAGE DIFF	3%	-5%	2%	7%	-9%	-1%	2%	

UNIT MIX DETAILED SUMMARY

PHASE 1 (WEST BLOCK)

		TOWER 1 STUDIO	TOWER 1 1 BED	TOWER 1 1 BED + DEN	TOWER 1 2 BED	TOWER 1 2 BED + DEN	TOWER 1 3 BED	TOWER 1 LIVE / WORK	TOWER 1 TOTAL	TOWER 2 1 BED	TOWER 2 1 BED + DEN	TOWER 2 2 BED	TOWER 2 3 BED	TOWER 2 TOTAL
TOWER	TOWER UNIT TOTAL	30	84	84	83	0	27		308	116	72	47	24	259
	PERCENTAGE	10%	27%	27%	27%	0%	9%			28%	18%	18%	9%	
	TARGET COUNT	3	108	77	62	28	31		306	91	65	52	26	234
	TARGET PERCENTAGE	1%	35%	25%	20%	9%	10%		100%	35%	25%	20%	10%	90% (no studios and 2+den)
	COUNT DIFF	27	-24	7	21	-28	-4			25	7	-5	-2	
	PERCENTAGE DIFF	9%	-8%	2%	7%	-9%	-1%			-7%	-7%	-2%	-1%	
PODIUM	PODIUM UNIT TOTAL	0	43	45	55	15	10	3	171					
	PERCENTAGE	0%	25%	26%	32%	9%	6%	2%						
	TARGET COUNT	2	60	43	34	15	17	0	169					
	TARGET PERCENTAGE	1%	35%	25%	20%	9%	10%	0%	100%					
	COUNT DIFF	-2	-17	2	21	0	-7	3						
	PERCENTAGE DIFF	-1%	-10%	1%	12%	0%	-4%	2%						

PHASE 2 (EAST BLOCK)

		TOWER 3 STUDIO	TOWER 3 1 BED	TOWER 3 1 BED + DEN	TOWER 3 2 BED	TOWER 3 2 BED + DEN	TOWER 3 3 BED	TOWER 3 LIVE / WORK	TOWER 3 TOTAL	TOWER 4 1 BED	TOWER 4 1 BED + DEN	TOWER 4 2 BED	TOWER 4 3 BED	TOWER 4 TOTAL
TOWER	TOWER UNIT TOTAL	30	85	84	82	0	27		308	87	33	51	16	193
	PERCENTAGE	10%	28%	27%	27%	0%	9%			17%	26%	26%	8%	
	TARGET COUNT	3	108	77	62	28	31		309	68	48	39	19	174
	TARGET PERCENTAGE	1%	35%	25%	20%	9%	10%		100%	35%	25%	20%	10%	90% (no studios and 2+den)
	COUNT DIFF	27	-23	7	20		-4			19	-15	12	-3	
	PERCENTAGE DIFF	9%	-7%	2%	7%		-1%			-18%	1%	6%	-2%	
PODIUM	PODIUM UNIT TOTAL	0	33	70	50	0	20	13	186					
	PERCENTAGE	18%	38%	27%	27%	0%	11%	7%						
	TARGET COUNT	2	65	47	37	17	19	0	187					
	TARGET PERCENTAGE	1%	35%	25%	20%	9%	10%	0%	100%					
	COUNT DIFF	-2	-32	23	13	-17	1	13						
	PERCENTAGE DIFF	17%	3%	2%	7%	-9%	1%	7%						

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CRW 2 L.P., CRW 2 G.P. INC. (c/o Slate Asset Management)

2077 & 2105 Royal Windsor drive
Mississauga ON L5J 1K5

Gensler

150 King Street West
Suite 1400
Toronto, Ontario M5H 1J9
Canada
Tel 416.601.3890

△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

Project Number
67.1245.000

Description
STATISTICS

Scale

A0.030

CONTEXT PLAN (SCALE: NTS)

DRAWING INDEX	
Sheet Number	**Sheet Name**
A0.030	STATISTICS
A0.031	ARCHITECTURAL SITE PLAN
A0.032	PHASING PLAN
A0.033	SITE SURVEY
A1.196	LOWER LEVEL - P4 TYPICAL PLAN
A1.197	LOWER LEVEL - P3 TYPICAL PLAN
A1.198	LOWER LEVEL - P2 TYPICAL PLAN
A1.199	LOWER LEVEL- P1 PLAN
A1.201	LEVEL 01 PLAN
A1.201A	LEVEL 01 PLAN - LOADING TRAVEL PATHS
A1.202	LEVEL 02-05 PODIUM TYPICAL PLAN
A1.206	LEVEL 06 PODIUM
A1.207	LEVEL 07 PLAN - AMENITY
A1.208	LEVEL 08 PLAN
A1.209	LEVEL 09 PLAN
A1.210	LEVEL 10-25 TYPICAL PLAN
A1.211	LEVEL 26-31 TYPICAL PLAN
A1.212	LEVEL 32-35 TYPICAL PLAN
A1.213	LEVEL 36 T1-T3 MECH PLAN
A1.214	ROOF PLAN
A2.000	BUILDING ELEVATIONS
A2.001	BUILDING ELEVATIONS
A2.002	BUILDING ELEVATIONS
A2.003	BUILDING ELEVATIONS
A2.004	BUILDING ELEVATIONS
A2.005	BUILDING ELEVATIONS
A2.006	BUILDING ELEVATIONS
A2.007	BUILDING ELEVATIONS
A2.200	BUILDING SECTION T2 T4
A2.201	BUILDING SECTION T1 T2
A2.202	BUILDING SECTION T3 T4
A3.007	3D RENDERING

01 OVERALL SITE PLAN

SCALE : 1 : 200

SHEET NOTES

1) REFER TO LANDSCAPE DRAWINGS FOR MORE DETAILED INFORMATION ON LANDSCAPE ELEMENTS

2) REFER TO CIVIL ENGINEER'S DRAWINGS FOR MORE DETAILED SITE SERVICING AND GRADING INFORMATION

LEGEND

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

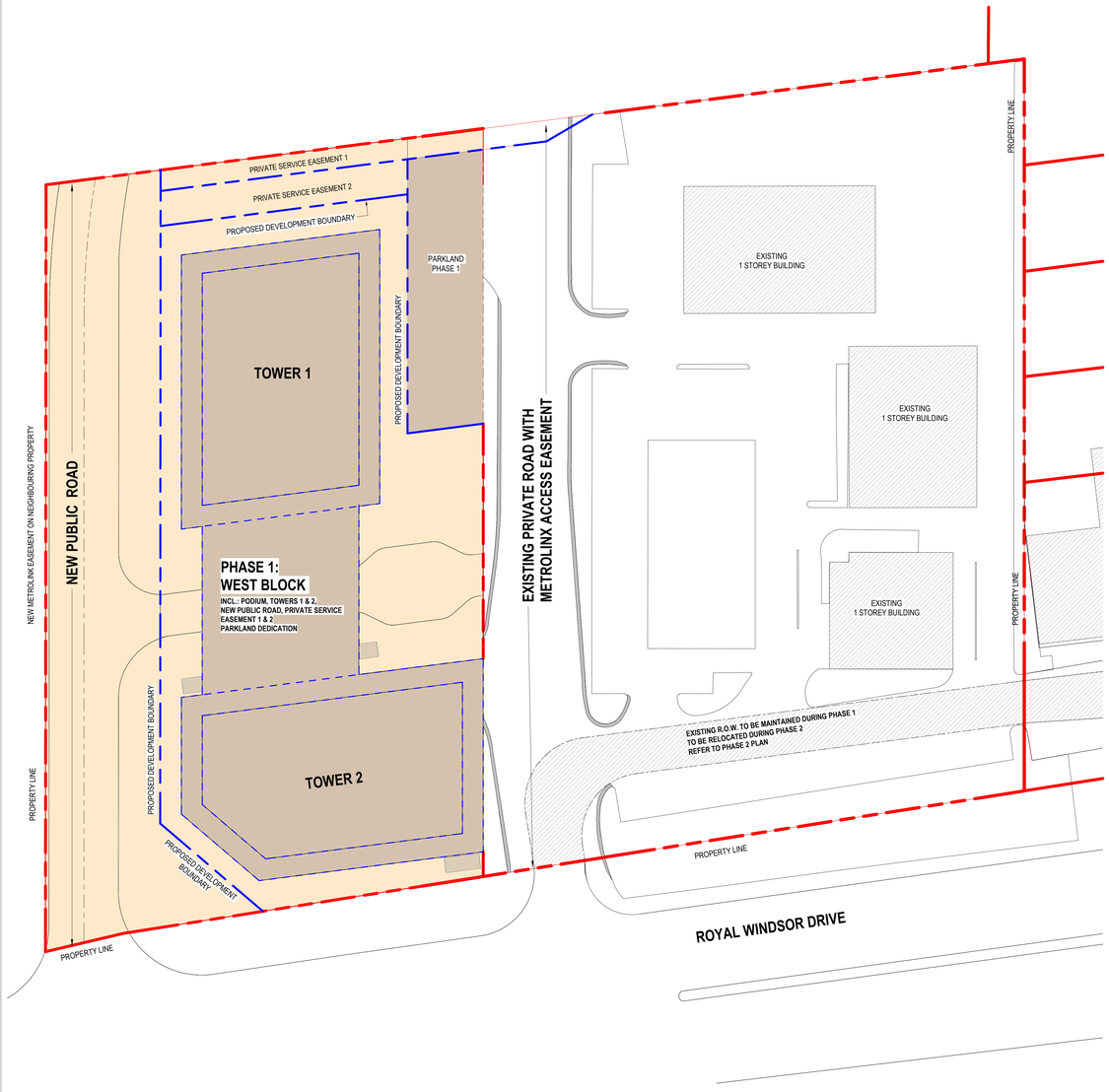
Project Name
CLARKSON GO

Project Number
67.1245.000

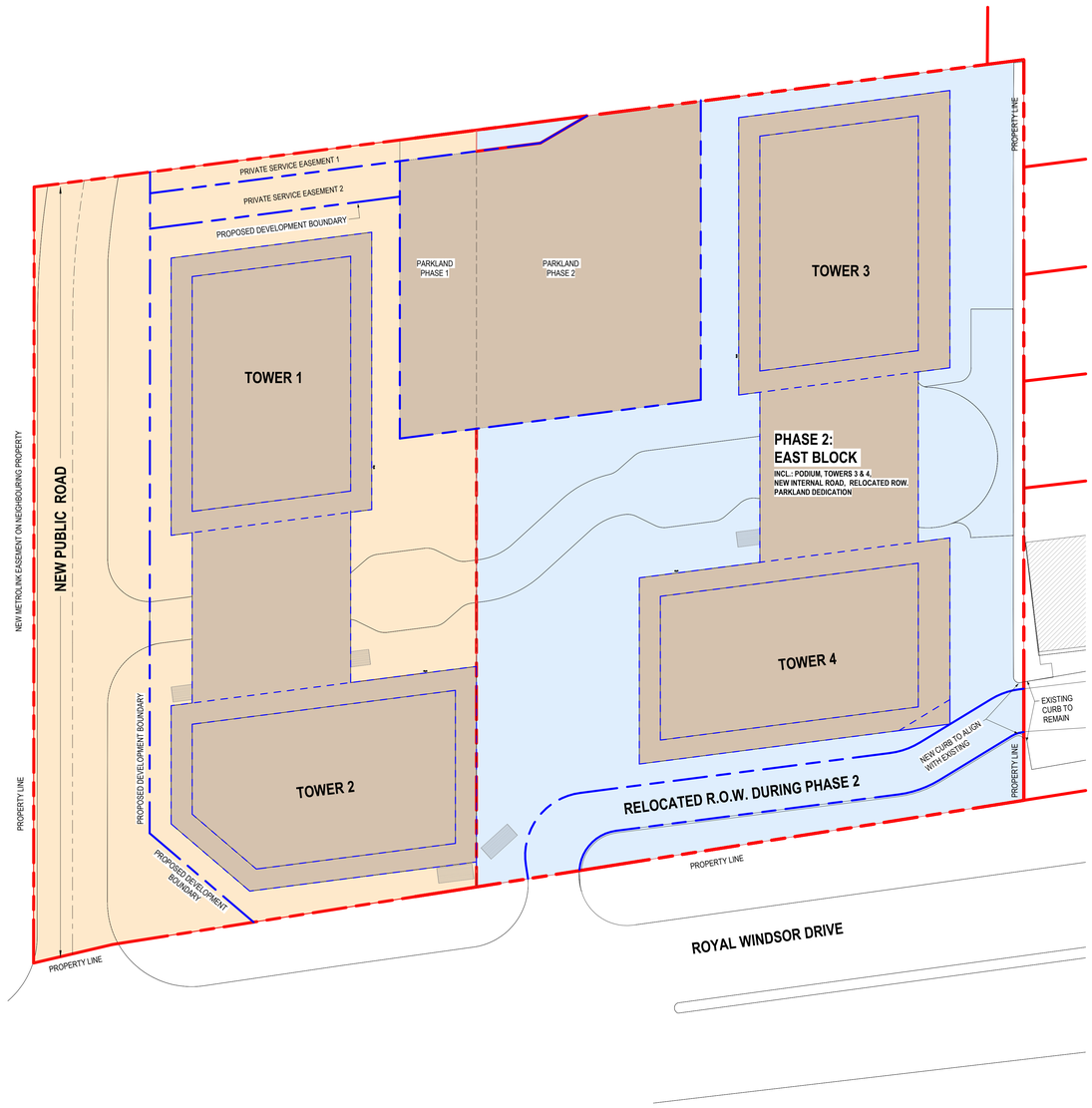
Description
ARCHITECTURAL SITE PLAN

Scale
As indicated

A0.031



1 PHASING PLAN - WEST BLOCK
SCALE: 1 : 300



2 PHASING PLAN - EAST BLOCK
SCALE: 1 : 300

LEGEND

- PHASE 1 - WEST BLOCK
- PHASE 2 - EAST BLOCK

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

Project Number
67.1245.000

Description
PHASING PLAN

Scale
As indicated

A0.032

SKETCH SHOWING TOPOGRAPHIC CONDITIONS ON

PART OF LOT 31, CONCESSION 2 SOUTH OF DUNDAS STREET

(GEOGRAPHIC TOWNSHIP OF TORONTO)

CITY OF MISSISSAUGA

REGIONAL MUNICIPALITY OF PEEL

SCALE 1 : 250

5 0 5 10 15 metres

J.D. BARNES LIMITED

METRIC DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NOTES

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0).

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99974.

ELEVATION NOTE

ELEVATIONS SHOWN ON THIS PLAN ARE DERIVED FROM THE CITY OF MISSISSAUGA BENCHMARKS:
No. 1035
ELEVATION=98.626m
No. 1036
ELEVATION=100.258m

LOCAL BENCHMARK

CUT CROSS IN ASPHALT ENTRANCE LOCATED AT THE SOUTHERN CORNER OF No. 2105 ROYAL WINDSOR DRIVE, AS SHOWN ON FACE OF PLAN.
ELEVATION=98.73m

LEGEND

□	CB	DENOTES CATCHBASIN
⬚	SICB	DENOTES SIDE INLET CATCHBASIN
□	HJB	DENOTES HYDRO JUNCTION BOX
●	GK	DENOTES GAS KEY
*	GM	DENOTES GAS METER
■	HW	DENOTES HANDWELL
○	MH	DENOTES MANHOLE
○	SAN MH	DENOTES SANITARY MANHOLE
○	STM MH	DENOTES STORM MANHOLE
•	BOL	DENOTES BOLLARD
•	HP	DENOTES HYDRO POLE
	HT	DENOTES HYDRO TRANSFORMER
•	LS	DENOTES LIGHT STANDARD
•	TP	DENOTES TELEPHONE POLE
⊟	PED	DENOTES TELEPHONE PEDESTAL
	TJB	DENOTES TELEPHONE JUNCTION BOX
-○-	H	DENOTES FIRE HYDRANT
-○-	WK	DENOTES WATER KEY
○	FDC	DENOTES FIRE DEPARTMENT CONNECTION
○	ICV	DENOTES IRRIGATION CONTROL VALVE
○	SV	DENOTES SPRINKLER VALVE
-○-	WV	DENOTES WATER VALVE
	BOC	DENOTES BACK OF CURB
—— C ——		DENOTES OVERHEAD TELEVISION CABLE
—— E ——		DENOTES OVERHEAD HYDRO CABLE
⊕		DENOTES TREE
✷		DENOTES CONIFEROUS TREE DIA=DIAMETER OF TRUNK IN METRES
✿		DENOTES DECIDUOUS TREE DIA=DIAMETER OF TRUNK IN METRES

BEFORE DIGGING, UNDERGROUND SERVICES SHOULD BE LOCATED ON SITE BY THE RESPECTIVE AGENCIES.

IT IS THE RESPONSIBILTITY OF THE CONTRACTOR TO VERIFY THAT LOCAL BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED AND THAT THE RELATIVE ELEVATIONS AGREE WITH THE INFORMATION SHOWN ON THIS PLAN.

PRIMARY CONTOURS ARE AT 0.50m INTERVALS.
SECONDARY CONTOURS ARE AT 0.25m INTERVALS.

BOUNDARY INFORMATION IS COMPILED FROM SURVEYOR'S REAL PROPERTY REPORTS BY J.D. BARNES LIMITED, DATED APRIL 2020, FILE No.'s 20-30-496-00-A AND 20-30-496-00-B.

FIELDWORK COMPLETED ON THE 26th DAY OF MARCH, 2020.
ADDITIONAL FIELDWORK COMPLETED ON THE 18th DAY OF NOVEMBER, 2022.

J.D.BARNES
LIMITED
SURVEYING
MAPPING
GIS
LAND INFORMATION SPECIALISTS
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DRAWN BY:	CHECKED BY:	REFERENCE NO.:
AP/MD	TSJ/RSQ	20-30-496-00-D
FILE: G:\20-30-496\00\Drawing\20-30-496-D_topo.dgn		DATED: 11/21/22
		PLOTTED: 11/21/22

GENERAL NOTES

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1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

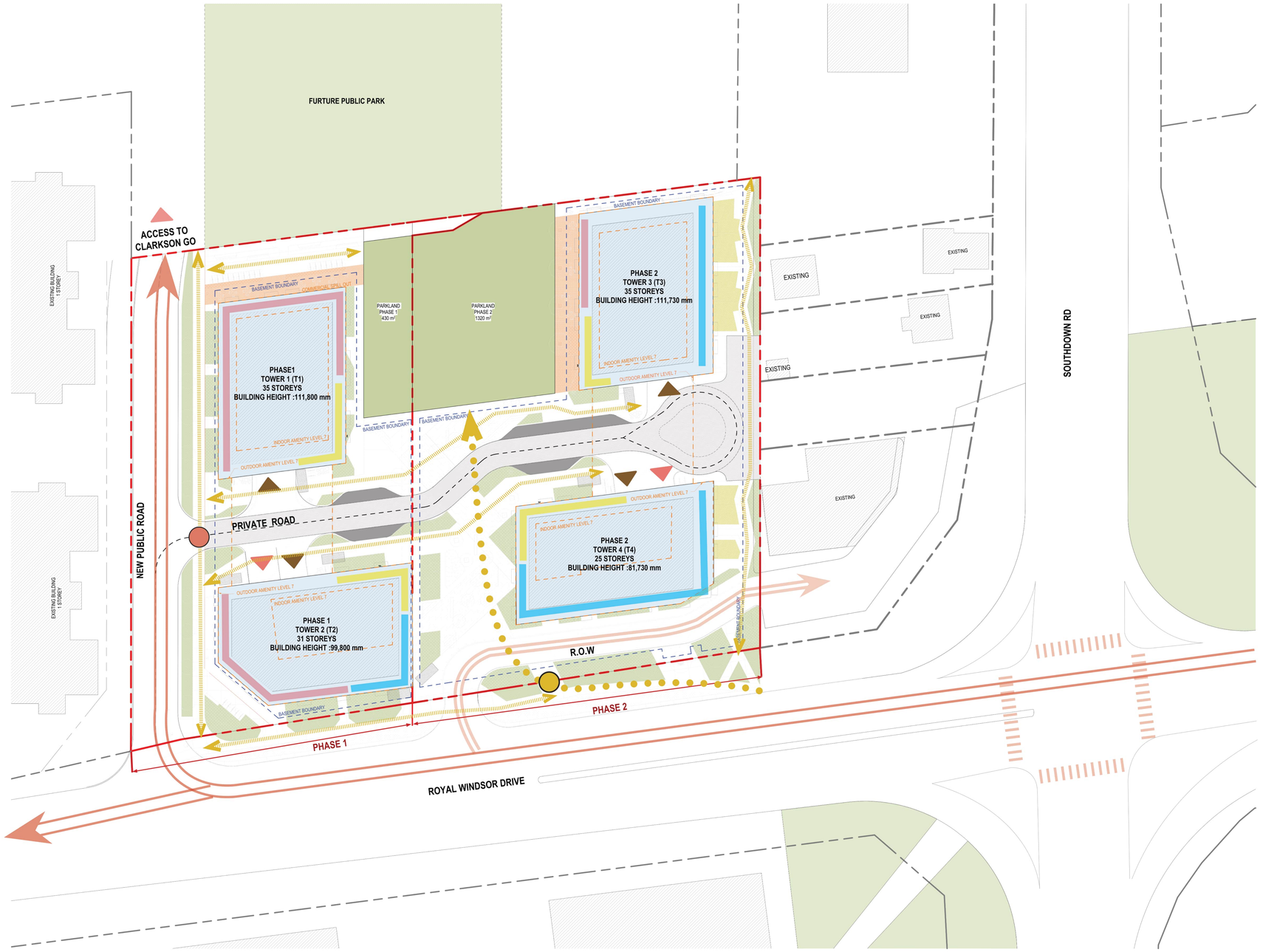
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
SITE SURVEY

Scale

A0.033



CONCEPT PLAN

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1	2024-09-25 OPA/ZBA SUBMISSION

Seal / Signature

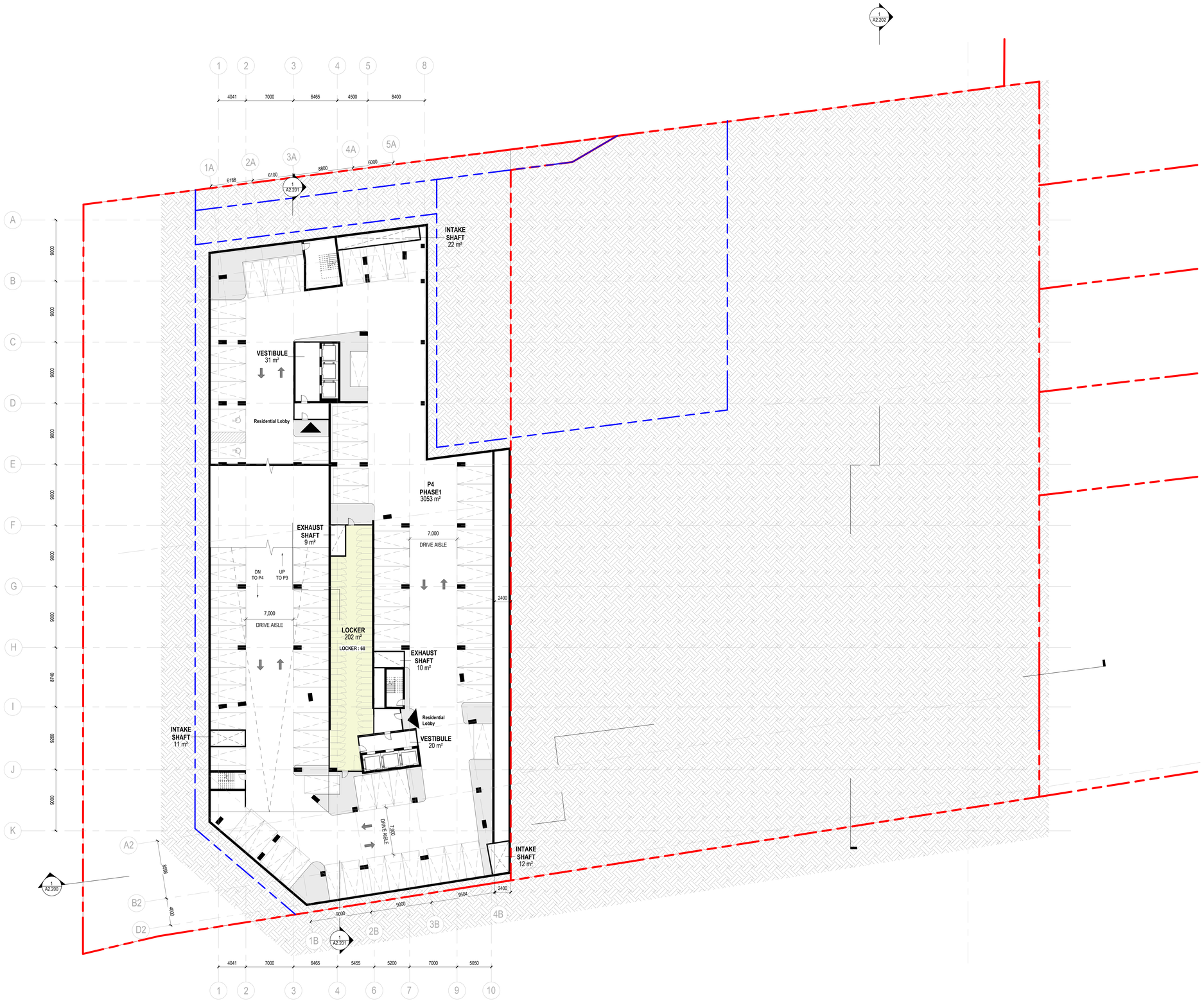
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
CONCEPT PLAN

Scale

A0.035



GENERAL NOTES

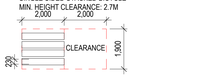
LEGEND

LOCKERS AND BICYCLE PARKING SPACE DIMENSIONS

LOCKER

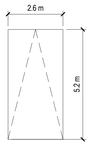
DOUBLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M

SINGLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M



TYPICAL CAR PARKING DIMENSIONS

TYPICAL PARKING SPACE



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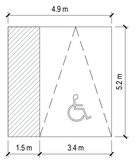

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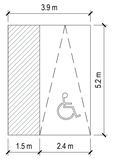

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LOWER LEVEL - P4 TYPICAL PLAN

Scale
As indicated

A1.196

1 LEVEL P4
SCALE: 1 : 200

1 LEVEL P3
SCALE: 1 : 200

GENERAL NOTES

LEGEND

LOCKERS AND BICYCLE PARKING SPACE DIMENSIONS

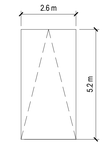
LOCKER

DOUBLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M

SINGLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M

TYPICAL CAR PARKING DIMENSIONS

TYPICAL PARKING SPACE



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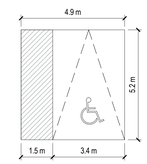

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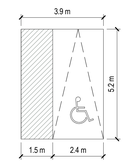

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1	2024-09-25	OPA/ZBA SUBMISSION

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LOWER LEVEL - P3 TYPICAL PLAN

Scale
As indicated

A1.197

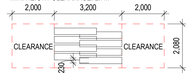
GENERAL NOTES

LEGEND

LOCKERS AND BICYCLE PARKING SPACE DIMENSIONS

LOCKER

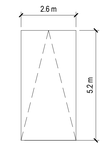
DOUBLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M



SINGLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M

TYPICAL CAR PARKING DIMENSIONS

TYPICAL PARKING SPACE



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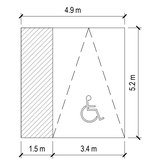

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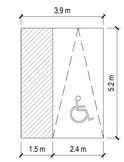

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LOWER LEVEL - P2 TYPICAL PLAN

Scale
As indicated

A1.198

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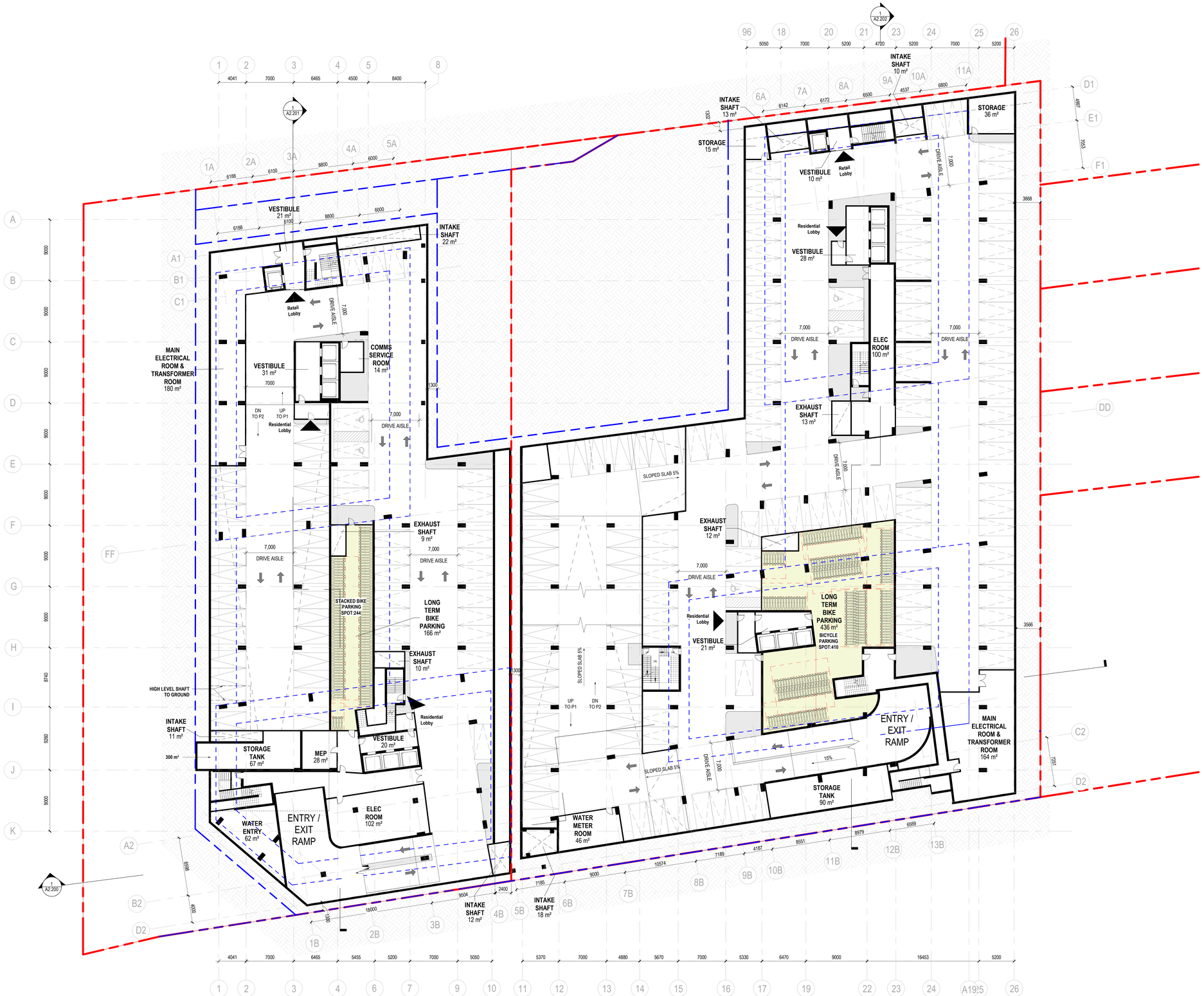


01 LEVEL P1
SCALE: 1 : 200

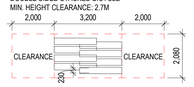
GENERAL NOTES

LEGEND

LOCKERS AND BICYCLE PARKING SPACE DIMENSIONS

LOCKER

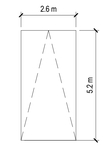
DOUBLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M



SINGLE SIDED STACKED BICYCLE
MIN. HEIGHT CLEARANCE: 2.7M

TYPICAL CAR PARKING DIMENSIONS

TYPICAL PARKING SPACE



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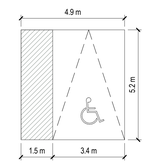

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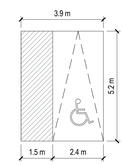

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1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LOWER LEVEL- P1 PLAN

Scale
As indicated

A1.199

01 GROUND FLOOR PLAN
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE
  NUMBER
  COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
  DIRECTION OF ELEVATION
  SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME — ROOM NAME
  1,234m² — AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR
- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

LEGEND

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 01 PLAN

Scale
As indicated

A1.201

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GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME / 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

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1 2024-09-25	OPA/ZBA SUBMISSION

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 01 PLAN - LOADING TRAVEL PATHS

Scale
1 : 200

A1.201A

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GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME / 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- 1BD
- 1BD+DEN
- 2BD
- 2BD+DEN
- 3BD
- CHUTE
- CORRIDOR
- ELEC.
- ELEVATOR
- LOCKERS
- STAIR

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1 2024-09-25	OPA/ZBA SUBMISSION

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 02-05 PODIUM TYPICAL PLAN

Scale
1 : 200

A1.202

1 LEVEL 02-05 PODIUM TYPICAL PLAN
SCALE: 1 : 200

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GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE
- NUMBER
- COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME — ROOM NAME
- 1,234m² — AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- 1BD
- 1BD+DEN
- 2BD
- 2BD+DEN
- 3BD
- BALCONY
- CHUTE
- CORRIDOR
- ELEC.
- ELEVATOR
- LOCKERS
- MEP
- STAIR
- VOID

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1 2024-09-25	OPA/ZBA SUBMISSION

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 06 PODIUM

Scale
1 : 200

A1.206

1 Level 06_Podium
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME / 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- EXTERIOR AMENITY
- INTERIOR AMENITY

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 07 PLAN - AMENITY

Scale
1 : 200

A1.207

1 LEVEL 07 PLAN - AMENITY
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- 1 — COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- 1 — LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- 2 A11.XX — DIRECTION OF ELEVATION / SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- 1BD
- 1BD+DEN
- 2BD
- 3BD
- BALCONY
- CHUTE
- CORRIDOR
- ELEC.
- ELEVATOR
- STAIR
- STUDIO

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

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Project Name: CLARKSON GO

Project Number: 67.1245.000

Description: LEVEL 08 PLAN

Scale: 1 : 200

A1.208

1 LEVEL 08 PLAN
SCALE: 1 : 200

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GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME / 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- 1BD
- 1BD+DEN
- 2BD
- 3BD
- BALCONY
- CHUTE
- CORRIDOR
- ELEC.
- ELEVATOR
- STAIR
- STUDIO

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 09 PLAN

Scale
1 : 200

A1.209

1 LEVEL 09 PLAN
SCALE: 1 : 200

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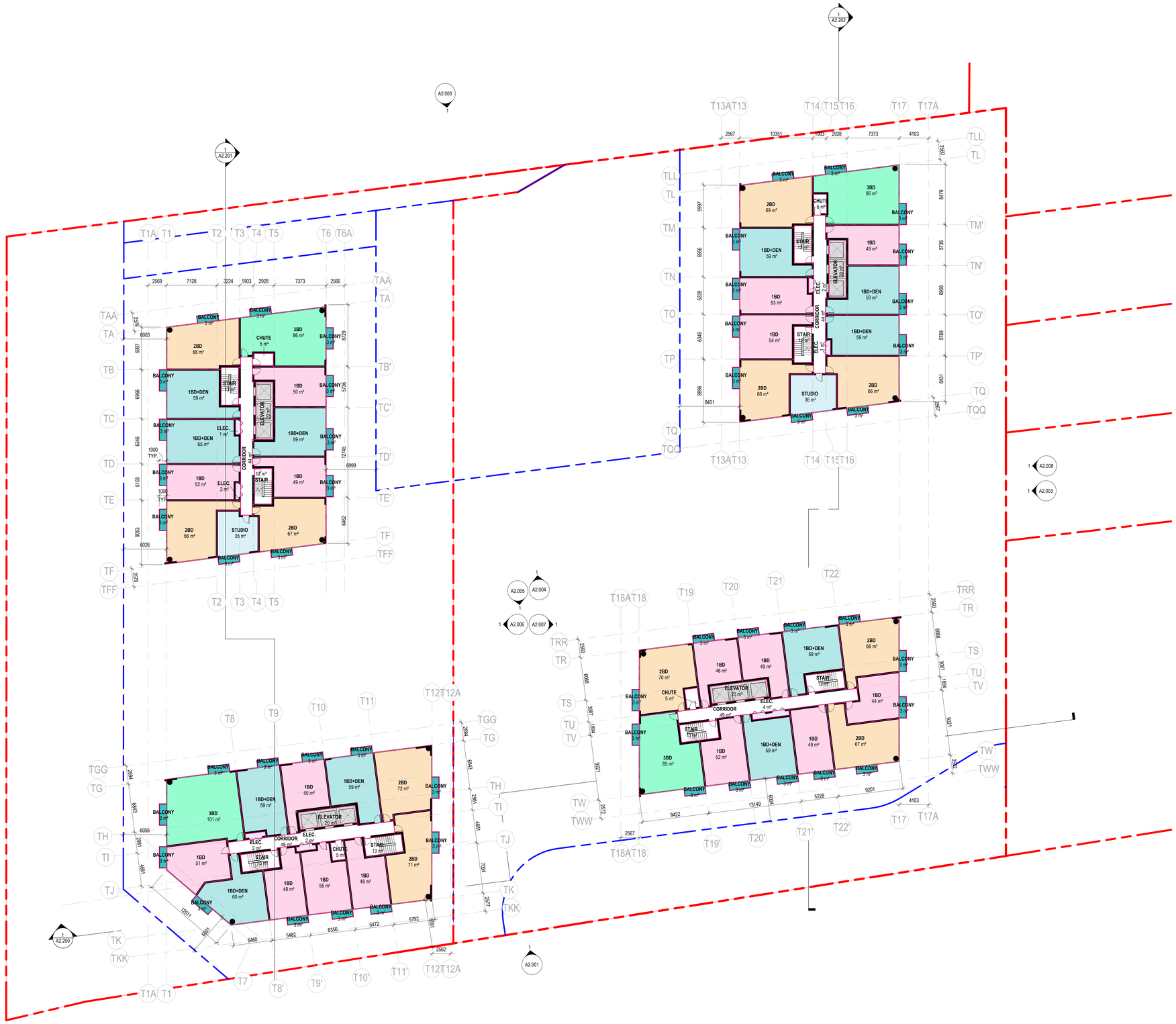

1 LEVEL 10-25 TYPICAL PLAN
SCALE: 1 : 200

GENERAL NOTES

LEGEND

COLUMN GRID REFERENCE NUMBER
COLUMN GRID LINES
LOCATION ON SHEET WHERE ELEVATION IS SHOWN
DIRECTION OF ELEVATION
SHEET NUMBER WHERE ELEVATION IS SHOWN
NAME 1,234m² — ROOM NAME AREA
01 — SHEETNOTE REFERENCE
ELEVATION DATUM REFERENCE
000 — NEW DIMENSIONS
DOOR

SUITE TYPE LEGEND

🟪	1BD
🟦	1BD+DEN
🟧	2BD
🟩	3BD
🟦	BALCONY
☐	CHUTE
☐	CORRIDOR
🟪	ELEC.
☐	ELEVATOR
☐	STAIR
🟦	STUDIO

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 10-25 TYPICAL PLAN

Scale
1 : 200

A1.210

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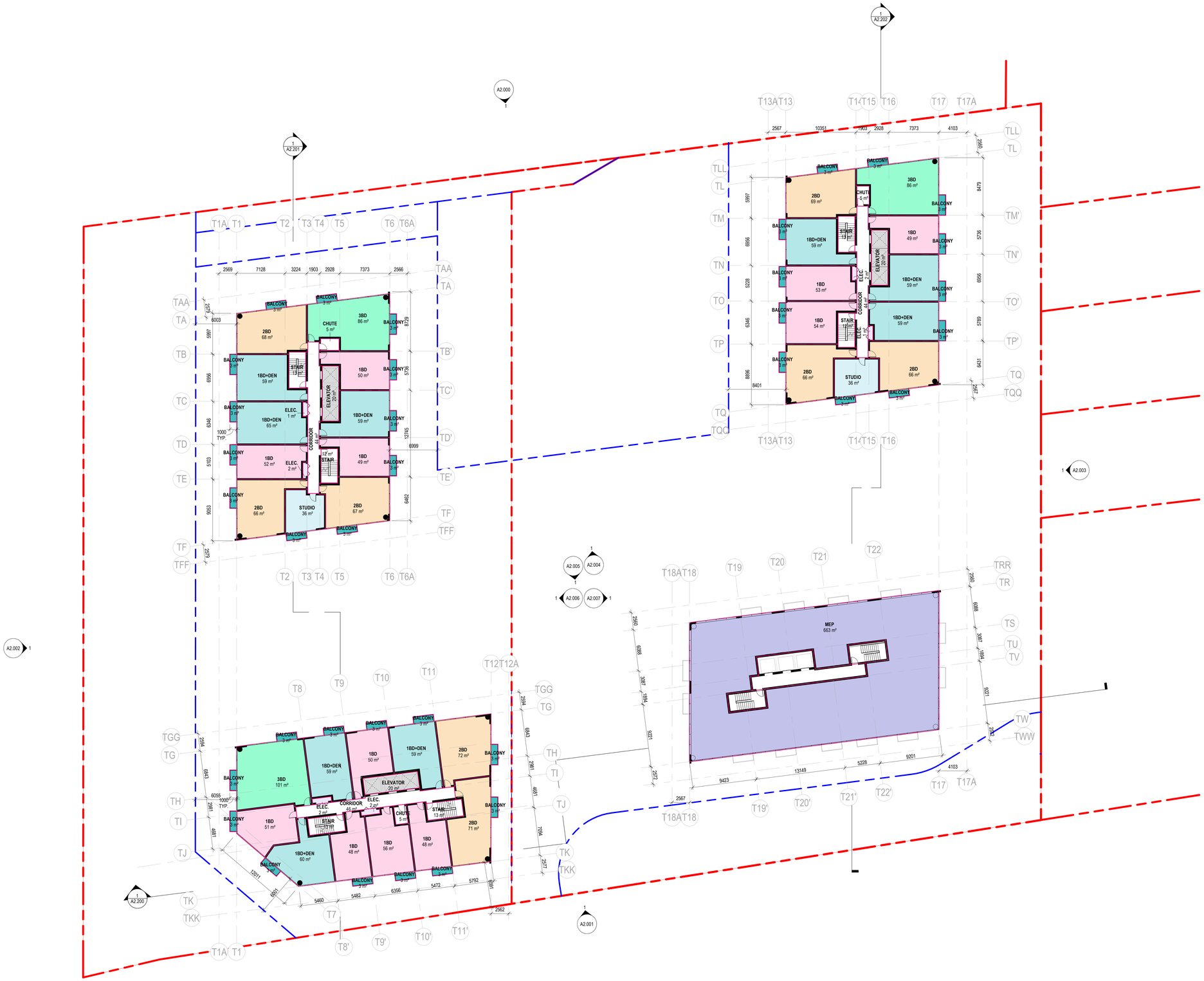

1 LEVEL 26 -31 TYPICAL PLAN
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME / 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- 1BD
- 1BD+DEN
- 2BD
- 3BD
- BALCONY
- CHUTE
- CORRIDOR
- ELEC.
- ELEVATOR
- MEP
- STAIR
- STUDIO

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1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

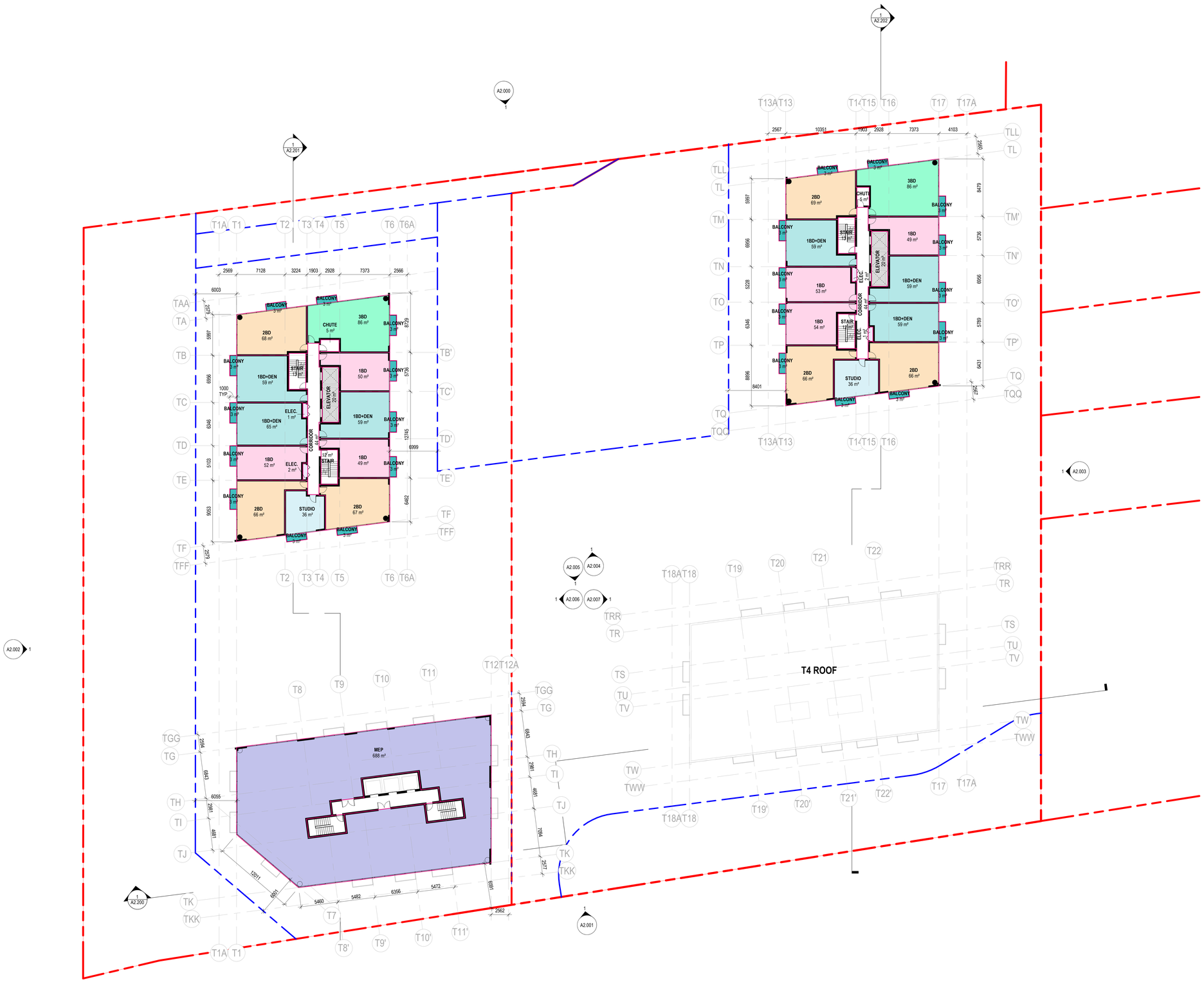
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 26-31 TYPICAL PLAN

Scale
1 : 200

A1.211



1 LEVEL 32-35 TYPICAL PLAN
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME — ROOM NAME
- 1,234m² — AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- 1BD
- 1BD+DEN
- 2BD
- 3BD
- BALCONY
- CHUTE
- CORRIDOR
- ELEC.
- ELEVATOR
- MEP
- STAIR
- STUDIO

CRW 2 L.P., CRW 2 G.P. INC. (c/o Slate Asset Management)

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Mississauga ON L5J 1K5

Gensler

150 King Street West
Suite 1400
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Canada

Tel 416.601.3890

Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

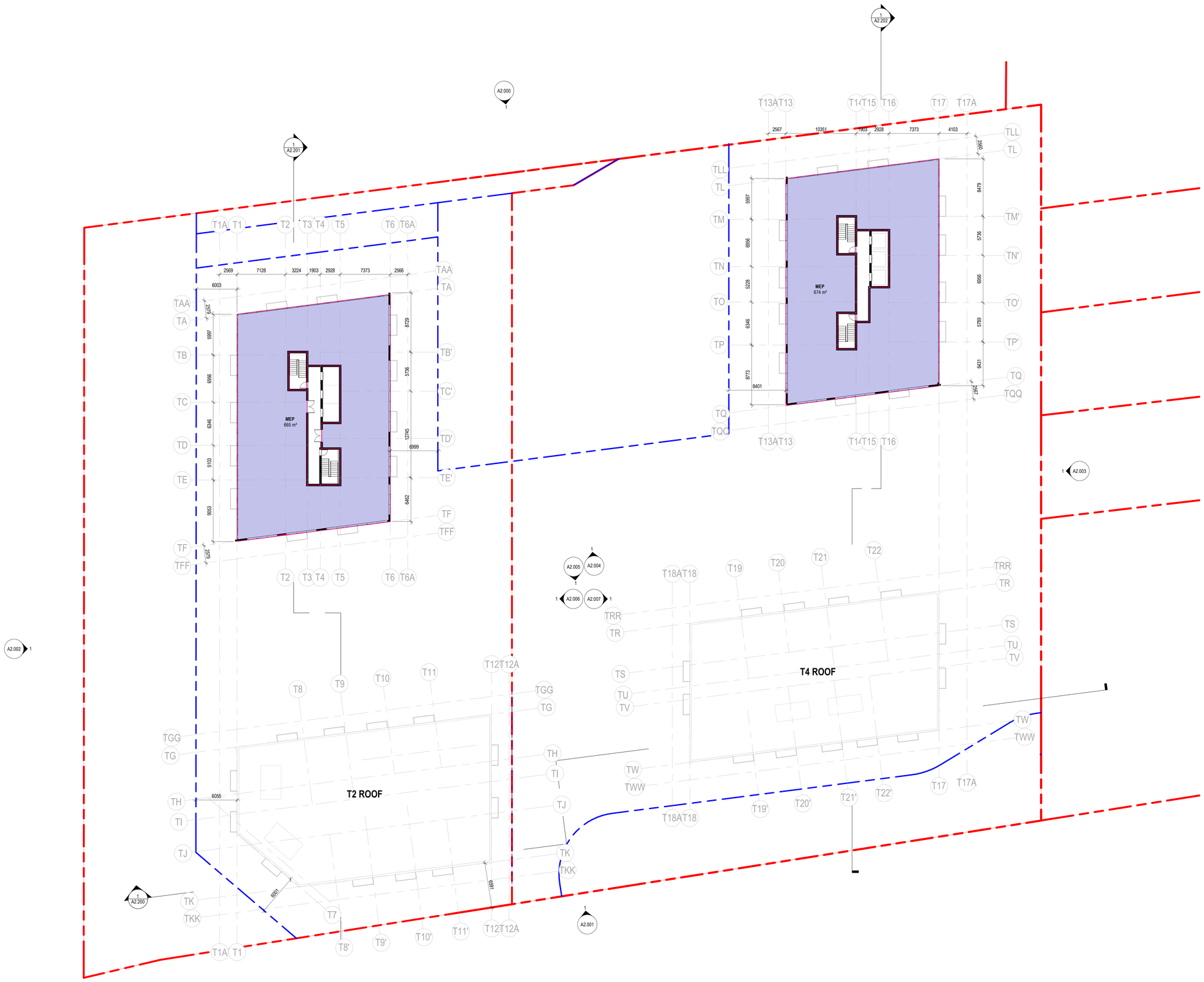
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
LEVEL 32-35 TYPICAL PLAN

Scale
1 : 200

A1.212



GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN
- DIRECTION OF ELEVATION
- SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME / 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

SUITE TYPE LEGEND

- MEP

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

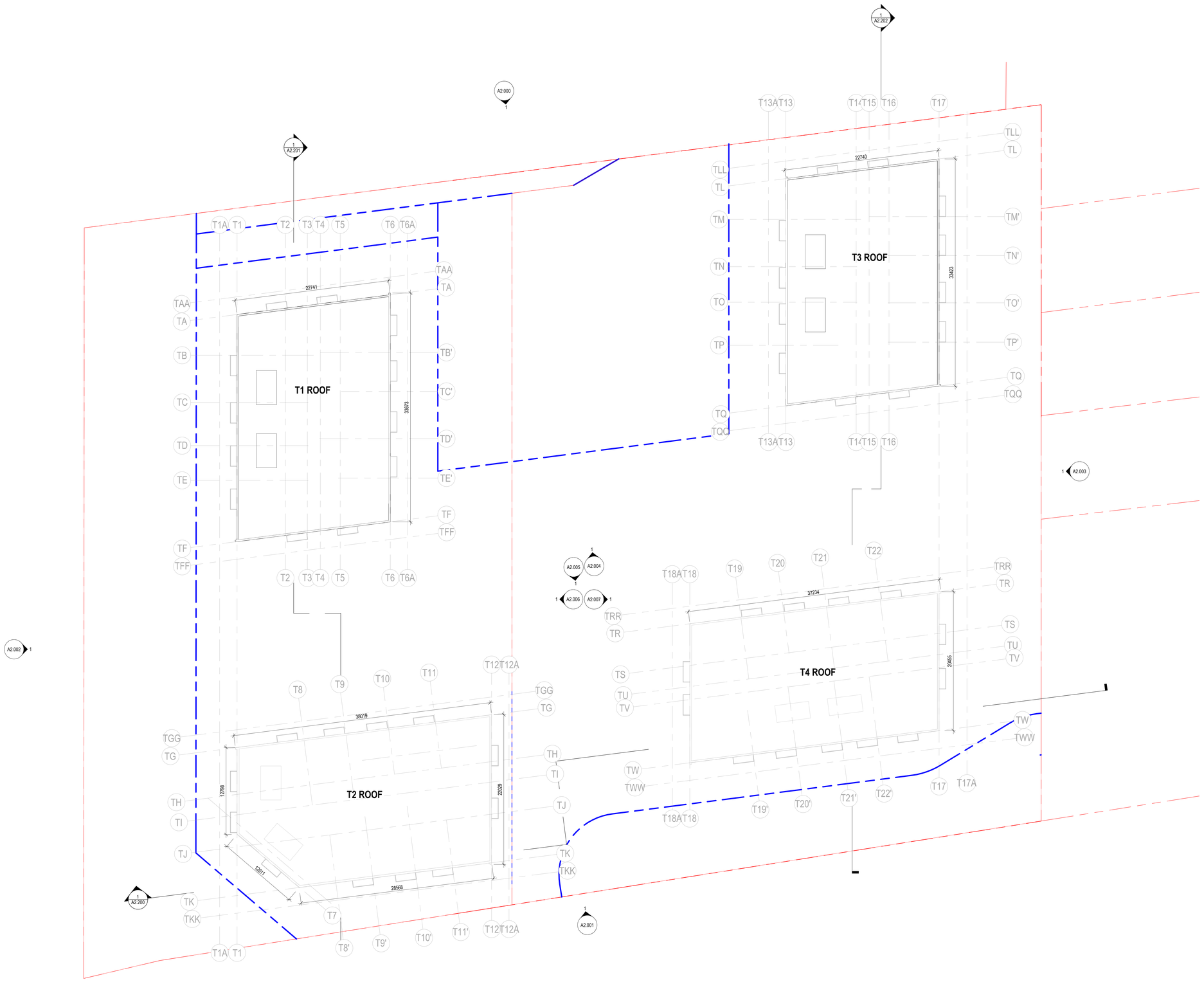
Project Number
67.1245.000

Description
LEVEL 36 T1-T3 MECH PLAN

Scale
1 : 200

A1.213

1 LEVEL 36 T1-T3 MECH PLAN
SCALE: 1 : 200



1 T/O MECH. PENTHOUSE (T1/T3)
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- COLUMN GRID REFERENCE NUMBER / COLUMN GRID LINES
- LOCATION ON SHEET WHERE ELEVATION IS SHOWN / DIRECTION OF ELEVATION
- A11.XX — SHEET NUMBER WHERE ELEVATION IS SHOWN
- NAME / 1,234m² — ROOM NAME / AREA
- 01 — SHEETNOTE REFERENCE
- ELEVATION DATUM REFERENCE
- 000 — NEW DIMENSIONS
- DOOR

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1	2024-09-25	OPA/ZBA SUBMISSION

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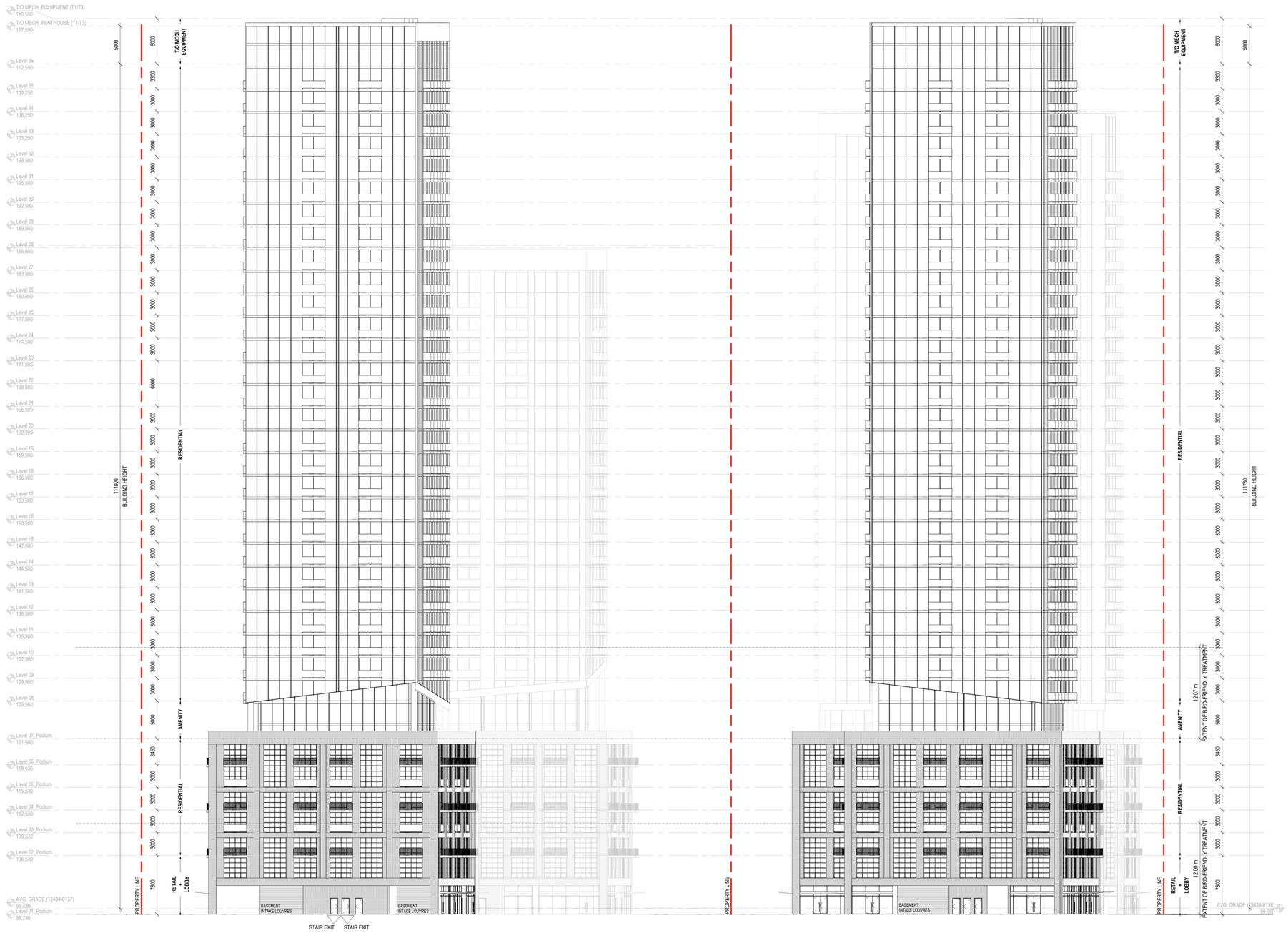
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
ROOF PLAN

Scale
1 : 200

A1.214



1 SITE ELEVATION - N
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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Seal / Signature

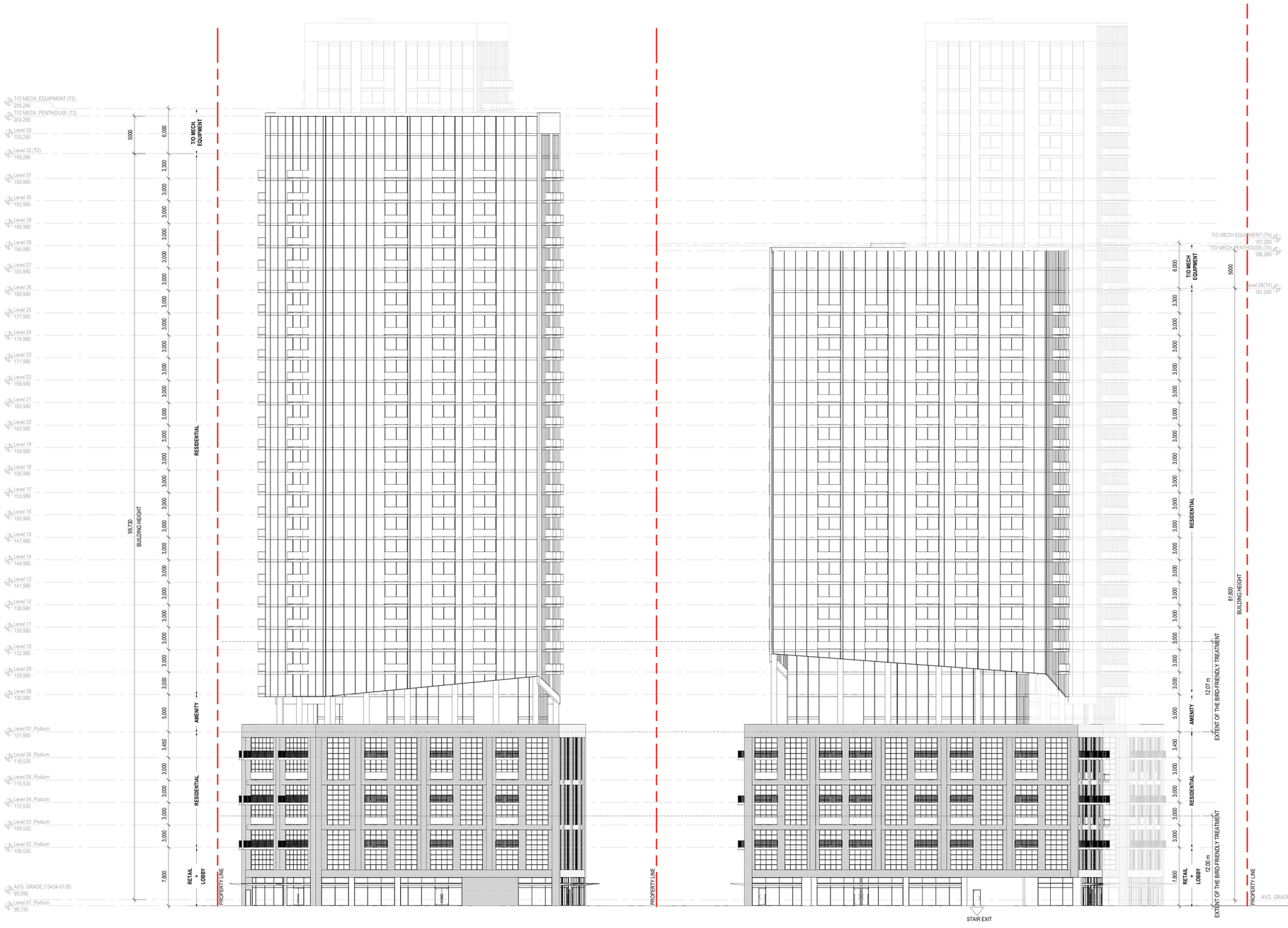
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.000



1 SITE ELEVATION - S
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

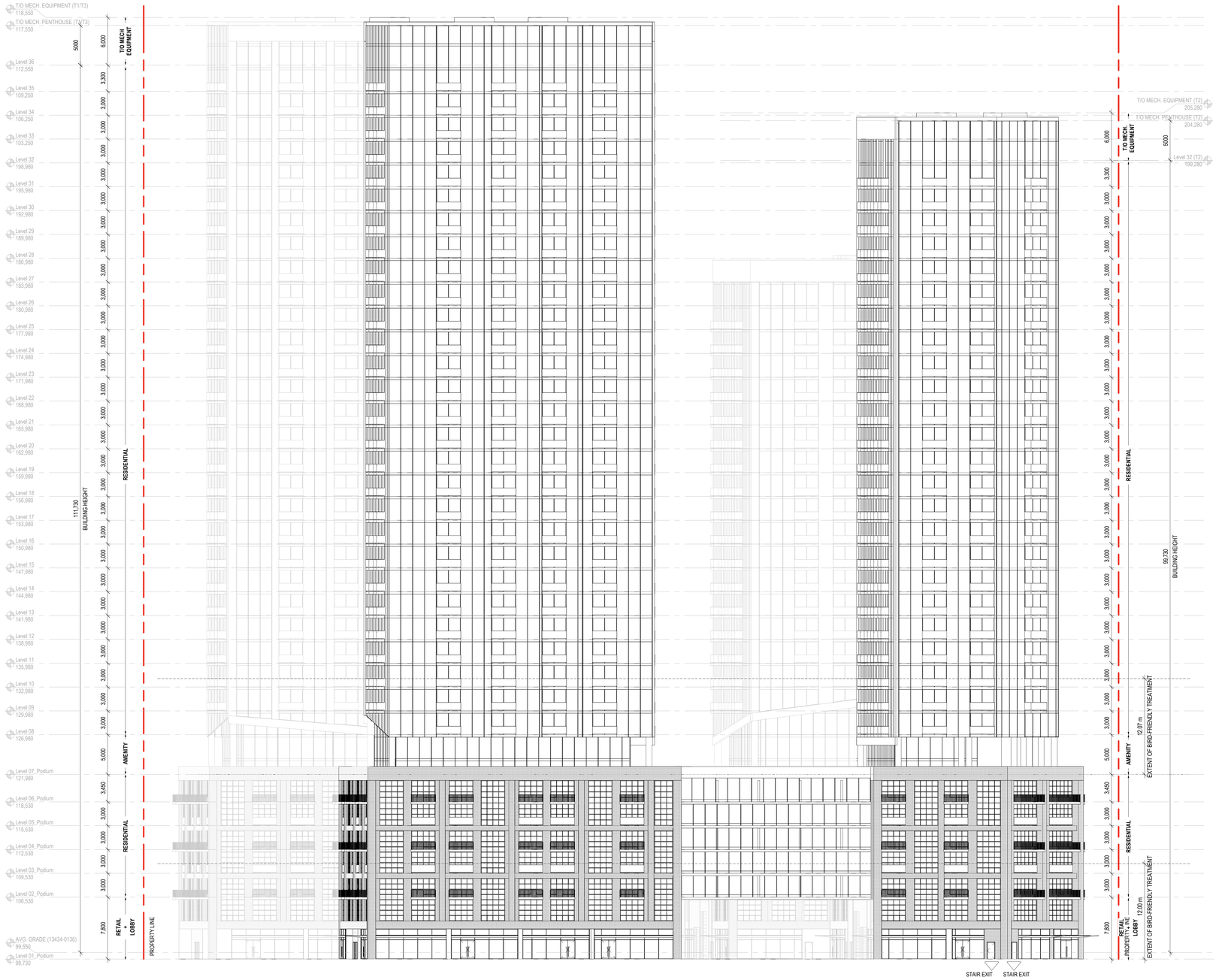
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.001



1 SITE ELEVATION - W

SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

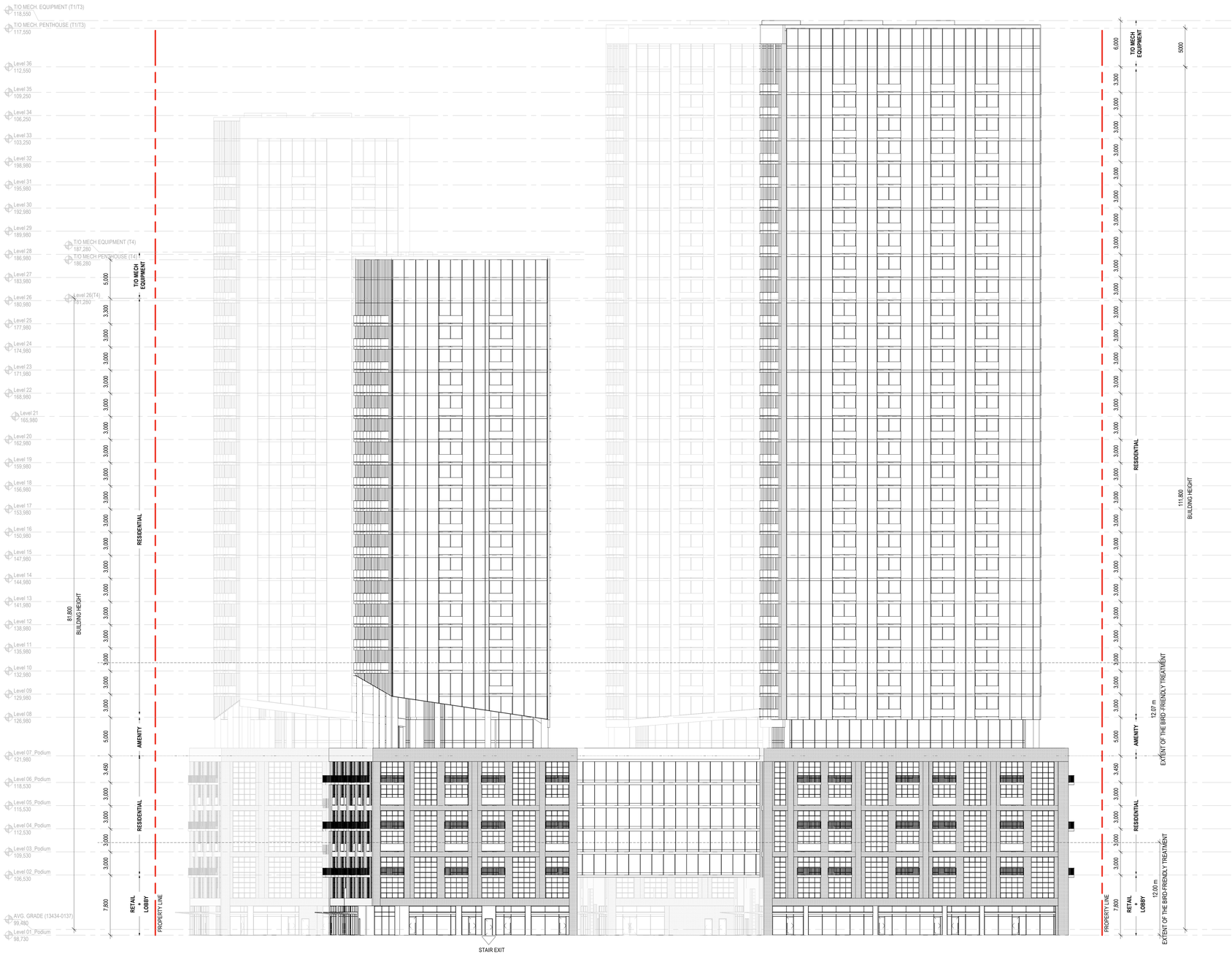
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.002



1 SITE ELEVATION - E
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

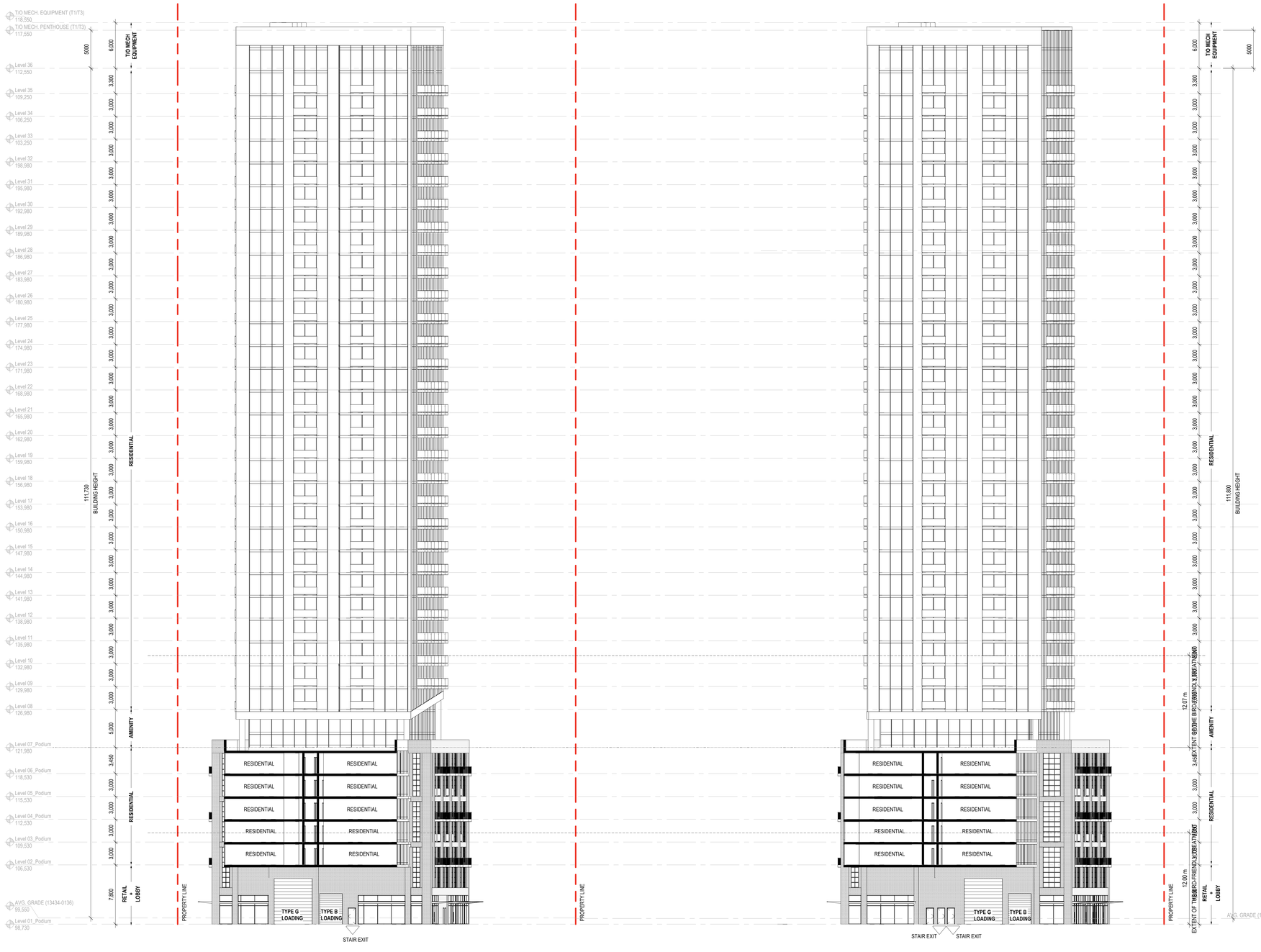
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.003



1 SITE ELEVATION - CENTRAL STREET N

SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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1	2024-09-25	OPA/ZBA SUBMISSION

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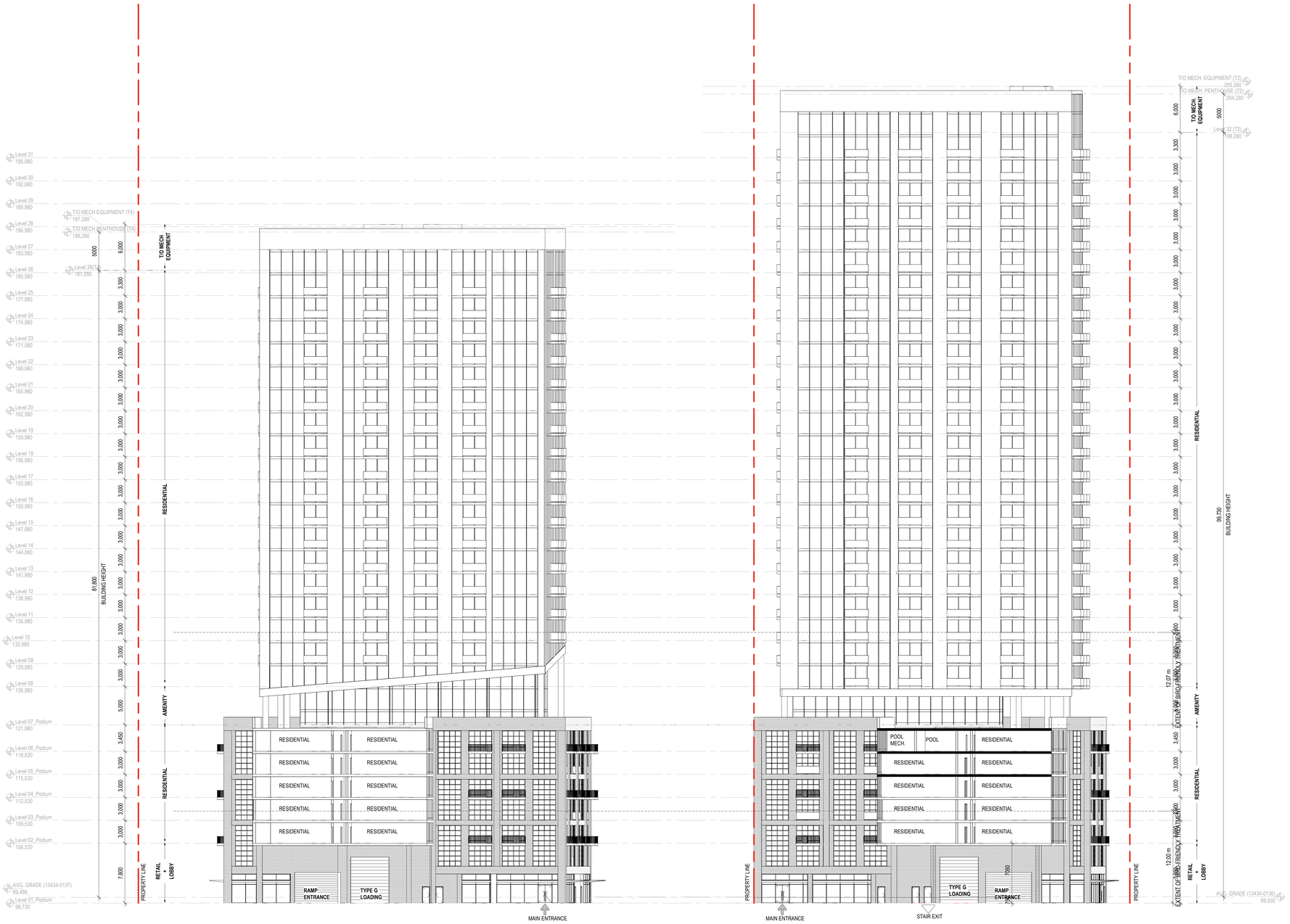
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.004



1 SITE ELEVATION - CENTRAL STREET S
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

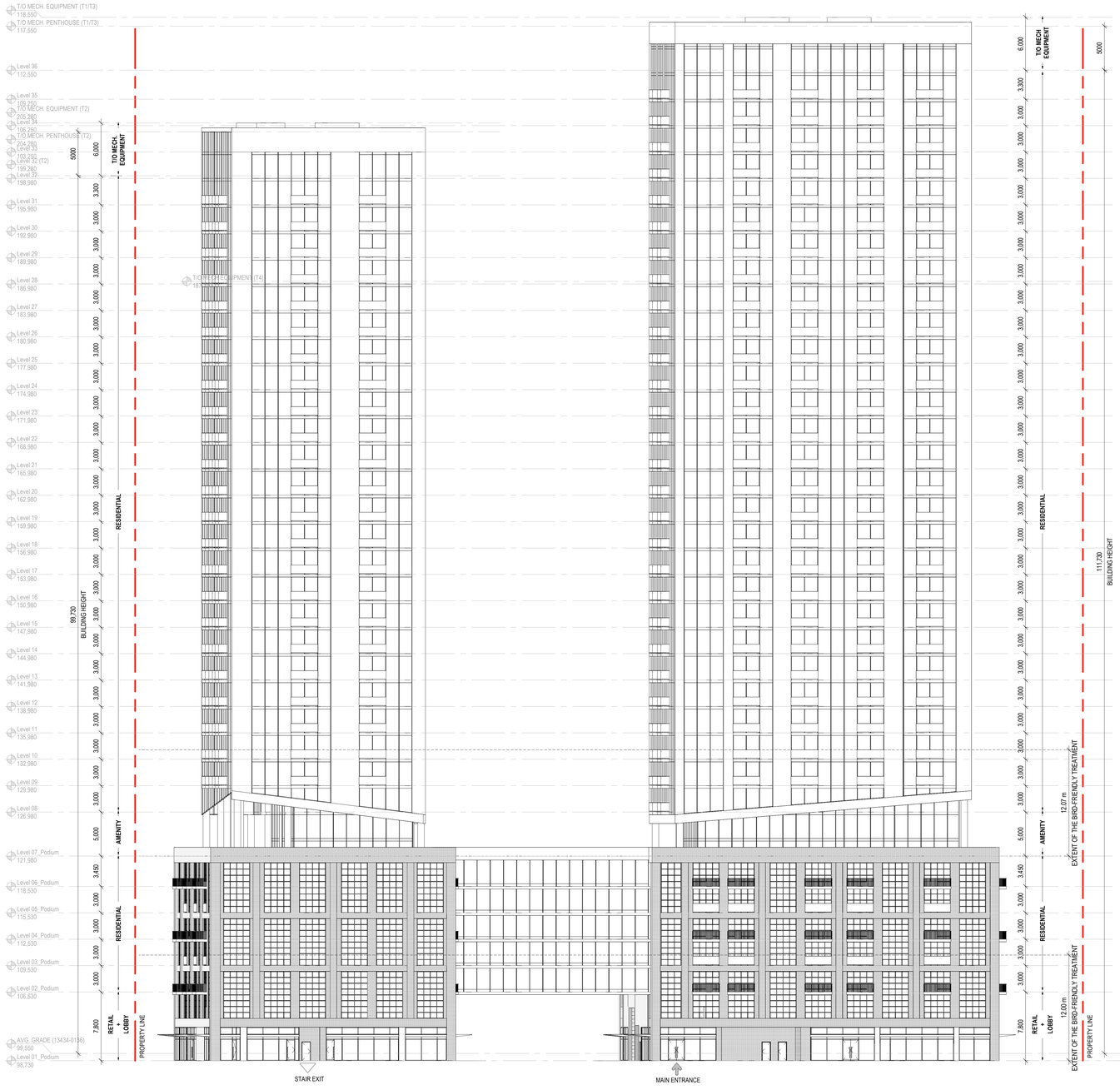
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.005



1 SITE ELEVATION - CENTRAL STREET W
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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1	2024-09-25	OPA/ZBA SUBMISSION

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Project Name
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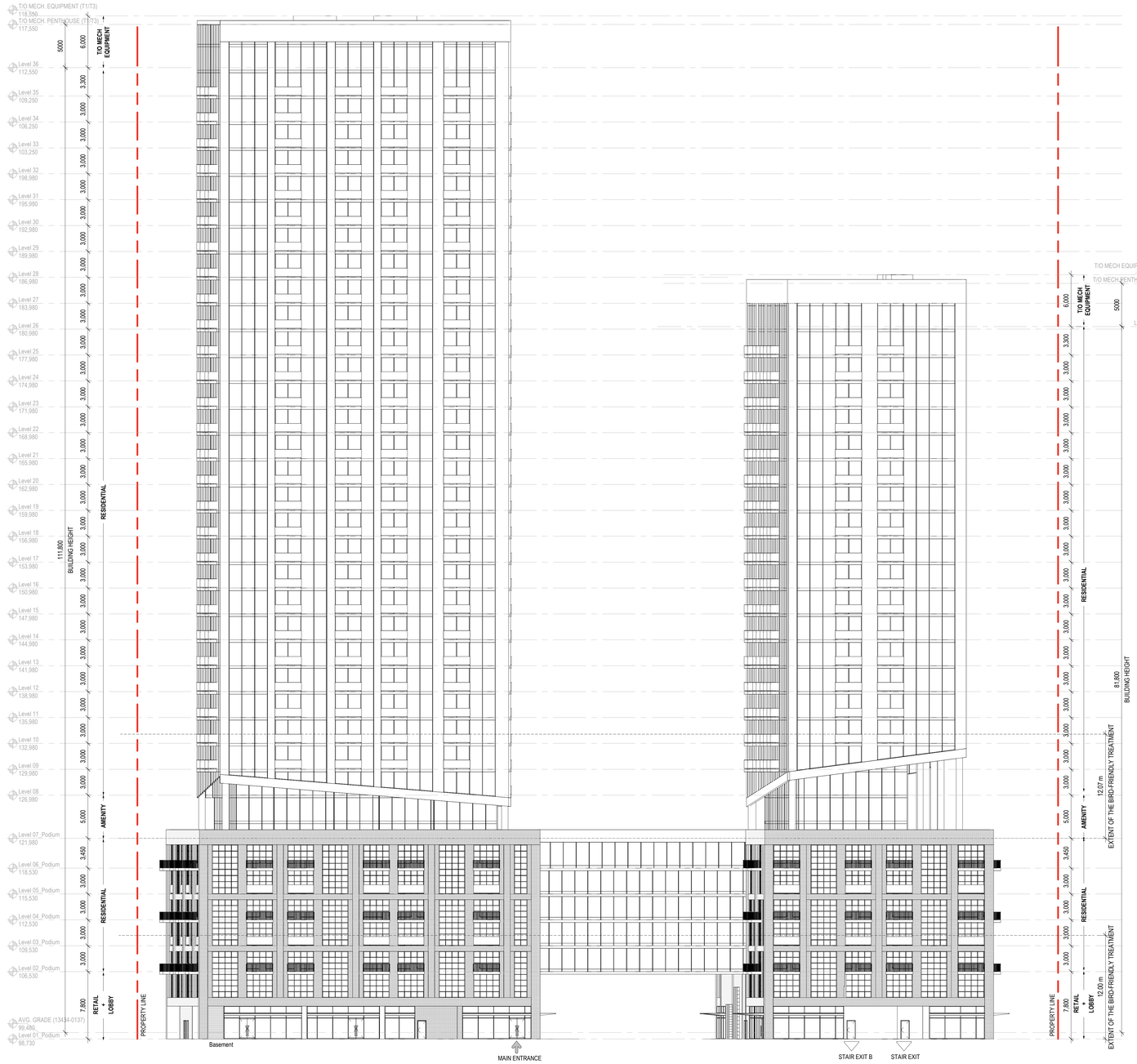
Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.006



1 SITE ELEVATION - CENTRAL STREET E
SCALE: 1 : 200

GENERAL NOTES

LEGEND

- MAIN BUILDING ENTRANCE
- BUILDING EXIT
- TYPE 'G' LOADING BAY OVERHEAD DOOR
- PROPERTY LINE

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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

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Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING ELEVATIONS

Scale
As indicated

A2.007

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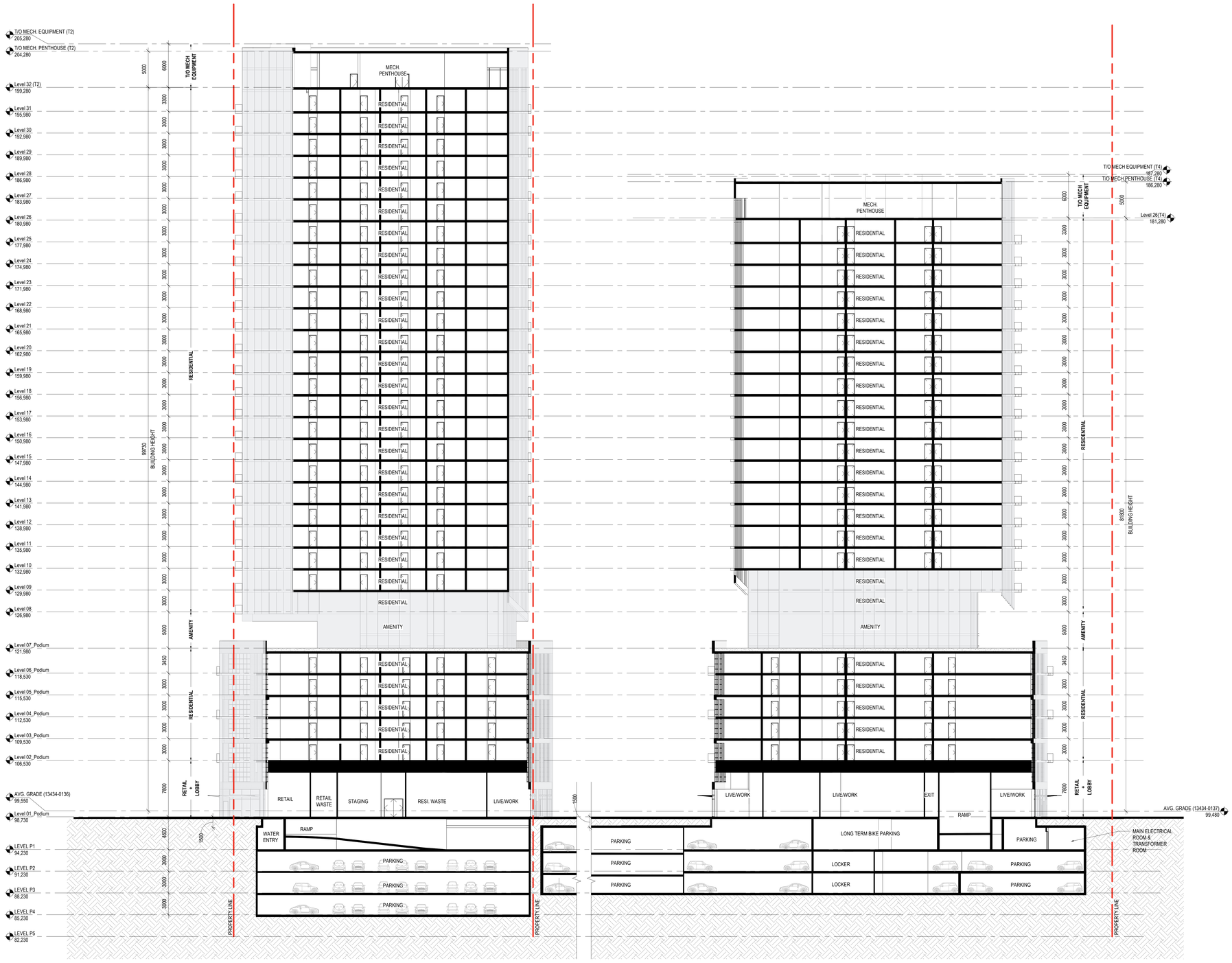

1 BUILDING SECTION - EW - T2 T4
SCALE: 1 : 200

10/17/2024 12:30:03 PM Autodesk Docs://67.1245.000 - Clarkson ZBA_KPZ/Architecture - 67.1245.000 - Clarkson GO_R23_ZBA SUBMISSION v2.rvt

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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

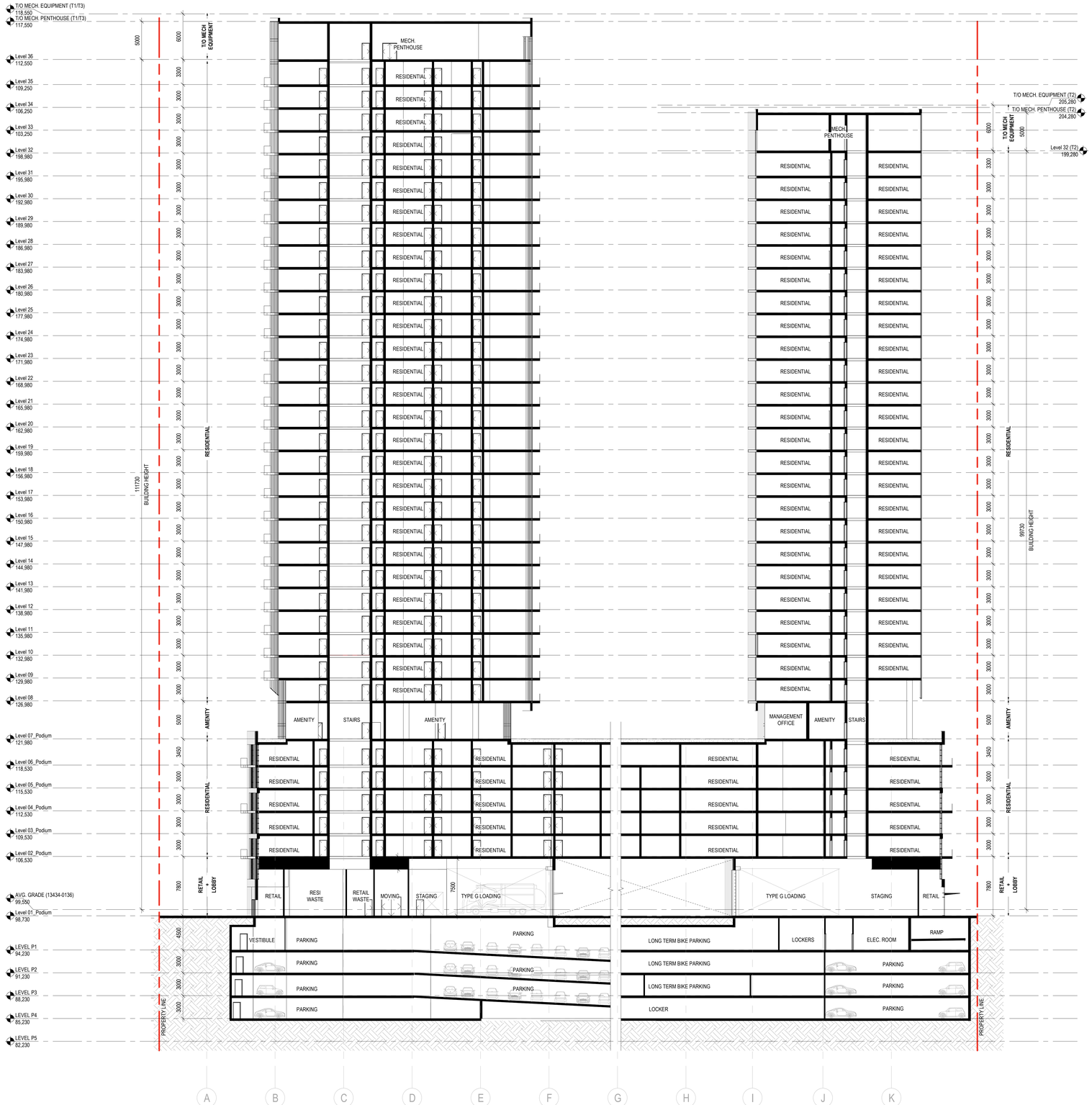
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING SECTION T2 T4

Scale
1 : 200

A2.200



1 BUILDING SECTION - EW - T1 T2
SCALE: 1 : 200

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1	2024-09-25	OPA/ZBA SUBMISSION

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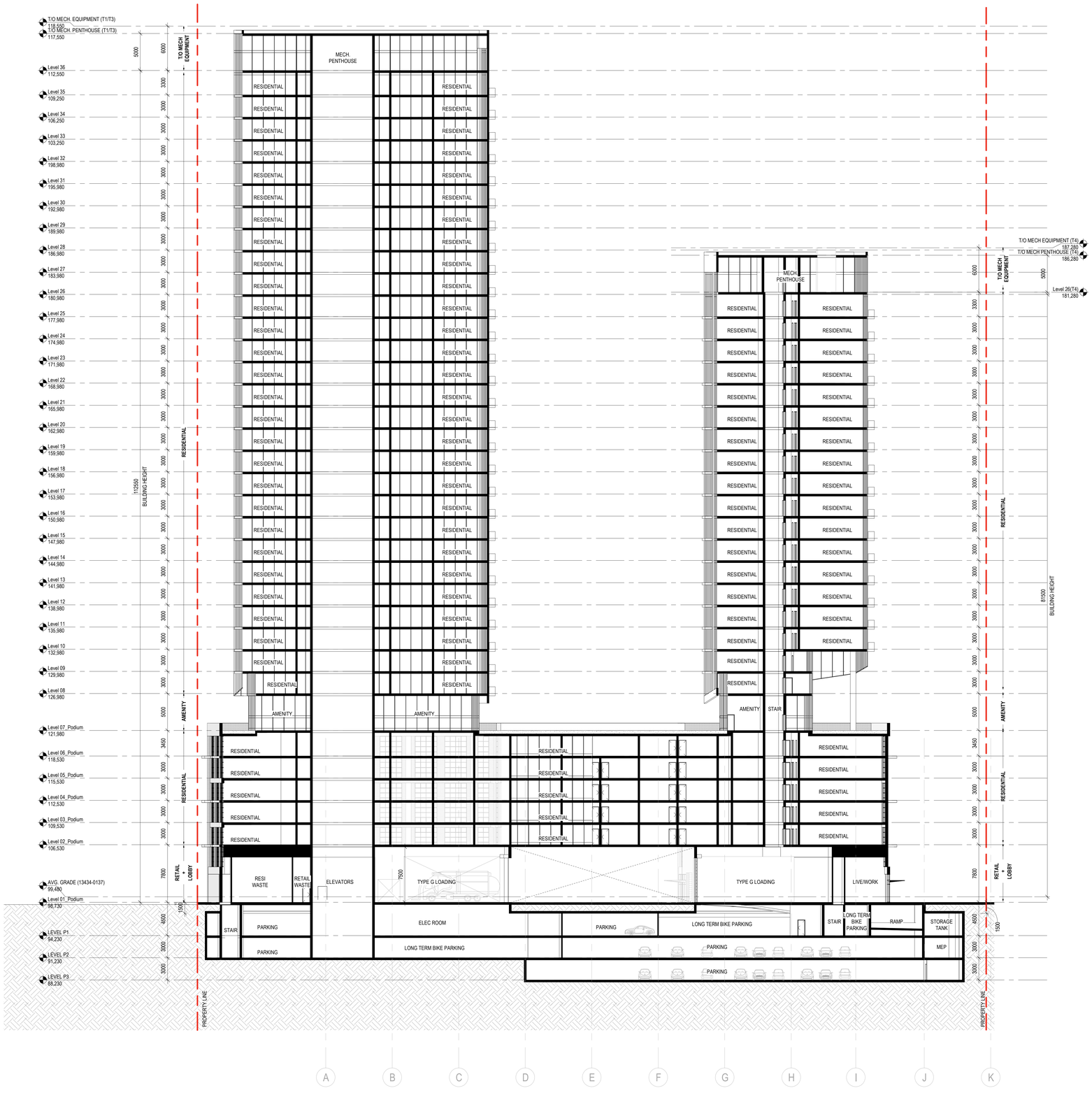
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING SECTION T1 T2

Scale
1 : 200

A2.201



1 BUILDING SECTION - NS - T3 T4

SCALE: 1 : 200

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1 2024-09-25	OPA/ZBA SUBMISSION

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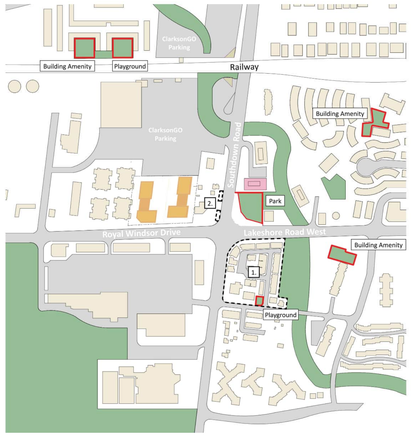
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
BUILDING SECTION T3 T4

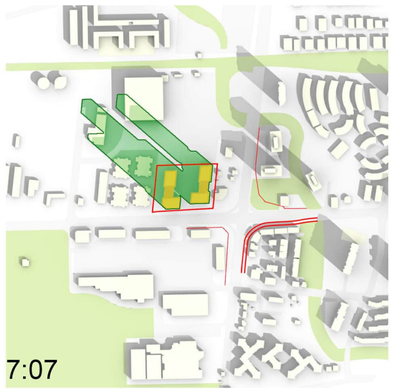
Scale
1 : 200

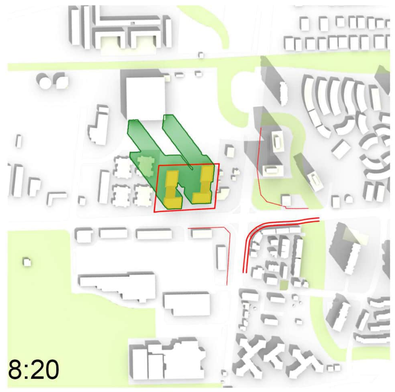
A2.202

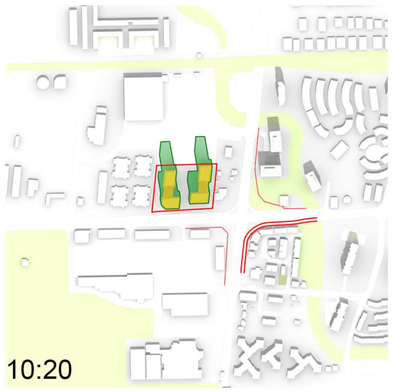


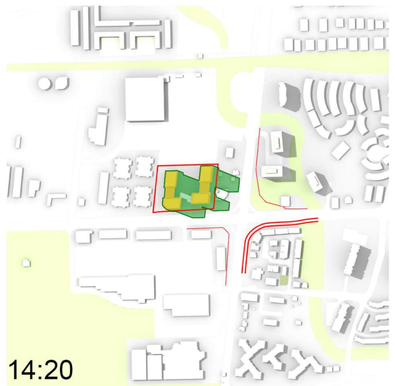
- Proposed Development
- S2 at Stonebrook Condominiums In Construction
- Green Space
- Outdoor Amenity Space
- Existing Context Buildings
- Roads + Parking
- Areas not meeting shadow impact criteria:
  1. South-East Townhouse Complex (3.1 + 3.5)

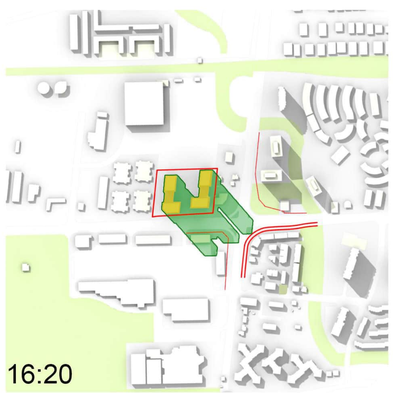
JUNE21











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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

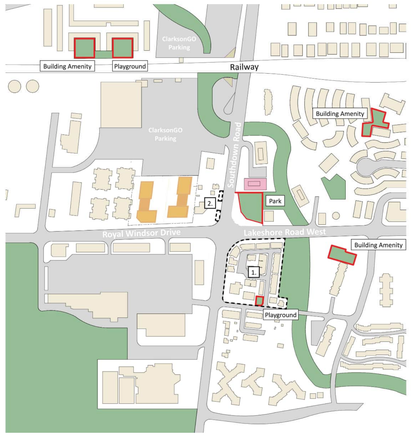
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
June - SUN_SHADOW STUDIES

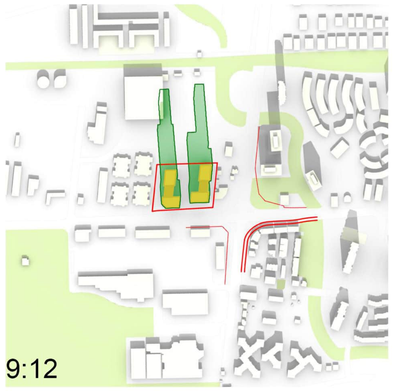
Scale

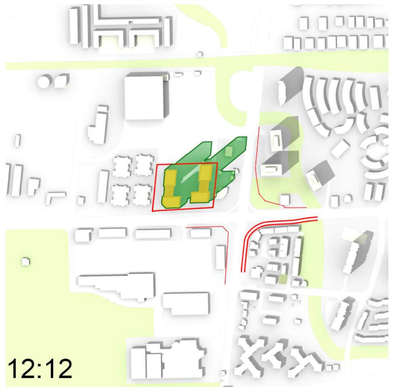
A3.000

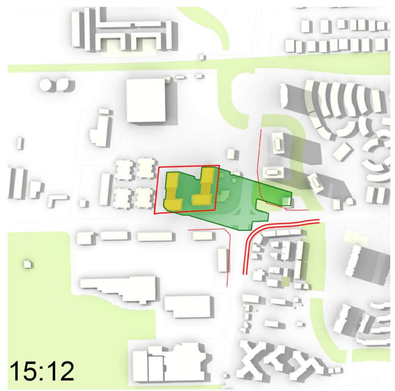


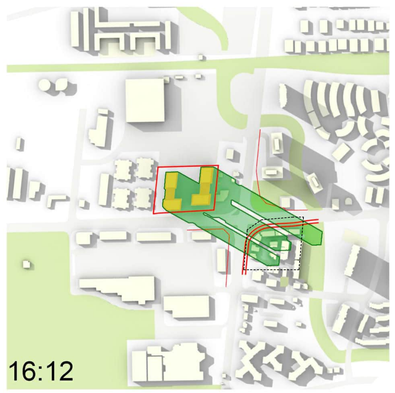
- Proposed Development
- S2 at Stonebrook Condominiums In Construction
- Green Space
- Outdoor Amenity Space
- Existing Context Buildings
- Roads + Parking
- Areas not meeting shadow impact criteria:
  1. South-East Townhouse Complex (3.1 + 3.5)

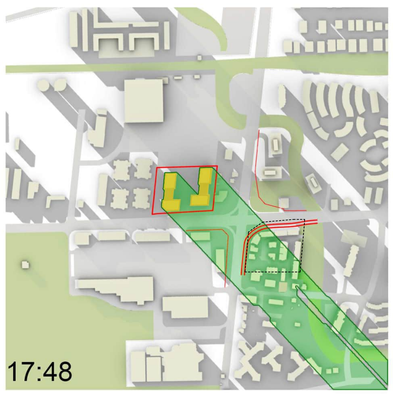
SEPTEMBER21











CRW 2 L.P., CRW 2 G.P. INC. (c/o Slate Asset Management)

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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

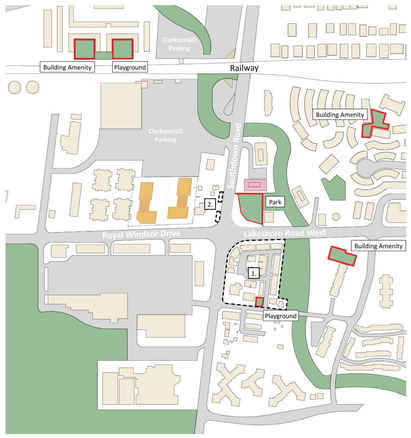
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
September - SUN_SHADOW STUDIES

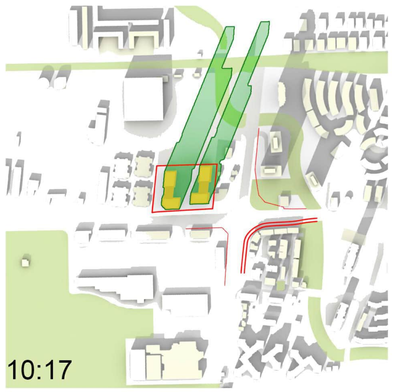
Scale

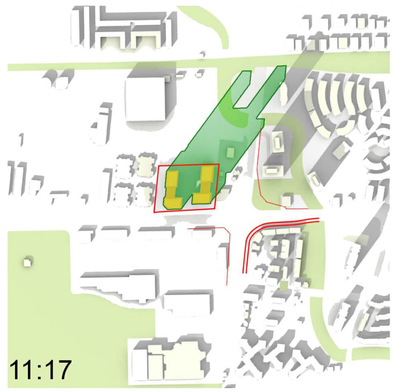
A3.001

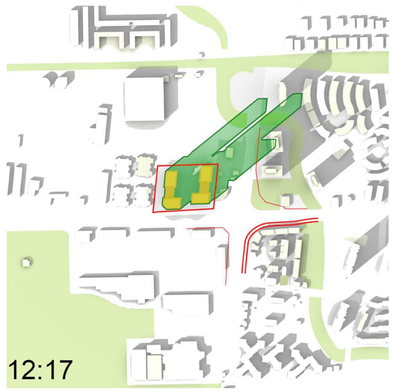


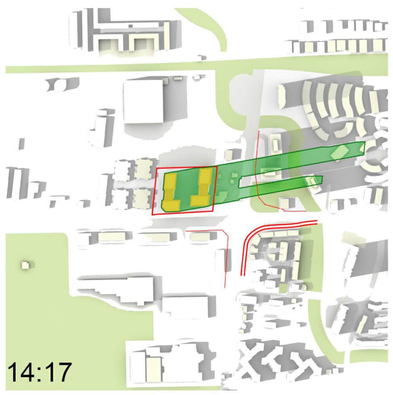
- Proposed Development
- S2 at Stonebrook Condominiums In Construction
- Green Space
- Outdoor Amenity Space
- Existing Context Buildings
- Roads + Parking
- Areas not meeting shadow impact criteria:
  1. South-East Townhouse Complex (3.1 + 3.5)

DECEMBER21









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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

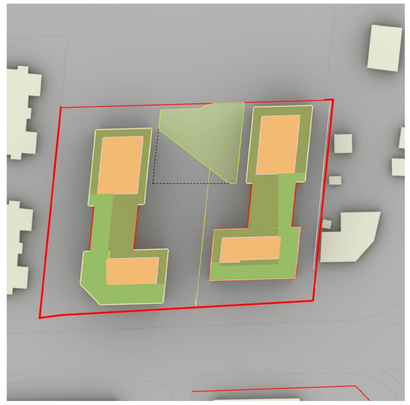
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
December - SUN_SHADOW STUDIES

Scale

A3.002



Outdoor Amenity Areas

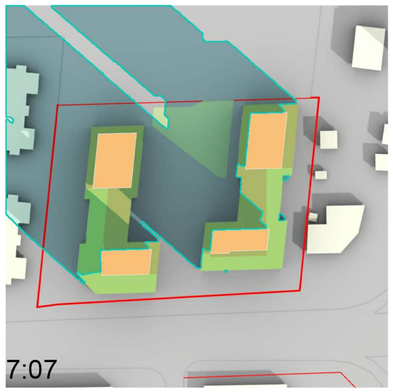
Indoor Amenity Areas

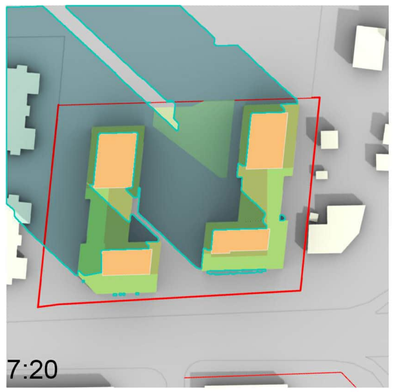
Additional Outdoor Amenity Areas

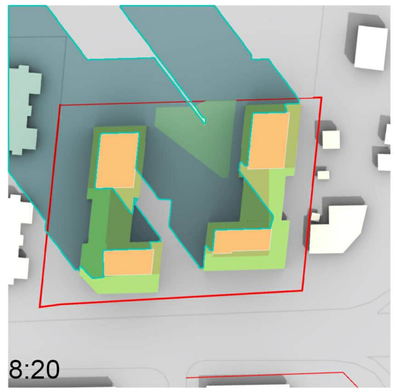
Parkland

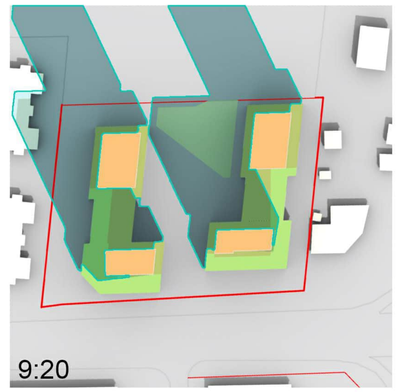
21-Jun	PHASE1	PHASE2
TIME		
7:07	51.282112	99.806076
7:20	51.282112	99.806076
8:20	42.81786	98.868779
9:20	40.088326	94.149971
10:20	36.007806	83.645773
11:20	37.055481	56.851956
12:20	59.25002	53.393676
13:20	61.014548	49.450574
14:20	51.778253	31.383326
15:20	51.116557	25.01615
16:20	51.28199	18.067216
17:20	51.502559	10.601153
18:20	54.176958	8.306385
19:20	58.036923	7.272127
19:33	47.091252	6.367153
AVG	50	50

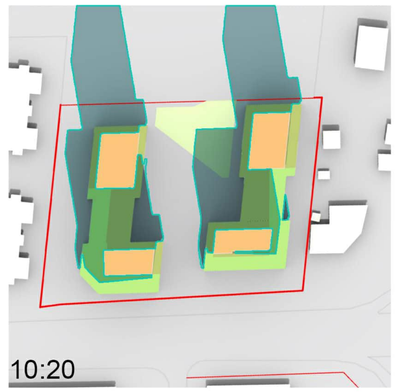
JUNE21

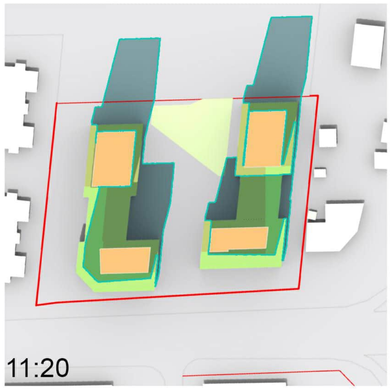


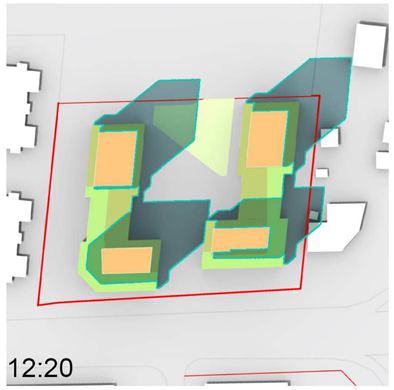


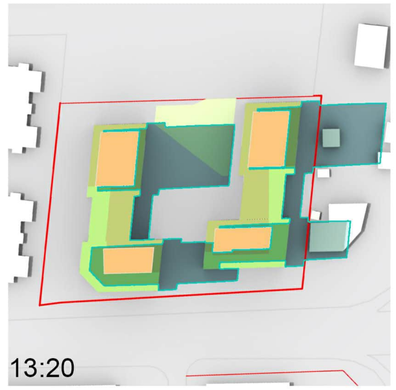


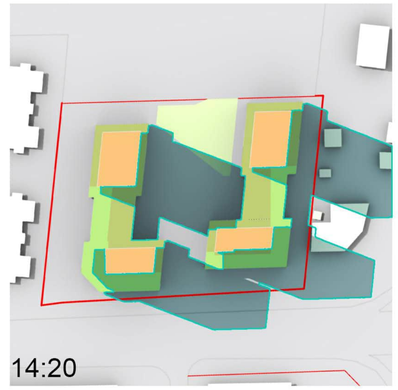


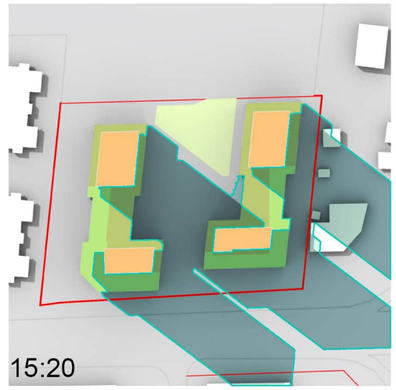


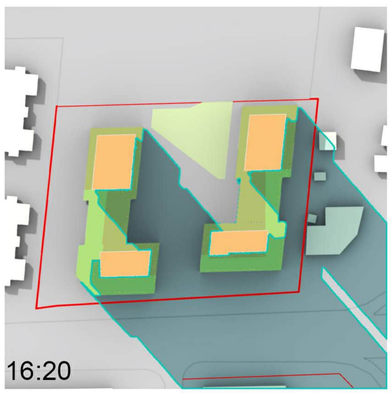


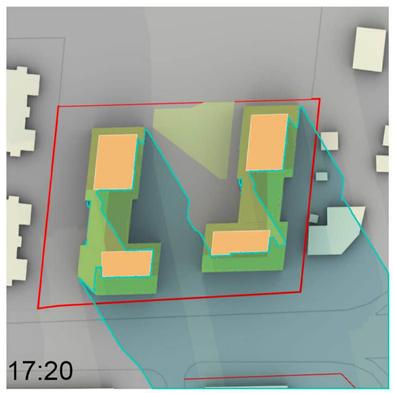


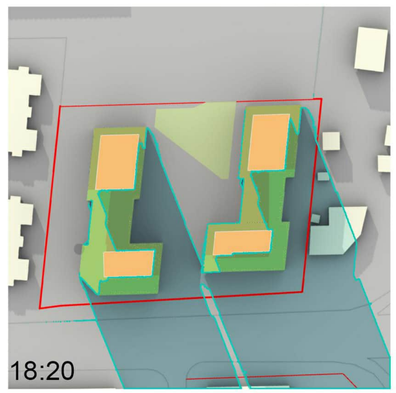


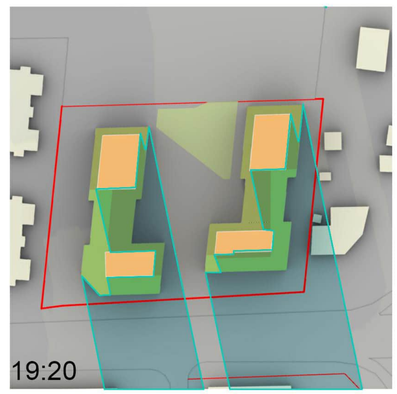


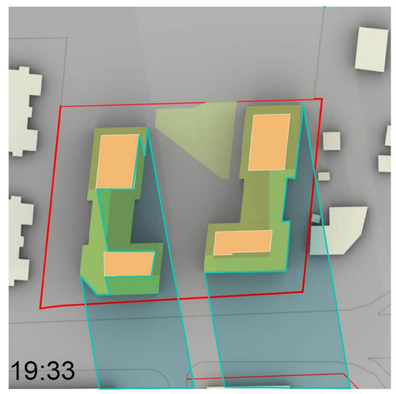












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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

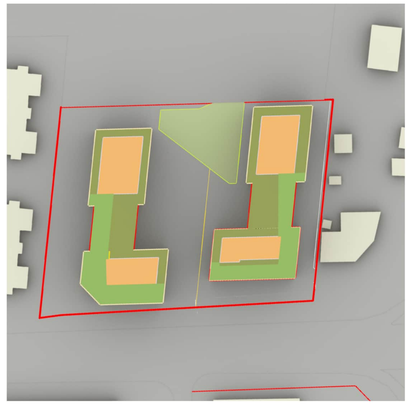
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
June - SUN_SHADOW STUDIES

Scale

A3.003



Outdoor Amenity Areas

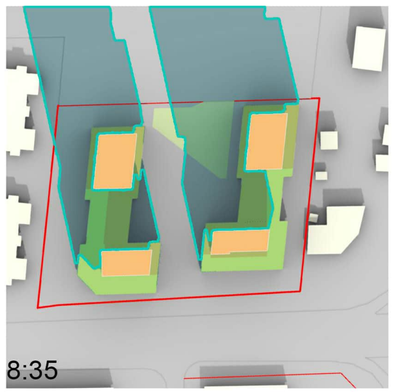
Indoor Amenity Areas

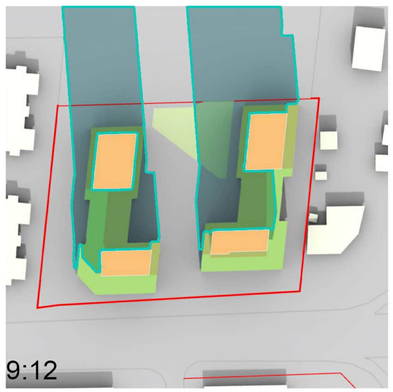
Additional Outdoor Amenity Areas

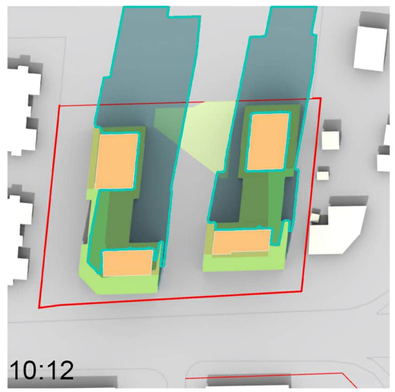
Parkland

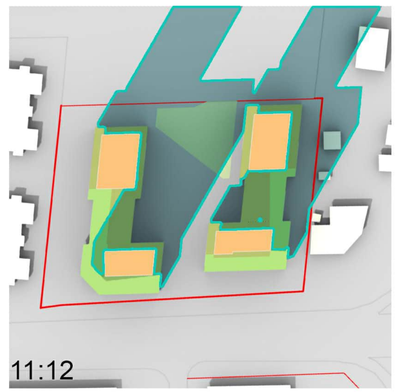
21-Sep	PHASE1	PHASE2	PARKLAND
TIME			
8:35	49.820904	81.18939	31.484677
9:12	49.820904	81.18939	31.484677
10:12	55.638364	58.855833	71.075051
11:12	73.035568	47.99611	14.313134
12:12	75.820199	45.895267	17.683436
13:12	73.697219	51.098916	8.319113
14:12	70.58169	21.68714	44.539272
15:12	64.929623	8.403347	70.285848
16:12	67.43859	20.652852	88.737206
17:12	69.809714	24.272777	100
17:48	67.824608	21.913368	100
AVG	65	42	53

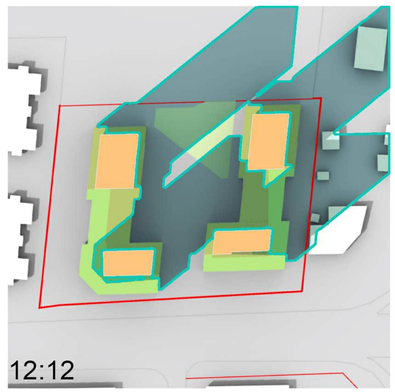
SEPTEMBER21

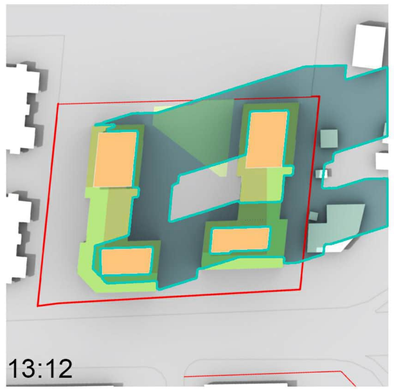


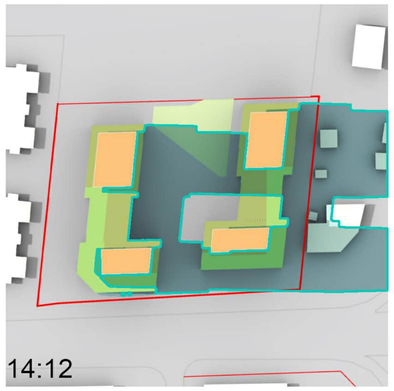


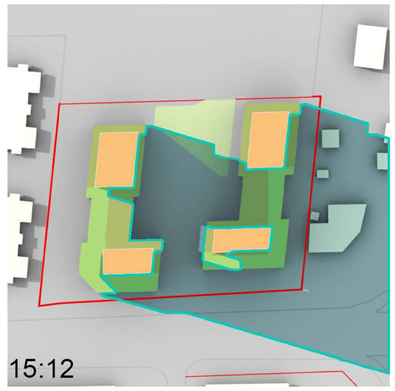


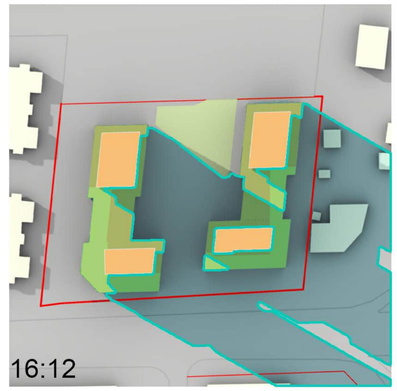


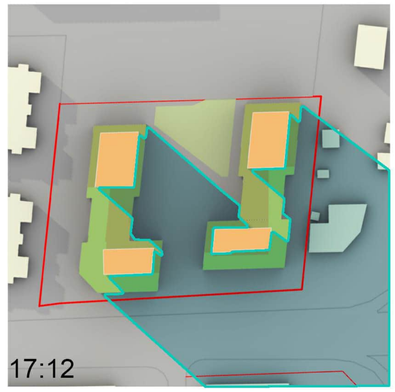


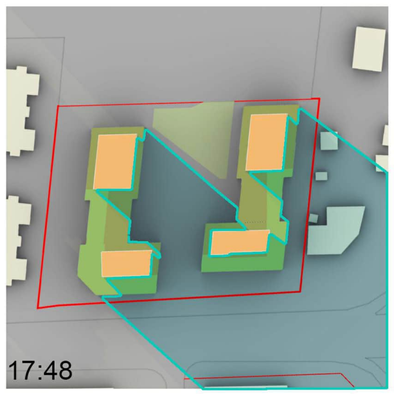












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Tel 416.601.3890

△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

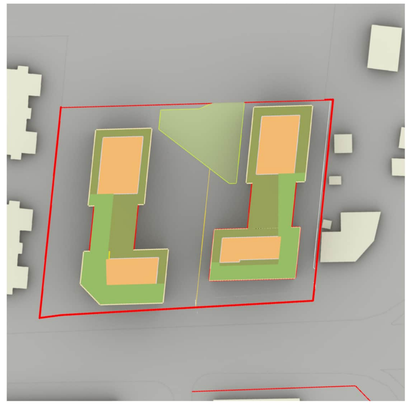
Project Name
CLARKSON GO

Project Number
67.1245.000

Description
September - SUN_SHADOW STUDIES

Scale

A3.004



Outdoor Amenity Areas

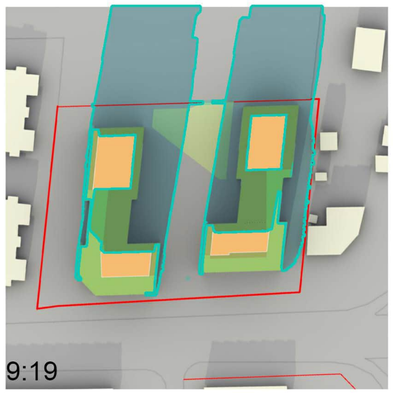
Indoor Amenity Areas

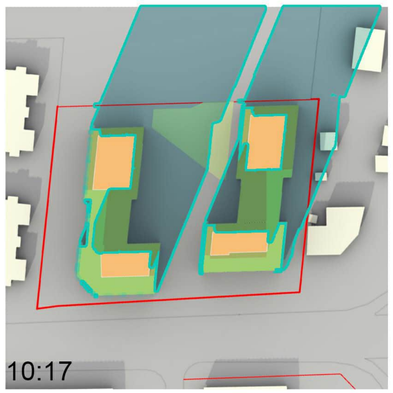
Additional Outdoor Amenity Areas

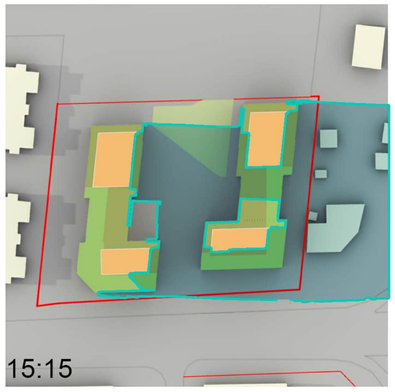
Parkland

21-Dec	PHASE1	PHASE2
TIME		
9:19	78.411997	83.742711
10:17	83.292027	63.057505
11:17	92.831548	56.65803
12:17	97.077473	52.488675
13:17	98.428449	48.804128
14:17	92.445529	41.758295
15:17	88.613152	21.105364
AVG	90	53

DECEMBER21







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Date	Description
1 2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

Project Number
67.1245.000

Description
December - SUN_SHADOW STUDIES

Scale

A3.005

STREET LEVEL VIEW FROM SW CORNER

CRW 2 L.P., CRW 2 G.P. INC. (c/o Slate Asset Management)

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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

Project Number
67.1245.000

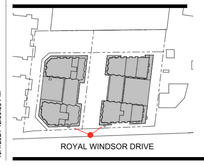
Description
3D RENDERING

Scale
NOT TO SCALE

A3.007

STREET LEVEL VIEW FROM SOUTH

KEY PLAN



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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

Project Number
67.1245.000

Description
3D RENDERING

Scale
NOT TO SCALE

A3.008

STREET LEVEL VIEW FROM SE CORNER

KEY PLAN

CRW 2 L.P., CRW 2 G.P. INC. (c/o Slate Asset Management)

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△	Date	Description
1	2024-09-25	OPA/ZBA SUBMISSION

Seal / Signature

Project Name
CLARKSON GO

Project Number
67.1245.000

Description
3D RENDERING

Scale
NOT TO SCALE

A3.009

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