Urban Design Review Panel Report
1047 Richmond Road, Ottawa

September 26, 2024

Kimberly Baldwin
Planner III (T), Development Review – West
Planning, Infrastructure and Economic Development Department
City of Ottawa
110 Laurier Avenue West
Ottawa, ON K1P 1J1

Via Email: kimberley.baldwin@ottawa.ca

RE: Urban Design Review Panel Report
Site Plan Control Application
1047 Richmond Road, Ottawa

Dear Ms. Baldwin,

Enclosed, please find responses to the Urban Design Review Panel's comments provided on August 20, 2024, regarding the Site Plan Control application for the property municipally known as 1047 Richmond Road, Ottawa.

In addition to this cover letter, the following materials are included within the submission package:

- UDRP Recommendations, dated August 20, 2024; and,
- Original UDRP presentation, dated August 2, 2024.

We trust that this addresses the Urban Design Review Panel Report requirements, and the development can move forward towards approval. Please feel free to contact the undersigned with any additional comments or questions at simpson@fotenn.com.

Respectfully submitted,

Jillian Simpson
Planner

Lisa Dalla Rosa, MCIP RPP
Associate, Planning

Key Recommendations

1. The Panel supports the integration of complete streets and green streets into the site design.
   - Ensure public realm relationship between POPS areas, park, and public streetscape mesh seamlessly.

   Response: Acknowledged. We are aware that the relationship between the park and the site are intertwined and we are open to coordinate with the city's Parks department to further refine the design of the edges of the site that frame the park to facilitate the city's future vision for the park.

   The proposed open spaces and public realm aim to create a seamless integration between the park, the privately owned public space (POPS), and the surrounding streetscape. The park is easily accessible via the sidewalk, and the POPS provides a clear pedestrian pathway into the site. The planters along Richmond Road frame the streetscape frontage and provide access points into the site. Along New Orchard Ave, a pedestrian access point is framed with planters to create a direct visual access along the building facade, further enhancing pedestrian connectivity and providing convenient access to both the Park and the POPS.

2. The Panel appreciates the commercial uses fronting onto the park space and Richmond Road.

   Response: Acknowledged.

3. The Panel has strong concerns with the wind conditions presented from the proposed massing, and recommends further molding the podium and tower massing to improve the future wind conditions on the public realm. Various recommendations on ways to explore mitigating wind conditions were shared.

   Response: The tower massing is limited by the 12.5m tower setback to the north property line, therefore option to increasing the tower stepback at the southwest corner of the building limited. Alternative strategies to mitigate the wind impact to the park has been integrated.

4. The Panel recommends limiting the vehicular presence on site by keeping the access and drop-off as tight and compact as possible, and appreciates the efforts already made.

   Response: Acknowledged.

5. The Panel recommends further greening the site and public realm, preferably in a manner that coincides with greater site sustainability (e.g., LIDs, stormwater) and improves wind conditions for pedestrians.

   Response: Acknowledged. Since the UDRP presentation, we have increased the size of the planters to maximize softscape on site while maintaining pedestrian access and walkways. The planting frontage along Richmond Road has been enlarged while maintaining pedestrian access points, and the sculptural planters within the outdoor amenity courtyard have been expanded while maintaining seating and visual connections. Given that New Orchard Avenue, is classified as a Green Street, we have proposed large shade canopy trees along that frontage to enhance the public realm experience and buffer to the townhouses.

6. The Panel supports the ribbed/fluted textured concrete architectural expression for the tower.

   Response: Acknowledged.

7. The Panel recommends further refining and integrating the glazed amenity at the top of the building in a manner that acts as a beacon while also elegantly integrating with the fluted tower design.

Response: Acknowledged. The glazed amenity at the top of the building has increased in massing to create more of a beacon atop the building.

8. The Panel has concerns with the shifting of the concrete pattern on the tower, and recommends pursuing a simplified linear verticality and continuity to the fluted concrete.

   Response: Acknowledged. Vertical articulation has been simplified through the integration of a combination of long vertical window wall and punched windows. The window offsets have also been removed from the design to further simplify and place the emphasis on the vertical fluting of the concrete materiality that are more continuous.

9. The Panel has concerns with the architectural expression of the podium, particularly the 'framing' not relating to the fluted tower design, and recommends exploring various options to improve the podium with regard to:
   a) the mitigation of wind effects on the public realm (park and POPS);
   b) the architectural legibility of the retail frontages along the park and Richmond Road as commercial space;
   c) better integration of the podium design with the strong fluted design of the tower.

   Response: Design of the podium has been revised to improve the architectural legibility of the retail frontages and improve the integration of the tower design- Please refer to revised Urban Design Review Panel Package (Urban Design Brief).

Site Design & Public Realm

10. The Panel appreciates the revisions made to this submission, particularly reducing from 3 to 2 towers.

    Response: Acknowledged.

11. The Panel appreciates the overall circulation of the site, organization of the servicing and consolidation of a single parking entrance.

    Response: Acknowledged.

12. The Panel appreciates the condensed loop for vehicular movement and drop-off, and the woonerf style treatment of the vehicular lanes is very strong for the project.

    Response: Acknowledged.

13. The Panel appreciates the clear delineation of the pedestrian and vehicular zones, while maintaining a pedestrian-oriented woonerf style.

    Response: Acknowledged.

14. The Panel appreciates having the loading, servicing, and parking incorporated indoors within the building envelope, and recommends ensuring that the landscaping screens those areas as much as possible, especially with regard to the properties to the north.

    Response: To ensure adequate screening of the loading, servicing, and parking areas, a planting buffer zone and a 2.1-metre HT solid wood fence is proposed along the length of the property line at the north and east. These elements will contribute to buffering these areas particularly in relation to neighboring properties.

15. The Panel has concerns with the public realm relationship between the streetscape design along Richmond Road and the POPS areas, and recommends further evolving the details of the landscape/site design, especially along the sidewalk/streetscape.

- The Panel recommends collaborating with the City on where the best areas for planters and trees along Richmond Road would be. Ensuring they coincide with adequate pedestrian through-way space and desire lines.
- Consider further greening the site with softscaping, introducing LIDs, and using stormwater to irrigate the site. As proposed, the site is largely hardscaped and introducing softscaping could also help mitigate wind impacts at grade.

Response: Since the UDRP presentation, we have increased the size of the planters to maximize softscape on site while maintaining pedestrian access and walkways. The planting frontage along Richmond Road has been enlarged while maintaining pedestrian access points. We are open to collaborating with the City on optimal locations for planters and trees.

Sustainability

16. The Panel appreciates the trees and buffer in the site design to accommodate for New Orchard's designation as a "green street".

    Response: Acknowledged.

17. The Panel appreciates the sustainability aspects of the proposal, especially the inclusion of a geothermal system and the proposed window-to-wall ratio.

    Response: Acknowledged.

18. The Panel recommends exploring opportunities on rooftops for greenery and amenity spaces—both at the podium level and tower top—to reduce heat island effect and assist with biodiversity/sustainability.

    Response: Acknowledged

Built Form & Architecture

19. The Panel appreciates the strides made in introducing interesting ways to clad the building.

    Response: Acknowledged.

20. The Panel appreciates the vertically ribbed/fluted precast concrete panels of the tower.

    Response: Acknowledged.

21. The Panel recommends pursuing a continuous vertical fluting for the tower from base to top, rather than segmenting/shifting the windows and fluting concrete. Contrast the light-coloured fluted panels with the windows and emphasize the verticality with full-length strips.

    Response: Acknowledged. Vertical articulation has been simplified through the integration of a combination of long vertical window wall and punched windows. The window offsets have also been removed from the design to further simplify and place the emphasis on the vertical fluting of the concrete materiality that are more continuous.

22. The Panel recommends introducing a greater focus on horizontality in the podium architecture, in contrast to the verticality of the tower fluting.

    Response: Acknowledged. Podium has been revised post UDRP meeting, please refer to revised UDRP Package attached.

23. The Panel recommends exploring changes to the massing and built-form that would improve the grade-level wind conditions on the public and private realms (Park and POPS in particular).
    - Consider increasing the height of the podium to 4-storeys and/or increasing the tower setback from the podium edge, as these are built-form measures that can assist with decreasing wind impacts at grade.

    Response: Increasing the podium height to 4 storeys has been reviewed by our wind consultant and we can confirm that it would offer minimal improvements to the wind conditions. A mitigation landscape strategy has been proposed in the updated design.

    A planting hedge along the north-western edge of the future public park has been introduced to help mitigate the wind conditions in this zone.

24. The Panel suggests there is a missed opportunity with the 2-storey glazed amenity space at the top of the building, as the language for that portion does not relate to the tower design.
    - Consider a volume of vision glass and vertical u-channel glass which brings it into dialogue with the tower.
    - Consider recessing the glazed volumes (between the fluted cladding) slightly making it more of a beacon at night that sits atop as a reveal from the cladding.

    Response: Acknowledged. The glazed amenity at the top of the building has increased in massing to create more of a beacon atop the building. The suggested use of channel glass will be considered as we progress the design.

25. The Panel suggests more refinement of the mechanical penthouse is needed to distinguish how the tower top meets the sky.
    - Consider a subtle exuberance for the tower top (e.g., the TD Tower in Toronto by Mies van der Rohe). A glazed mechanical penthouse that is slightly recessed could work well as a beacon to the vertically fluted precast tower.

    Response: Acknowledged. The glazed amenity at the top of the building has increased in massing to create more of a beacon atop the building. Please refer the updated Design Brief for updated design. The suggested use of channel glass will be reviewed as with the owner as an option for this are of the building.

26. The Panel recommends maximizing the podium to 4-storey height and reducing the tower height slightly. Reconfiguring the massing in this way could help improve wind conditions, along with shifting the tower away from New Orchard and the park space with tower setbacks.

    Response: Increasing the podium height to 4 storeys has been reviewed by our wind consultant and we can confirm that it would offer minimal improvements to the wind conditions in question. A mitigation landscape strategy has been proposed in the updated design.

    The tower can't shift any further north due to the fact that is limited by the 12.5m set back along the north property line. Alternative wind mitigation strategies are being proposed to address the wind concerns.

27. The Panel provided multiple suggestions for improving the architectural treatment of the podium, with some Panel members suggesting greater emphasis on horizontality and others suggesting vertical openings would fit better than the proposed “big frames” of the current podium design (e.g., p.25 at top-right, ‘IDP Architects’).
    - Additionally, the Panel suggests exploring the picket style railings for the balconies (e.g., p.25 at bottom-left, ‘Passelac & Roques Architectes’).

    Response: Acknowledged. Podium has been revised post UDRP meeting, please refer to revised UDRP Package attached. We will review the picket style railings with the owner for consideration.

28. The Panel suggests the elevation fronting the park and Richmond Road does not clearly appear as retail space, and recommends exploring ways to make the retail uses more apparent to passers-by.

- The Panel recommends retail canopies could help mitigate wind conditions while also helping to delineate retail uses. Furthermore, the Panel suggests the podium needs further refinement and recommends exploring a stronger horizontal legibility to the storefronts.

Response: Acknowledged. Podium has been revised post UDRP meeting, please refer to revised UDRP Package attached.

29. The Panel recommends ensuring that the architectural details of the tower design are extremely well executed (e.g., seams, joints, vents, etc.).

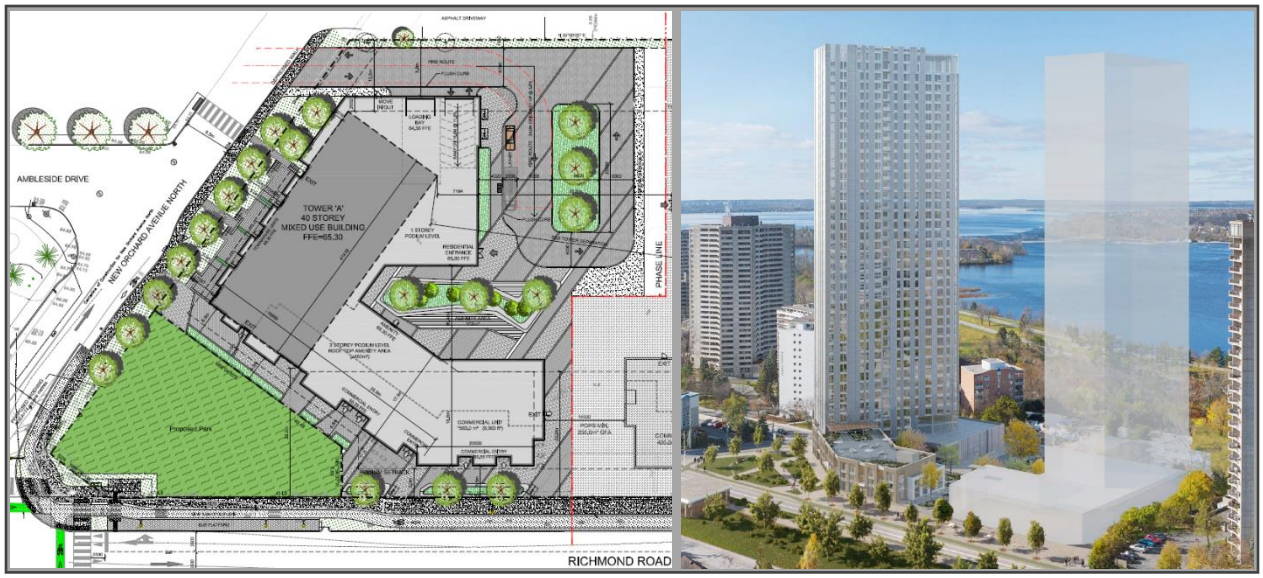
Response: Acknowledged.

30. The Panel appreciates the insetting of balconies.

Response: Acknowledged.

URBAN DESIGN REVIEW PANEL RECOMMENDATIONS
August 2nd, 2024

1047 Richmond Road | Informal Pre-consultation | Site Plan Control Application | Fengate Asset Management, RLA Architects, Fotenn Planning + Design, Studio TLA, Egis



Key Recommendations

- The Panel supports the integration of complete streets and green streets into the site design.
    - Ensure public realm relationship between POPS areas, park, and public streetscape mesh seamlessly.
- The Panel appreciates the commercial uses fronting onto the park space and Richmond Road.
- The Panel has strong concerns with the wind conditions presented from the proposed massing, and recommends further molding the podium and tower massing to improve the future wind conditions on the public realm. Various recommendations on ways to explore mitigating wind conditions were shared.
- The Panel recommends limiting the vehicular presence on site by keeping the access and drop-off as tight and compact as possible, and appreciates the efforts already made.
- The Panel recommends further greening the site and public realm, preferably in a manner that coincides with greater site sustainability (e.g., LIDs, stormwater) and improves wind conditions for pedestrians.
- The Panel supports the ribbed/fluted textured concrete architectural expression for the tower.

- The Panel recommends further refining and integrating the glazed amenity at the top of the building in a manner that acts as a beacon while also elegantly integrating with the fluted tower design.
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- The Panel has concerns with the architectural expression of the podium, particularly the 'framing' not relating to the fluted tower design, and recommends exploring various options to improve the podium with regard to:

  a) the mitigation of wind effects on the public realm (park and POPS);

  b) the architectural legibility of the retail frontages along the park and Richmond Road as commercial space;

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Site Design & Public Realm

- The Panel appreciates the revisions made to this submission, particularly reducing from 3 to 2 towers.
- The Panel appreciates the overall circulation of the site, organization of the servicing and consolidation of a single parking entrance.
- The Panel appreciates the condensed loop for vehicular movement and drop-off, and the woonerf style treatment of the vehicular lanes is very strong for the project.
- The Panel appreciates the clear delineation of the pedestrian and vehicular zones, while maintaining a pedestrian-oriented woonerf style.
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they coincide with adequate pedestrian through-way space and desire lines.
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Sustainability

- The Panel appreciates the trees and buffer in the site design to accommodate for New Orchard's designation as a "green street".
- The Panel appreciates the sustainability aspects of the proposal, especially the inclusion of a geothermal system and the proposed window-to-wall ratio.
- The Panel recommends exploring opportunities on rooftops for greenery and amenity spaces—both at the podium level and tower top—to reduce heat island effect and assist with biodiversity/sustainability.

Built Form & Architecture

- The Panel appreciates the strides made in introducing interesting ways to clad the building.
- The Panel appreciates the vertically ribbed/fluted precast concrete panels of the tower.
- The Panel recommends pursuing a continuous vertical fluting for the tower from base to top, rather than segmenting/shifting the windows and fluting concrete. Contrast the light-coloured fluted panels with the windows and emphasize the verticality with full-length strips.
- The Panel recommends introducing a greater focus on horizontality in the podium architecture, in contrast to the verticality of the tower fluting.
- The Panel recommends exploring changes to the massing and built-form that would improve the grade-level wind conditions on the public and private realms (Park and POPS in particular).
    - Consider increasing the height of the podium to 4-storeys and/or increasing the tower setback from the podium edge, as these are built-form measures that can assist with decreasing wind impacts at grade.
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- The Panel provided multiple suggestions for improving the architectural treatment of the podium, with some Panel members suggesting greater emphasis on horizontality and others suggesting vertical openings would fit better than the proposed “big frames” of the current podium design (e.g., p.25 at top-right, *‘IDP Architects’*).
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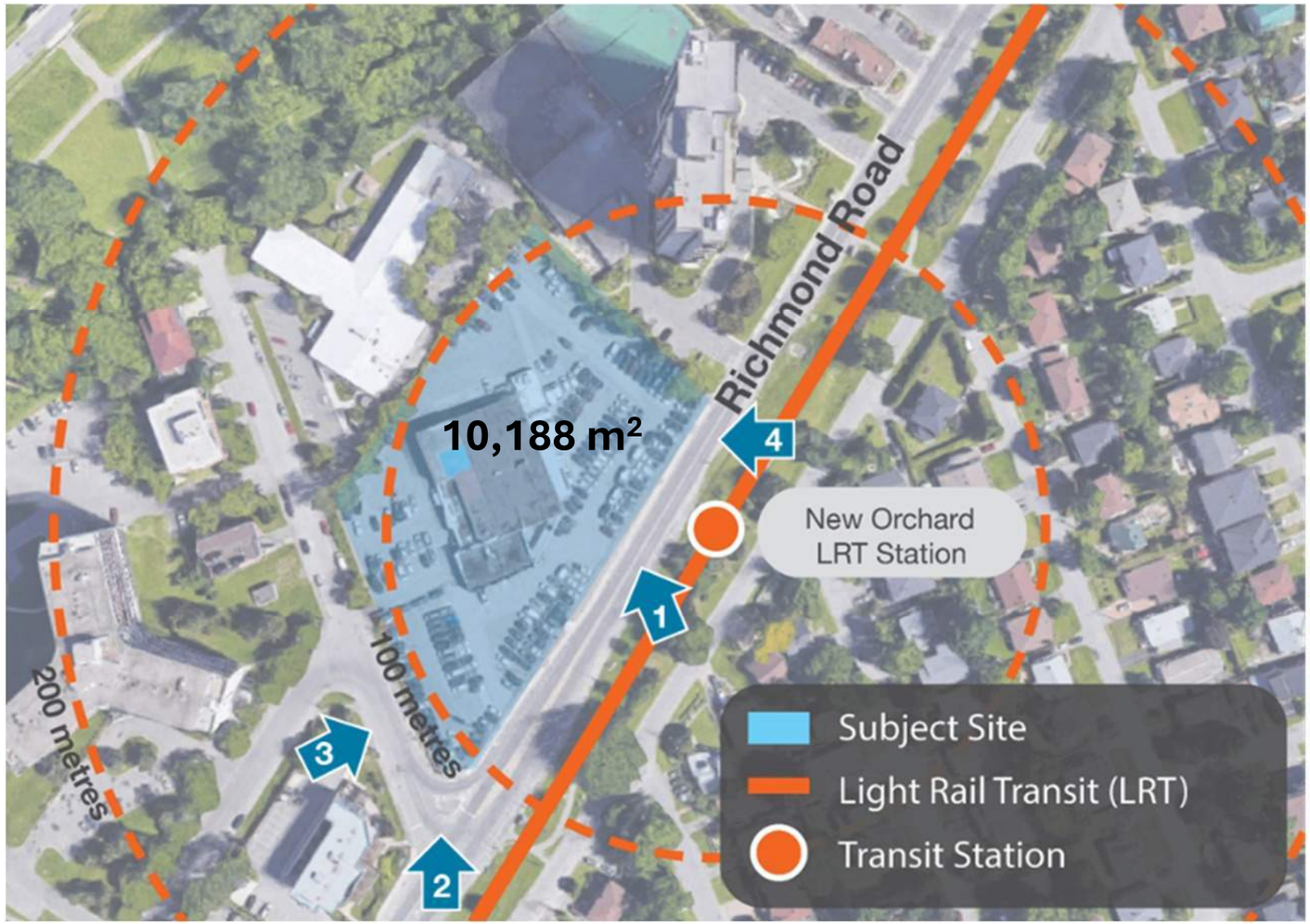
TABLE OF CONTENTS

Site Context

Description and Surroundings

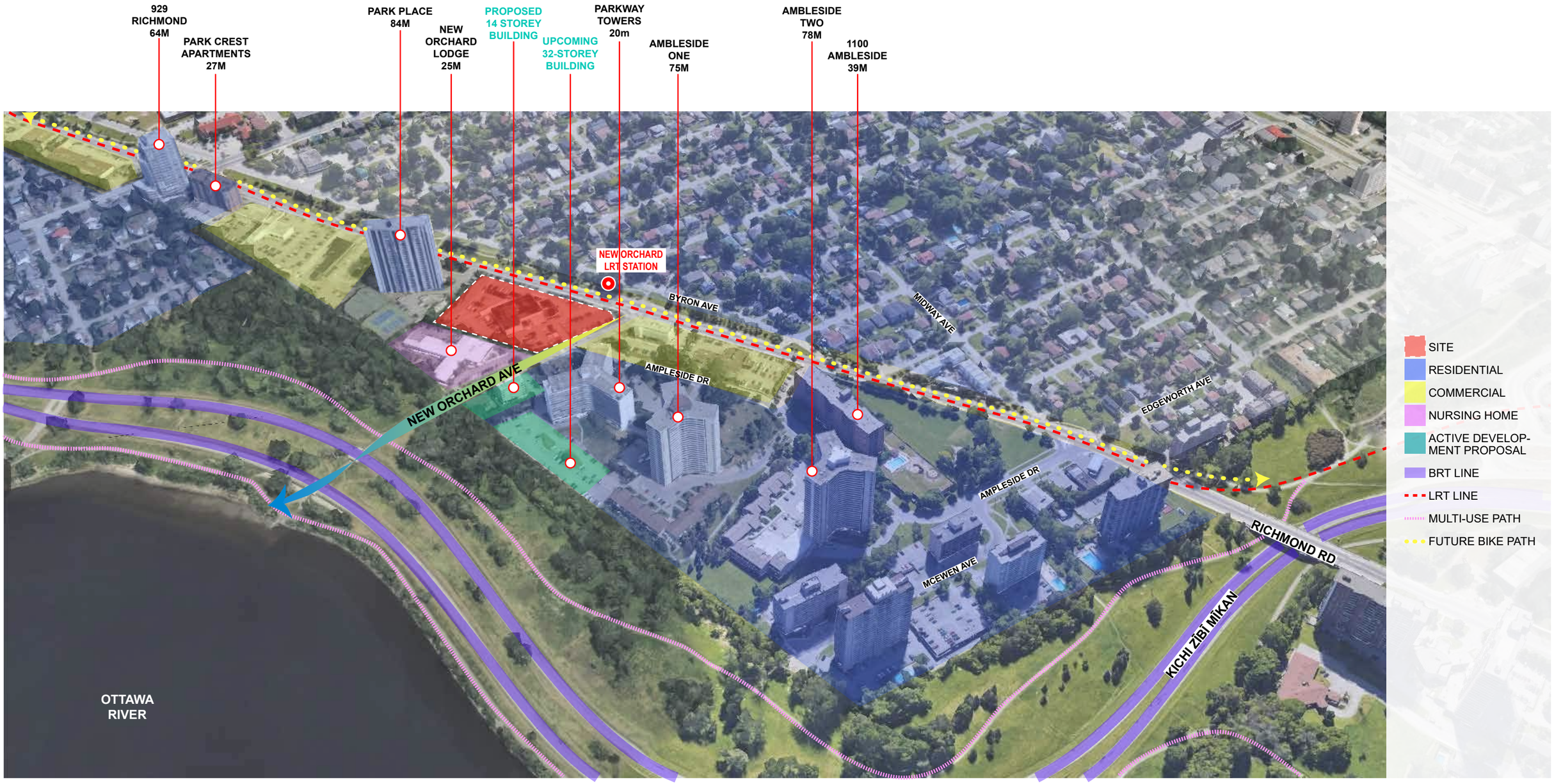


Looking north towards subject site

Looking northeast along Richmond Road

Looking east towards subject site from New Orchard Ave

Looking northwest towards high-rise context to the west



SITE DESCRIPTION

The proposal will redevelop the underutilized site which was previously occupied by a used car dealership with large surface parking lots. The site fronts onto Richmond Rd and New Orchard Ave. N. The neighboring properties are currently in transition towards more higher density buildings in response to the areas new transit developments. The property is zoned as Traditional Mainstreet and is situated directly across from the future New Orchard LRT station offering a great launching pad to become a bustling hub drawing users into the site and activating the streetscape along main street of Richmond Rd.

The sites proximity to the Ottawa River will offer the tenants uninterrupted views of the river and beyond, the Gatineau hills. Additionally, it is within steps to a great gateway pedestrian access to the parkway's Multi-Use Pathways along the formerly known Sir John A. Macdonald Parkway (Kichi Zībī Mīkan) which offers the residents of this development great connectivity to a beautiful greenspace. On site urban greenspace is also offered by the future proposed public park at the south corner of the property, large semi-public amenity courtyard and POPs space centrally located between the two phases.

Design Directives

CITY DESIGN POLICIES

Urban Design Guidelines

High-Rise Buildings

- Enhances and creates the overall pedestrian experience in the immediate surrounding public realm through the design of the lower portion which creates a new urban fabric.
- Includes three distinctive and integrated parts - base, middle, and top.
- Places the base of the building at the edges of the street to create a new street wall condition.
- Ensures appropriate minimum separation distances between towers and step backs from the base of the towers.
- Provides public spaces which is complimentary and integrate into the existing network of streets, pathways parks and open spaces, and provides direct connections to the surrounding streets.

Transit-Oriented Development

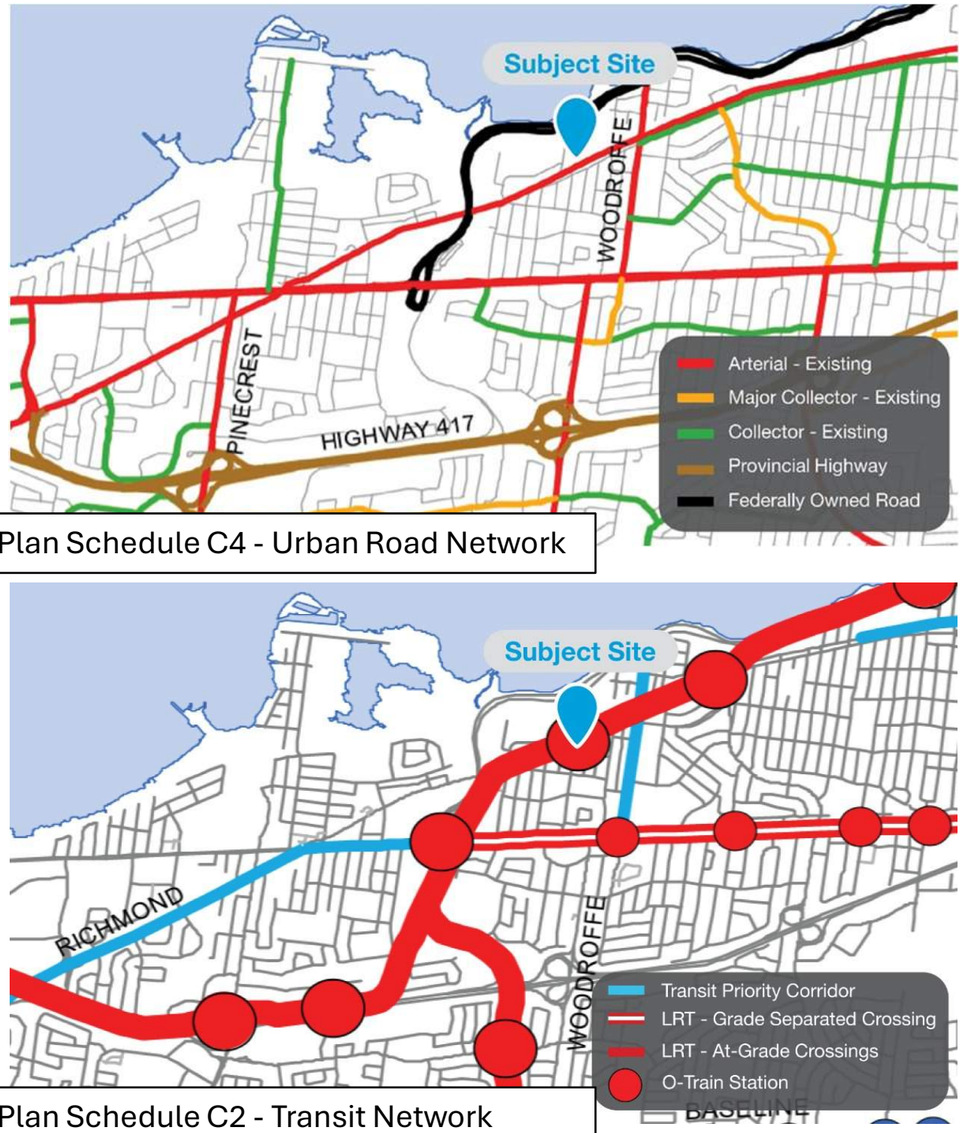
- Provides a transit-supportive land use within a 600-metre walking distance of a rapid transit station.
- Locates a high-density residential use close to the transit station.
- Creates transition in scale between higher-intensity development around the transit station and adjacent lower-intensity communities.
- Provides architectural variety on the lower storeys of buildings to provide visual interest to pedestrians
- The proposed building is located in reference to the front property line in a manner that is intended to define the street edge.
- Use clear windows and doors to make the pedestrian level facade of walls facing the street highly transparent in order to provide east of entrance, visual interest and increased security

Traditional Mainstreets

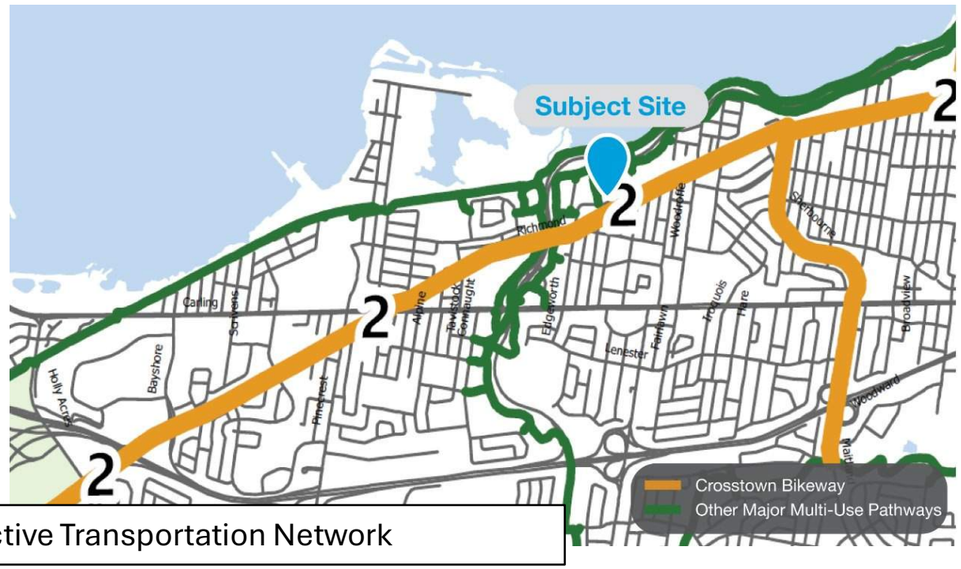
- Provides quality building design which is rich in architectural detail and respects the rhythm and pattern of the existing and planned context.
- Sets back the upper floors of taller buildings to help achieve a human scale and more light on the sidewalks.
- Creates attractive public spaces and semipublic outdoor amenity areas.
- Ensures sufficient light and privacy for residential properties surrounding the site.
- Uses clear windows and doors, to make the pedestrian level highly transparent.
- Locates active pedestrian-oriented uses at grade.

Site Context

MOBILITY NETWORK



Official Plan Schedule C4 - Urban Road Network



TMP- Active Transportation Network

Official Plan Schedule C2 - Transit Network

OCTranspo Current Route Map

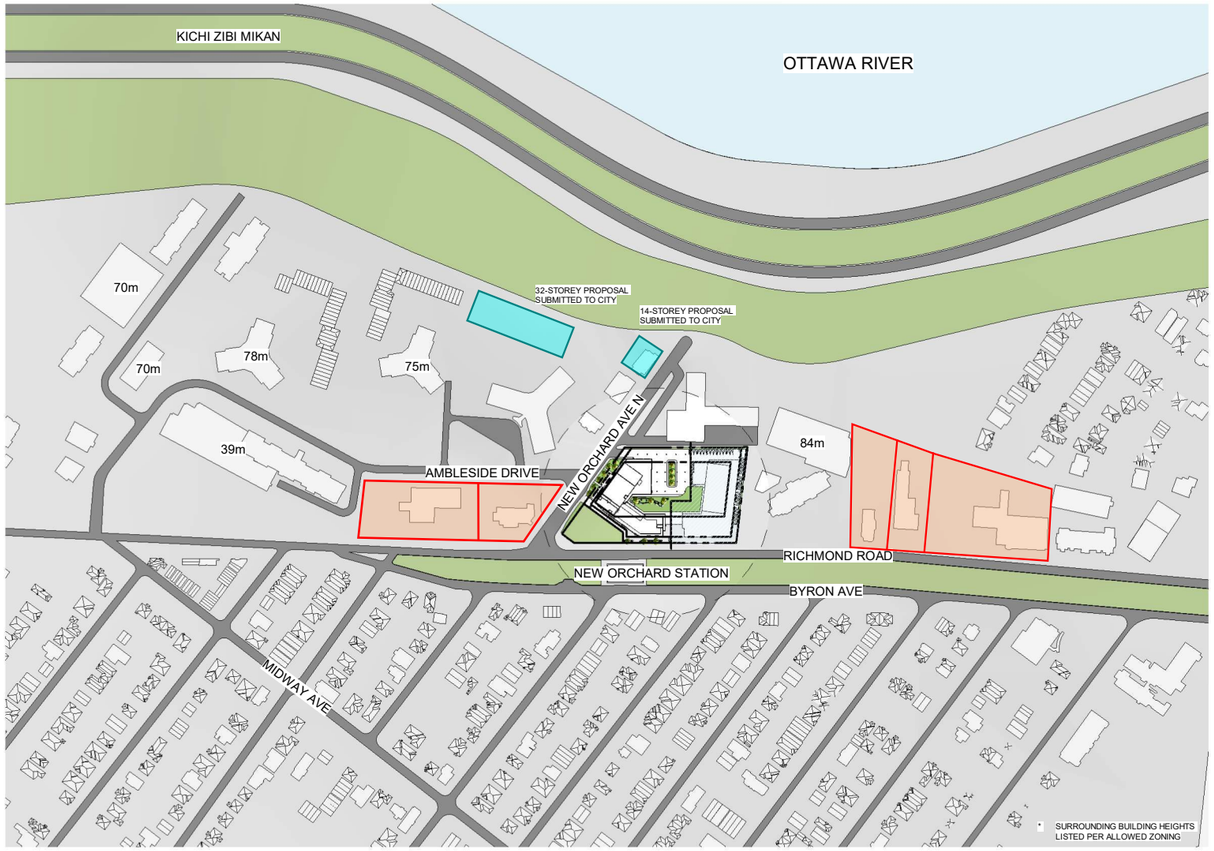
RECENT DEVELOPMENT ACTIVITY

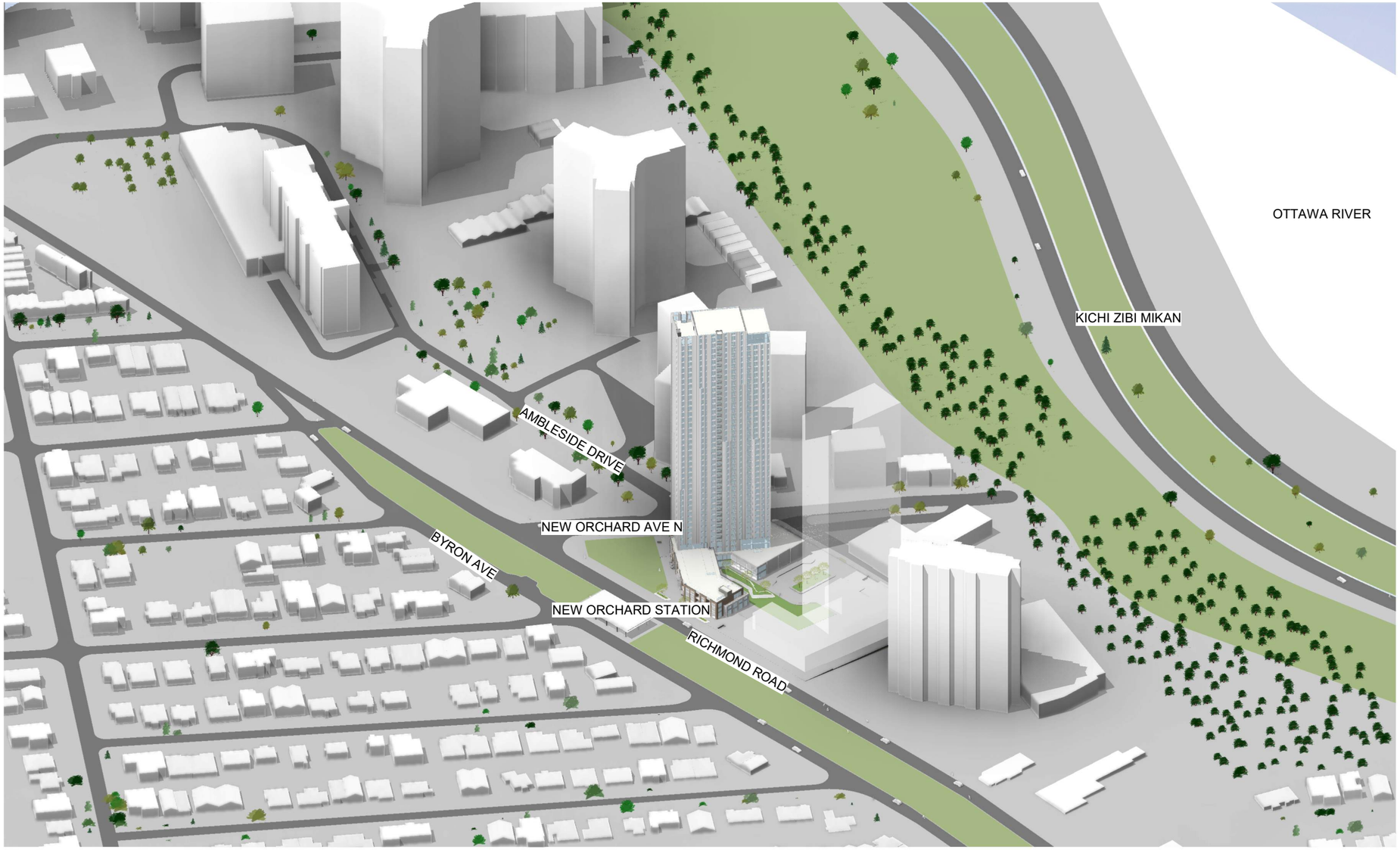
Site Address	Development Activity	Status
2525 Carling	Secondary Plan is proposing up to 40 storeys	ZBLA application in process
1299 Richmond Road	Two towers of 32 and 28 storeys	ZBLA and SP applications in process
100 New Orchard Avenue*	14 storey tower	ZBLA application in process
30 Cleary	6-storey and 16-storey residential buildings	OPA and ZBLA applications in process
2475 Regina	Two towers of 32 and 28 storeys	OPA and ZBLA applications approved
1071 Ambleside*	32 storey tower	OPA and ZBLA applications approved

LEGEND

RECENT DEVELOPMENT ACTIVITY

BUILDING HEIGHTS AS SHOWN ON SHERBOURNE AND NEW ORCHARD SECONDARY PLAN





PROPOSED DEVELOPMENT

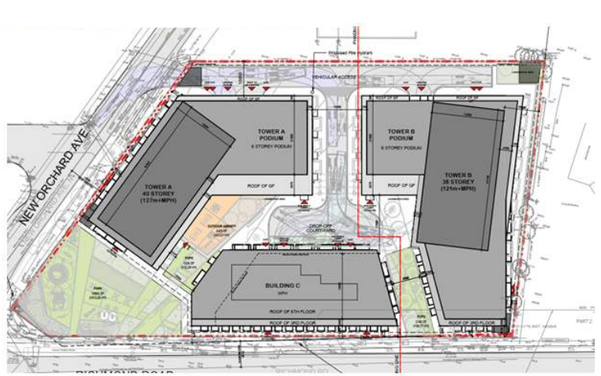
The proposed development consists of two mixed-use high-rise buildings comprised of both residential and commercial spaces. The current development (referred to as Phase 1), proposes 40-Stroreys framed by a 3-storey podium. The development offers 460 units, over 5000sf of commercial space, 259 combined parking spaces, 460+ bicycle bike parking spaces, 30,000 sf of combined internal and external amenity areas, over 200sm of POPS and over 1000sm proposed future park. Units range from studios to three-bedroom units with a total of 70 barrier-free accessible units distributed through the building. Commercial areas are located on the ground floor with active entrances along Richmond Rd and are intended for retail tenants. Residential amenity spaces are proposed internally on the ground floor, the fourth floor of the podium and the 40th story of the tower.

Vehicular access to the site is provided from New Orchard Ave and offers an internal pick-up/drop-off area designed with the future Phase 2 in mind. The two phases will share this private drive loop which also doubles as a fire route for both buildings.

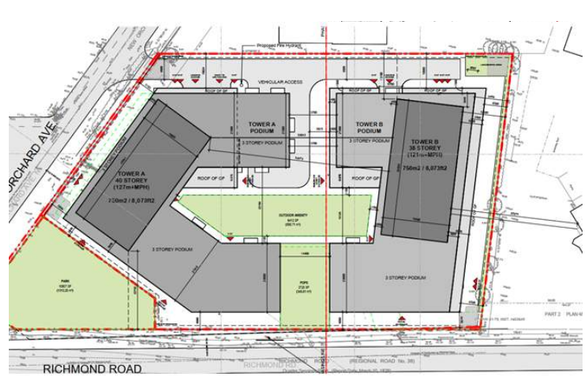
A minimum of 200sm privately owned publicly accessible space (POPs) is provided between the two buildings. It is centrally located offering pedestrian connection from Richmond Rd. It will be completed as part of Phase 2, but maintained as a pedestrian pathway and egress for the building until then. The dedicated park space at the corner of the site, along with the POPs and outdoor amenity spaces connecting the central courtyard encourage pedestrian movement at-grade, integrating the public and private realm throughout the site and into the surrounding community.

MASSING

ORIGINAL RE-ZONING SUBMISSION



OPA AND ZONING APPROVAL



CURRENT

MASSING HISTORY

The massing of the proposal was studied at great lengths during the re-zoning process back in 2023. The inital design has evolved from a three tower scheme, to a few iterations of a two tower scheme, and now finally it has landed as a two tower (40 + 38 levels) + 3-storey podium scheme.

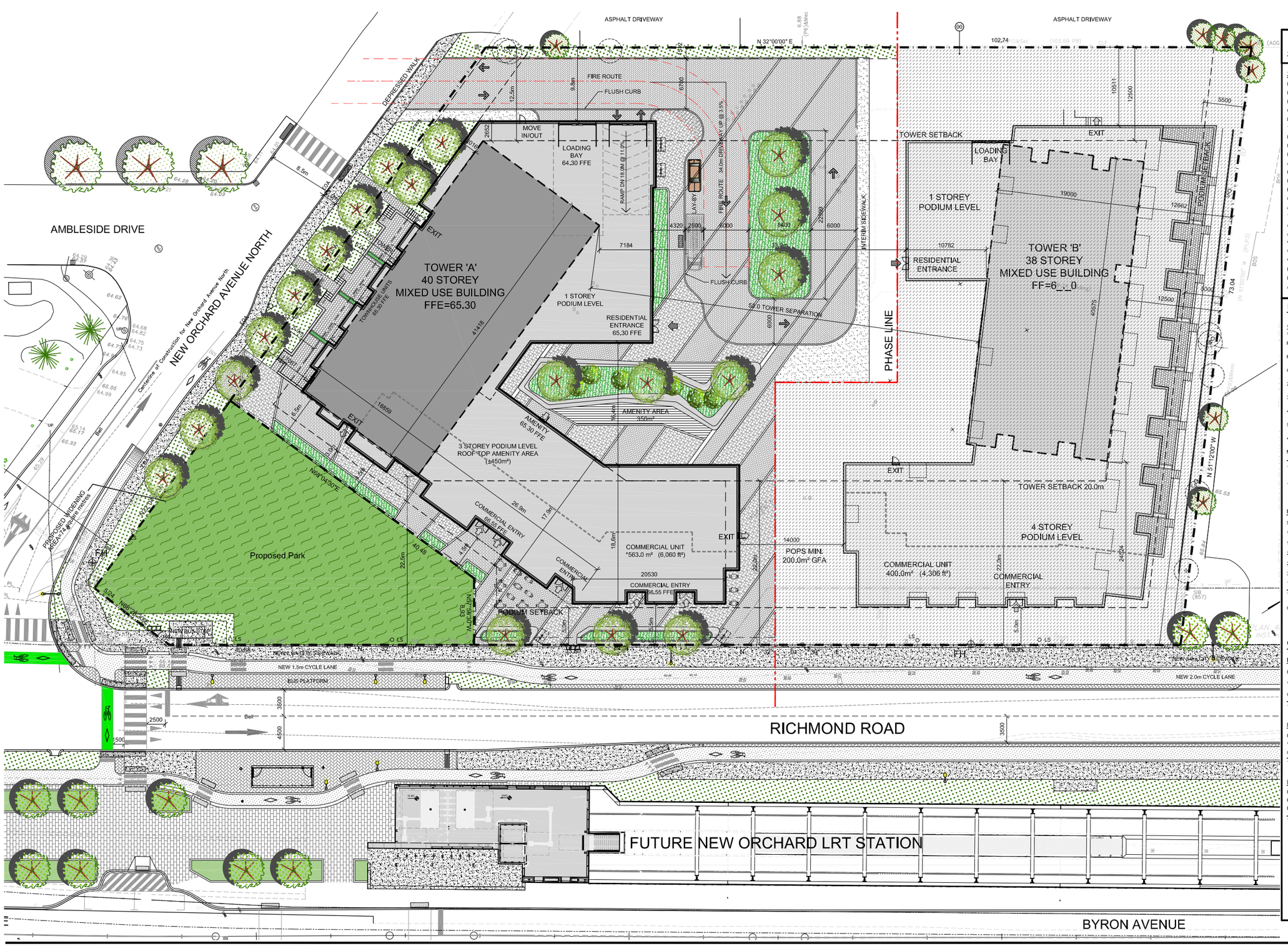
PROPOSED MASSING

To ensure consideration to pedestrian experience, the tower of the proposed development steps back from the podium along both street fronts to ensure active inviting frontages via commercial and residential programing. The tower location and orientation are strategic to minimize shadow impacts on the existing neighborhoods to the south of Richmond Rd. by pulling them as far as possible to the northern edge of the subject property. The mechanical penthouse has been integrated within the volume of the tower and their appearance has been diminished through extending the materiality of the tower up to enclose and conceal them. The tower separation between Phase 1 and 2 is currently 52m.

The three-storey podium wraps just over 95% the perimeter of the tower. Tower setbacks are offered on both street frontages as follows:

- Along New Orchard, the tower sets back 1m from the face of the podium with the townhomes, and then 2.1m from the units further north.
- Along Richmond, the tower sets back 1.2m from the face of the podium with the townhome, and then 2m from the face of the commercial spaces

Both the podium and tower setbacks are within the minimum zoning requirements.



PROJECT INFORMATION

Zoning By-law 2008-250 Consolidation TM[2494] H(127)

SITE AREA 0.9 ha. 9,104.0 sq. m / 9,104.0 sq. m

ZONING	REQUIRED	PROVIDED
BUILDING HEIGHT - PODIUM	4 STOREY / 15.0m	3 STOREY / 11.0m
BUILDING HEIGHT - TOWER 'A' WEST	40 STOREY / 127.0m	40 STOREY / 127.0m
BUILDING HEIGHT - TOWER 'B' EAST - PHASE 2	38 STOREY / 121.0m	STOREY / ___0m
GRADE (GEODETIC ELEVATION - ASL)	65.50m ASL	65.50m ASL
DENSITY - FSI	6.3 (57,355.2m²)	2.72 (24,798m²)
TOWER FLOOR PLATE - GFA	750.0m²	592.26m²
PRIVATELY OWNER PUBLIC SPACE (POPS): MIN. 200.0m²	200.0m²	0.0m²
NON-RESIDENTIAL SPACE AT GRADE: MIN. 1,000.0m²	1,000.0m²	*563.0m²
FRONT, CORNER & INTERIOR YARD SETBACK (PODIUM)	5.0m	5.0m
ABUTTING PARK SETBACK (PODIUM)	3.0m	4.5m
FRONT YARD SETBACK (TOWER)	22.0m	22.5m
REAR & INTERIOR YARD SETBACK (TOWER)	12.5m	12.5m
INTERIOR YARD SETBACK (TOWER)	12.5m	n/a
CORNER SIDE YARD SETBACK (TOWER)	7.0m	7.0m
ABUTTING PARK SETBACK (TOWER)	6.5m	6.5m
TOWER SEPARATION (SAME LOT)	25.0m	52.0m
AMENITY AREA - TOTAL 6.0m² PER UNIT: 460 UNITS	2,760.0m²	2,811.0m²
AMENITY AREA - 50% COMMUNAL PER UNIT	1,380.0m²	1,951.0m²
VEHICLE PARKING: RESIDENTIAL - AREA 'Z' NOT REQUIRED	0	194
VEHICLE PARKING: VISITOR - 0.1 PER UNIT AFTER 12 UNITS (MAX. 30 PER BLDG.)	30	30
VEHICLE PARKING: COMMERCIAL - AREA 'Z' NOT REQUIRED	0	35
BICYCLE PARKING - RESIDENTIAL - 0.5 PER UNIT	230	468
BICYCLE PARKING - COMMERCIAL - 1.0 PER 250m² GFA	2	8
AISLE & DRIVEWAY MINIMUM / MAXIMUM WIDTH	6.0m / 6.7m	6.0m / 6.7m

BUILDING STATISTICS

GROSS BUILDING - AREA (CITY OF OTTAWA'S DEFINITION) — PHASE 1 - TOWER 'A'

P2 PARKING LEVEL	0.0 sq. m. / 0 sq. ft.	
P2 PARKING LEVEL	0.0 sq. m. / 0 sq. ft.	
GROUND FLOOR	664.3 sq. m. / 7,151 sq. ft.	
2nd FLOOR	655.3 sq. m. / 7,054 sq. ft.	
3rd FLOOR	1,251.7 sq. m. / 13,473 sq. ft.	
4th FLOOR - AMENITY LEVEL	0.0 sq. m. / 0 sq. ft.	
5th - 39th FLOOR	35 x 622.82 sq. m. / 35 x 6,704 sq. ft.	21,798.8 sq. m. / 234,640 sq. ft.
40th FLOOR - RESIDENTIAL / AMENITY		427.8 sq. m. / 4,605 sq. ft.
MECHANICAL PENTHOUSE		0 sq. m. / 000 sq. ft.
TOTAL AREA		24,798.0 sq. m. / 266,923 sq. ft.
TOWER FLOOR PLATE		622.82 sq. m. / 6,704 sq. ft.

UNIT STATISTICS

STUDIO UNIT	8.70%	40
1 BEDROOM UNIT	40.87%	188
1 BEDROOM + DEN UNIT	8.04%	37
2 BEDROOM UNIT	40.00%	184
2 BEDROOM + DEN UNIT	0.0%	0
3 BEDROOM UNIT	1.52%	7
TOWNHOUSE UNIT - 3 BEDROOM	0.87%	4
TOTAL	100%	460
COMMERCIAL AREA		*563.0 sq. m. 6,060 sq. ft.

CAR PARKING

REQUIRED by ZONING BY-LAW

RESIDENCE	- AREA 'Z' NONE REQUIRED	0
VISITOR	- 0.1 PER DWELLING UNIT (MAX. 30 PER BLDG.)	30
COMMERCIAL	- AREA 'Z' NONE REQUIRED	0
TOTAL		30

PROVIDED

RESIDENCE	- 0.426 PER UNIT	194
VISITOR	- 0.065 PER UNIT	30
COMMERCIAL		35
TOTAL		259

LOCATION

P2 U/G PARKING LEVEL	134
P1 U/G PARKING LEVEL	125
EXTERIOR AT GRADE	0
TOTAL	259

BICYCLE PARKING

REQUIRED

RESIDENCE	- 0.5 PER UNIT	230
COMMERCIAL	- 1.0 PER 250m² OF G.F.A.	2
TOTAL		232

PROVIDED

RESIDENCE - INTERIOR	- 1.0 PER UNIT	460
RESIDENCE - EXTERIOR		8
COMMERCIAL		8
TOTAL		476

LOCATION

P2 U/G PARKING LEVEL	230
P1 U/G PARKING LEVEL	230
GROUND FLOOR	0
EXTERIOR AT GRADE	16
TOTAL	476

AMENITY SPACE

GROUND FLOOR COMMUNAL EXTERIOR =	392.0 sq. m.
GROUND FLOOR COMMUNAL INTERIOR =	226.0 sq. m.
4th FLOOR COMMUNAL INTERIOR =	669.0 sq. m.
4th FLOOR COMMUNAL TERRACE =	450.0 sq. m.
40th FLOOR COMMUNAL INTERIOR =	214.0 sq. m.
40th FLOOR COMMUNAL TERRACE =	0.0 sq. m.
PRIVATE BALCONIES =	760.0 sq. m.
PRIVATE TERRACE =	100.0 sq. m.
TOTAL =	2,811.0 sq. m.
TOTAL COMMUNAL =	1,951.0 sq. m.
REQUIRED - 6.0m² PER UNIT (460) =	2,760.0 sq. m.
REQUIRED COMMUNAL @ 50% =	1,380.0 sq. m.

WASTE REQUIREMENT

GARBAGE - COMPACTED	- 0.053 PER UNIT	25 YARDS
RECYCLING GMP	- 0.018 PER UNIT	9 YARDS
RECYCLING FIBER	- 0.038 PER UNIT	18 YARDS
COMPOST	- 240L PER 50 UNITS	9

LOT COVERAGE — PHASE 1

PHASE 2	4,004.1 sq. m.	44.00%
POPS	0.0 sq. m.	0%
PAVED SURFACE	1,062.0 sq. m.	11.67%
BUILDING B FOOTPRINT	2,066.6 sq. m.	22.70%
LANDSCAPE OPEN SPACE	1,974.3 sq. m.	21.68%
TOTAL	9,107.0 sq. m.	100.0%
PARKLAND DEDICATION	1,012.0 sq. m.	
NEW ORCHARD ROW	74.0 sq. m.	
TOTAL - PRE DEVELOPMENT AREA	10,193.0 sq. m.	

rla/architecture

SITE PLAN

SCALE: 1:500

PLOT DATE: Wednesday, July 17, 2024

ISSUED FOR: UDRP (August 2 2024)

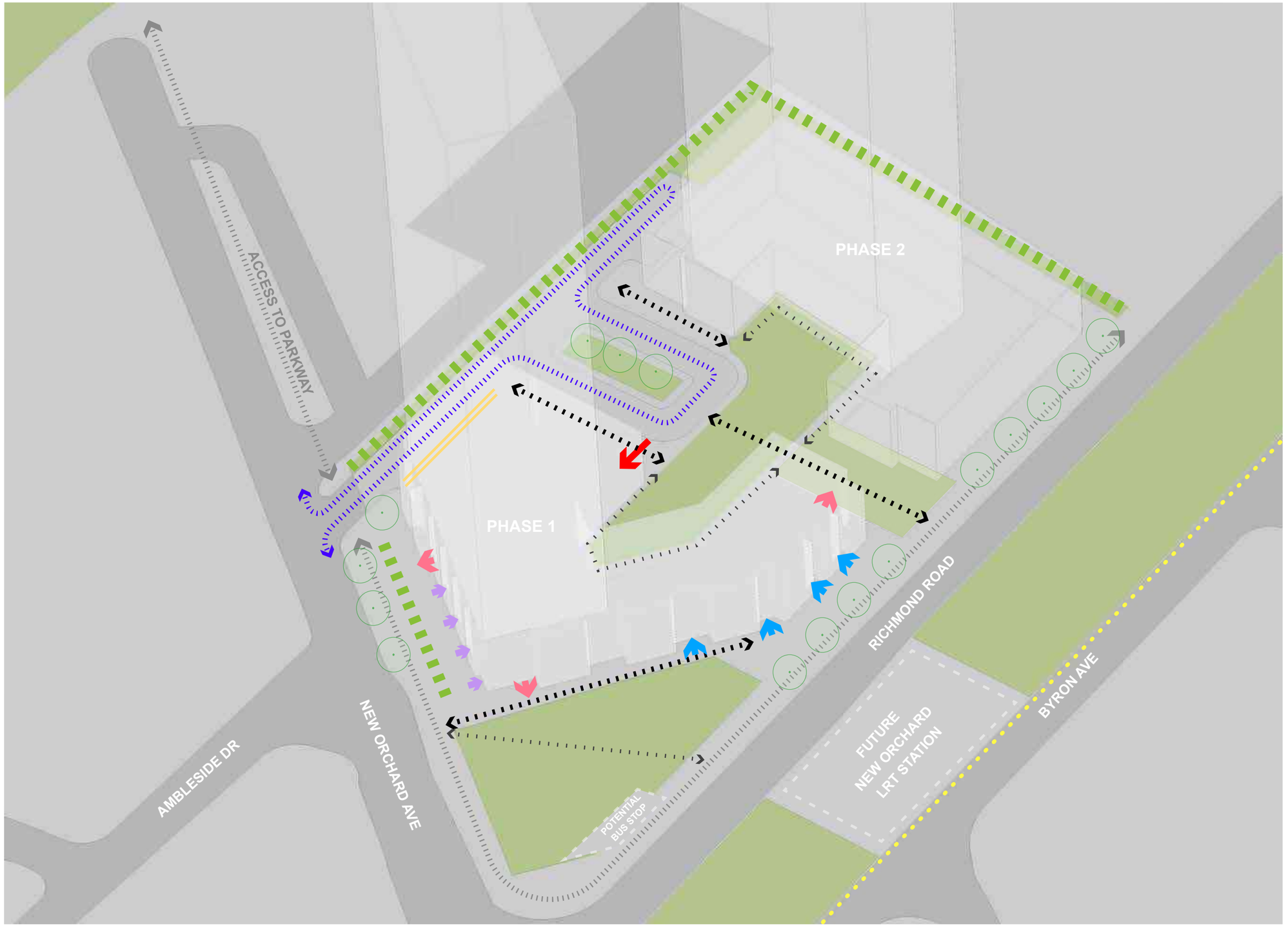
1047 RICHMOND ROAD
OTTAWA ONTARIO

FENGATE Asset Management

SHEET # SP-1

PROJ. # 2404

SITE CIRCULATION



- VEHICULAR ACCESS
- SERVICES ACCESS
- GREEN BUFFER
- PEDESTRIAN PATH
- SECONDARY PATH
- PEDESTRIAN R.O.W
- FUTURE BIKE BATH
- MAIN RESIDENTIAL ENTRANCE
- COMMERCIAL ENTRANCE
- EGRESS EXITS
- PRIVATE RESIDENTIAL ENTRANCE

SITE STATISTICS

PROJECT INFORMATION

Zoning By-law 2008-250 Consolidation TM[2494] H(127)

SITE AREA 0.9 ha. 9,104.0 sq. m
9,104.0 sq. m

ZONING	REQUIRED	PROVIDED
BUILDING HEIGHT - PODIUM	4 STOREY / 15.0m	3 STOREY / 11.0m
BUILDING HEIGHT - TOWER 'A' WEST	40 STOREY / 127.0m	40 STOREY / 127.0m
BUILDING HEIGHT - TOWER 'B' EAST - PHASE 2	38 STOREY / 121.0m	STOREY / ___.0m
GRADE (GEODETIC ELEVATION - ASL)	65.50m ASL	65.50m ASL
DENSITY - FSI	6.3 (57,355.2m²)	2.72 (24,798m²)
TOWER FLOOR PLATE - GFA	750.0m²	592.26m²
PRIVATELY OWNER PUBLIC SPACE (POPS): MIN. 200.0m²	200.0m²	0.0m²
NON-RESIDENTIAL SPACE AT GRADE: MIN. 1,000.0m²	1,000.0m²	*563.0m²
FRONT, CORNER & INTERIOR YARD SETBACK (PODIUM)	5.0m	5.0m
ABUTTING PARK SETBACK (PODIUM)	3.0m	4.5m
FRONT YARD SETBACK (TOWER)	22.0m	22.5m
REAR YARD SETBACK (TOWER)	12.5m	12.5m
INTERIOR YARD SETBACK (TOWER)	12.5m	n/a
CORNER SIDE YARD SETBACK (TOWER)	7.0m	7.0m
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BUILDING STATISTICS

GROSS BUILDING - AREA

PHASE 1 - TOWER 'A'

(CITY OF OTTAWA'S DEFINITION)

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NEW ORCHARD ROW	74.0 sq. m.	
TOTAL - PRE DEVELOPMENT AREA	10,193.0 sq. m.	

DESIGN DIRECTIVES - INITIAL CITY COMMENTS

1. Approach to POPs construction and timing-
The completion of the construction of the POPs will be deferred to Phase 2 as a portion of the Phase 2 parking garage is directly located below grade under the POPs. In the meantime, a portion of the POPs above the Phase 1 parking garage will be completed as a pathway connecting pedestrian access along Richmond Rd to the amenity courtyard, main residential entrance, and exit stair behind the commercial. Access will be maintained through the duration of construction of Phase 2.

2. Wind impacts-
Mitigation strategies will be considered as the development of the project progresses, as recommended by the consultants. The proposal currently offers mitigation strategies through use of strategic landscaping and architectural elements. Site wide plantings are strategically designed to help create comfortable outdoor areas through the use of a variety of medium sized trees, shrubs and grasses. Private terraces along New Orchard Av. will have canopies and privacy screens offering shade and wind protection. Commercial entries are also integrated with overhead canopies at entry points.

3. Grading interface along New Orchard-
The ground floor townhouses are accessed from the sidewalk via steps up to a private terrace along New Orchard. We are proposing raised planters along the perimeter of the terraces and steps to soften the edges as well as provide a level of privacy to the terraces from the sidewalk by being on a different elevation. We are also proposing tree plantings along this sidewalk to support the city's Green Street design initiative.

4. Interface along the north, retaining, introducing planting-
We don't anticipate there to be any requirement for retaining walls along the north access lane. This corner is the lowest point of the site, however with the private drive aisle being located here we have stepped the ground floor lower in this corner to provide at grade access to the building's loading/garbage room. To address a 2.5m grade different across the site, there are 3 different ground floor elevations to accommodate accessible entrances. A 1.5m green buffer strip will be provided along the property line edge along the north.

5. Portion of building with no podiums, human scale along the park-
The Podium wraps the entirety of the tower with the exception of a linear length of 7m around the south west corner. The intention of touching the tower down to grade at the south-west corner is to connect the pedestrian with the built form, rather than conceal it. The fluted precast panels of the tower was chosen for its sculptural characteristics, yet would not be experienced at grade on the site by an individual if the podium wrapped the entirety of the tower perimeter. By revealing the tower at the corner, the tower is celebrated while also connecting the pedestrian with the true built form, hence the location at a relatively publicly exposed corner along both street fronts, sidewalks and the public park.

6. Ground floor programing and public realm interaction-
Commercial areas are strategically located along Richmond Rd to provide an active street frontage to the city sidewalk and the proposed park. Small- mid sized retail tenants are envisioned for these areas such as small restaurants, coffee shops, boutique shops, etc. Fronting the POPs and proposed park offer a great vista for potential patio use by the future commercial tenants.
The amenity courtyard is framed by internal public spaces such as the main entrance, reception lobby, elevator waiting area and a Co-Working amenity space. This interactive programing is strengthened by the use of primarily window wall offering a strong indoor-outdoor relationship and animation of the public realm. A sculptural landscaping planter and seating area also encourages use of the outdoor space.
As mentioned before, there is a grade difference of 2.5m across the site. To mitigate and offer accessible entrances to commercial areas, residential, and back-of house spaces the ground floor slab is stepped with 3 different elevations. This was important in the design to maintain active interactive street fronts.

7. Wind Study to prevent impacts on public realm-
Please refer to the second point in the document, which outlines the mitigation strategies, including strategic landscaping and architectural elements, to address wind concerns.

8. Separation between the tower and the podium is required-
Podium separation has improved along New Orchard Ave. since previous submission. The tower stepback above the podium along New Orchard ranges between 1m and 2m. The canopies at the townhouse entrances also project out about 2m. The private terraces also step the building back from the sidewalk, creating another stepped back transitional space that is considerate with the human scale along this sidewalk.
The podium separation along Richmond Rd. is 2m. Similarly to the townhouse canopies, the canopies over the retail entrances extend further than the podium face.

9. Concern about pedestrian oriented space-
The design intentionally touches the tower to the ground at the south-west corner to create a direct connection between the pedestrian and the built form, as explained in point 5. Additionally, the wind mitigation strategies through strategic landscaping and architectural elements, as detailed in point 2 ensure a comfortable pedestrian-oriented space.

10.Comments regarding landscaping and extent of parking-
Please refer to first point in this document for the extent and planning of the parking levels. Landscaping details and strategies are also addressed in point 1 as well as point 6.

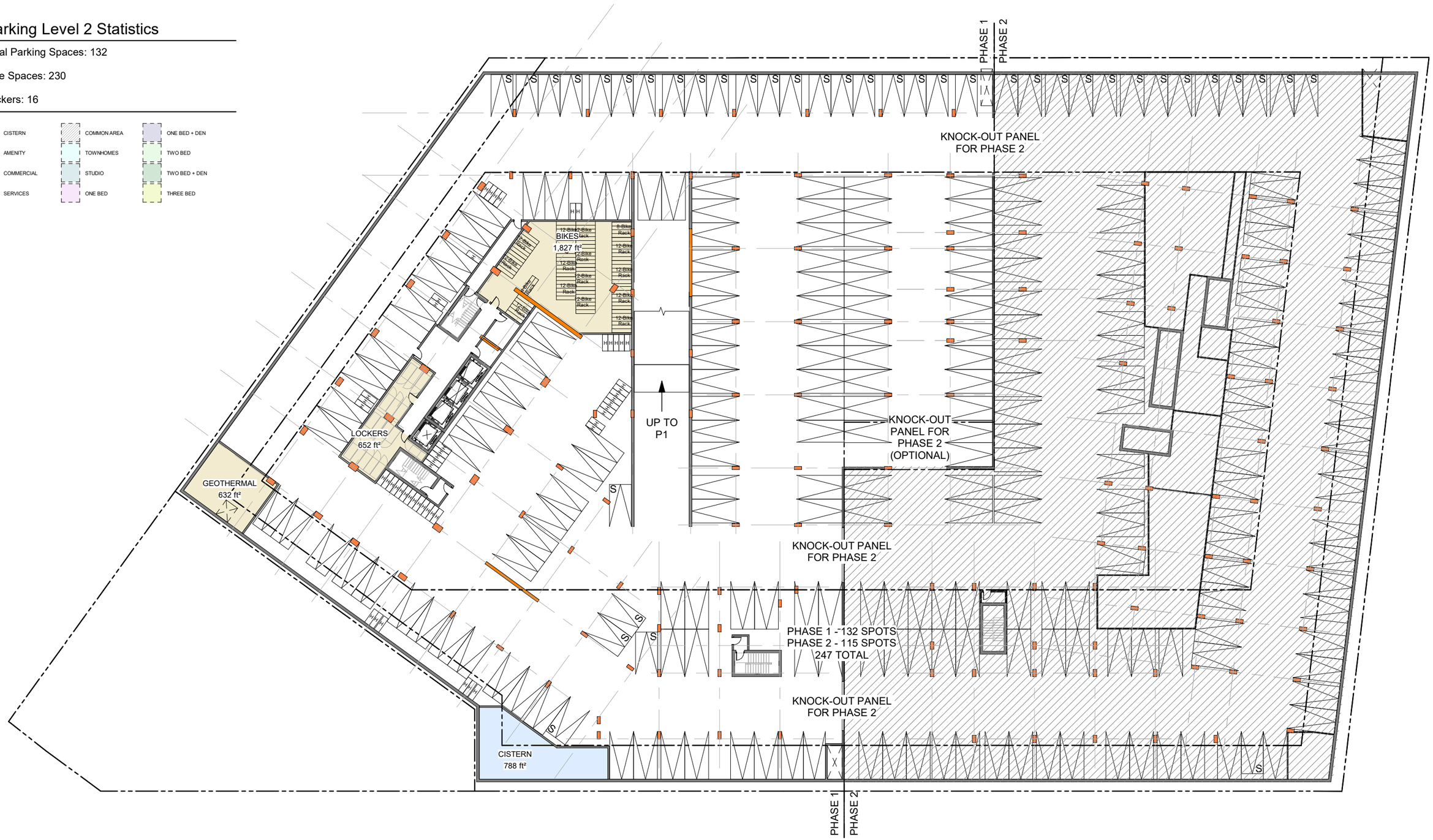
Parking Level 2 Statistics

Total Parking Spaces: 132

Bike Spaces: 230

Lockers: 16

CISTERN
AMENITY
COMMERCIAL
SERVICES
COMMON AREA
TOWNHOMES
STUDIO
ONE BED
ONE BED + DEN
TWO BED
TWO BED + DEN
THREE BED



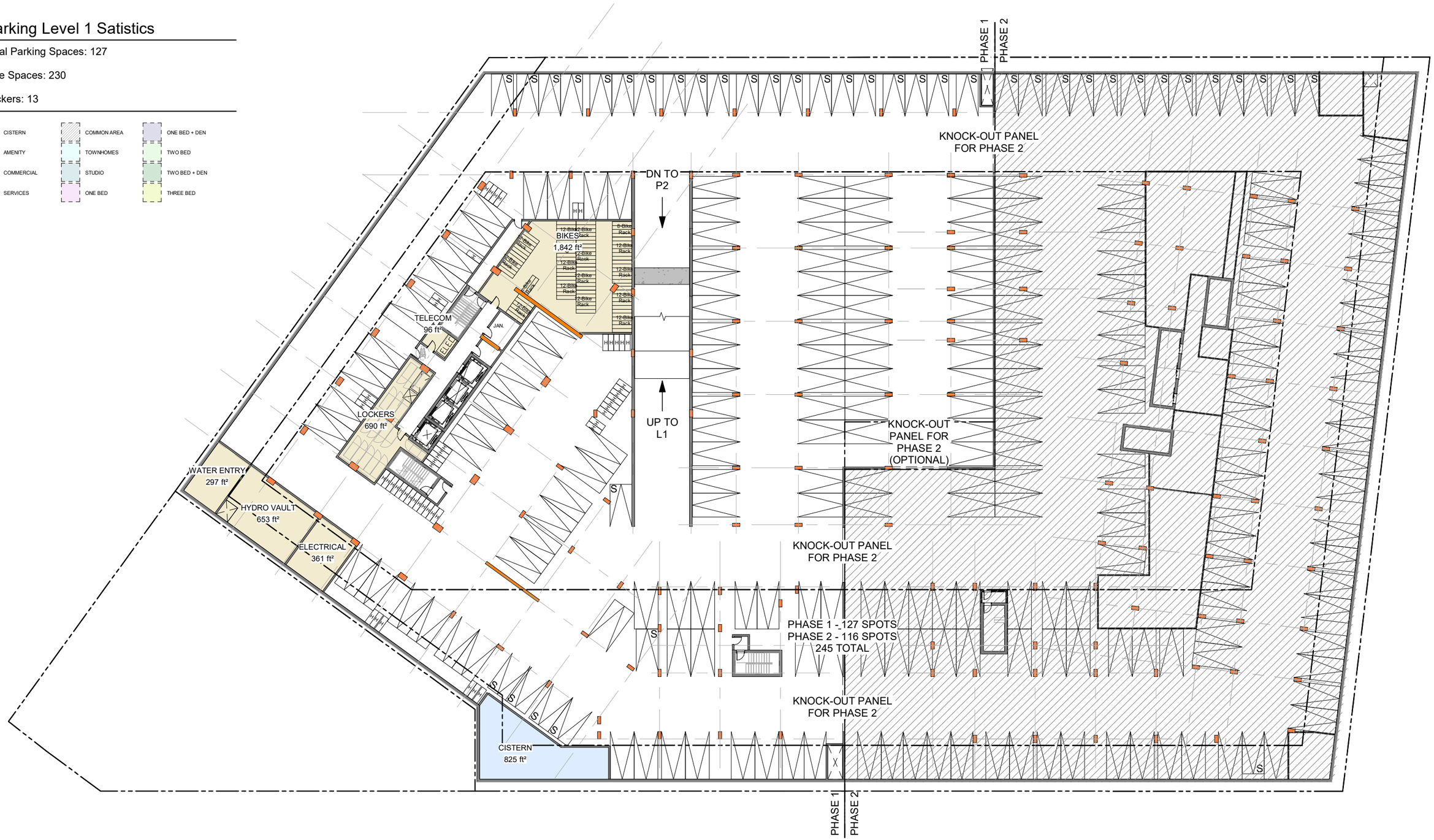
Parking Level 1 Satistics

Total Parking Spaces: 127

Bike Spaces: 230

Lockers: 13

CISTERN
AMENITY
COMMERCIAL
SERVICES
COMMON AREA
TOWNHOMES
STUDIO
ONE BED
ONE BED + DEN
TWO BED
TWO BED + DEN
THREE BED



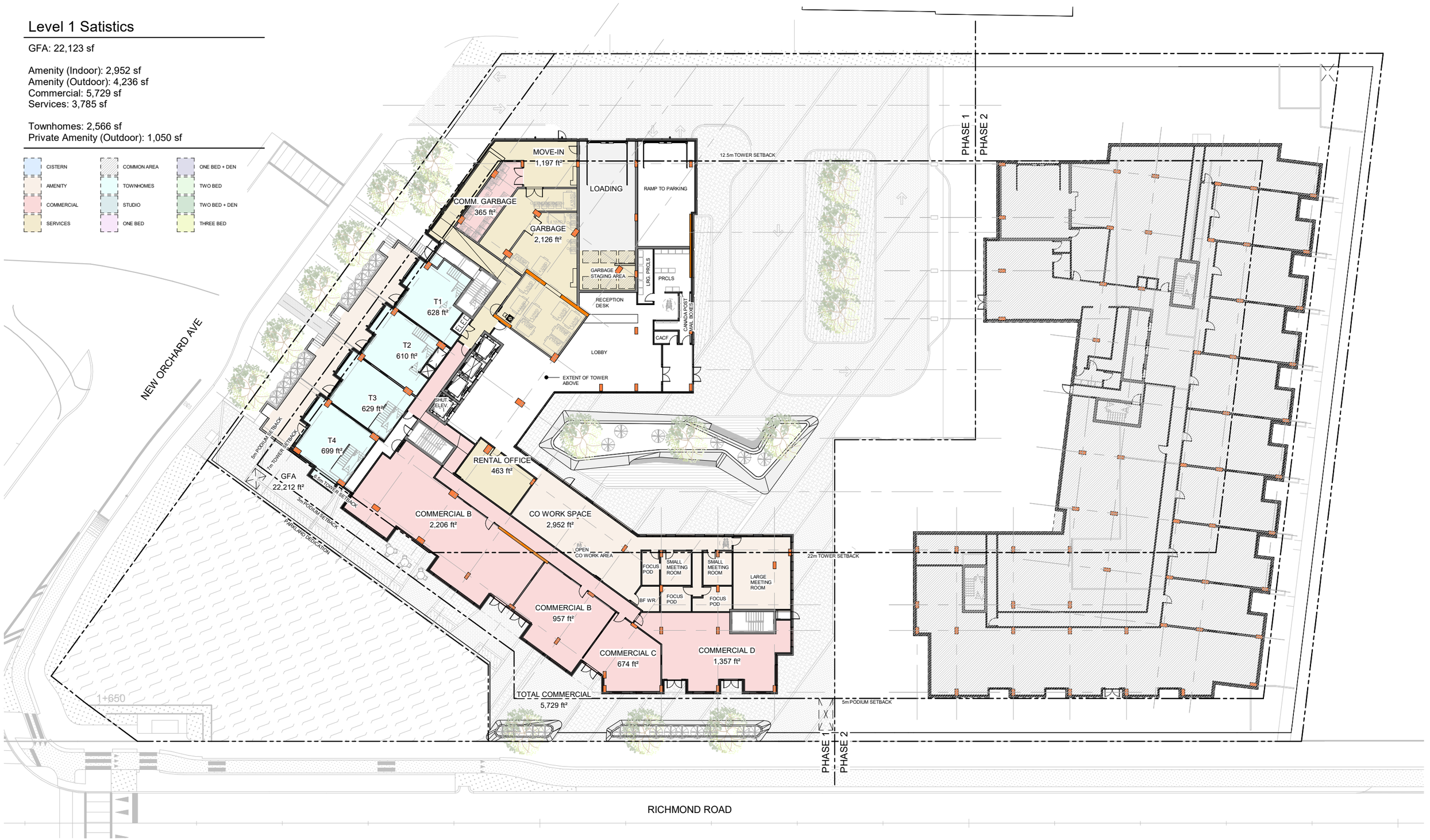
Level 1 Satistics

GFA: 22,123 sf

Amenity (Indoor): 2,952 sf
Amenity (Outdoor): 4,236 sf
Commercial: 5,729 sf
Services: 3,785 sf

Townhomes: 2,566 sf
Private Amenity (Outdoor): 1,050 sf

CISTERN
AMENITY
COMMERCIAL
SERVICES
COMMON AREA
TOWNHOMES
STUDIO
ONE BED
ONE BED + DEN
TWO BED
TWO BED + DEN
THREE BED



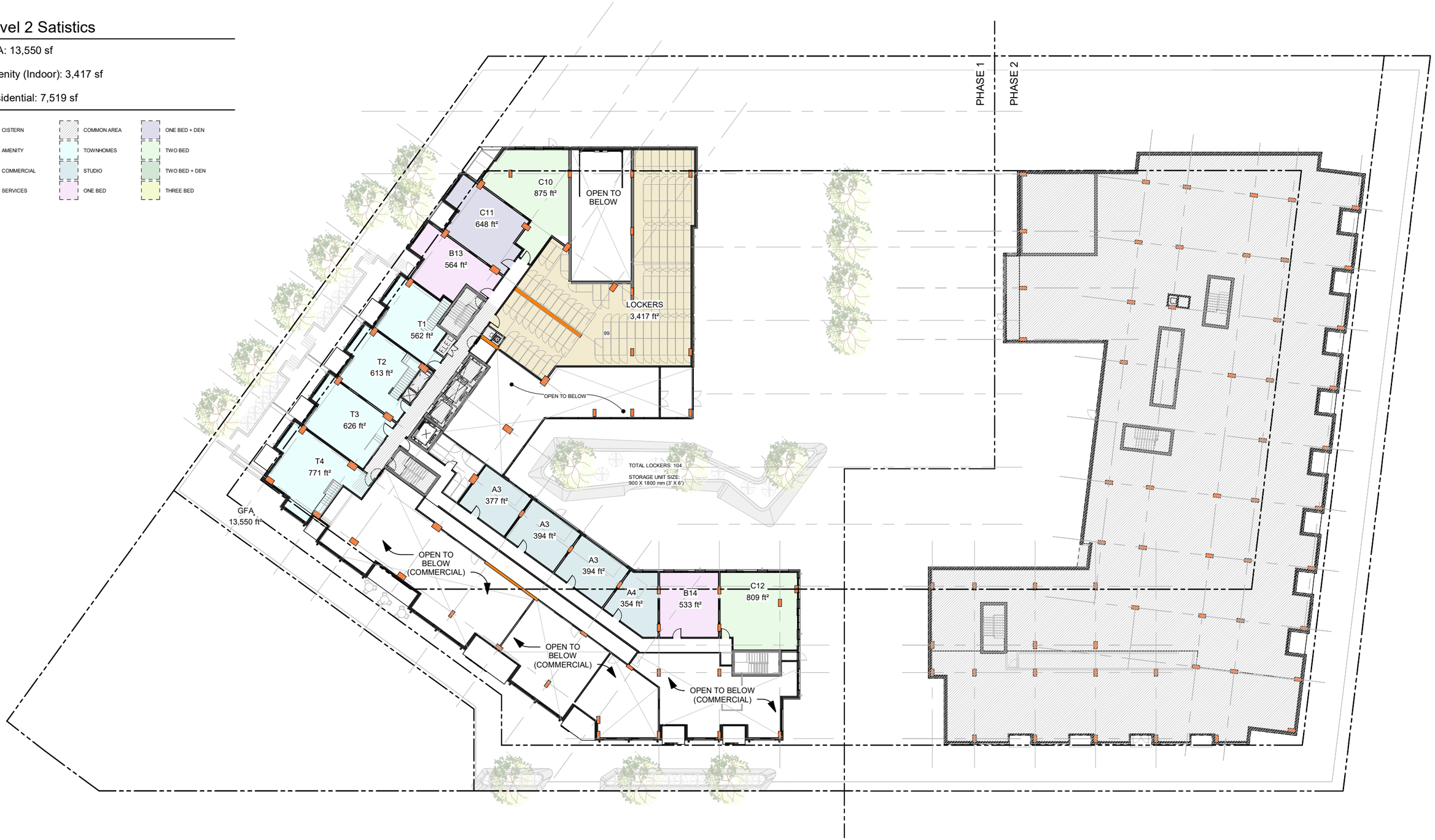
Level 2 Satistics

GFA: 13,550 sf

Amenity (Indoor): 3,417 sf

Residential: 7,519 sf

CISTERN
AMENITY
COMMERCIAL
SERVICES
COMMON AREA
TOWNHOMES
STUDIO
ONE BED
ONE BED + DEN
TWO BED
TWO BED + DEN
THREE BED



Level 3 Satistics

GFA: 16,517 sf

Residential: 14,457 sf

Private Amenity (Outdoor): 700 sf

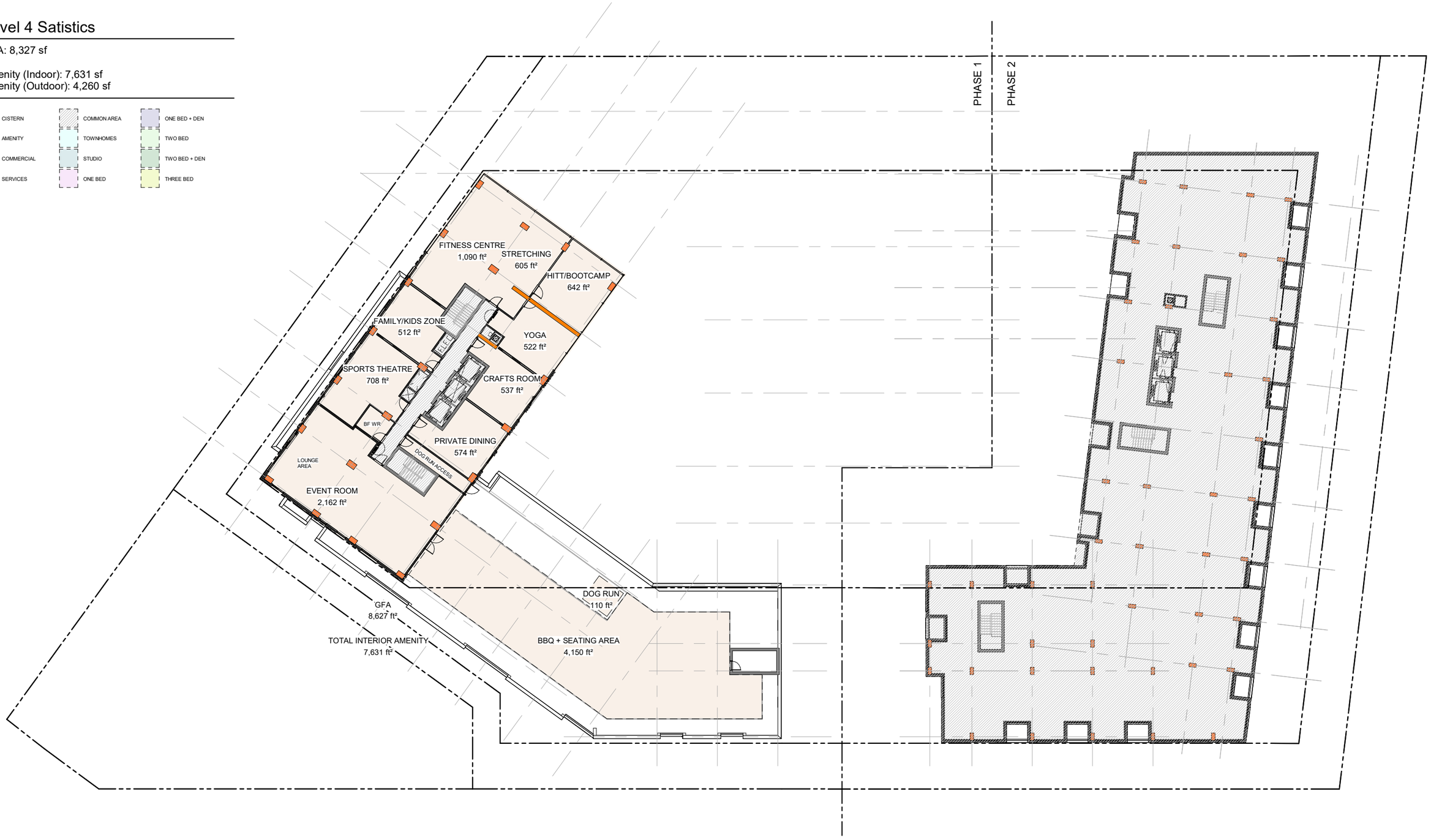
CISTERN
AMENITY
COMMERCIAL
SERVICES
COMMON AREA
TOWNHOMES
STUDIO
ONE BED
ONE BED + DEN
TWO BED
TWO BED + DEN
THREE BED

Level 4 Satistics

GFA: 8,327 sf

Amenity (Indoor): 7,631 sf
Amenity (Outdoor): 4,260 sf

CISTERN	COMMON AREA	ONE BED + DEN
AMENITY	TOWNHOMES	TWO BED
COMMERCIAL	STUDIO	TWO BED + DEN
SERVICES	ONE BED	THREE BED



Level 5-33 Satistics

GFA: 8,431 sf

Residential: 7,302 sf

Private Amenity (Outdoor): 195 sf

CISTERN	COMMON AREA	ONE BED + DEN
AMENITY	TOWNHOMES	TWO BED
COMMERCIAL	STUDIO	TWO BED + DEN
SERVICES	ONE BED	THREE BED

Level 34-39 Satistics

GFA: 8,431 sf

Residential: 7,302 sf

Private Amenity (Outdoor): 195 sf

CISTERN	COMMON AREA	ONE BED + DEN
AMENITY	TOWNHOMES	TWO BED
COMMERCIAL	STUDIO	TWO BED + DEN
SERVICES	ONE BED	THREE BED

Level 40 Satistics

GFA: 8,482 sf

Amenity (Indoor): 2,284 sf

Residential: 5,052 sf
Private Amenity (Outdoor): 156 sf

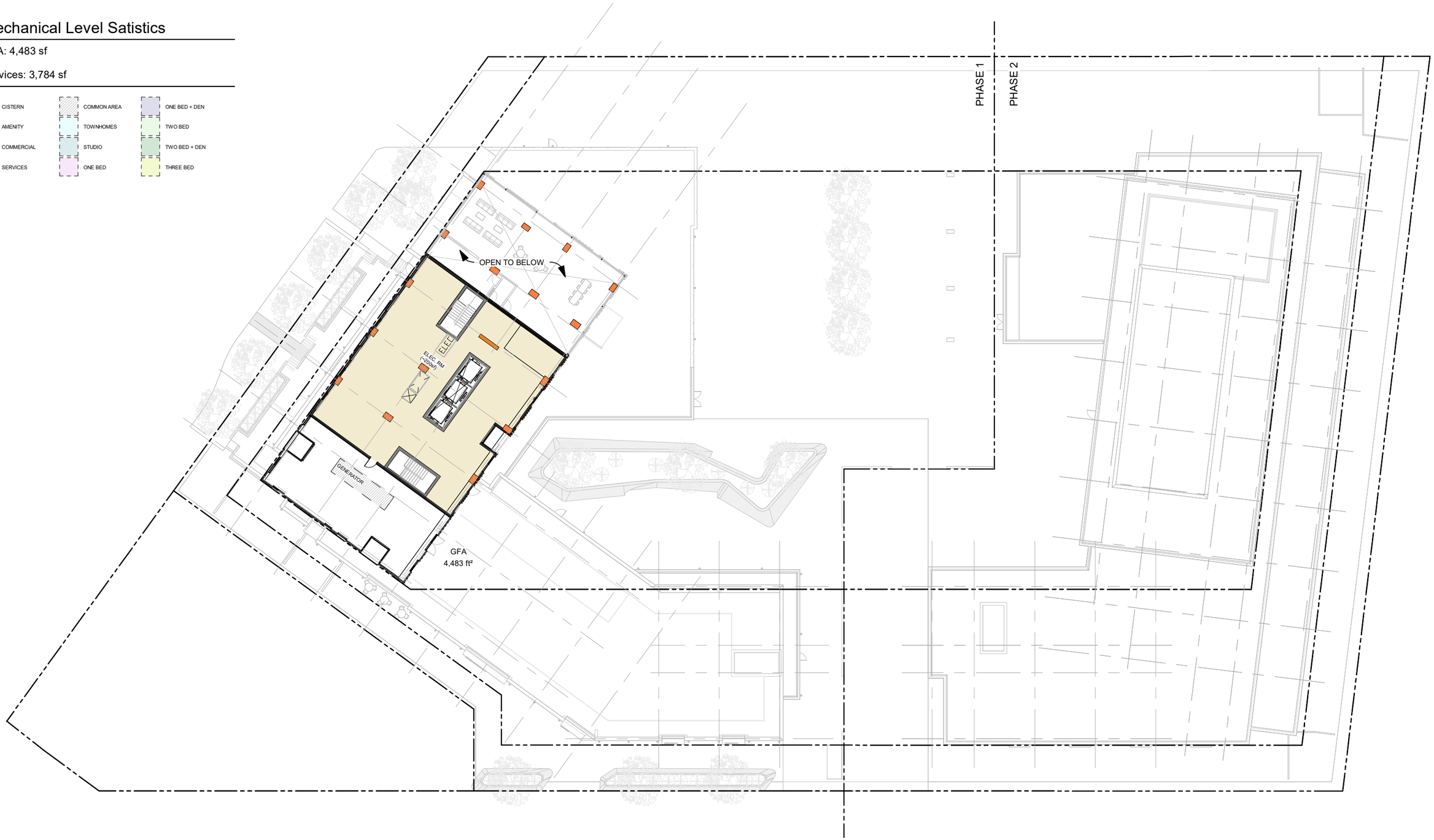
CISTERN	COMMON AREA	ONE BED + DEN
AMENITY	TOWNHOMES	TWO BED
COMMERCIAL	STUDIO	TWO BED + DEN
SERVICES	ONE BED	THREE BED

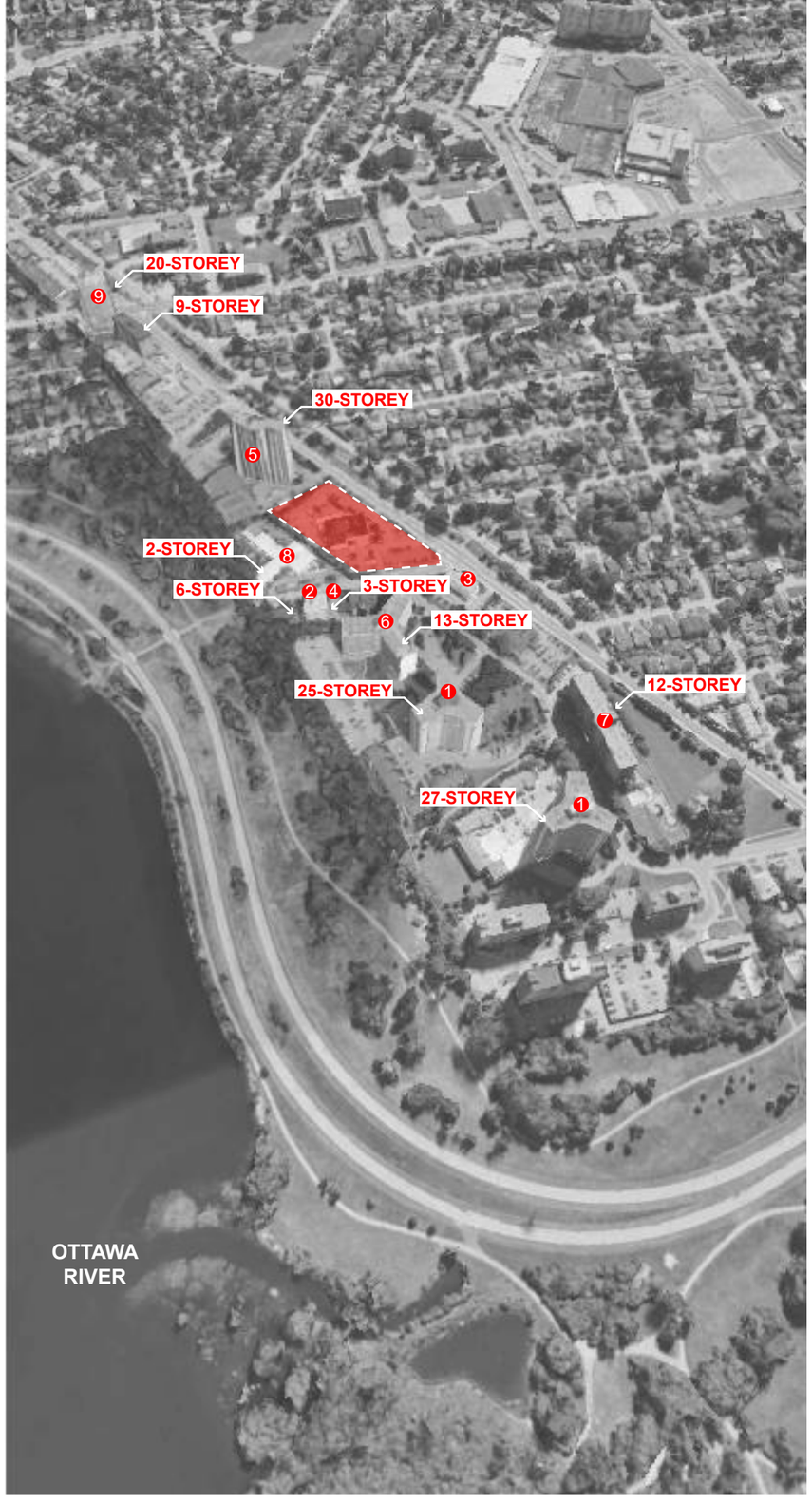
Mechanical Level Satistics

GFA: 4,483 sf

Services: 3,784 sf

CISTERN	COMMON AREA	ONE BED + DEN
AMENITY	TOWNHOMES	TWO BED
COMMERCIAL	STUDIO	TWO BED + DEN
SERVICES	ONE BED	THREE BED





ARCHITECTURAL CONTEXT & MATERIALITY

Buildings with varying characteristics, typologies, number of story's, materials, and roof types surround the project.
More specifically, the site surroundings include:

- To the North of the site, two-story nursing home complex, and a proposed 14-storey development at the end of New Orchard Ave.
- To the East, along Richmond Rd a 27-storey apartment building composed of beige precast concrete interrupted by bays of black mullioned windows that extend the full height of the building. Further down is a 20- story residential building composed of brown brick masonry and aluminum window wall system.
- To the South of the site and across from Richmond Road, low-density two-story detached homes.
- To the West along New Orchard Ave there are two mid-rise residential buildings primarily composed of light-colored brick masonry construction. Further west along Ambleside Dr. there are a handful of high-density residential buildings ranging from 13- 27 stories. Ambleside One and Two are 25 + 27 story residential towers constructed with beige precast panels that have a vertical pattern formed on them. 1100 Ambleside is a brown brick masonry apartment building.

MATERIAL INSPO - PRECEDENT STUDY

TOWER

Chuck Choi Architects

Zomorrodi Associates

PODIUM

ACPV Architects

IDP Architects

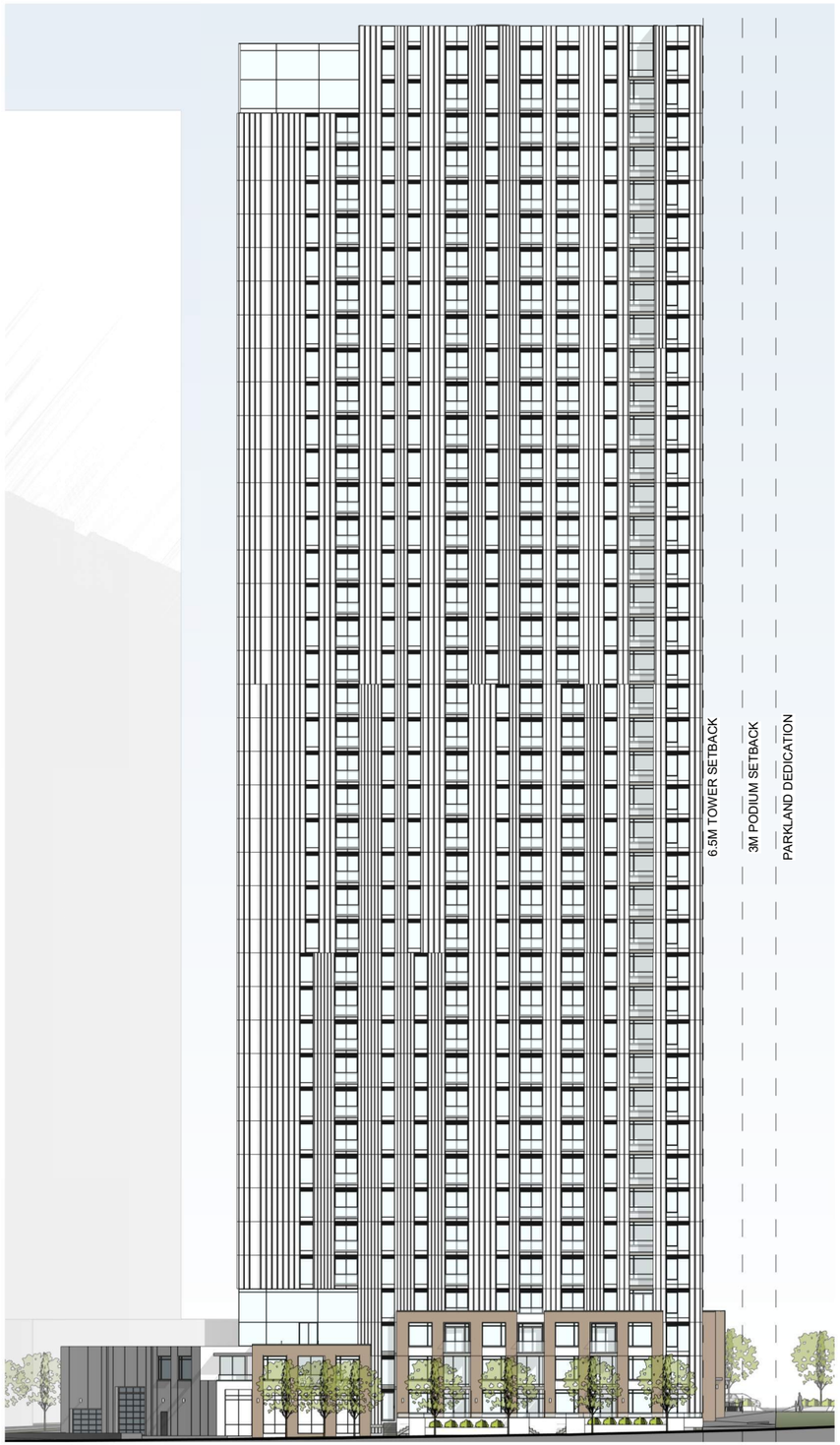
Passelac & Roques Architectes

JNS Architecture + Interior Design

Störmer Murphy and Partners

Proske Architects

NORTH ELEVATION



WEST ELEVATION

ARCHITECTURAL EXPRESSION

TOWER EXPRESSION

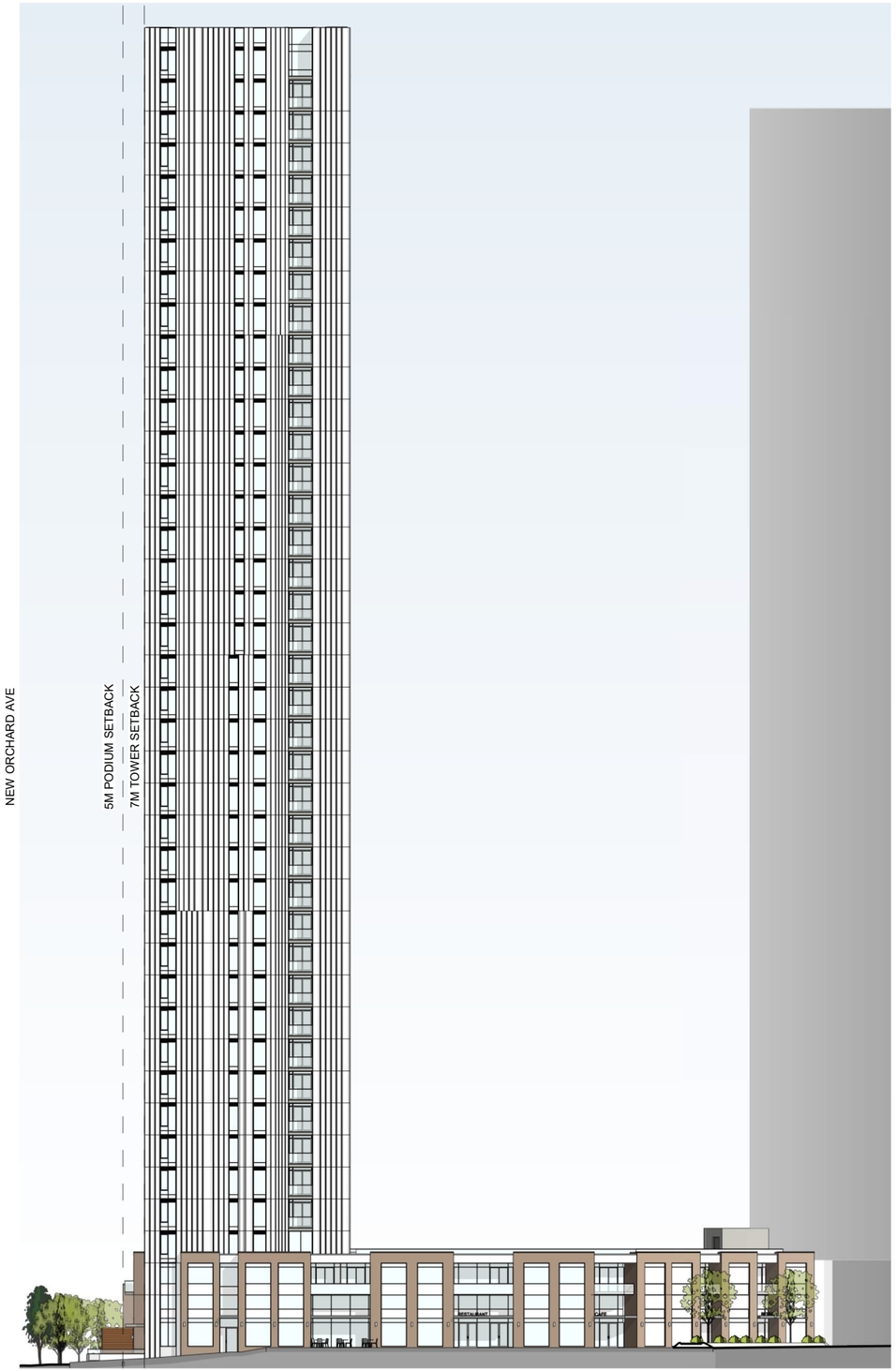
The proposed development will provide consistent architectural vocabulary that will present Phase 1 and 2 as a unified development. The expression of the tower plays with the verticality of the tower through the use of precast concrete panels formed with vertical fluted patterns. This vertical articulation is carried through the length of the tower with subtle offsets created the vertical articulation of the windows. The offsets offer a playful illusion of movement in the finished expression of the tower in addition to providing visual interest on all four faces. The offsets are achieved by shifting the location of a window in the suite design; however, the floor plan does not change and is carried up the tower.

This playful movement up the tower will be elevated by pairing the offset window articulation with a some offsets in the precast panels by changing the dimension of panel fluting/ribbing in strategic areas. This variance in the pattern of the precast panels is intended to create dramatic shadows at each transition. Further complimenting the vertical language of the elevations are the inset balconies that create vertical breaks through the mass. Carrying this expression through on all four faces of the tower seeks to create a minimal yet elegant backdrop for the local community and greater skyline.

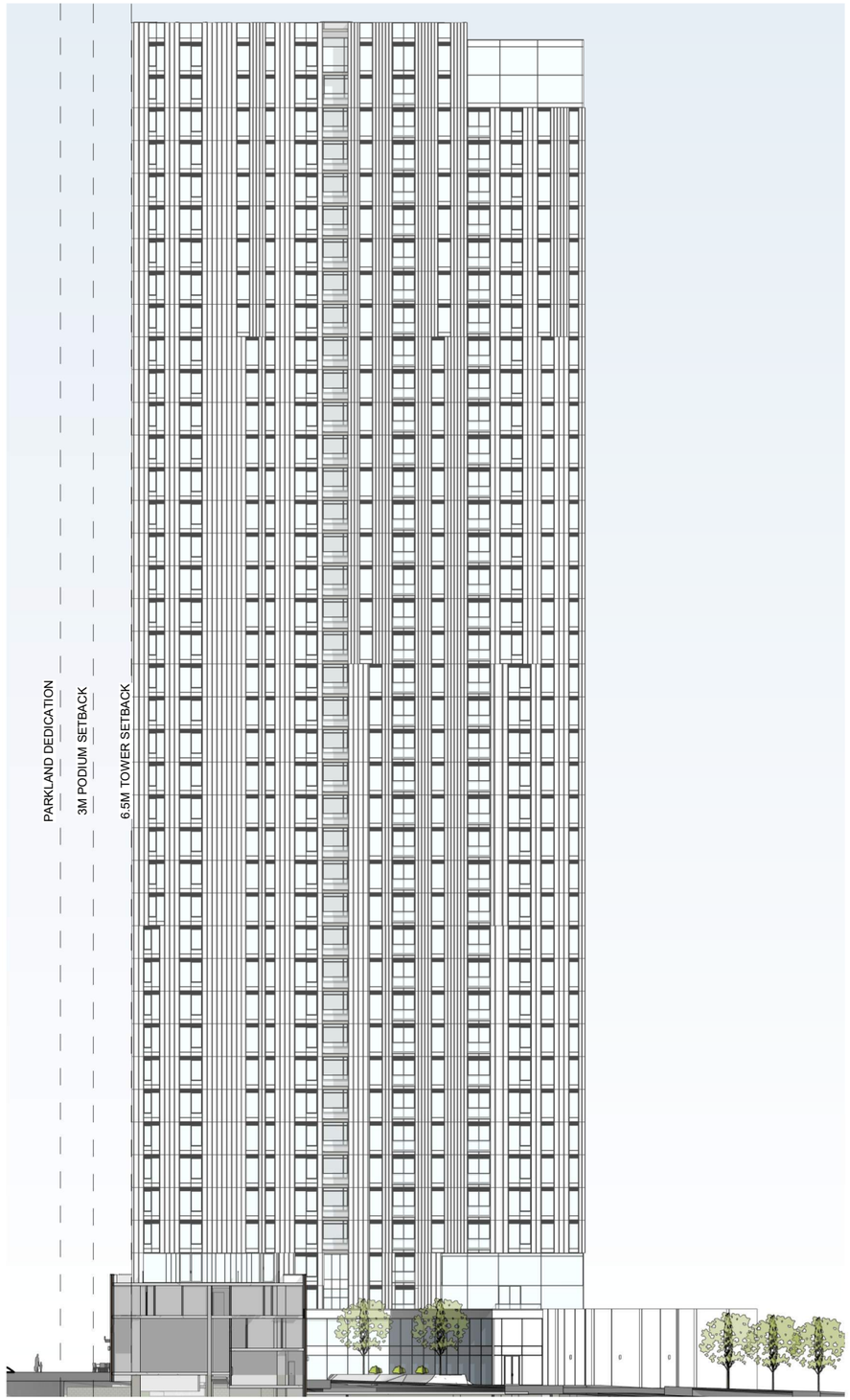
PODIUM EXPRESSION

The expression of the podium is influenced and informed by existing architecture found on neighboring existing buildings. The playful vertical articulation from the tower is translated into the Podium design, but at a different scale. Active commercial and residential entrances are finished with familiar materials but presented playfully in a game of mass and void. This articulation of brick masonry and glazing aims to compliment the vertical articulation from the tower above through the implementing of large vertical bays of windows, distributed through a rhythmic pattern of brick framed masses.

The Podium wraps the entirety of the tower with the exception of a linear length of 7m around the south west corner. The intention of touching the tower down to grade at the south-west corner is to connect the pedestrian with the built form, rather than conceal it. The fluted precast panels of the tower was chosen for its sculptural characteristics, yet would not be experienced at grade on the site by an individual if the podium wrapped the entirety of the tower perimeter. By revealing the tower at the corner, the tower is celebrated while also connecting the pedestrian with the true built form, hence the location at a relatively publicly exposed corner along both street fronts, sidewalks and the public park.

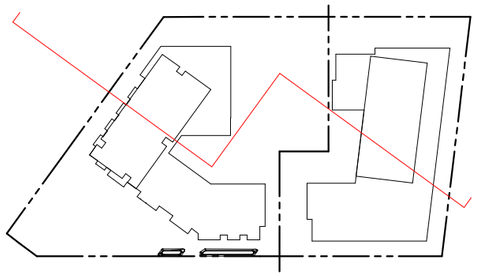


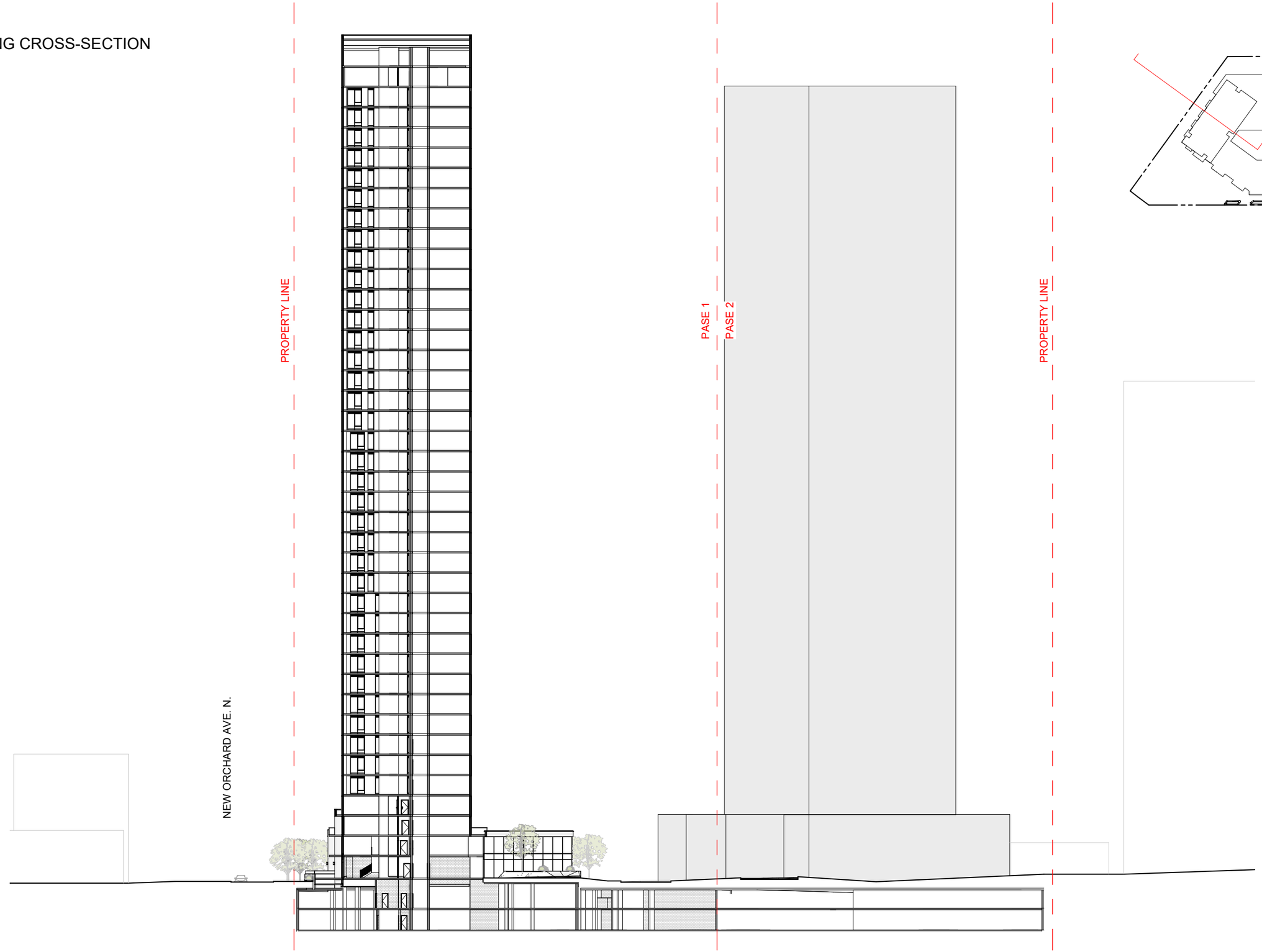
SOUTH ELEVATION



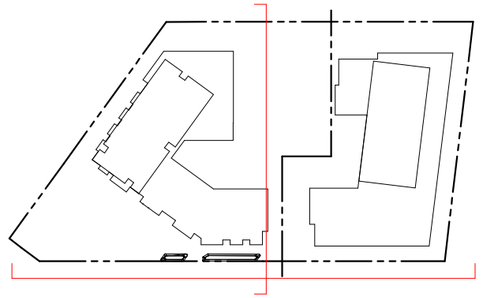
EAST ELEVATION

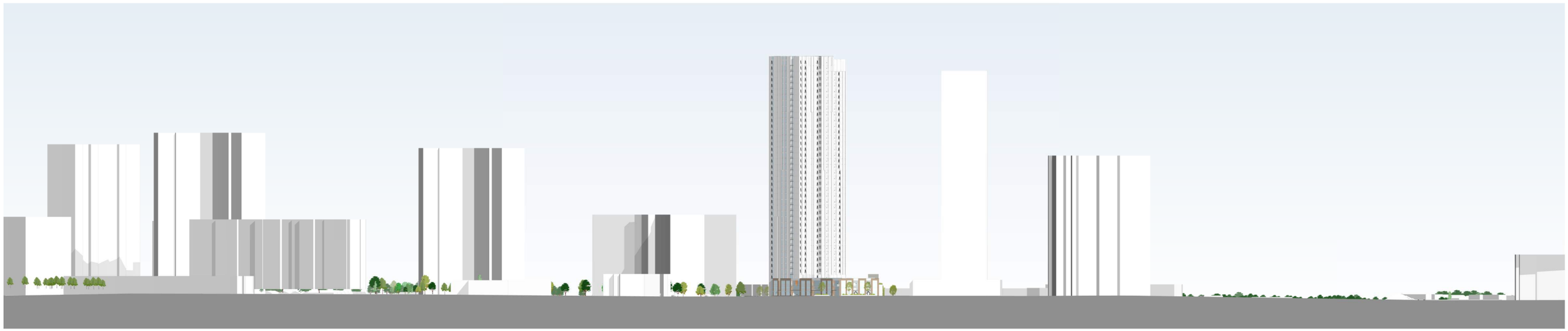
BUILDING CROSS-SECTION





NEIGHBORHOOD CROSS-SECTIONS

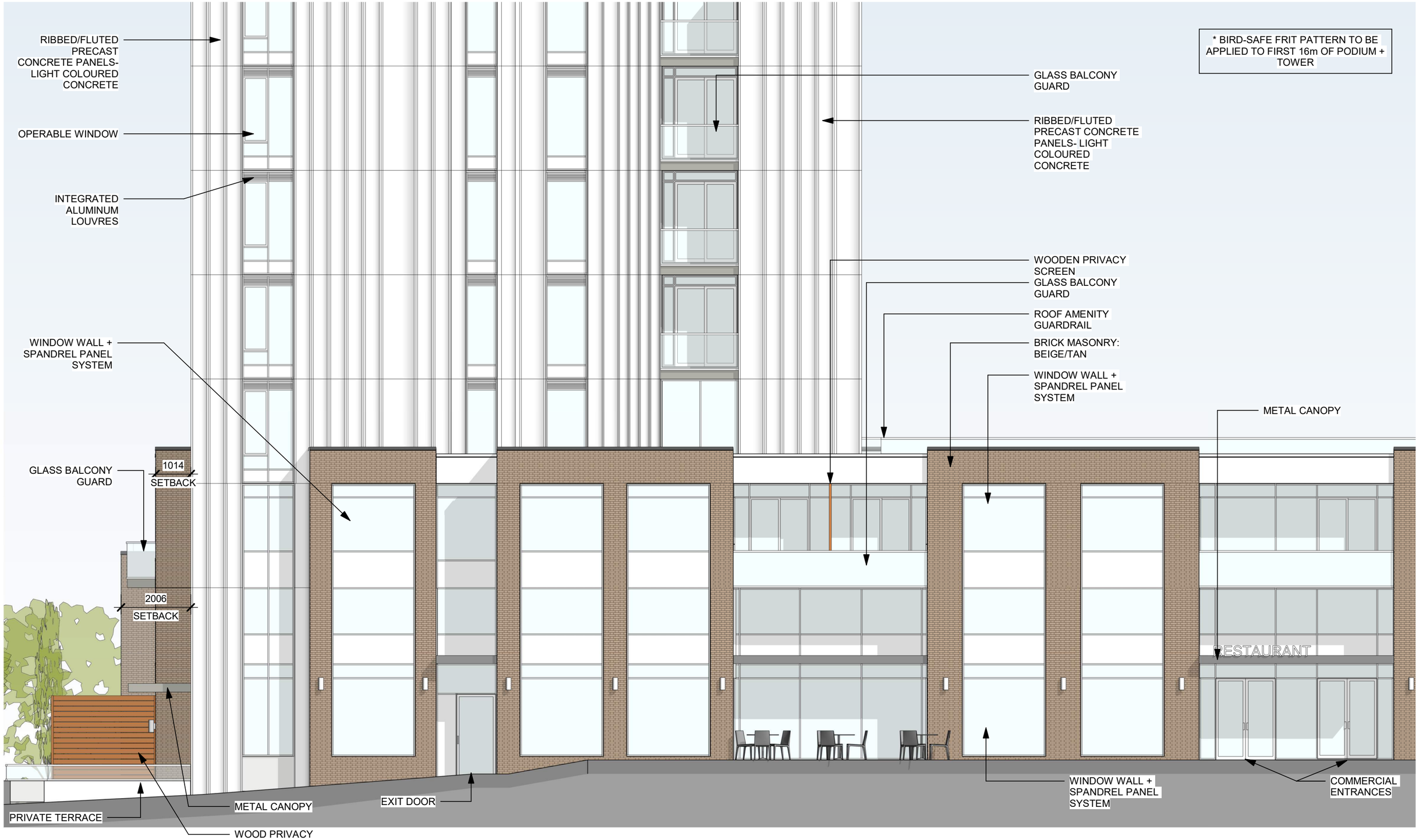




CROSS-SECTION ALONG RICHMOND RD. FACING NORTH

CROSS-SECTION THROUGH POPs FACING WEST

ENLARGED ELEVATION- SOUTH



ENLARGED ELEVATION- WEST

VIEW FROM KICHI ZIBI MIKAN LOOKING SOUTH

VIEW FROM KICHI ZIBI MIKAN LOOKING EAST

VIEW LOOKING WEST FROM RICHMOND RD.- COMMERCIAL AND POPS

VIEW LOOKING SOUTH FROM INTERNAL VEHICULAR LOOP- MAIN RESIDENTIAL ENTRANCE AND AMENITY COURTYARD

BIRDS-EYE VIEW LOOKING WEST FROM RICHMOND ROAD

BIRDS-EYE VIEW LOOKING NORTH FROM WOODLAND AVENUE

VIEW LOOKING WEST FROM RICHMOND ROAD - COMMERCIAL & POPS

VIEW LOOKING NORTH FROM RICHMOND AND NEW ORCHARD INTERSECTION

VIEW LOOKING SOUTH FROM KICHI ZIBI MIKAN

MICROCLIMATE CONDITIONS

VIEW LOOKING NORTH AT THE INTERSECTION OF NEW ORCHARD AVE.N AND RICHMOND RD- COMMERCIAL AND TOWNHOMES

VIEW LOOKING SOUTH ON NEW ORCHARD AVE. N TOWARDS RICHMOND ROAD - TOWNHOMES

- Site wide plantings are strategically designed to create comfortable microclimates and reduce the adverse effects of urban heat. The landscape will be a comfortable place to live, work, learn, play and socialize.
- Raised sculptural planters are proposed to be planted with a variety of medium-sized trees, shrubs, and grasses. The plant species are selected to buffer the outdoor amenity courtyard at ground level and in the POPS area from wind impacts.
- Private terraces have been provided with canopies for sun and wind protection.
- Commercial entries have been provided canopies for sun and wind protection.
- Location of the main roof top amenity area on L4 was selected based on calm wind exposure. Wind screens and addition of a pergola will be implemented based on consultant recommendations.

The proposed development is exploring various sustainability strategies and components which may be suitable to the site. The Owners aim to contributed to all three pillars of sustainability: social, economic and environmental. Various options are being explored, including CMHC MLI Select which targets energy efficiency which the development seeks to achieve through implementing a geothermal energy system for the building. Social sustainability initiatives such as additional bike parking, ample exterior amenity spaces for residents, and proximity to the future transit station encourage a healthy lifestyle. This phase of the development will also be offering 15 affordable units.

Architectural Considerations:

- 15% of the residential units are proposed to be accessible barrier/free units designed to include wider doorways and clear passages to washroom and bedrooms
- All internal and external communal spaces within the building will be designed to be accessible
- Incorporation of pedestrian pathways that are continuous and universally accessible into landscape design along all site frontages connecting the courtyard, POPS and public park
- Installing high quality windows that utilize low-e coatings and gas filling, while choosing the glazing and window frame materials that will be most sustainable
- Air-tight building envelope using increasing insulation to help reduce heating and cooling loads
- Reduction of heat island effect through the use of cool roofs
- Reduction of carbon footprint by considering use of low carbon concrete mixes
- Bird friendly design guidelines have been incorporated in the podium and up to first 16 m of the building, as per the City of Ottawa Birth Friendly Design Guidelines. Application of bird-safe glass within the first 16m of building height as measured from finished grade.
- Provision of window treatments by owner for all units to help minimize light pollution and bird-friendly as they provide visual markers to glazed areas.
- The development provides underground parking spaces to maximize landscape areas at grade
- Bicycle parking spaces for residential and retail users are provided in weather protected areas, primarily within the underground parking levels.

Other Considerations:

- High-density development in close proximity to public transit (bus and LRT), encouraging use of public transit subsequently lowering greenhouse gas emissions
- Proximity to bike paths: Multi-Use Path along the Kichi Zibi Mikan Parkway and future bike path along Richmond Rd.
- Incorporation of electric car charging stations on site

Sustainability Program

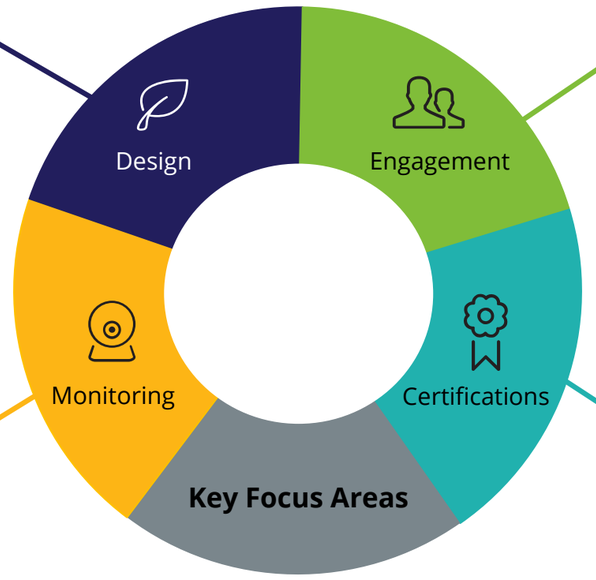
The project aims to look for innovative ways to turn commitment to sustainability into meaningful action.

1. Sustainable Design

- Pursue a low carbon design to minimize operational emissions and improve tenant comfort by providing year-round, consistent heating and cooling
- Propose a geothermal design with heat pumps to reduce base load and natural gas usage by converting electricity consumption to come from a renewable energy source

2. Ongoing ESG Monitoring

- Establish ENERGY STAR account to track and collect energy, water, and waste consumption data on an annual basis
- Review operational data to find opportunities to improve efficiencies and reduce consumption



3. Property Management

- Proactively engage with property management teams on a consistent ESG strategy across the assets we manage, along with standard ESG Policies. Areas include:

1. Environmental sustainability and resource efficiency
2. Climate resilience and physical climate risk
3. Nature and biodiversity management
4. Social procurement and community impact

4. Certification and Benchmarking

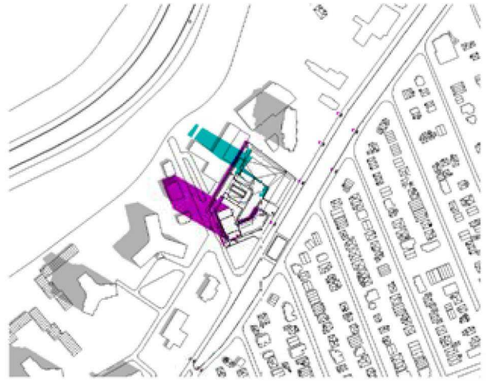
- Aim to pursue BOMA BEST after the property has been occupied for 12 months
- Submitted 1047 Richmond to GRESB to benchmark against peers using a third-party ESG rating system

Diagram prepared by Fengate's Environmental, Social and Governance team.

JUNE 8 AM

JUNE 9 AM

JUNE 10 AM



JUNE 11 AM

JUNE 12 PM

JUNE 1 PM

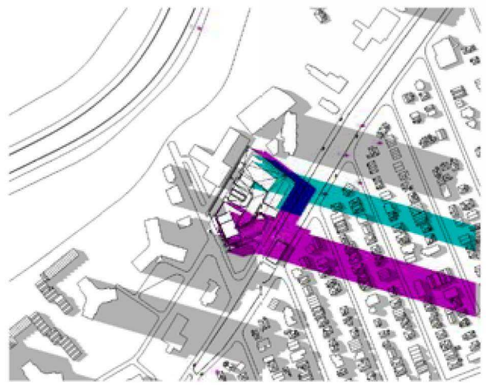
JUNE 2 PM

JUNE 3 PM

JUNE 4 PM

JUNE 5 PM

JUNE 6 PM



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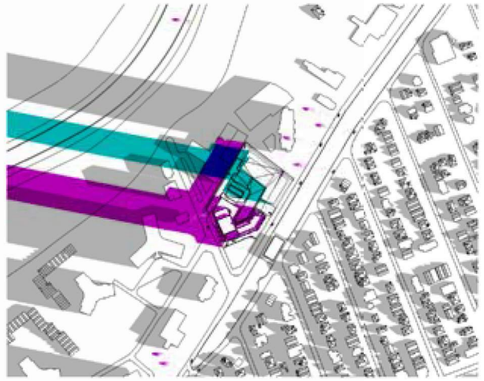

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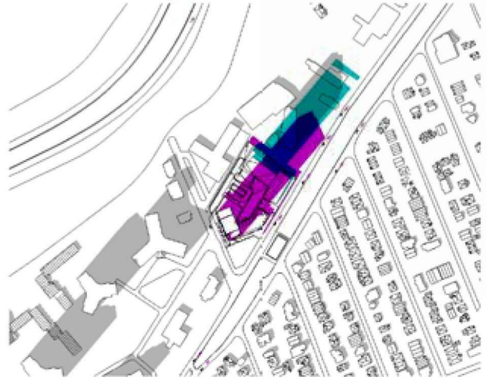

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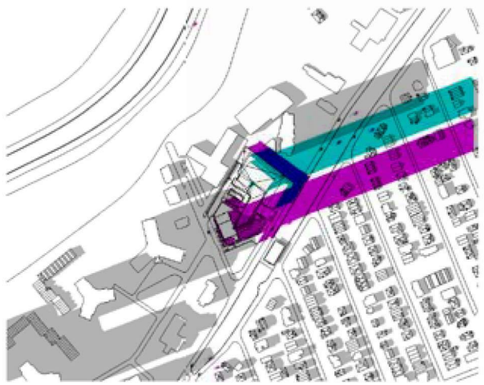

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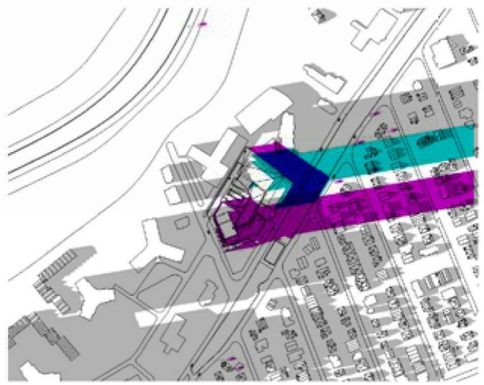

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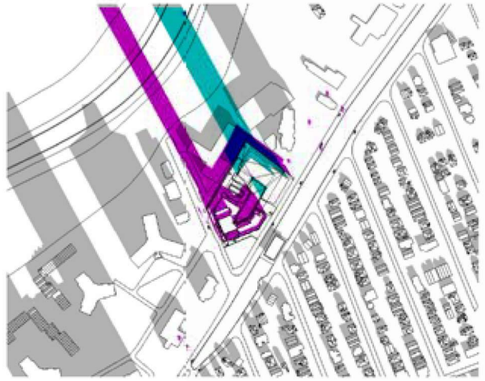

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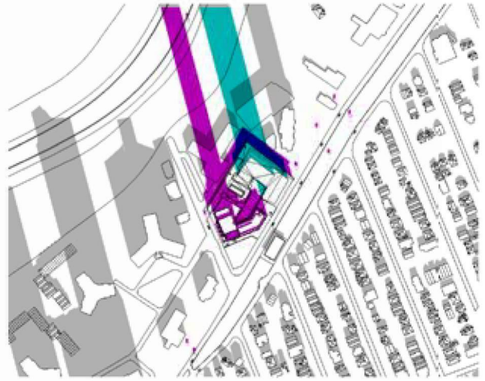

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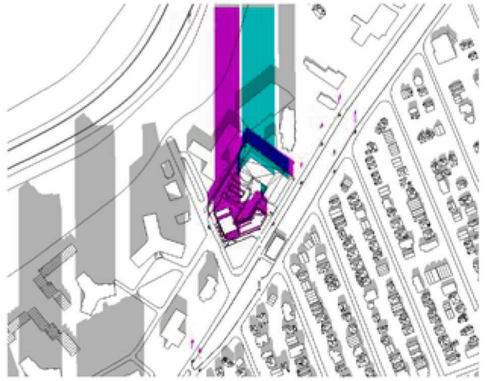

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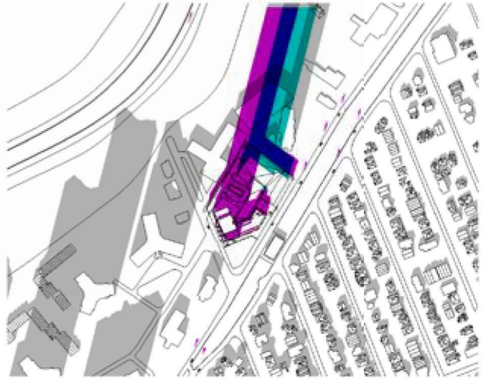

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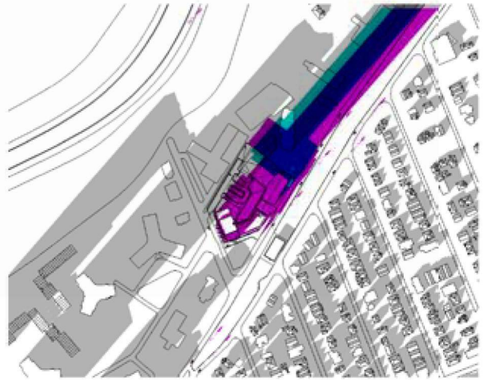

DECEMBER 4 PM

FUNCTIONAL ZONING PROGRAM

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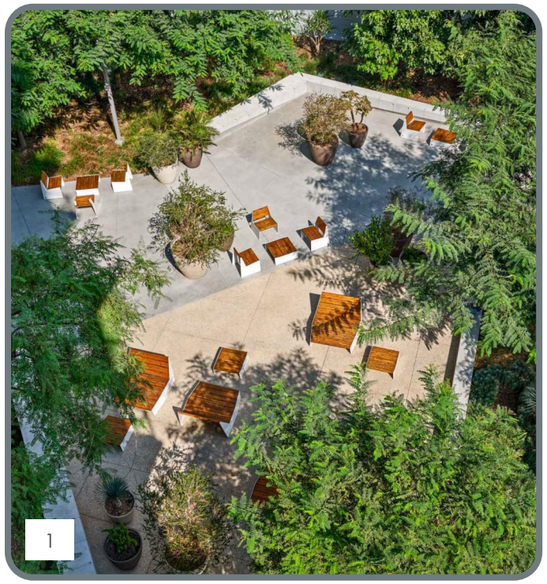

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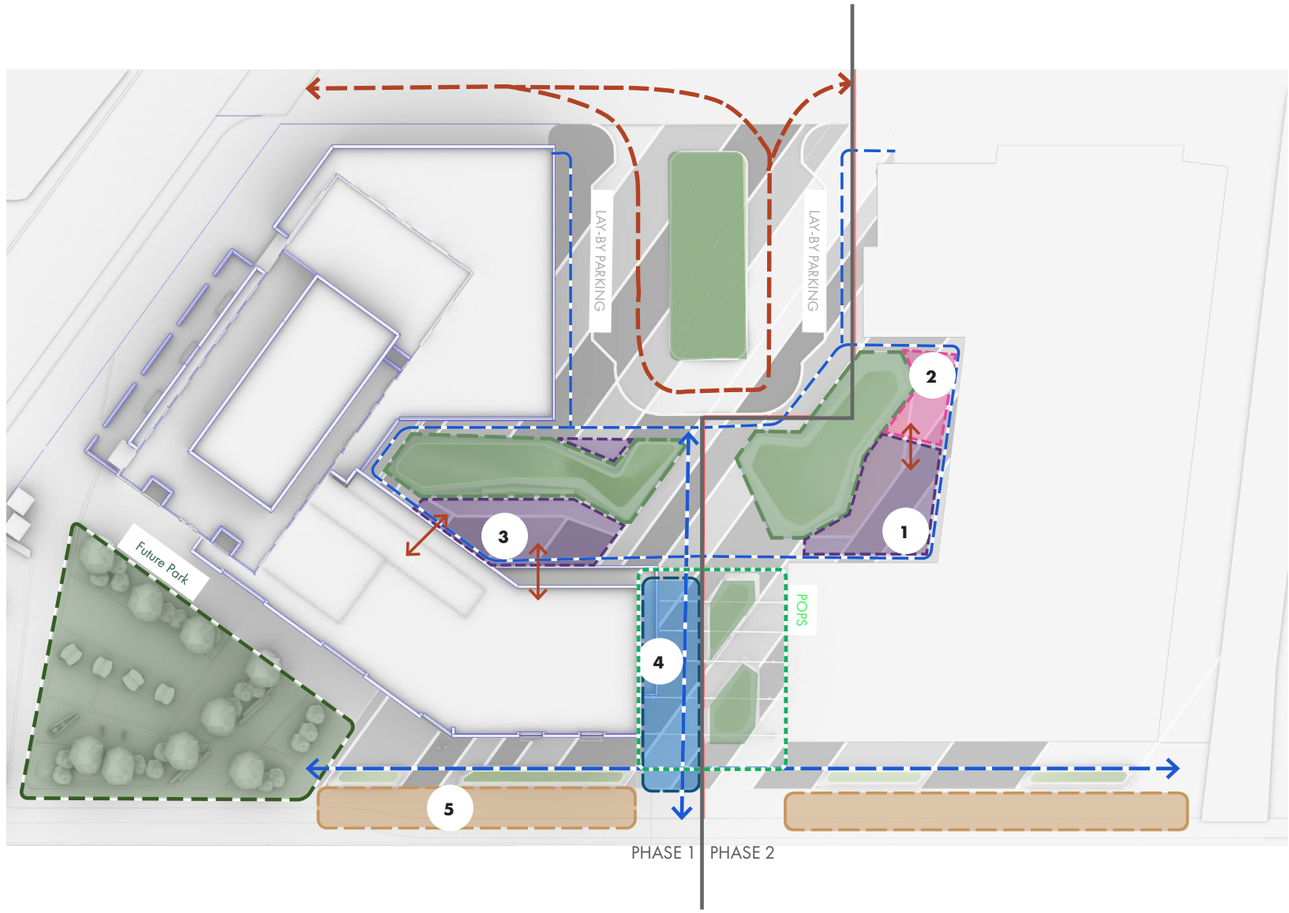
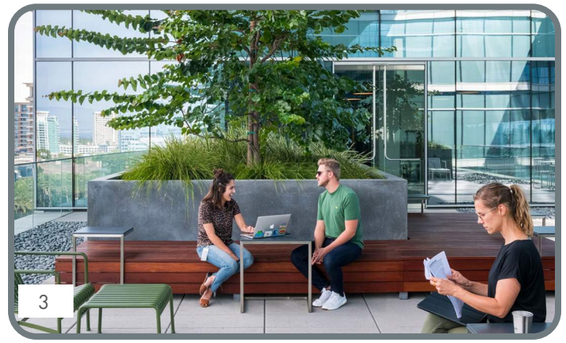
2-STUDIO tla, Bloor & Dufferin, Under Construction





3

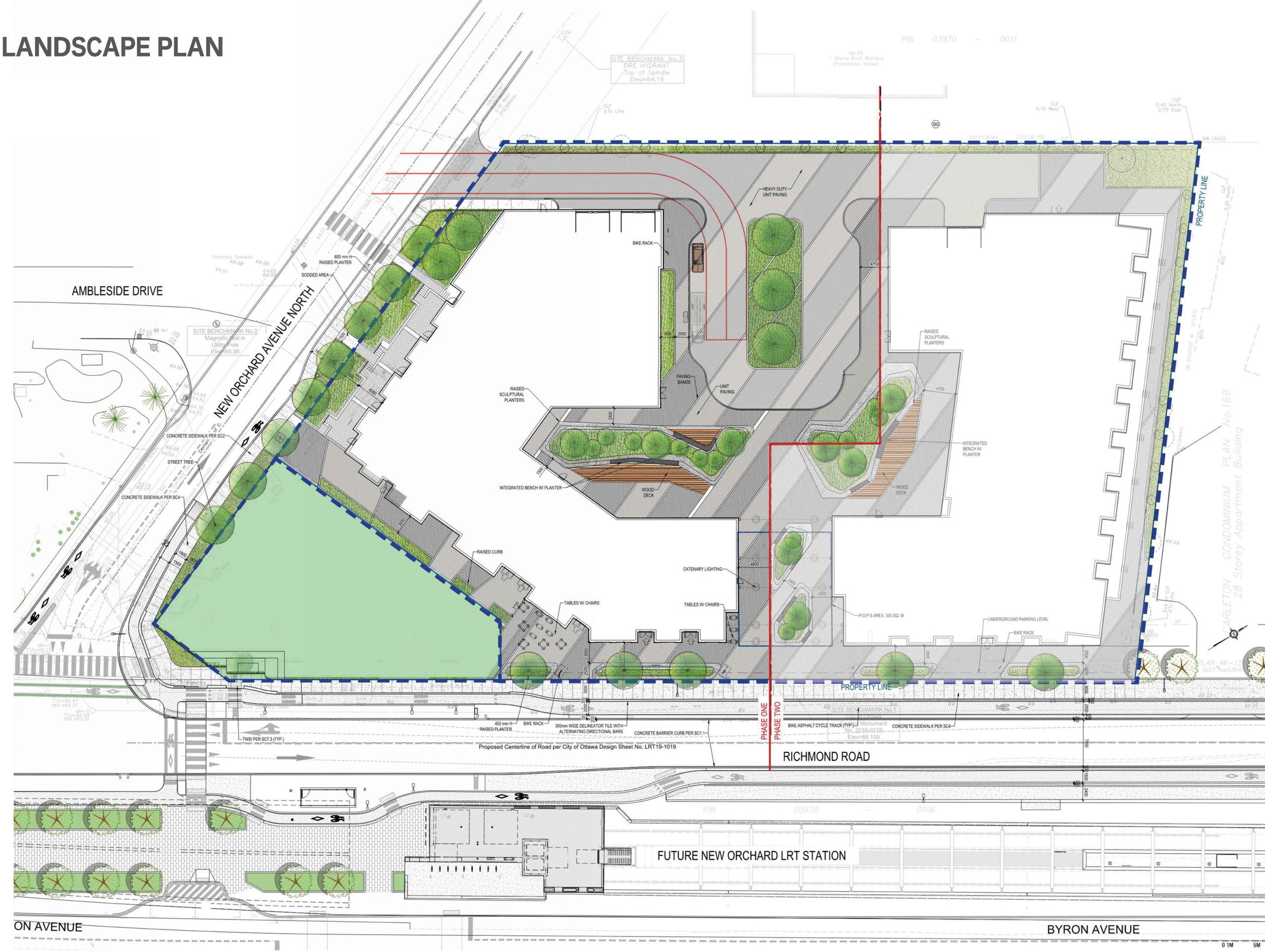
4- STUDIO tla, Cactus Ave,Under Construction

5- STUDIO tla, Markham & Ellesemere ,Under Construction

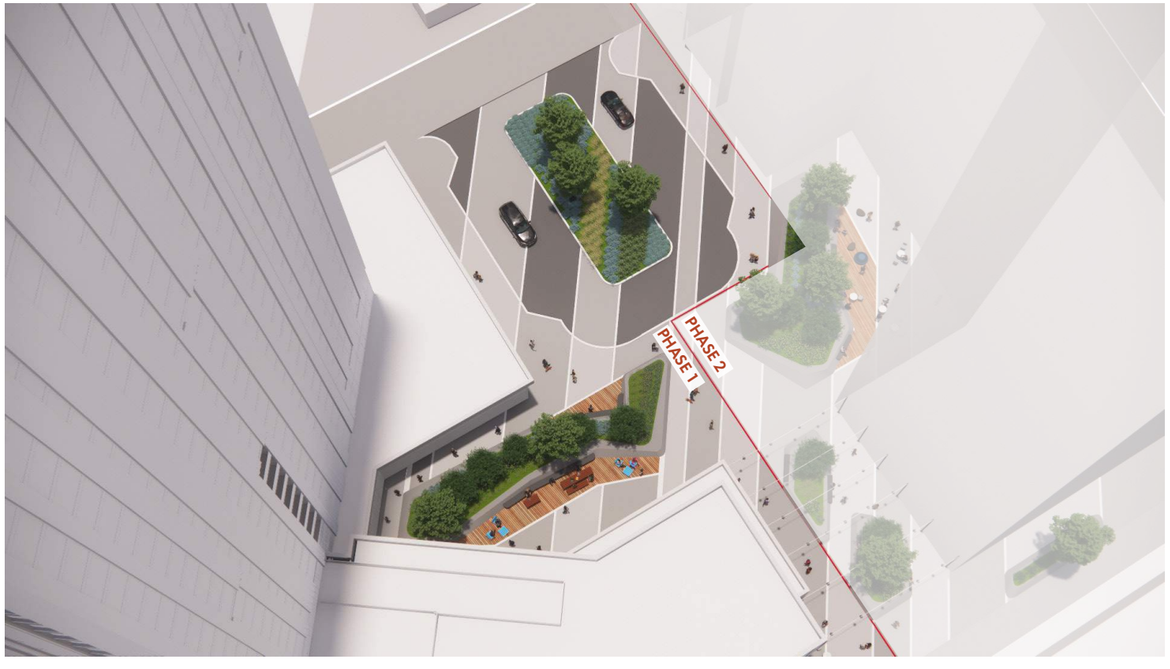
OUTDOOR AMENITY / COURTYARD
FLEXIBLE ZONE
FRONTAGE ZONE / STREETSCAPE BOULEVARD
RAISED SCULPTURAL PLANTERS
PEDESTRIAN MEWS
POPS
FUTURE PARK
FUNCTIONAL CONNECTION
PEDESTRIAN CONNECTION
VEHICULAR ACCESS

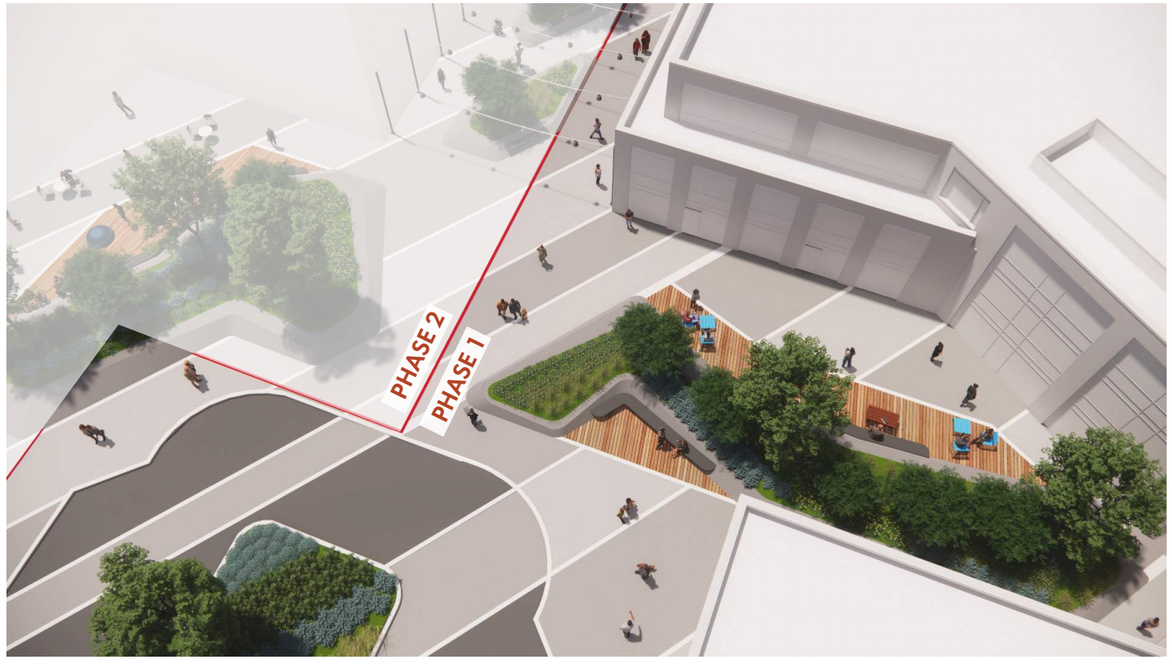
STUDIO tla

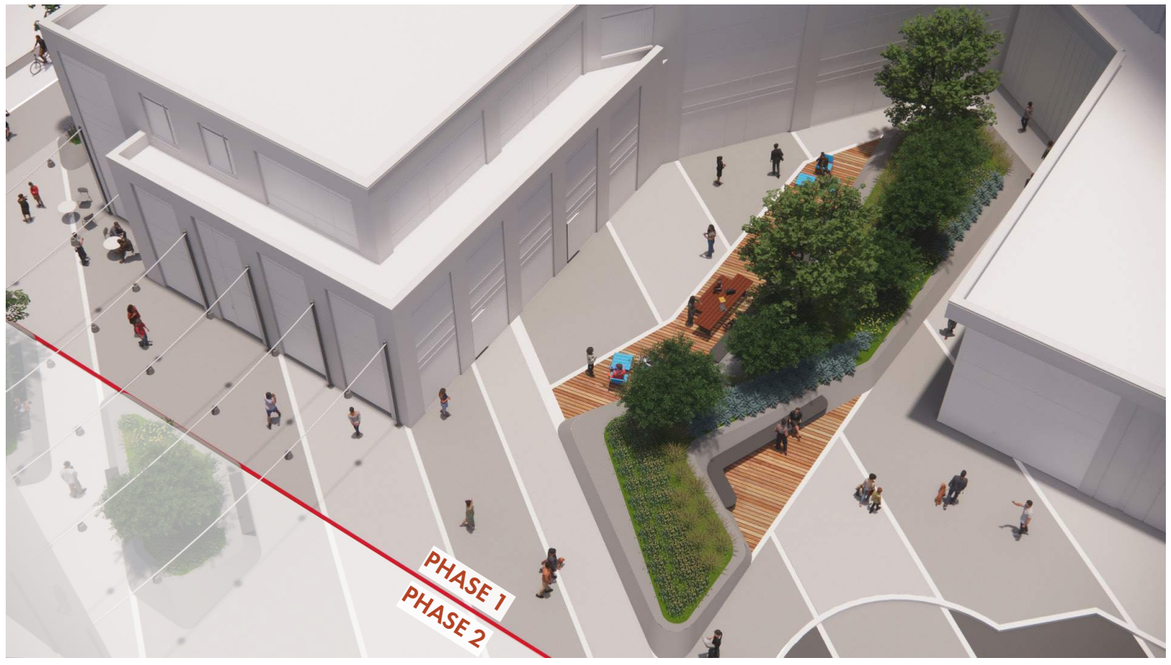
LANDSCAPE PLAN

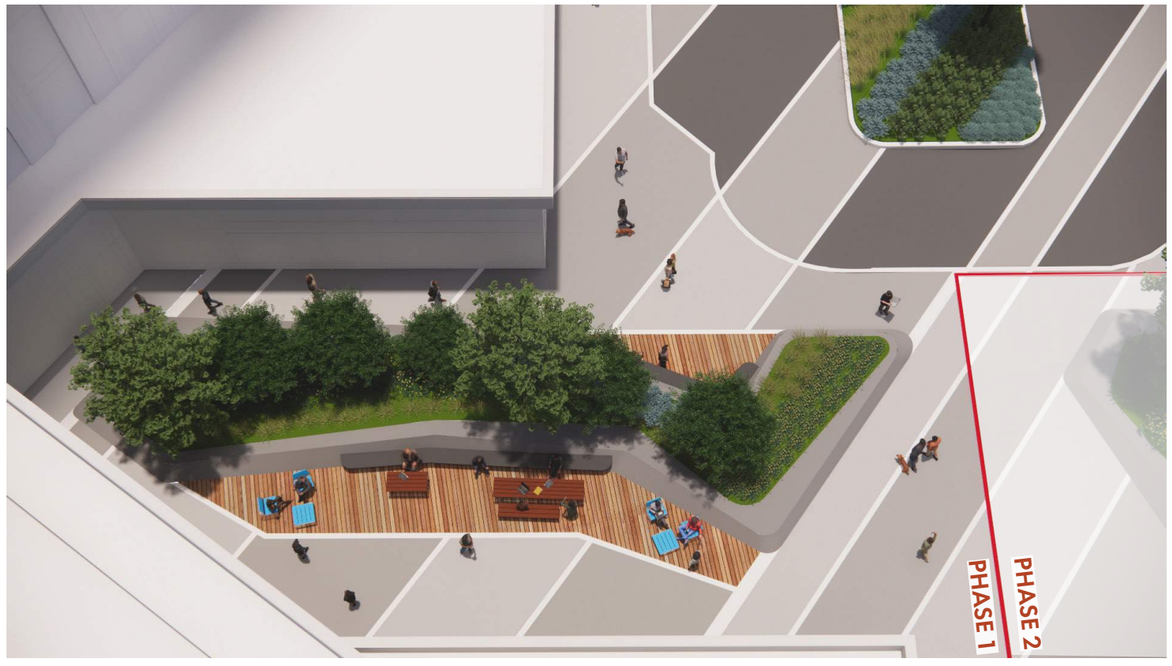


VIEWS



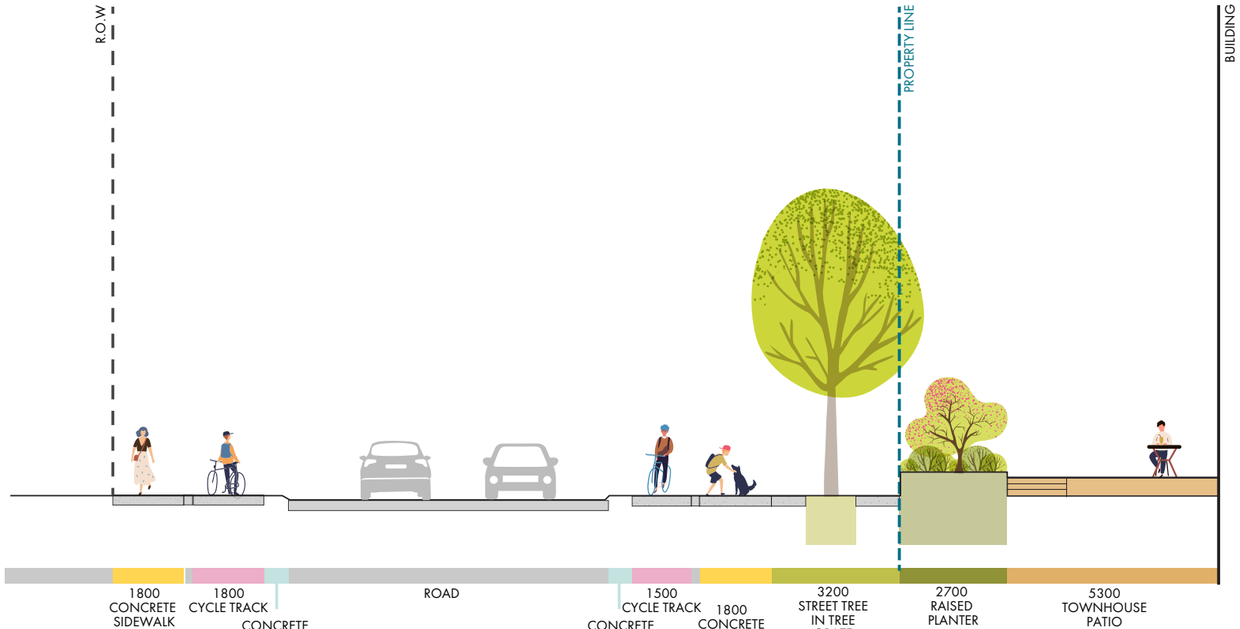




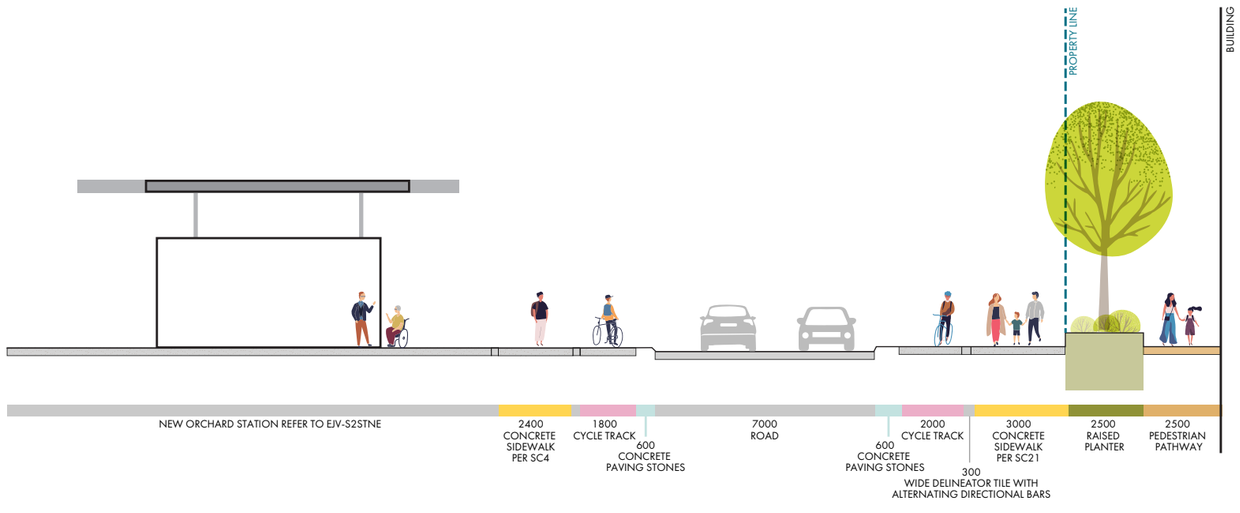


VIEWS

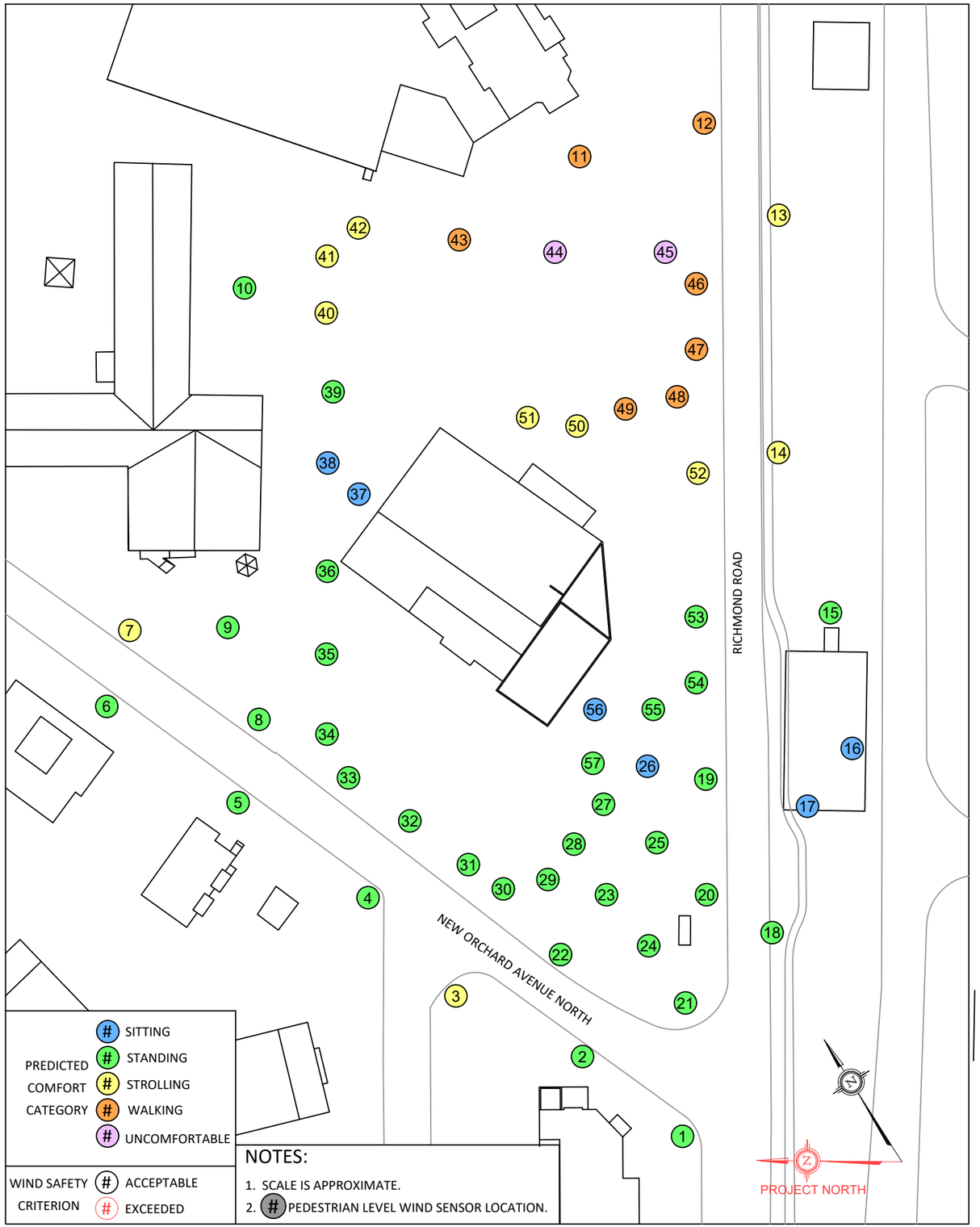
SECTION: NEW ORCHARD AVENUE NORTH



SECTION: RICHMOND ROAD



STUDIO tla



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PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-2A
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 2A: SPRING
EXISTING GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS

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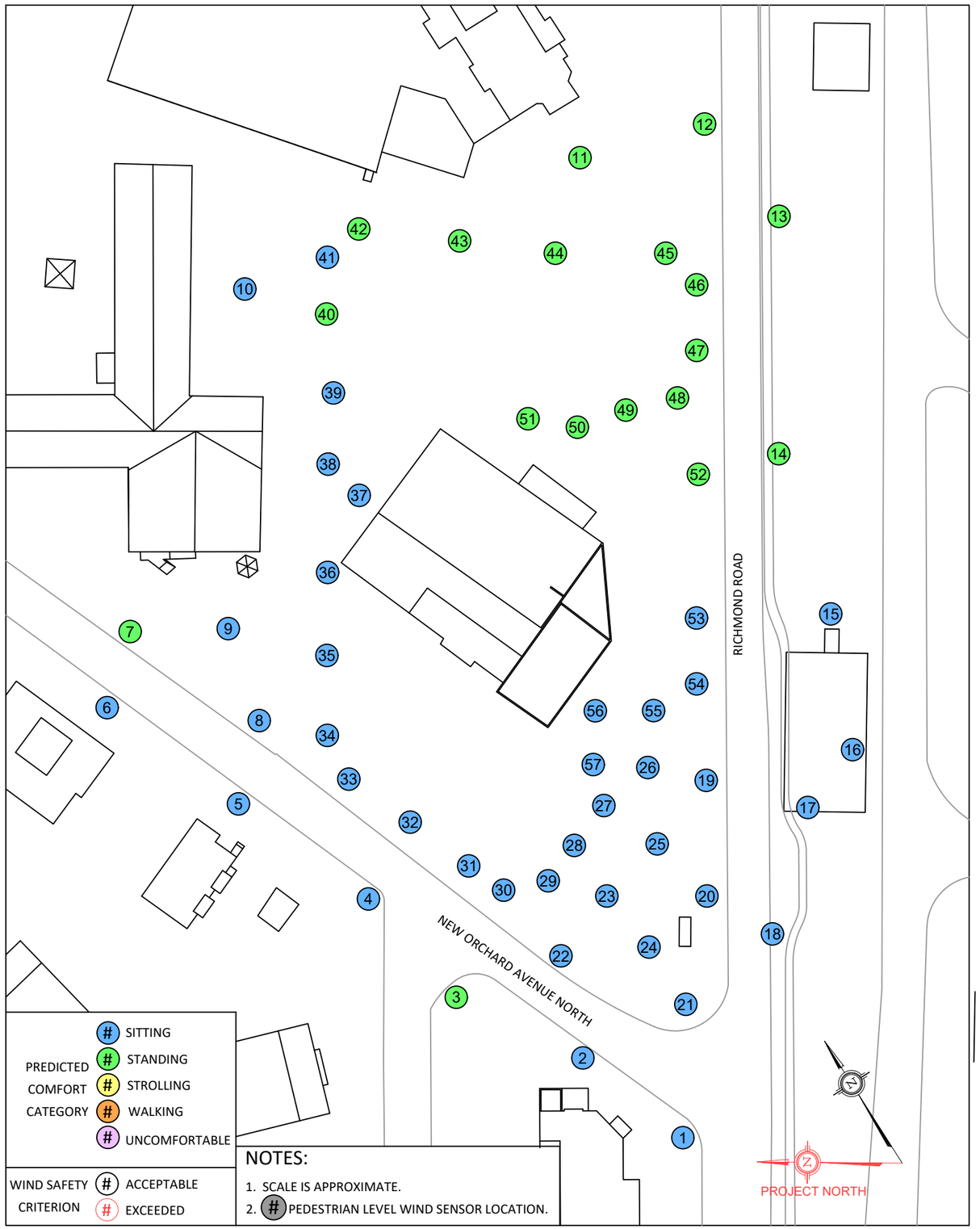
DRAWING NO.	GW21-416-PLW-2023-3A
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3A: SPRING
FUTURE GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS



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SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-2B
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 2B: SUMMER
EXISTING GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS

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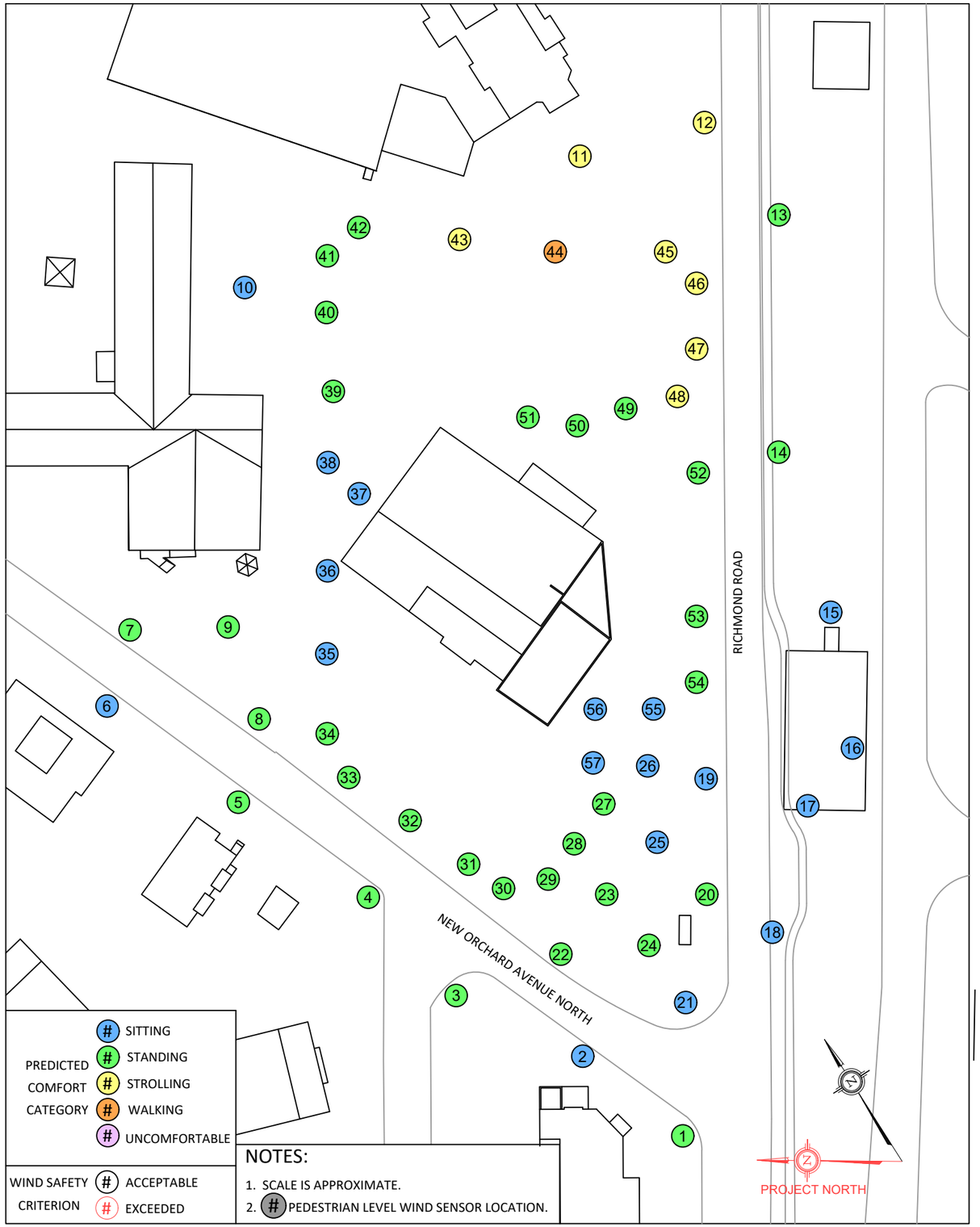
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-3B
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3B: SUMMER
FUTURE GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS



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PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-2C
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 2C: AUTUMN
EXISTING GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS

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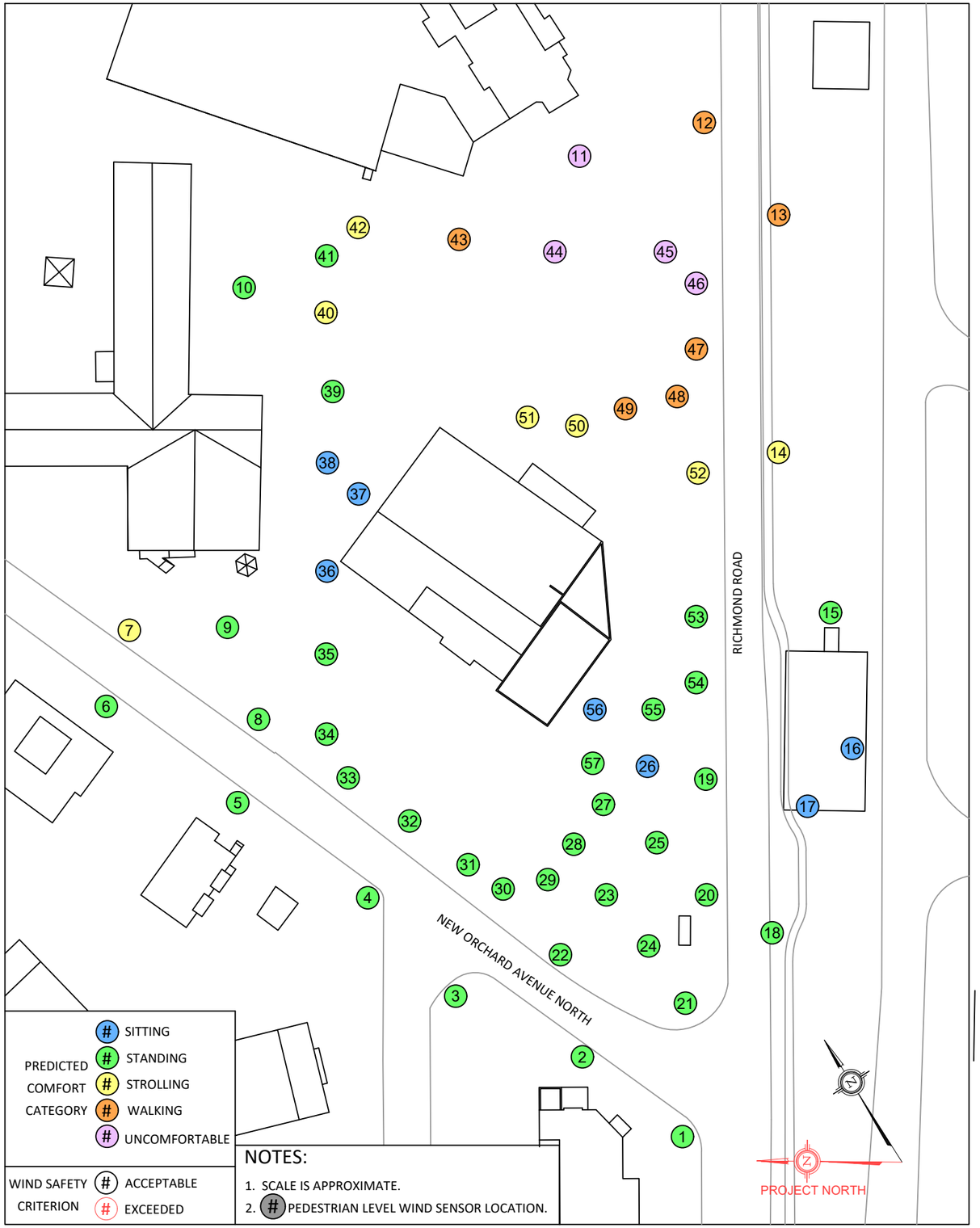
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-3C
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3C: AUTUMN
FUTURE GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS



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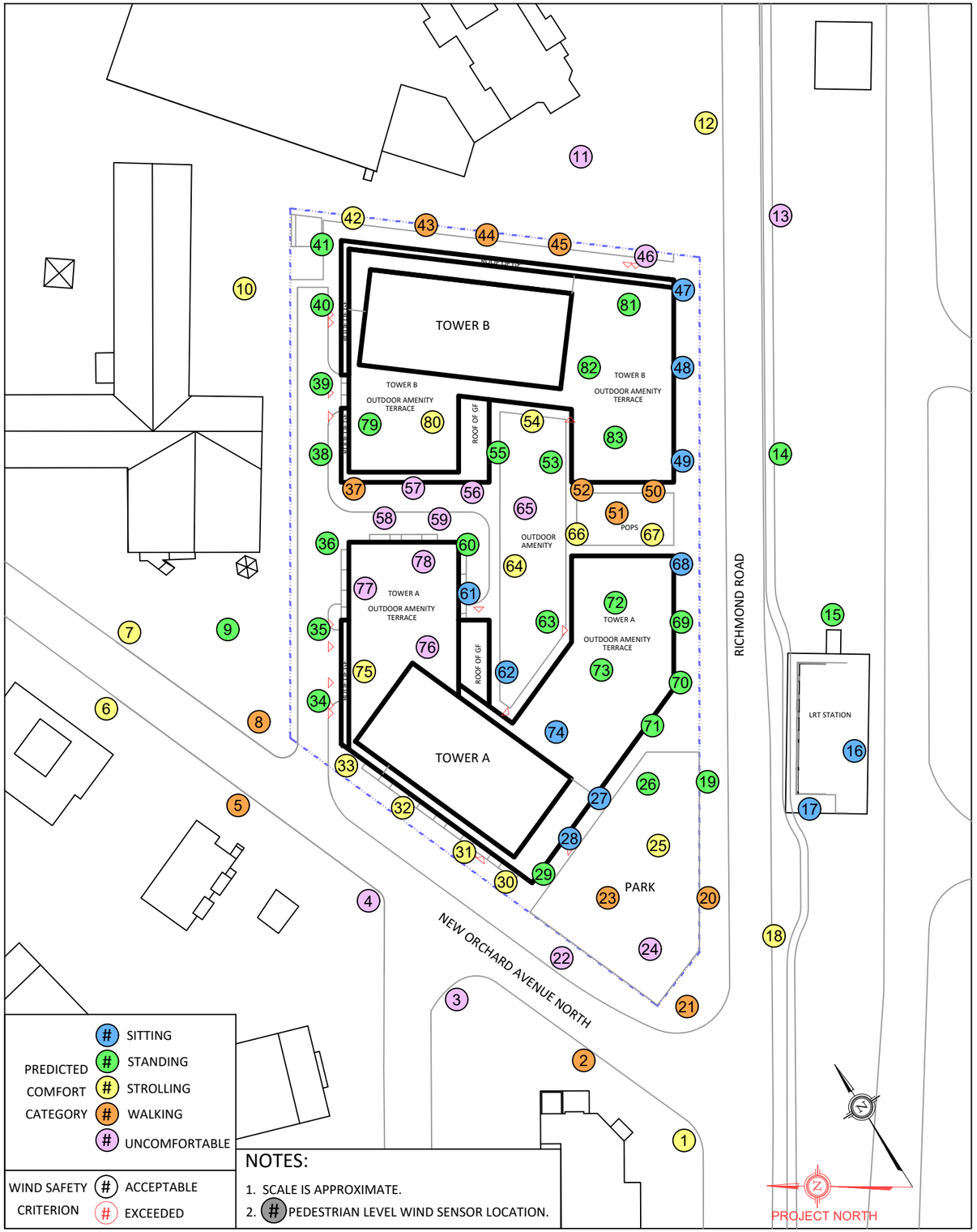
PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-2D
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 2D: WINTER
EXISTING GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS



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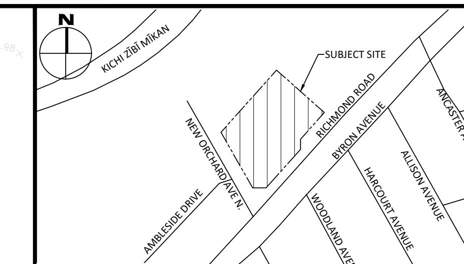
PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-3D
DATE	OCTOBER 3, 2023
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3D: WINTER
FUTURE GRADE LEVEL PLW SENSOR LAYOUT
PEDESTRIAN COMFORT PREDICTIONS



LOCATION PLAN

LEGEND

- CONCRETE BARRIER CURB
- CONCRETE WALKWAY
- PROPOSED ASPHALT
- LSCB# LANDSCAPING CATCHBASIN
- CBMH# T/G CATCHBASIN MANHOLE
- CB# T/G CATCHBASIN
- MH#A T/G SANITARY SEWER MANHOLE
- HYD B/F FIRE HYDRANT
- WATER VALVE
- WATER METER
- REMOTE WATER METER
- RETAINING WALL
- LIMIT OF CONSTRUCTION
- DRAINAGE SWALE
- DRAINAGE DITCH
- SLOPING AT 3:1 UNLESS SPECIFIED
- 95.50 SURFACE ELEVATION
- 95.50 (S) SWALE ELEVATION
- T/W95.50 B/W94.25 TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION
- OVERLAND FLOW ROUTE
- SILT FENCE BARRIER
- STRAW BALE CHECK DAM
- MUD MAT

GENERAL NOTES

1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
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   - 5.1. FOR LIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING:
     - 5.1.1. A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE.
     - 5.1.2. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
   - 5.2. FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS.
   - 5.3. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
   - 5.4. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPSS 180.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A STORM EVENT.
7. DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEARING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANTS AS PER OPSS 506. THIS IS TO LIMIT WIND EROSION OF SOILS WHICH MAY TRANSPORT SEDIMENTS OFFSITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.
8. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOD AS SOON AS FEASIBLE, AS PER OPSS 570.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS LEFT IN PLACE IN EXCESS OF 14 DAYS.
11. IF REQUIRED, DEWATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSD 219.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OR BLOCKED, AND TEMPORARY WATERCOURSES CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY, THE CONTRACTOR SHALL RELEASE ANY STRANDED FISH TO THE OPEN PORTION OF THE WATERCOURSE WITHOUT HARM.
12. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSS 577
13. WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSS 518.
14. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 270R GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

ROADWAY NOTES

1. RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY AUTHORITIES.
2. CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SC1.1 (BARRIER CURB), SC2 (MONOLITHIC SIDEWALK & CURB), AND SC4 (STANDARD SIDEWALK) AS NOTED. PROVISIONS SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS, DRIVEWAYS AND RAMPS.
3. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R10 AND OPSD 509.010, OPSS 310, AND SHALL BE REINSTATED PER THE DETAIL SHOWN ON THIS DRAWING.
4. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
5. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPMDD.
6. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
7. SUB- EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
8. PAVEMENT STRUCTURE: REFER TO DETAIL.

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1	ISSUED FOR PRELIMINARY DISCUSSION	JULY 17, 2024

Check and verify all dimensions before proceeding with the work

Do not scale drawings

SCALE 1 : 250

0 5 10 15 20 25 Metres

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FENGATE ASSET MANAGEMENT
2275 UPPER MIDDLE RD. E. SUITE 700
OAKVILLE, ON L6H 0C3

Project:
MIXED-USE RESIDENTIAL DEVELOPMENT
1047 RICHMOND ROAD

Drawing Title:
LOT GRADING & DRAINAGE PLAN

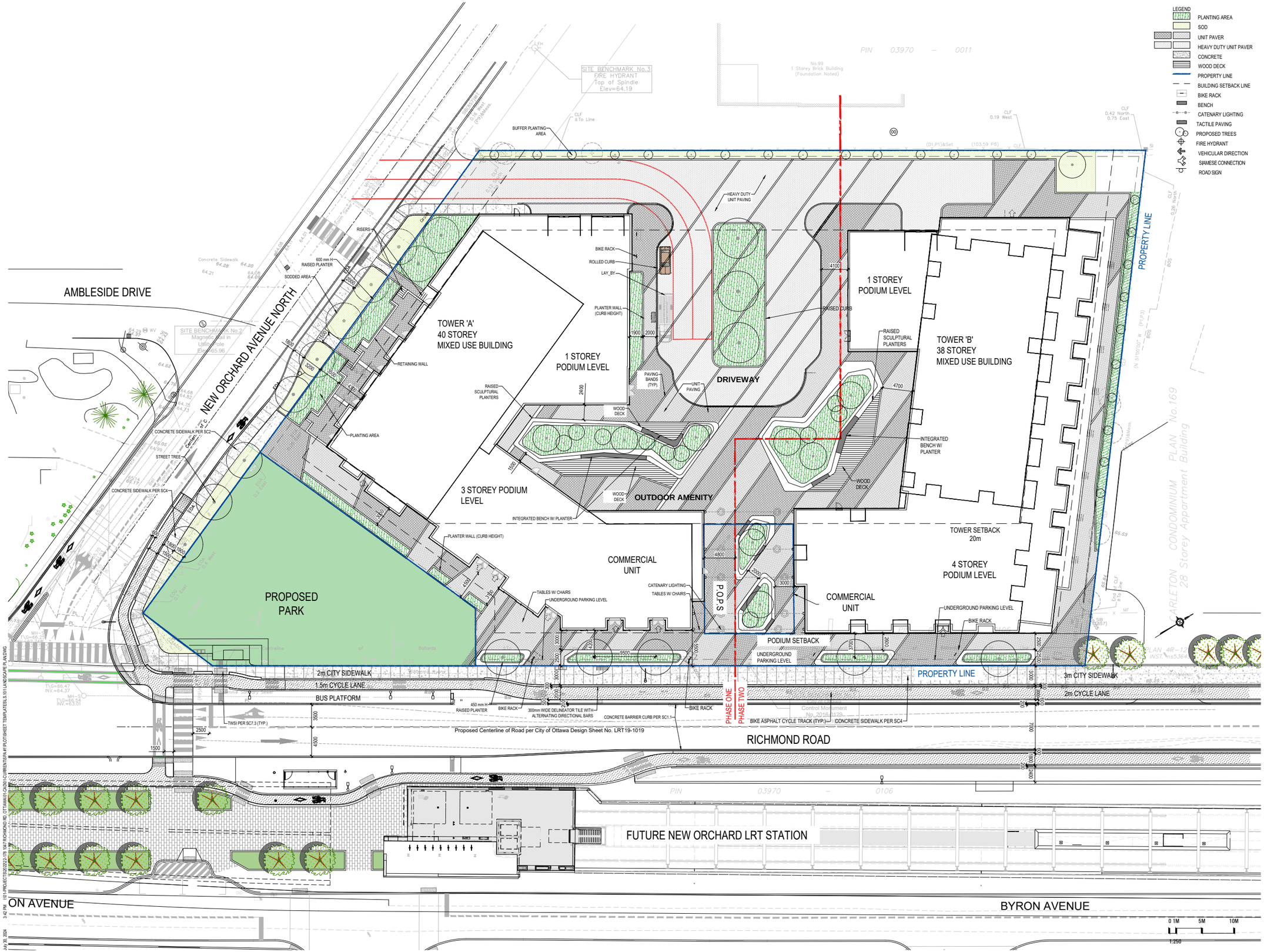
Scale:	1:250	Project Number:	CCO-22-2242
Drawn By:	FV		
Checked By:	AG	Drawing Number:	C101
Designed By:	AG		

D07-12-XX-XXXX

#XXXXX

THANK YOU

APPENDIX



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Project Number
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Revisions

4	ISSUED FOR UDRP	2024-07-30	AK
3	ISSUED FOR COORDINATION	2024-07-15	AK
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ASSOCIATION OF LANDSCAPE ARCHITECTS ONTARIO — PAUL MARSALA — OALA MEMBER

Signature
YYYY-MM-DD
Date

Keymap

Scale
AS SHOWN

North

Phase
SPA

Date
2024-07-09

Drawing Name
LANDSCAPE PLAN-ULTIMATE

Sheet Number
NOT FOR CONSTRUCTION

LS.101

LEGEND
PLANTING AREA
SOD
UNIT PAVER
HEAVY DUTY UNIT PAVER
CONCRETE
WOOD DECK
PROPERTY LINE
BUILDING SETBACK LINE
BIKE RACK
BENCH
CATENARY LIGHTING
TACTILE PAVING
PROPOSED TREES
FIRE HYDRANT
VEHICULAR DIRECTION
SIAMESE CONNECTION
ROAD SIGN

AMBLESIDE DRIVE
NEW ORCHARD AVENUE NORTH
SITE BENCHMARK No.2
Magnetic Nail in Utility Pole
Elev=65.96
SITE BENCHMARK No.3
FIRE HYDRANT
Top of Spindle
Elev=64.19
PIN 03970 – 0011
No.99
1 Storey Brick Building
(Foundation Noted)
BUFFER PLANTING AREA
HEAVY DUTY UNIT PAVING
RISERS
600 mm H RAISED PLANTER
SODDED AREA
BIKE RACK
ROLLED CURB
LAY_BY
PLANTER WALL (CURB HEIGHT)
RETAINING WALL
TOWER 'A'
40 STOREY
MIXED USE BUILDING
1 STOREY
PODIUM LEVEL
PAVING BANDS (TYP.)
UNIT PAVING
DRIVEWAY
RAISED CURB
PROPERTY LINE
RAISED SCULPTURAL PLANTERS
WOOD DECK
PLANTING AREA
CONCRETE SIDEWALK PER SC2
STREET TREE
CONCRETE SIDEWALK PER SC4
CONCRETE ACCESSWAY FOR INTERIM CONDITION
3 STOREY PODIUM
LEVEL
INTEGRATED BENCH W/ PLANTER
OUTDOOR AMENITY
PLANTER WALL (CURB HEIGHT)
TOWER SETBACK
20m
PROPOSED
PARK
COMMERCIAL
UNIT
TABLES W/ CHAIRS
UNDERGROUND PARKING LEVEL
POPS
P.O.P.S AREA 200 SQ. M
PODIUM SETBACK
UNDERGROUND
PARKING LEVEL
2m CITY SIDEWALK
1.5m CYCLE LANE
BUS PLATFORM
450 mm H RAISED PLANTER
BIKE RACK
300mm WIDE DELINEATOR TILE WITH ALTERNATING DIRECTIONAL BARS
CONCRETE BARRIER CURB PER SC1.1
TWSI PER SC7.3 (TYP.)
Proposed Centerline of Road per City of Ottawa Design Sheet No. LRT19-1019
PHASE ONE
PHASE TWO
PROPERTY LINE
3m CITY SIDEWALK
2m CYCLE LANE
BIKE ASPHALT CYCLE TRACK (TYP.)
CONCRETE SIDEWALK PER SC4
Monument
Elev=66.109
RICHMOND ROAD
PIN 03970 – 0106
FUTURE NEW ORCHARD LRT STATION
ON AVENUE
BYRON AVENUE
0 1M 5M 10M
1:250

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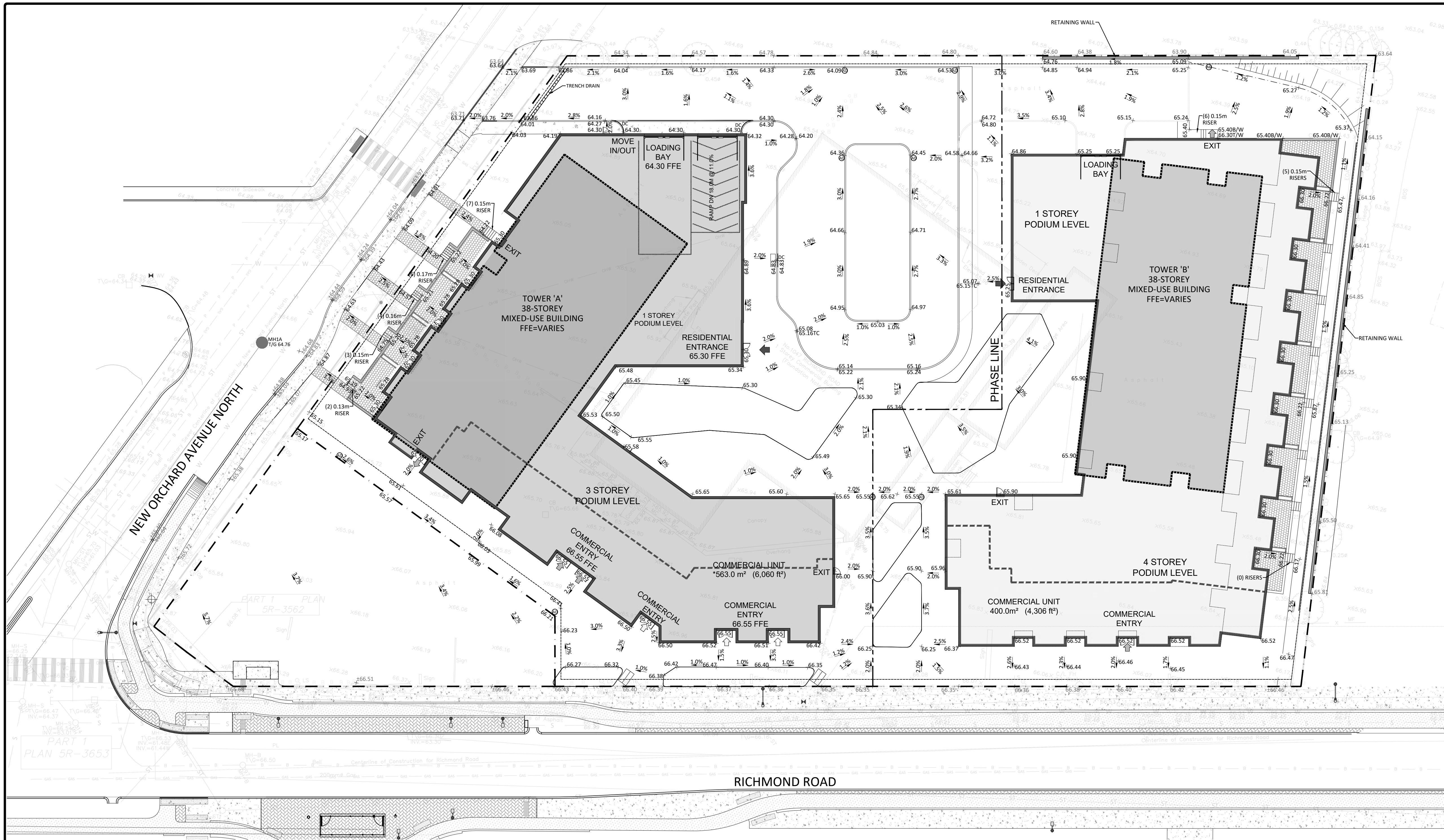
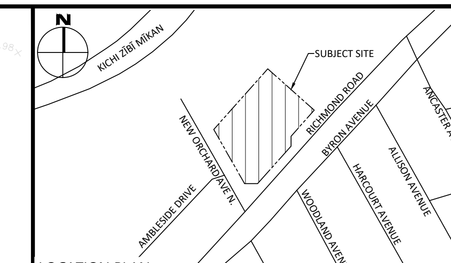
Drawing Name
LANDSCAPE PLAN-INTERIM

Sheet Number
NOT FOR CONSTRUCTION

LS.102

3:42 PM I:\01-PROJECTS\2022\22-178 1047 RICHMOND RD, OTTAWA\01-CAD\1-CURRENT\SPA #1\PLOTS\SHEET TEMPLATE\LS.102 LANDSCAPE PLAN -INTERIM.DWG
July 30, 2024





LOCATION PLAN

LEGEND

- CONCRETE BARRIER CURB
- CONCRETE WALKWAY
- PROPOSED ASPHALT
- LSCB# LANDSCAPING CATCHBASIN
- CBMH# T/G CATCHBASIN MANHOLE
- CB# T/G CATCHBASIN
- MH#A T/G SANITARY SEWER MANHOLE
- HYD B/F FIRE HYDRANT
- WATER VALVE
- WATER METER
- REMOTE WATER METER
- RETAINING WALL
- LIMIT OF CONSTRUCTION
- DRAINAGE SWALE
- DRAINAGE DITCH
- SLOPING AT 3:1 UNLESS SPECIFIED
- 95.50 SURFACE ELEVATION
- 95.50 (S) SWALE ELEVATION
- T/W 95.50 B/W 94.25 TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION
- OVERLAND FLOW ROUTE
- SILT FENCE BARRIER
- STRAW BALE CHECK DAM
- MUD MAT

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5. SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS ESCAPE OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED TO THE LEVEL OF THE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING:
    - 5.1. FOR LIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE FOLLOWING:
        - 5.1.1. A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE.
        - 5.1.2. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASURE.
    - 5.2. FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS.
    - 5.3. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
    - 5.4. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPSS 180.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A STORM EVENT.
7. DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEARING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANTS AS PER OPSS 506. THIS IS TO LIMIT WIND EROSION OF SOILS WHICH MAY TRANSPORT SEDIMENTS OFFSITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING WATER BY THE NEXT RAINSTORM.
8. ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOD AS SOON AS FEASIBLE, AS PER OPSS 570.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS LEFT IN PLACE IN EXCESS OF 14 DAYS.
11. IF REQUIRED, DEWATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSD 219.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OR BLOCKED, AND TEMPORARY WATERCOURSES CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY, THE CONTRACTOR SHALL RELEASE ANY STRANDED FISH TO THE OPEN PORTION OF THE WATERCOURSE WITHOUT HARM.
12. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSS 577
13. WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSS 518.
14. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 270R GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

ROADWAY NOTES

1. RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY AUTHORITIES.
2. CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SC1.1 (BARRIER CURB), SC2 (MONOLITHIC SIDEWALK & CURB), AND SC4 (STANDARD SIDEWALK) AS NOTED. PROVISIONS SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS, DRIVEWAYS AND RAMPS.
3. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R10 AND OPSD 509.010, OPSS 310, AND SHALL BE REINSTATED PER THE DETAIL SHOWN ON THIS DRAWING.
4. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
5. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPMDD.
6. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
7. SUB- EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
8. PAVEMENT STRUCTURE: REFER TO DETAIL.

Client:
FENGATE ASSET MANAGEMENT
2275 UPPER MIDDLE RD. E. SUITE 700
OAKVILLE, ON L6H 0C3

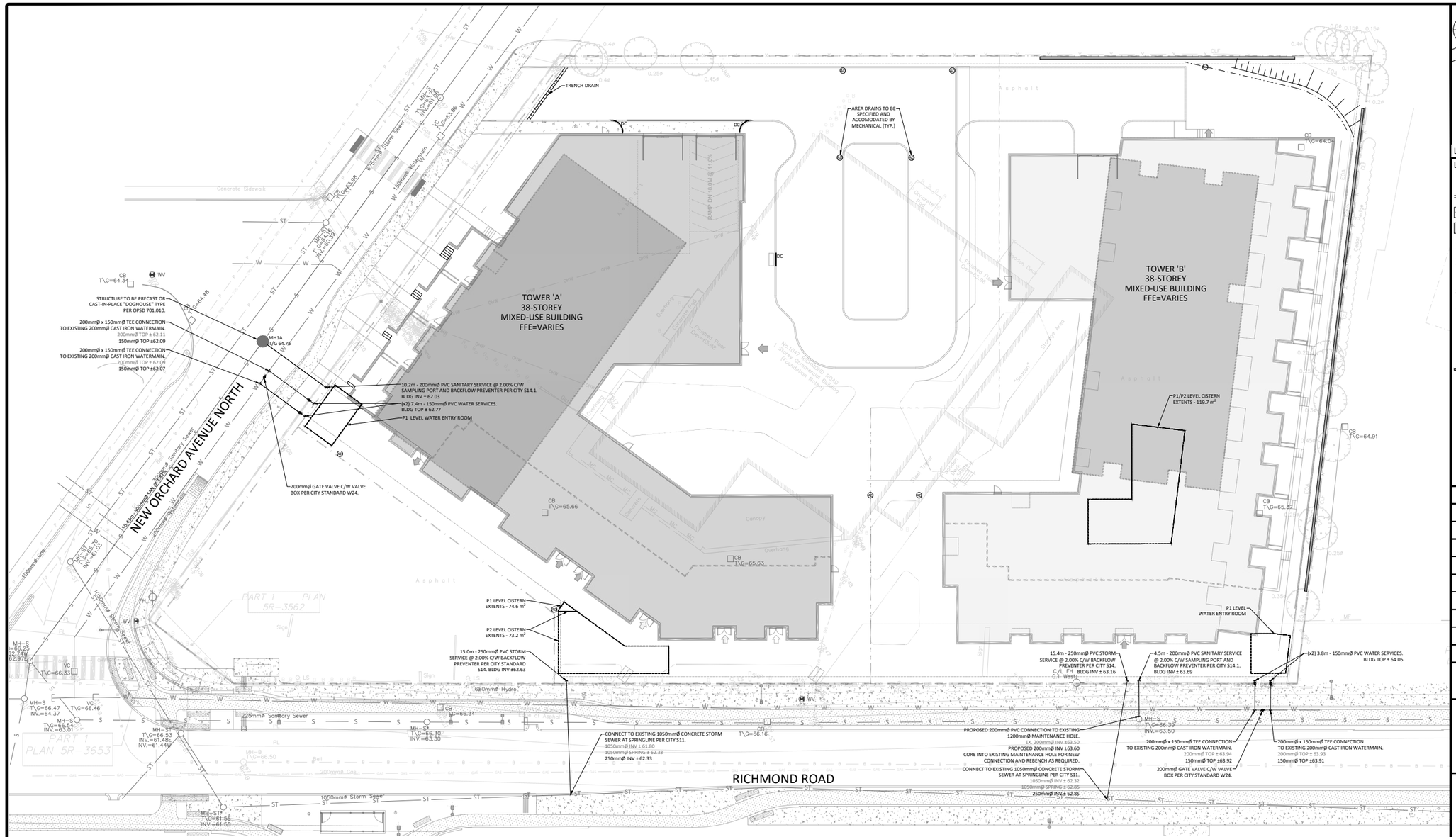
Project:
MIXED-USE RESIDENTIAL DEVELOPMENT
1047 RICHMOND ROAD

Drawing Title:
LOT GRADING & DRAINAGE PLAN

Scale: 1:250	Project Number: CCO-22-2242
Drawn By: FV	
Checked By: AG	Drawing Number: C101
Designed By: AG	

D07-12-XX-XXXX

#XXXXX



SAN STRUCTURE TABLE				
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH1A	64.76	S61.795 E61.830	N61.768	STRUC: OPSD 701.010 FRAME: CITY S25 COVER: CITY S24

GENERAL NOTES

1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. DRAWING 21985-21 AND CANNOT BE RELIED UPON TO BE ACCURATE OR COMPLETE. THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
5. THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.
7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
9. CONTRACTOR TO MINIMIZE THE ACTUAL LIMITS OF REMOVALS AND REINSTATEMENT WHEREVER POSSIBLE, AND SHALL MAKE THEIR OWN JUDGEMENT AND ACCOUNT FOR ALL MATERIAL AND LABOUR REQUIRED FOR ADEQUATELY REINSTATING THE AREA TO PRE-CONSTRUCTION CONDITIONS OR BETTER, AND BEAR THE COST OF THE SAME. NO ADDITIONAL PAYMENT WILL BE MADE FOR REINSTATEMENT WORK NOT SHOWN ON THE CONTRACT DRAWING AS A DIRECT RESULT FROM CONSTRUCTION.
10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
12. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
13. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
14. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
15. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
16. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
    - ELECTRICAL SERVICE - HYDRO ONE,
    - GAS SERVICE - ENBRIDGE,
    - TELEPHONE SERVICE - BELL CANADA,
    - TELEVISION SERVICE - ROGERS.
16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL AND THE CITY.
17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.

SEWER NOTES:

1. CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
    - 2.1. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
    - 2.2. SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1.
    - 2.3. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1.
    - 2.4. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
3. SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
4. SEWERS AND CONNECTIONS 200mmØ AND LARGER TO BE PVC SDR-35. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
5. SEWERS AND WATERMAINS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES. WHEN IT IS IMPOSSIBLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MECP STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 350 kPa (50 psi) WITHOUT LEAKAGE USING THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD SPECIFICATION 701 (OPSS 701) OF THE OPS.
6. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER CITY DETAIL S35, OPTION A.
7. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
8. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"X8' LONG MARKER.
9. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
10. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

WATERMAIN NOTES

1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.
2. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMAINS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W22.
3. IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER AND CITY OF OTTAWA STANDARDS W25 AND W25.2.
4. THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY DETAIL W23.
5. VALVES TO BE OPERATED BY CITY STAFF ONLY.
6. NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CONNECTIONS TO BE COMPLETED BY CITY FORCES. EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY SITE SERVICING CONTRACTOR.
7. CONCRETE THRUST BLOCKS TO CONFORM TO CITY STANDARD W25.3.
8. WATERMAIN 100-300mmØ TO BE CLASS 150 DR-18 PVC OR APPROVED EQUIVALENT.
9. ALL PVC WATERMAIN SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWU OR RWU TRACER WIRE IN ACCORDANCE WITH CITY STANDARD W36.
10. FIRE HYDRANTS SHALL CONFORM TO CITY STANDARDS W18, W19, AND W20.
11. VALVE BOXES SHALL CONFORM TO CITY STANDARD W24.
12. 300mmØ VALVES AND SMALLER TO BE INSTALLED WITH VALVE BOXES AS PER CITY STANDARD W24. 400mmØ VALVES AND LARGER TO BE INSTALLED WITH BUTTERFLY VALVES AND VALVE CHAMBERS AS PER CITY STANDARD W2.
13. AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER, THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

ROADWAY NOTES

1. RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY AUTHORITIES.
2. CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SC1.1 (BARRIER CURB), SC2 (MONOLITHIC SIDEWALK & CURB), AND SC4 (STANDARD SIDEWALK) AS NOTED. PROVISIONS SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS, DRIVEWAYS AND RAMPS.
3. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R10 AND OPSD 509.010, OPSS 310, AND SHALL BE REINSTATED PER THE DETAIL SHOWN ON THIS DRAWING.
4. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
5. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPMDD.
6. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
7. SUB- EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
8. PAVEMENT STRUCTURE: REFER TO DETAIL.

LOCATION PLAN

LEGEND

═	CONCRETE BARRIER CURB	▬ ▪ ▪ ▬	LIMIT OF CONSTRUCTION
▨	CONCRETE WALKWAY	— · — · —	DRAINAGE SWALE
▨	PROPOSED ASPHALT	— ·· — ·· —	DRAINAGE DITCH
○ LSCB#	LANDSCAPING CATCHBASIN	┴┴┴	SLOPING AT 3:1 UNLESS SPECIFIED
◙ CBMH# T/G	CATCHBASIN MANHOLE	95.50	SURFACE ELEVATION
■ CB# T/G	CATCHBASIN	95.50 (S)	SWALE ELEVATION
● MH#A T/G	SANITARY SEWER MANHOLE	T/W 95.50 B/W 94.25	TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION
● HYD B/F	FIRE HYDRANT	⇦	OVERLAND FLOW ROUTE
⊖	WATER VALVE	﹏	SILT FENCE BARRIER
Ⓜ	WATER METER	▩	STRAW BALE CHECK DAM
RM	REMOTE WATER METER	▧	MUD MAT
▬	RETAINING WALL		

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

No.	Revisions	Date
1	ISSUED FOR PRELIMINARY DISCUSSION	JULY 17, 2024

Check and verify all dimensions before proceeding with the work

Do not scale drawings

SCALE 1 : 250
0 5 10 15 20 25 Metres

egis
115 Walgreen Road, R.R.3
Carp, ON K0A 1L0
Tel: 613-836-2184
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Stamp:

Client:
FENGATE ASSET MANAGEMENT
2275 UPPER MIDDLE RD. E. SUITE 700
OAKVILLE, ON L6H 0C3

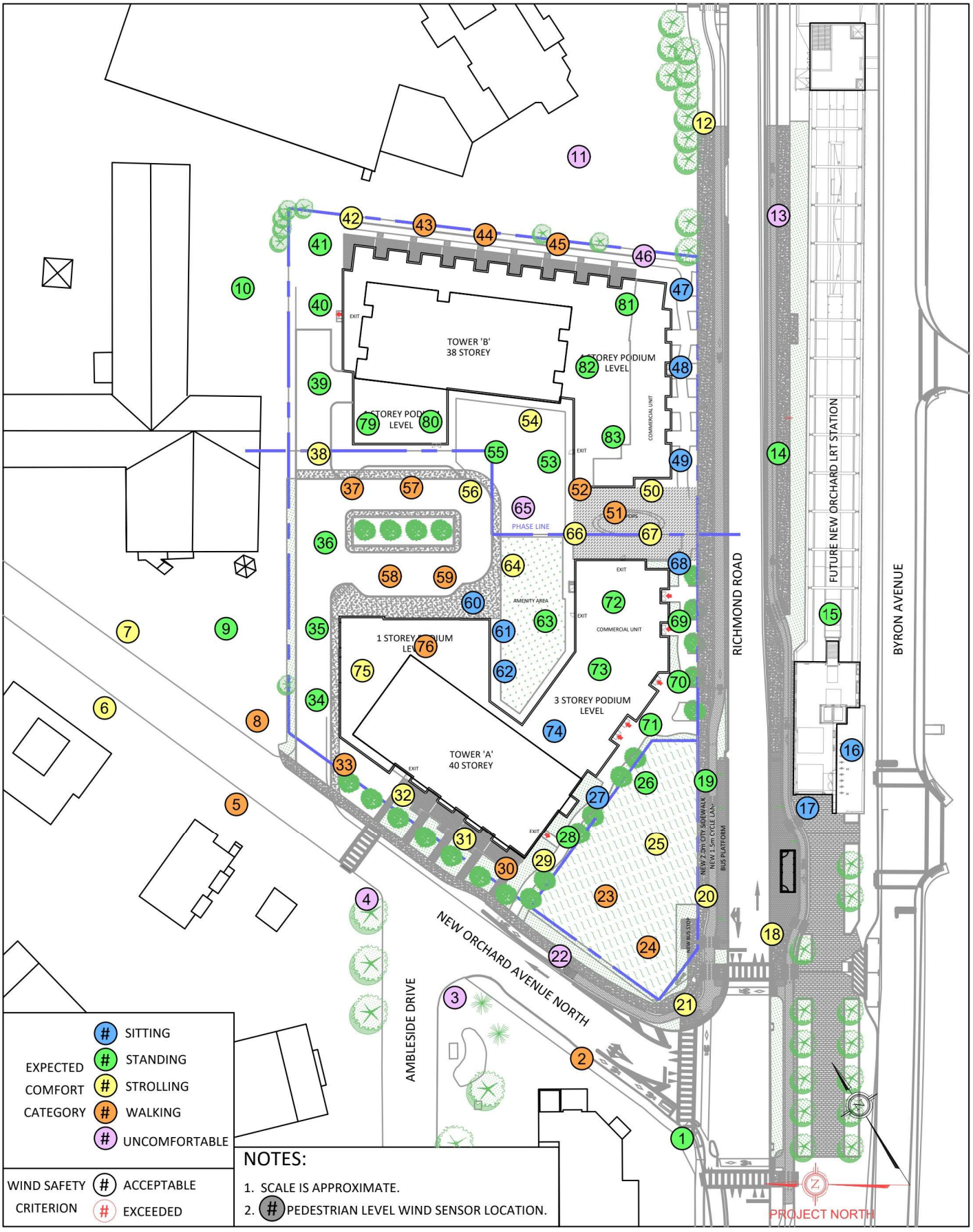
Project:
MIXED-USE RESIDENTIAL DEVELOPMENT
1047 RICHMOND ROAD

Drawing Title:
SITE SERVICING PLAN

Scale: 1:250
Drawn By: FV
Checked By: AG
Designed By: AG
Project Number: CCO-22-2242
Drawing Number: C102

D07-12-XX-XXXX

#XXXXX



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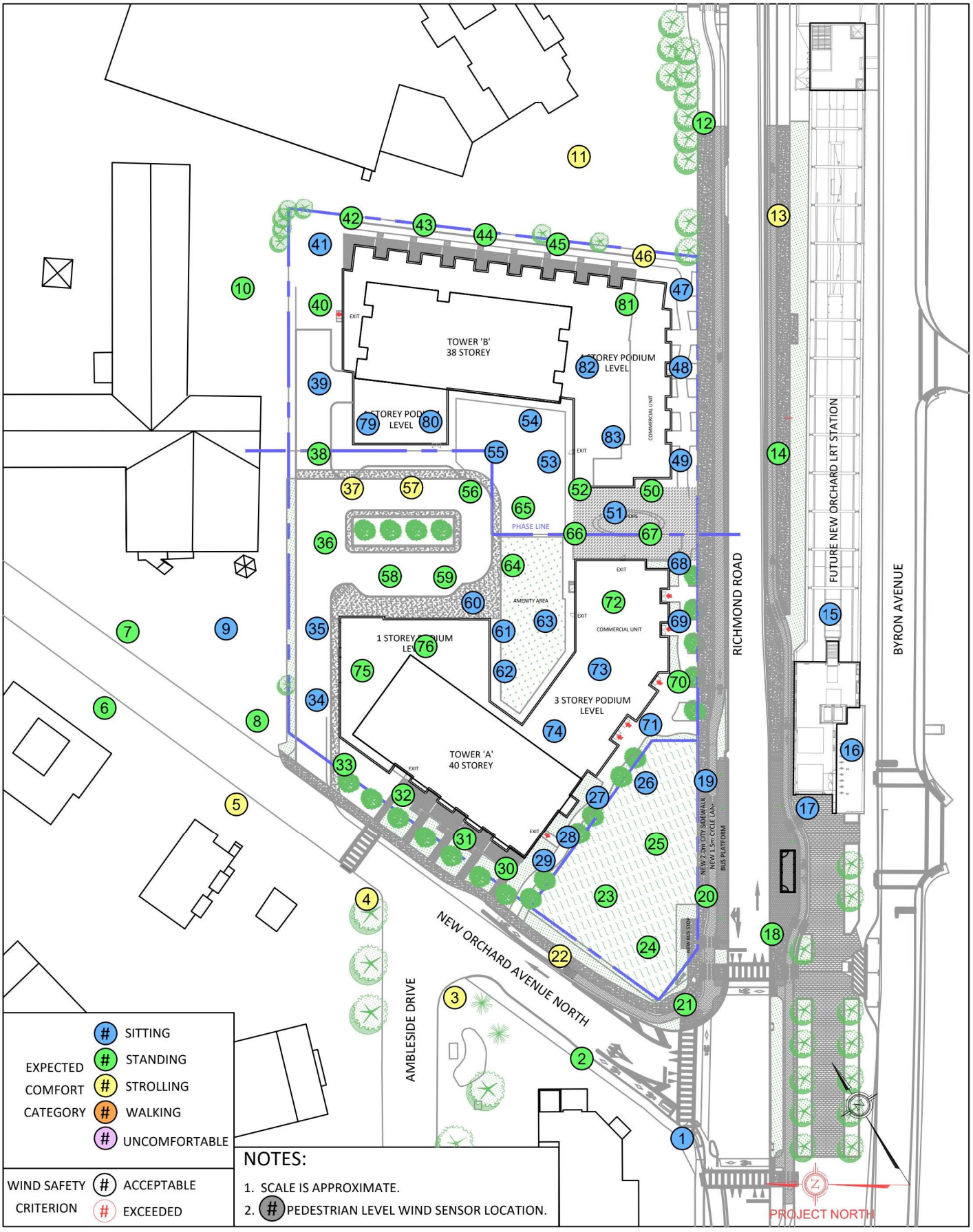
PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-3A
DATE	JULY 11, 2024
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3A: SPRING
EXPECTED FUTURE GRADE LEVEL
PEDESTRIAN COMFORT BASED ON PREVIOUS SITE CONFIGURATION WIND TUNNEL TEST



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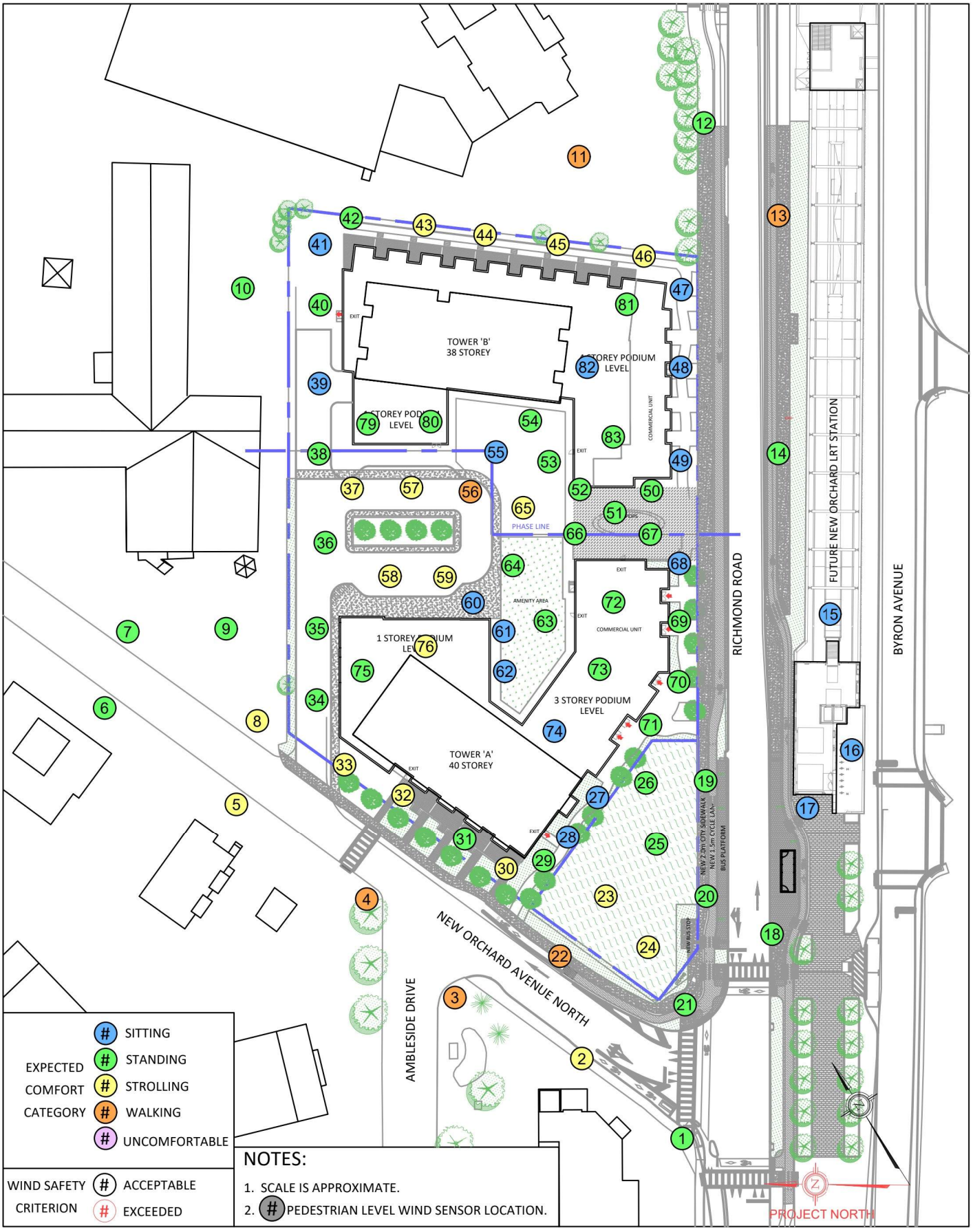
PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-3B
DATE	JULY 11, 2024
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3B: SUMMER
EXPECTED FUTURE GRADE LEVEL
PEDESTRIAN COMFORT BASED ON PREVIOUS
SITE CONFIGURATION WIND TUNNEL TEST



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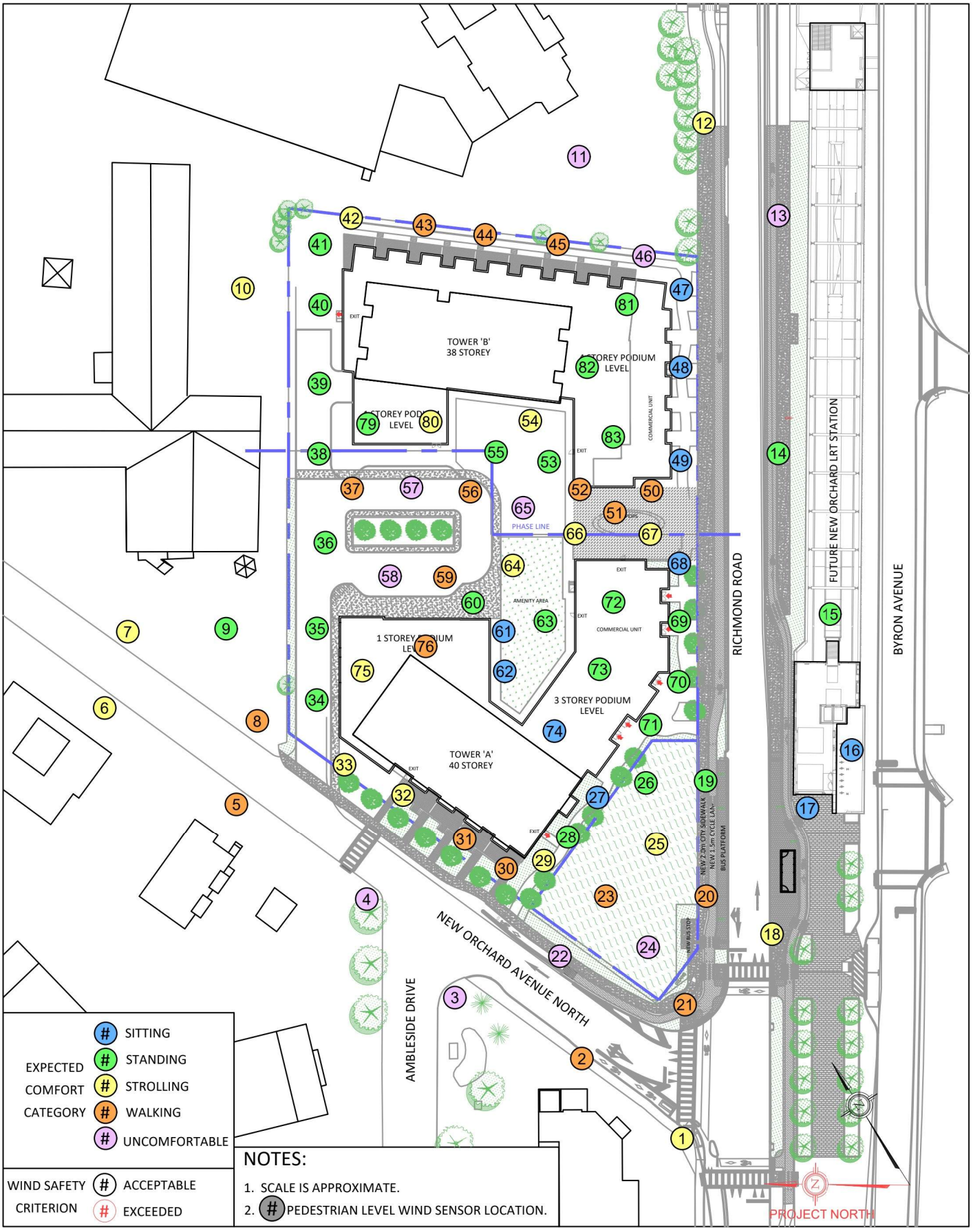
PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-3C
DATE	JULY 11, 2024
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3C: AUTUMN
EXPECTED FUTURE GRADE LEVEL
PEDESTRIAN COMFORT BASED ON PREVIOUS
SITE CONFIGURATION WIND TUNNEL TEST



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PROJECT	1047 RICHMOND ROAD, OTTAWA PEDESTRIAN LEVEL WIND STUDY
SCALE	1:1000 (APPROX.)
DRAWING NO.	GW21-416-PLW-2023-3D
DATE	JULY 11, 2024
DRAWN BY	K.A.

DESCRIPTION

FIGURE 3D: WINTER
EXPECTED FUTURE GRADE LEVEL
PEDESTRIAN COMFORT BASED ON PREVIOUS
SITE CONFIGURATION WIND TUNNEL TEST