Sajecki Planning

URBAN DESIGN STUDY

30 QUEEN STREET EAST
MISSISSAUGA, ONTARIO

MARCH 2022

Sajecki Planning Inc.

TABLE OF CONTENTS

1.0 INTRODUCTION

Sajecki Planning

This Urban Design Study ("UDS") has been prepared is support of applications by Edenshaw Queen Developments Limited to amend the City of Mississauga Official Plan and Zoning By-law No. 0225-2007 with respect to the lands municipally known as 30 Queen Street East (the "subject site").

This UDS is prepared in support of amendments to the City of Mississauga Official Plan and Zoning By-law to permit two mixed-use buildings, 40- and 42-storeys in height, including residential, commercial, and office components at the north and south sides of the site, and Privately-Owned Publicly Accessible Space (POPS). The two buildings contain 1,139 residential units and 1,765 m² of commercial floor space, split between the ground floor of both towers and the second floor of tower B.

This UDS provides:

- An overview of the subject property and local context;
- A review of the applicable Urban Design Policies;
- A vision and guiding principles for the development; and
- An overview of the proposal's built form, circulation, and public realm organization.

2.0 CONTEXT ANALYSIS

Sajecki Planning

2.1 Subject Property

The subject site is in Ward 1, immediately adjacent to the Port Credit GO Transit and Hurontario LRT Stations, with Ann Street to the west and Hurontario Street, beyond the LRT station to the east. The subject property is currently occupied by a Metrolinx parking lot. The site is irregular in shape with a gross lot area of approximately 0.59 hectares (5,952 m²). The frontage along Park Street is approximately 50 metres and the frontage along Ann Street is 94 metres.

Located within the Port Credit Community Node, Intensification Corridor, and Major Transit Station Area ("MTSA"), the property is designated "Mixed Use" in the City of Mississauga Official Plan (2021 office consolidation). It is zoned "D" Development in the City of Mississauga Zoning By-law 0225-2007.

Figure 1 | View of subject site looking northeast from Ann Street

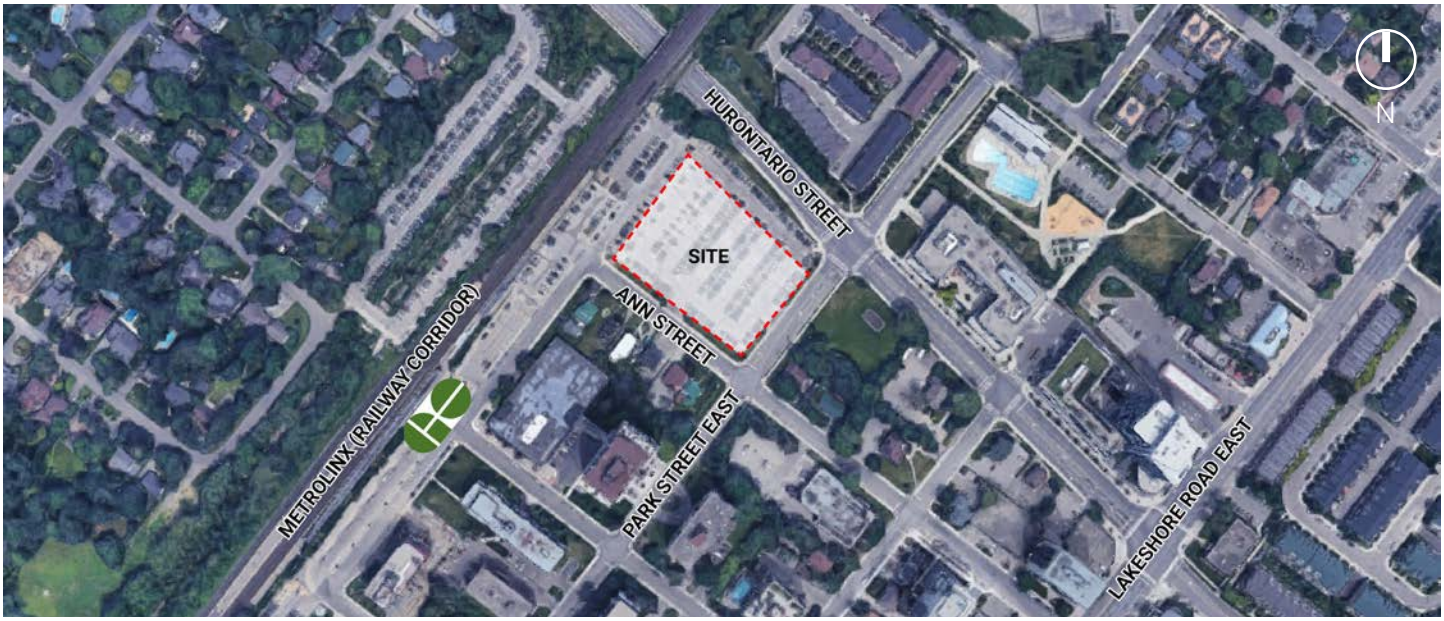


Figure 2 | Aerial View of Subject Property

2.2 Adjacent Lands

The subject site is located in a transit-oriented, mixed-use community with the Port Credit GO Station situated directly to the north with the under-construction LRT Station located immediately to the east. A 22-storey mixed use building currently under construction and a single detached dwelling are located on the west side of Ann Street. Properties to the south include single detached dwellings and a vacant lot zoned Development.

Immediate Surroundings

- North: The Queen Street right-of-way is located immediately north of the subject site, followed by Port Credit GO Station and the railway corridor. Directly north of the railway corridor is a surface parking lot servicing the GO Station.
- East: The subject site is immediately adjacent to the Hurontario LRT Station, currently under construction. Along the east side of Hurontario Street are the Ports of Olde Port Credit townhomes. Community amenities located on the east side of Hurontario Street within a short walk from the subject site include Forest Avenue Public School, Lions Club of Credit Valley Outdoor Pool and Harold E. Kennedy Park.
- South: The southwest corner of Ann Street and Park Street East include a large vacant parcel, used as a parking lot for the two-storey Bell Canada office building. Lands immediately to the south are owned and being developed by FRAM. Currently, these include three twentieth century residences that have cultural heritage value, including the Charles Hamilton House, which was constructed in 1912. The two-and-a-half storey colonial bungalow-style residences have large lots. Two of the residences, located at 84 High Street East and 90 High Street East are designated Residential High Density in the City's Official Plan, whereas the lands containing the residence immediately adjacent to the subject site are designated Mixed Use.
- West: Mid to high-rise residential apartments are located to the west. Immediately adjacent to the subject site on the west side of Ann Street are the under-construction Westport Condos. This project was approved at 22 storeys with 359 residential units and ground floor commercial uses. West of the future Westport Condos is a 4-storey parking garage with retail units on the ground floor and the Century Park Apartments, a 27-storey high-rise residential building.

Figure 3 | Context Massing

2.3 General Built Form

North of the subject site, Hurontario Street features low-density built form, primarily consisting of detached dwellings, townhomes, and small commercial plazas. Commercial uses include personal services, a pharmacy, medical clinics, and a dental office. Retail uses include local grocery stores, restaurants, and retail stores. Community amenities include Port Credit Secondary School and Mineola Public School located north of subject site, east of Hurontario Street. Peel Gardens Public Park is located north of the subject site, west of Hurontario Street.

Mid to high-rise residential apartments and several commercial plazas are located south of the subject site, west of Hurontario Street. Notable developments include the 22-storey under construction Westport Condos and the 27-storey Century Park Apartments. There are several rental apartment buildings to the south and west, such as Park Heights (12-storeys), 28 Helene Street North Apartments, (27-storeys), and Harbourview Apartments, (20-storeys). Vimy Park and Port Credit Memorial Park are located southwest of the subject site, bordering the Credit Valley River, which lies to the west.

Built form south of the subject site, along the east side of Hurontario Street, consists primarily of detached dwellings and townhomes, with the exception of North Shore, a mixed-use, high-rise building consisting of 23-storeys, 213 residential condo units, retail units at-grade, and a parking garage. Forest Avenue Public School and Harold E. Kennedy Park are located east of Hurontario Street.

Port Credit includes a variety of community amenities, such as parks, trails, and recreational facilities. These include St. Lawrence Park, Tall Oaks Park, the Port Credit Harbour Marina and Credit Village Marina, and the 19-kilometre stretch of Mississauga's Waterfront Trail that connects eleven major parks in the city. The Mississauga portion of the Waterfront Trail extends from the east border of Oakville to the west border of Toronto. It consists of paved trail and residential streets that serve as road connections. Port Credit is a vibrant community with a range of commercial amenities primarily located along Lakeshore Road.

2.4 Transportation Network

The subject site is located within the Port Credit Community Node, along an Intensification Corridor, and within a MTSA as identified on Schedule 2: Intensification Areas of the City of Mississauga Official Plan ("MOP"). The following subsections outline the transportation network that connects the subject site to other parts of Mississauga and the wider region.

2.4.1 Road Network

Hurontario Street runs north-south and is identified in the MOP as an Arterial Road (Schedule 5: Long Term Road Network). It has a right-of-way of 30 metres (MOP Schedule 8: Designated Right-of-Way). In this location, Hurontario Street is four lanes wide with dedicated left-turn lanes at all intersections.

Hurontario Street is undergoing significant change, with the construction of higher-order transit in the form of the LRT line, and future primary on-road/ boulevard cycling route (MOP Schedule 7: Long-Term Cycling Routes). As part of the road network, Hurontario Street will continue to play an important and ever expanding role, providing connections to downtown Mississauga and east-west routes such as Lakeshore Road and the QEW Expressway.

Park Street East is a local road that runs east-west. It is a two-lane road with dedicated left turn lanes to Hurontario Street. Intersections with other streets have stop signs to control traffic.

Ann Street is a two-way road identified in the MOP as a Minor Collector (MOP Schedule 5: Long Term Road Network) that runs from the Port Credit GO Station to Lakeshore Road East. Intersections have stop signs to control traffic.

Queen Street East is also identified in the MOP as a Minor Collector (MOP Schedule 5: Long Term Road Network). It is a one-way street that runs from Ann Street to Elizabeth Street North. It is used by vehicles dropping off passengers or accessing parking lots as well as buses servicing the Port Credit GO Station.

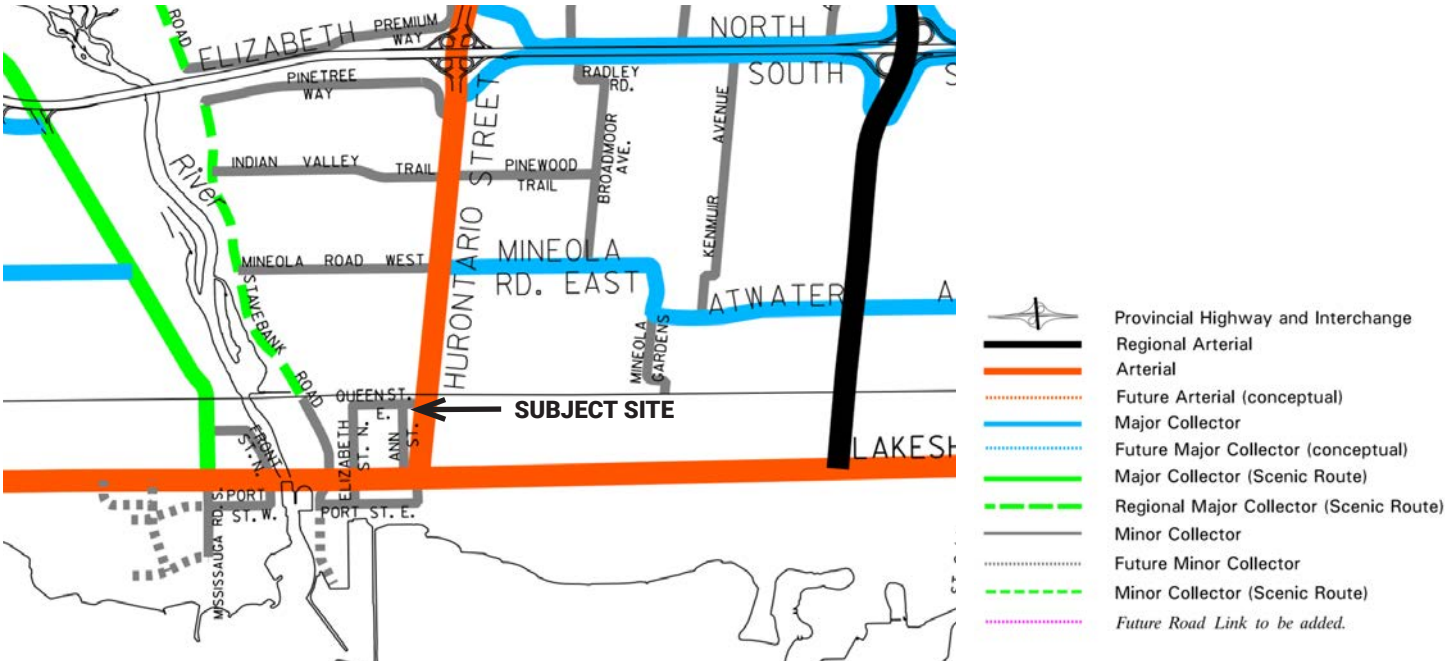


Figure 4 Mississauga Official Plan - Schedule 5 - Long Term Road Network

2.4.2 Transit Network

GO Train Service

The Port Credit GO Station is located less than 250 metres away, immediately north of the subject site. The GO Station services the Lakeshore West GO Train. The Lakeshore West GO Train route features two-way, all-day service between Toronto and Aldershot and weekday rush-hour service from Hamilton to Toronto in the morning and back in the afternoon. On weekdays, the Lakeshore West GO Train runs every 15 minutes on average. On weekends, it runs every 30 minutes.

Metrolinx's Port Credit GO Station Southeast Area Master Plan Study outlined two major service improvements that will affect ridership at the Port Credit GO Station. First, in April 2015, the provincial government committed funding for a future Hurontario LRT line between the Port Credit GO Station and the Downtown Brampton GO Station. By 2031, the Port Credit GO Station is expected to accommodate 118,000 passengers each weekday. Second, the Metrolinx Regional Express Rail project will introduce 15-minute or better service throughout the day between Toronto and Aldershot and add new hourly service to and from Hamilton 7 days a week. These improvements are expected to significantly increase ridership along the Lakeshore West line.

Light Rail Transit Services

The Port Credit GO Station will be the terminus for the Hurontario Light Rail Transit ("LRT") line. The LRT Station will be immediately adjacent to the subject property, located between the east lot line and Hurontario Street. The LRT will run along Hurontario Street in Mississauga and Brampton and fully integrate with municipal and regional transit systems. The project, valued at $4.6 billion, includes 18 kilometres of new dedicated rapid transit between Port Credit GO Station in Mississauga to the Gateway Terminal at Steeles Avenue in Brampton. The LRT will feature 19 stops and connect to major transit systems,

Figure 5 | Hurontario LRT Route

including GO Transit (Milton and Lakeshore West lines), the Mississauga Transitway, Brampton Transit, ZUM, and MiWay. Construction of the Hurontario LRT is underway, expected to be completed in Fall 2024. The LRT project is the third project to include Metrolinx's Community Benefits program to help contribute to neighborhood improvements.

Bus Services

The subject site's proximity to the Port Credit GO Station offers a high level of transit accessibility via bus routes, including:

• **GO Bus Route 18** from Port Credit GO Station Platform 7 at the corner of Park Street East and Elizabeth Street; and

• **MiWay routes 2, 8, 14 and 23** from Port Credit GO Station Platform 7 at the corner of Park Street East and Elizabeth Street.

Route 18 runs from St. Catharines to Toronto and stops in Lincoln, Grimsby, Hamilton, Burlington, Oakville, and Mississauga. The stop in Mississauga includes the Port Credit GO Station. This route runs every day.

2 Hurontario runs north-south on Hurontario Street and features 29 stops between Port Credit GO Station and City Centre Transit Terminal and provides all-day service, seven days a week.

8 Cawthra features 47 stops and runs north-south from the Port Credit GO Station along Cawthra Road to the City Centre Transit Terminal on weekdays.

14 Lorne Park has 58 stops and runs east-west from the Port Credit GO Station to the Clarkson GO Station on weekdays.

14A Lorne Park follows a similar route as 14 Lorne Park and services an area south of the Port Credit GO Station during weekday rush hour.

23 Lakeshore runs east-west, seven days a week from Clarkson GO Station to Long Branch GO Station. This route has 48 stops, including Port Credit GO Station and Ann Street at Park Street.

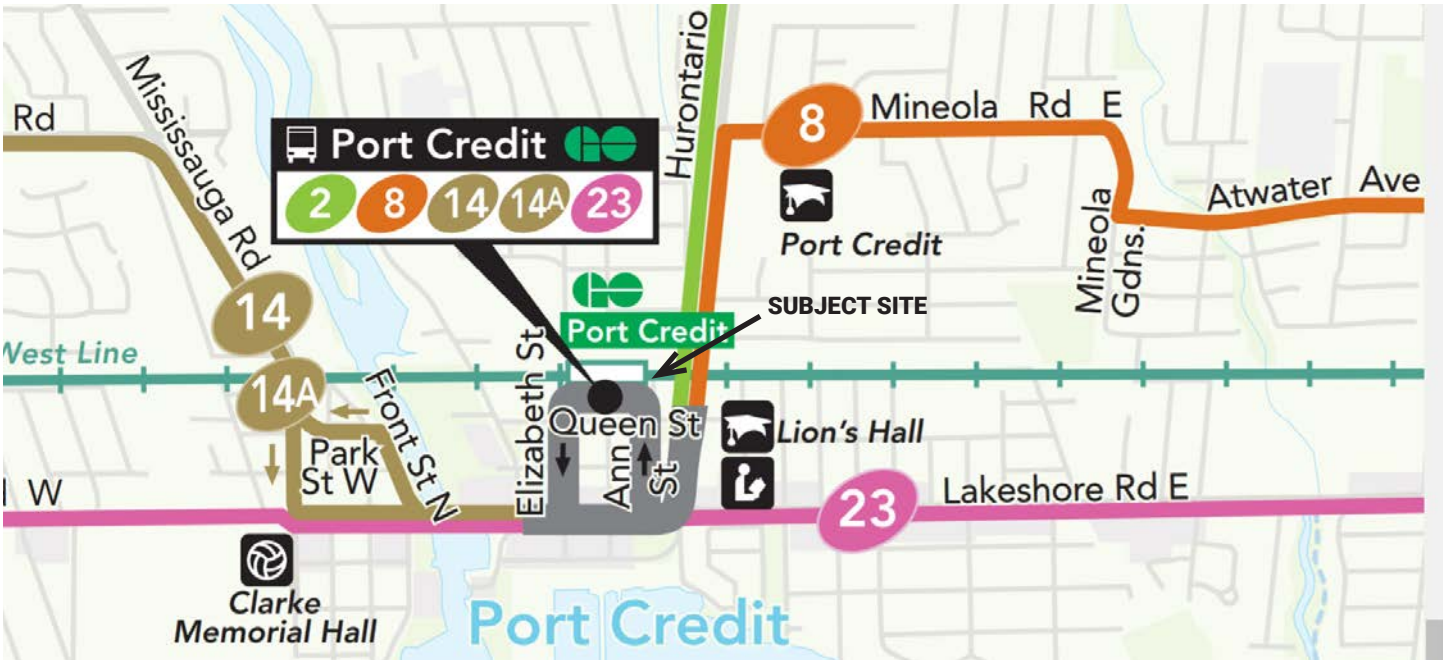


Figure 6 | Mississauga Transit Map

Page is intentionally left blank.

3.0 URBAN DESIGN POLICY

Sajecki Planning

3.1 City of Mississauga Official Plan and Port Credit Local Area Plan

The City of Mississauga Official Plan ("MOP") was adopted by City Council on September 29, 2010, and partially approved by the Region of Peel on September 22, 2011. This Section refers to the April 8, 2021 office consolidation, including appeal decisions and Council-approved amendments.

The Port Credit Local Area Plan ("PCLAP") provides a vision for directing growth, protecting the environment, creating complete communities, supporting a multi-modal city, building desirable urban form, and maintaining a strong economy in the Port Credit area.

A fulsome review of applicable MOP and PCLAP policies has been compiled in the Planning Justification Report for 30 Queen Street East (Sajecki Planning, 2022). Policies specific to urban design are highlighted below.

MOP Chapter 9 - Build a Desirable Urban Form

Chapter 9 of the MOP focuses on achieving a sustainable urban form for Mississauga through high quality urban design and a strong sense of place. Growth is to be directed to Intensification Areas comprised of the Downtown, Major Nodes, Community Nodes, Corporate Centres, Intensification Corridors, and MTSAs (Section 9.1).

The subject site is located within a Community Node, Intensification Corridor, and MTSA according to Schedule 2 of the MOP.

Development within Intensification Areas must promote a diverse mix of uses and support transit and active transportation (Policy 9.1.2), and development on Corridors must be consistent with existing character, seek opportunities to enhance the Corridor, and provide appropriate transitions to neighbouring uses (Policy 9.1.5). The urban form should support creating an efficient multi-modal transportation system that encourages greater transit use and active transportation (Policy 9.1.9). Site development must respect the urban hierarchy, utilize sustainable best practices, demonstrate context sensitivity, promote

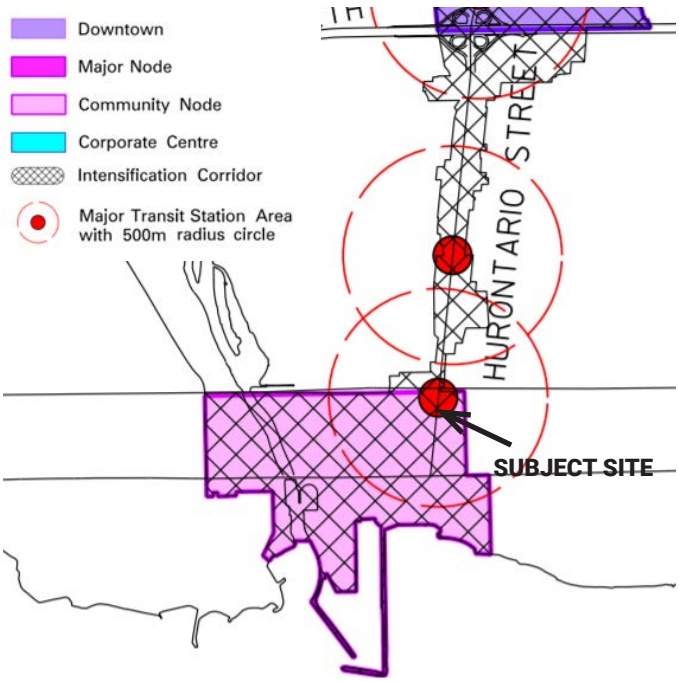


Figure 7 | MOP - Schedule 2 - Intensification Areas

universal accessibility and employ design excellence (Policy 9.1.10).

The primary built form in the surrounding area consists of mid to high-rise development. Many of the existing and recently approved buildings have heights above 20 storeys. The proposed towers have been positioned towards Ann Street and Park Street East to increase the separation distance from low rise developments to the north and east.

Section 9.2.1 expands on policies for new development in Intensification Areas such as that built form should create a sense of place (Policy 9.2.1.3). In Intensification Areas, small land parcels should be assembled to create efficient development parcels (Policy 9.2.1.5). Tall buildings are preferred to be located in proximity to existing or planned MTSAs (Policy 9.2.1.8), should be designed to enhance an area's skyline (Policy 9.2.1.11), should incorporate podiums to mitigate wind impacts (Policy 9.2.1.14) and consider pedestrians and adverse microclimatic impacts on the public realm (Policy 9.2.1.15 and 9.2.1.16). The MOP also outlines several other design considerations for development within Intensification Areas, such as that developments must face the street (Policy 9.2.1.24) and feature active facades (Policy 9.2.1.25).

The proposed development of an underutilized greyfield site promotes efficient use of the land and existing infrastructure. The POPS will create a sense of space as a unique development feature. The proposed tall buildings are located within an existing MTSA and Mobility Hub and immediately next to the LRT and GO stations. The proposed towers' built form and orientation prevent adverse noise, wind, and shadow impacts on nearby developments and the public realm. Mitigation measures have been identified through supporting studies and will be implemented during detailed design.

Section 9.4 focuses on how urban form supports transit and active transportation. The design of all new developments must improve connections and accessibility for transit users and promote active transportation modes (Policy 9.4.1.1). A transit and active transportation supportive urban form is required in Intensification Areas (Policy 9.4.1.2). Ways to achieve these goals include methods outlined in Policy 9.4.1.3:

a. Locating buildings at the street edge, where appropriate;

b. Requiring front doors that open to the public street;

c. Ensuring active/animated building façades and high quality architecture;

d. Ensuring buildings respect the scale of the street;

e. Ensuring appropriate massing for the context;

f. Providing pedestrian safety and comfort; and

g. Providing bicycle destination amenities such as bicycle parking, shower facilities and clothing lockers, where appropriate.

The proposed buildings have been directed towards Ann Street and Park Street East and pedestrian spaces including the internal POPS and interface with the LRT station. Ground floors will be animated through a combination of commercial and residential uses. Open design and passive surveillance will help facilitate that all publicly accessible areas on and around the subject property will be safe and comfortable. The podium of both buildings creates an urban streetwall both internally for the mid-block connection and externally for surrounding streets. The residential tower portion begins at the 11th level; setbacks at these levels respect the scale and massing of the nearby area by limiting the impacts onto surrounding properties. The proposal encourages active and public transportation and

creates an attractive and safe environment for cyclists and pedestrians.

New developments should also be compatible and provide an appropriate transition to existing and planned development by having regard to size and distribution of building mass and height, continuity and enhancement of streetscapes, street and block patterns, and more (Policy 9.5.1.2). Development proposals must demonstrate compatibility and integration with surrounding land uses and the public realm by maintaining privacy, sunlight, and sky views and mitigating microclimatic conditions (Policy 9.5.1.9). Siting and massing of new developments must also create a safe and comfortable environment for pedestrians (Policy 9.5.2.2). Site development must also incorporate stormwater management best practices, enhance the streetscape, provide landscaping that complements the public realm, and more (Policy 9.5.2.11).

Buildings must also create a sense of identity through site layout, massing, forms, orientation, scale, and more (Policy 9.5.3.1). Buildings must clearly address the street (Policy 9.5.3.2), be pedestrian oriented through design and orientation of facades (Policy 9.5.3.7) and facades should be articulated to include changes in materials or material treatments to provide visual interest (Policy 9.5.3.3). Tall buildings must minimize undue physical and visual negative impact related to microclimatic conditions, noise, view, skyview and cultural heritage resources (Policy 9.5.3.9). Parking must be located underground (Policy 9.5.5.1). Building design should also consider crime prevention best practices by promoting natural surveillance (Policy 9.5.6.1) and creating active building frontages that face public spaces (Policy 9.5.6.2).

The subject site is located at the northern edge of the central residential precinct and borders the railway corridor to the north, and LRT station and Hurontario right of way on the east. The subject site is in a unique position to provide additional height and density without adversely impacting the existing neighbourhood. Redevelopment on the blocks to the south and west includes built form between the heights existing in the neighbourhood and the height proposed on the subject property. Therefore, an appropriate transition is provided to the existing neighbourhood. The design of the proposed development considers the impacts of wind, noise, and shadows and their impact on creating a comfortable environment. Section 5 of this report includes a summary of supporting studies and reports that determine the appropriate conditions are met.

The proposed street frontages include active uses, which are pedestrian friendly and engaging. Parking has been proposed within four levels of underground parking accessed from a single entry point on Ann Street. The tower portion of the buildings has been directed away from the adjacent buildings and is stepped back from the GO Station to the north and LRT Station to the east to minimize any adverse impacts on surrounding development or the pedestrian realm.

PCLAP Chapter 10 - Desirable Urban Form

Section 10 outlines desirable urban form policies for the Port Credit area. General policies include that development will be in accordance with the minimum and maximum height limits identified in the Local Area Plan. However, additional height may be considered through a site-specific Official Plan Amendment application (policy 10.1.1 and 10.1.2). This application must demonstrate:

a. The achievement of the overall intent, goals, objectives of this Plan;

b. Appropriate site size and configuration;

c. Appropriate built form that is compatible with the

immediate context and planned character of the area;

d. Appropriate transition to adjacent land uses and buildings, including built form design that will maximize sky views and minimize visual impact, overall massing, shadow and overlook;

e. Particular design sensitivity in relation to adjacent heritage buildings; and

f. Measures to limit the amount of additional vehicular and traffic impacts on the Port Credit transportation network (Policy 10.1.2).

Schedule 1 identifies the subject site as within the Community Node Character Area and the Central Residential precinct. Development within the Community Node Character Area should be at a scale that reflects its role in the urban hierarchy (Policy 10.2.1.1), and floor plate size for buildings over 6 storeys should decrease as building height increases to address overall massing, visual impact, protected skyviews and limited shadow impacts (Policy 10.2.1.2).

Additionally, buildings over 6 storeys should maintain separation distances that address existing separations between buildings, overcrowding of skyviews, protection of view corridors, and occupants' privacy (Policy 10.2.1.3). New development in these areas should also provide landscaping that provides a buffer between uses, incorporates stormwater best management practices, enhances the area's aesthetic quality, and enhances the tree canopy (Policy 10.2.1.4). Streetscapes must address setbacks and side yards to reflect the planned function, minimize vehicular access points and create an attractive public realm (Policy 10.2.1.5).

The proposed development incorporates appropriate separation distances from adjacent development while maintaining pedestrian connectivity between the GO Transit and LRT stations. The proposed buildings consist of 10-storey podiums, with typical residential towers beginning at the 11th level. The site is located immediately adjacent to the rail corridor and GO parking lot to the northwest, Hurontario Street and vacant lands to the north, and the Hurontario LRT station and Hurontario Street to the northeast, providing appropriate transitions.

Urban form policies for the Central Residential Precinct are outlined in Section 10.2.2 of the Local Area Plan. The Plan states that the precinct has many apartment buildings with potential for intensification. The Plan identifies the area in the immediate vicinity of the GO Station as having the highest building heights in Port Credit (Section 10.2.2). It is assumed that the LRT station, not considered in this policy, further adds to the rationale of locating the tallest buildings in this location. Building heights will decrease towards the east and west of the precinct and demonstrate an appropriate transition if located near the Mainstreet Precinct (Policy 10.2.2.1 and 10.2.2.2). If lands near the GO station are designated Mixed Use or Utility, then detailed land use and urban design studies are required to verify appropriate heights, design, transition to adjacent lands, and mix of uses (Policy 10.2.2.3).

The site location and building design allow the proposed development to meet the intent, goals, and objectives of the PCLAP. The proposed buildings incorporate appropriate separation distances from each other and from adjacent development. The Shadow Study Analysis found that the proposed development meets the City's standards for sun and daylight access on neighbouring properties and the public realm. The proposed orientation of the buildings, setbacks at different heights, public space and other placemaking elements work together to create a safe and comfortable pedestrian environment, especially for transit users. The POPS provides a seamless transition between the GO Transit and LRT Stations, making it easier for transit users to navigate between spaces.

Height limits for the subject site are between 2 and 22 storeys according to Schedule 2B. Additionally, the site is subject to Special Site policies that require studies to determine appropriate development, including building heights according to Schedule 2B. New development heights should support the vision of an urban waterfront village. However, the area in the vicinity of the GO Transit and LRT Stations is recognized as potentially accommodating additional height and density (Section 5.2.2).

The building heights identified in Schedule 2B were outlined before funding and investment approval for the Metrolinx Regional Express Rail ("RER") project and Hurontario LRT and prior to detailed LRT station site selection and design. Neither Schedule 2B nor the map in policy 13.12.1 includes the LRT station now under construction. The Metrolinx transit investments will bring significant transit improvements and allow for greater intensification adjacent to these stations.

The proposed development exceeds height limits for the subject site as identified in Schedule 2B. However, policy 5.2.2 states that additional height and density may be appropriate in the vicinity of the GO station and future LRT station. It is our opinion that in light of recent developments, including the construction of the LRT station, and increased density targets required by recent Provincial policy changes and proposed through the Draft Peel 2051 ROP, the proposed 40 and 42-storey heights are appropriate and consistent with higher level planning policy.

Appendix I of the PCLAP contains the Port Credit Built Form Guides, discussed below.

3.2 Port Credit Built Form Guide

The Port Credit Built Form Guide ("Guide"), although not considered part of the PCLAP, is used during the design and review of development applications.

Building heights are addressed in Section 2.2 of the Port Credit Built Form Guide ("Guide"). This section states that proposals for new buildings must refer to their surroundings through footprint, setback, street and building alignment (Section 2.2), and the greatest heights in the Port Credit Community Node should be located closest to the GO Transit Station and slope down to Lakeshore Road East (Section 2.2). The maximum height in the Port Credit Community Node should be 22 storeys due to its role within the urban hierarchy (Section 2.2).

The proposed height is representative of other developments at the centre of MTSAs and Mobility Hubs in the GTA, is transit-supportive and appropriate given the location adjacent to both the existing GO Station and planned LRT Station. The PCLAP and the Guide were developed before investment into the LRT and GO Expansion projects, delineation of MTSAs and greater Provincial minimum density targets. The proposal aligns with Provincial and Regional planning policy due to the site's location immediately adjacent to the LRT and GO Stations.

Urban design for the Central Residential Precinct is outlined in Section 2.3.2 of the Built Form Guide. This section states that this area will have the highest buildings in Port Credit and a more urban built form to provide a more conducive environment for pedestrians walking between the GO Transit and LRT Stations (Section 2.3.2).

Built form guidelines are discussed in Section 2.4.1. Guidelines affecting the proposed development and subject lands include:

- Taller buildings must have a smaller floor plate size, except for at the lower level of the building in order to allow for greater design flexibility and a continuous street wall (Section 2.4.1);
- Buildings between 16 and 22 storeys should have a maximum floor plate of 800 m2 (Section 2.4.1);

- Taller buildings are required to be at least 40 metres away from other tall buildings (Section 2.4.2);
- New developments should maintain existing views to Lake Ontario and demonstrate how the building fits into the context through photographic imagery (Section 2.4.3);
- Tall buildings must be set back a minimum of 10 metres from side and rear property lines, and if those setbacks cannot be accommodated, then the site is considered too small to permit a tower (Section 2.4.4);
- Shadow and wind comfort studies are required for new developments (Section 2.4.5.1 and 2.4.5.2);
- Setbacks on residential streets should be 4.5 to 7.0 metres depending on the character of adjacent developments and the configuration of the proposed building (Section 2.4.7);
- A minimum of 30% landscape area is required for all sites within the Central Residential Precinct (Section 2.4.9);
- Developments on residential streets should have generous setbacks, upgraded tree planting and landscape treatment, and new development should ensure that existing trees are preserved, maintained and enhanced (Section 2.4.10);
- Service, loading and garbage storage areas should be screened from the public realm (Section 2.4.11);
- All mechanical penthouses should be designed and clad with materials to complement the building façade (Section 2.4.12);
- The portion of the roof not used as a mechanical penthouse should be developed as green roofs or usable outdoor amenity space (Section 2.4.12); and
- New developments should choose high-quality materials that reference their surroundings, most likely red tone brick (Section 2.4.13).

The proposed development fulfills the majority of these guidelines. The separation distance between the proposed buildings reaches 40 metres on the western side and narrowing towards the centre

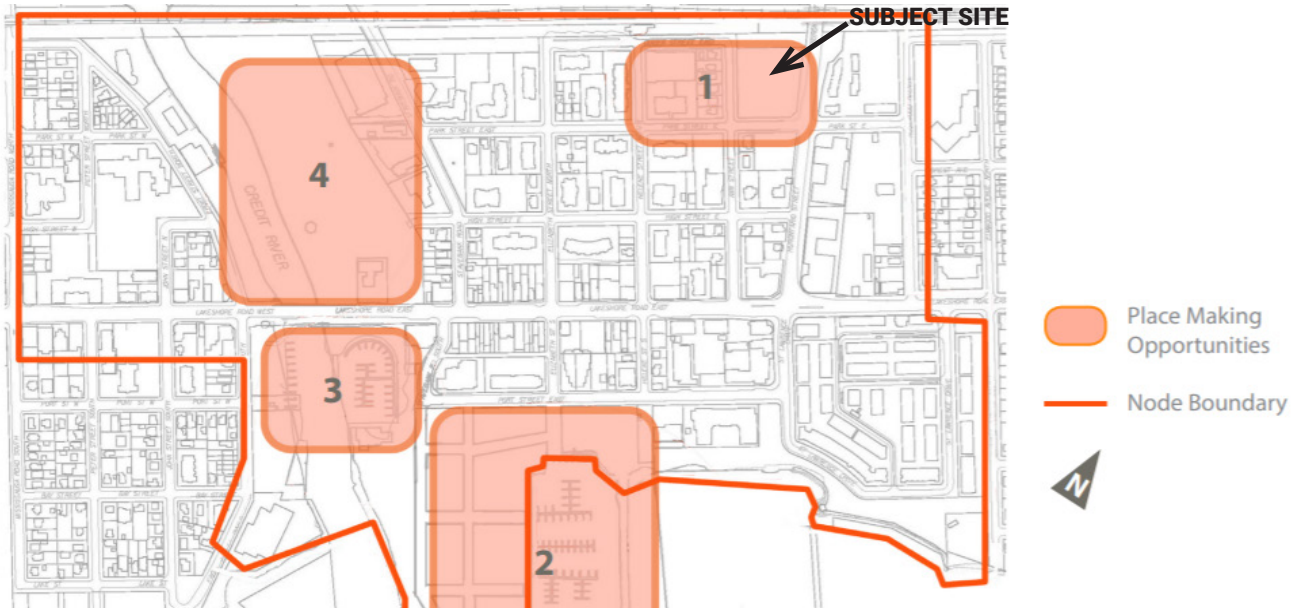


Figure 8 | Port Credit Built Form Guide - Placemaking Opportunities

of the lot. The closest distance between the towers is 29 metres, which only occurs for a small portion of each building. Nearby developments have been approved at separation distances of around 30 metres, including the recently approved development at 28 Ann Street. The proposed development still achieves the intent of the tower separation guideline by avoiding overcrowding of views and the skyline, protecting view corridors and privacy of occupants. The proposed design creates an elegant addition to the skyline while achieving an eclectic mix of building styles and heights within the local area. The floor plate size is 850 m² that is consistent with developments of similar scale in urban intensification areas.

The buildings do not meet the guideline of a 10 metre setback from the side and rear property lines. However, the Queen St ROW, the GO railway corridor, and the parking lot at Oriole Avenue are located at the rear property line and provide for a buffer between the proposed development and low-rise developments to the north. The proposed podiums provide commercial space, residential units, and indoor and outdoor amenity areas, with residential tower portions of the buildings beginning from the 11th level. The tower setbacks and orientation ensure no adverse noise or wind impacts on nearby developments or the pedestrian realm, especially with recommended strategies to mitigate wind in the winter months. Additionally, according to the Shadow Study prepared by CORE Architects Inc, the proposed development does not result in adverse or prolonged shadow impacts on the surrounding developments, the GO Transit and LRT Stations, or the pedestrian realm.

Service, loading, and garbage storage areas are enclosed within the building, with access from Ann Street toward the rear of the subject site abutting the railway corridor. The proposed landscaped area is approximately 28% of the site and is a minor reduction from the recommended 30% as per Section 2.4.9, with further opportunity for refinement. The architecture and design of the buildings reflect other recent developments in the surrounding area.

Along Ann Street and Park Street East, and the interface with the LRT station, street frontages have been activated through commercial units, residential lobbies, and entrances to grade-related townhouse units. The site has further been activated through the retail uses fronting the proposed POPS.

Section 2.6 identifies placemaking opportunities (Figure 8). The subject site is identified as site number 1 - Transportation hub: the vicinity of the GO station, parking lot, and future LRT. When reviewing development applications, consideration should be given to capitalizing on any opportunities that may foster place-making and would contribute to the urban form of Port Credit.

The proposed redevelopment of 30 Queen Street East capitalizes on the placemaking opportunity identified in the Guide. The design direction and guiding principles of the proposal are centred around prioritizing transit conenctions, the public realm and creating a destination and landmark. The proposed design achieves the goals of fostering placemaking for Port Credit and positively contributing to the urban form of a transit node.

3.3 Hurontario/Main Street Corridor Master Plan

The Hurontario/Main Street Corridor Master Plan, conducted by the Cities of Mississauga and Brampton between 2008 and 2010, outlines a vision to link Urban Growth Centres in the two cities. The Master Plan covers Hurontario and Main Street from the Downtown Brampton Community to the Port Credit and Mineola Communities.

The Plan examines several options for transit

connectivity on the corridor and ultimately recommends a new LRT line from Downtown Brampton to the Port Credit GO Station. A robust pedestrian and cyclist strategy would accompany the LRT route on the corridor.

Section 8.11 specifically identifies a vision for the Port Credit area within the corridor. The goal is to create a Gateway Mobility Hub centered around the GO Transit station that links GO Trains with the Hurontario LRT system, local transit, and potential higher order transit system along Lakeshore Road (Section 8.11.1). Section 8.11.3 defines permitted uses at grade level. It requires commercial or Institutional uses along Hurontario Street to link Lakeshore Road to the GO Transit Station as well as along Park Street East and Ann Street. Development along Park Street East and Ann Street are required to have continuous street frontage. Along Hurontario Street, a continuous frontage of 95% is required (Section 8.11.6). The subject site is not affected by specific setbacks identified in the Master Plan.

The subject site is identified as a Primary Placemaking Opportunity in the Master Plan due to its location between the GO Transit and LRT Stations (Section 8.11.8). The success of the Port Credit Mobility Hub is largely dependent on the connection between the two stations and the convenience it offers for users to move between the two locations (Section 8.11.8). The subject site is located within the Port Credit Mobility Hub in the Metrolinx Regional Transportation Plan and will play a significant role in the planned development of Port Credit. Development around the GO Station must be pedestrian-friendly, providing attractive public spaces and links between those spaces and surrounding areas. The placemaking locations identified in Section 8.11.8 must give special consideration to urban design in accordance with Section 7.3.12 of the Master Plan.

Section 7.3.12 provides placemaking policies and guidelines for the Hurontario Corridor with the aim of developing the corridor into a vibrant and active pedestrian-friendly urban environment. New development along the corridor should create unique and memorable places with a strong sense of identity and character. Relevant placemaking policies include:

- ii. Growth should be directed to key nodes of mobility and activity, to support transit, facilitate 'placemaking' and to revitalize the Corridor;
- iii. Growth should facilitate the creation of a sense of place through developing an identity, providing public art and cultural venues and spaces, such as parks, plazas and open spaces for community interactions;
- iv. Public art should animate civic spaces and reflect the culture and diversity of the local residents and community.

The proposed development supports the Master Plan's goal to provide a safe and convenient pedestrian link between the GO and LRT stations and bus terminal by mid-block connection that prioritizes pedestrian movement (Section 8.11.8). The proposed POPS, lined with retail uses, further animates the public realm and provides transit users with a safe and vibrant space to use between their commute and access to a variety of stores for their needs. The proposed development supports the Master Plan's policy of enhancing pedestrian access to the GO Station from Ann Street (Section 8.11.9). Proposed pedestrian improvements such as wayfinding and signage will further facilitate movement throughout the site and to the GO Transit and LRT Stations.

Figure 9 | Hurontario/Main Street Master Plan - Section 8.11.1 - Port Credit Permitted Use Map

Figure 10 | Hurontario/Main Street Master Plan - Section 8.11.2 - Port Credit Continuous Street Frontage Map

Figure 11 | Hurontario/Main Street Master Plan - Section 8.11.4 - Port Credit Placemaking Map

4.0 DESIGN VISION AND GUIDING PRINCIPLES

Sajecki Planning

4.1 Vision

Located between the Port Credit GO Station and Hurontario LRT Station (under construction), and steps away from Lake Ontario and the Waterfront Trail, 30 Queen Street East will become a vibrant place where people gather. Complementing municipal and provincial infrastructure investments, 30 Queen Street East will connect people and transit and become the city's most transit-oriented and active community.

Thoughtfully planned and future-focused, with an objective to enhance local identity through collaboration and partnerships, 30 Queen Street East will redefine the relationship between private and public space by investing in beautiful privately owned publicly accessible spaces that residents and the local community may celebrate and call their own.

By providing a variety of housing options in a mixed-use development within a Major Transit Station Area, 30 Queen Street East will support provincial, regional and municipal policies directed at meeting density targets and building complete communities. In building up instead of out, supporting transit use, reducing vehicle parking spaces in favour of bicycle parking spaces, and using eco-friendly building practices and materials, 30 Queen Street East will minimize its impact on the environment, reduce sprawl, traffic, resource consumption, save energy, and encourage a shift in mobility towards more active modes, which in turn will contribute to the development of a thriving, healthy community.

30 Queen Street East will create an iconic destination and enhance the pedestrian experience for Port Credit residents, visitors and transit users. The mixed-use landmark, which proposes ample amenity and commercial space, will reshape the site's relationship with its surroundings providing generous pedestrian-oriented spaces at the ground level and places to live, work, and gather.

4.2 Guiding Principles

The vision for 30 Queen Street East will be supported through the guiding principles set out below.

The guiding principles are informed by urban design policies included in Mississauga Official Plan Chapter 9 - Build a Desirable Urban Form, Port Credit Local Area Plan Chaper 10 - Desirable Built Form, the Port Credit Built Form Guide, and the Hurontario/Main Street Corridor Master Plan.

4.2.1 Connecting People and Transit

30 Queen Street East is located directly adjacent to the Port Credit GO Station and Hurontario LRT Station (under construction), steps away from MiWay services, and a future bus rapid transit route along Lakeshore Road. Located at the heart of a transit node, the subject property will facilitate connections between different transportation modes and the existing neighbourhood.

The proposal shall:

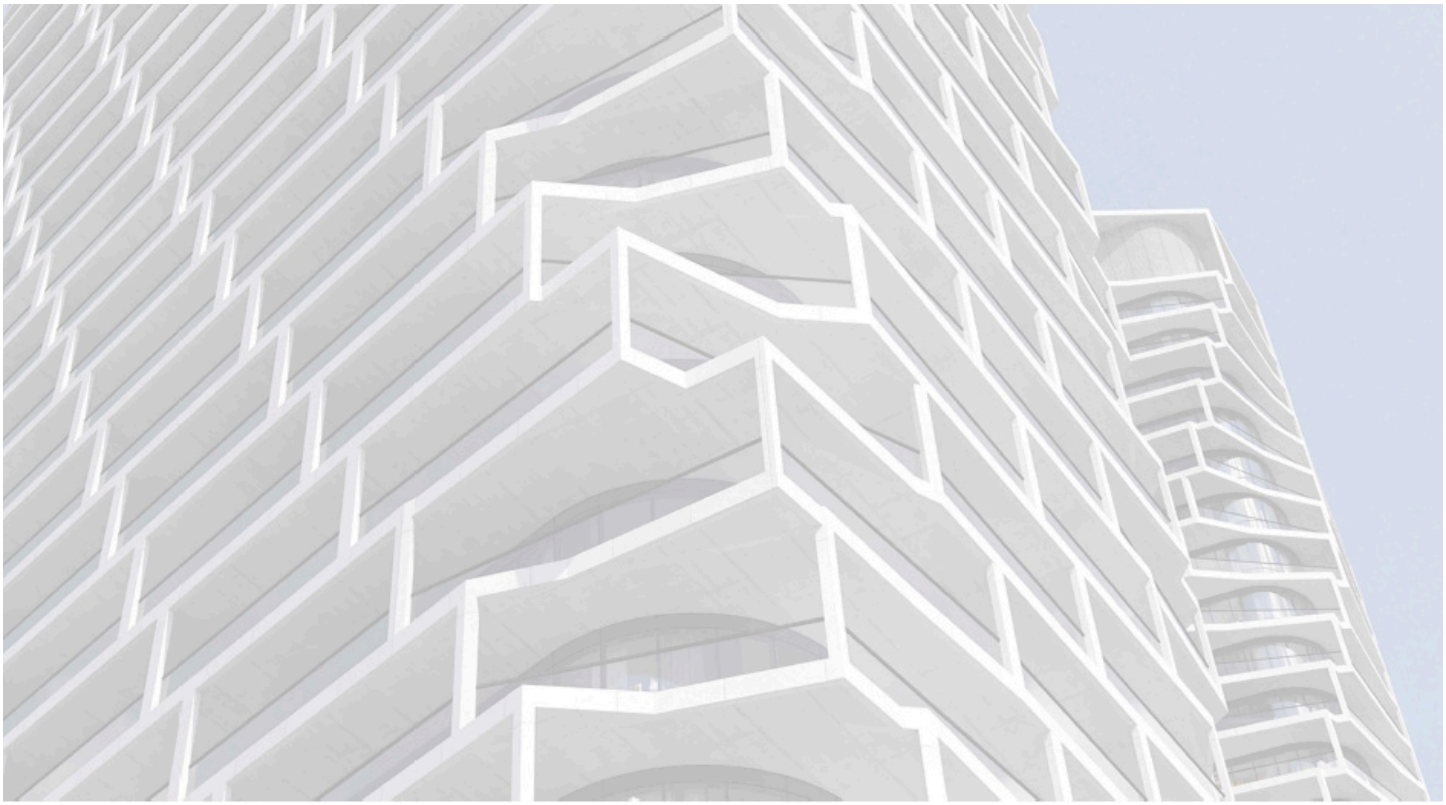
- Improve access to transit stations and facilitate connections between them;
- Encourage active transportation;
- Provide a pedestrian-friendly public realm with clear paths of travel; and
- Design for safety and accessibility of pedestrians, transit users and residents.

4.2.2 Prioritize Public Realm

30 Queen Street East will positively contribute to the development of Port Credit's transit-oriented community by seamlessly integrating commercial and residential uses with generous pedestrian-oriented spaces at the ground level. A high-quality public realm will create a memorable urban experience for residents and transit users alike.

The proposal shall:

- Create an attractive public realm that harmonizes private and public spaces;
- Ensure a human-scale, people-centric built-form at the ground level;
- Prioritize safety through active spaces, passive surveillance and animated building frontages; and
- Ensure porosity and connectivity for pedestrians and transit users.



4.2.3 Design Excellence

Design excellence will be exhibited through beautifully designed buildings and an engaging public realm. 30 Queen Street East will be an iconic addition to Port Credit for the local community and regional transit users alike.

The proposal shall:

- Create a landmark building befitting a high profile site;
- Create an attractive and functional public space for the community;
- Provide high-quality architectural design and materials in all aspects of building design, contributing to and enhancing the Port Credit skyline;
- Respect and respond to the area's existing character and emerging urban context; and
- Implement low impact design (LID) practices to further sustainability goals.

4.2.4 Destination Creation

The proposed development will contribute to Port Credit by providing a place that not only facilitates movement, but a creates a destination to gather and stay. Attractive built form and public realm design will combine to form a landmark that acts as a gateway to Port Credit.

The proposal shall:

- Create a welcoming place, acting as an inviting entry point to Port Credit for transit users;
- Provide spaces for passive and active gatherings;
- Foster a sense of place and civic pride; and
- Enhance local character and identity.

5.0 THE PROPOSAL

Sajecki Planning

5.1 Proposal Overview

Edenshaw Queen Developments Limited proposes to redevelop the subject site with two mixed-use residential buildings, Tower A and Tower B, consisting of 40- and 42-storeys, respectively. A total GFA of 73,540 m² is proposed, comprised of a residential GFA of 71,775 m² and a non-residential GFA of 1,765 m². Commercial space is located at grade and partially on the second floor in Tower B, directed towards a mid-block connection between the LRT Station and Ann Street, and facing Ann Street. Five townhouse units are proposed as part of Tower A, with frontage on Park Street East.

A total of 1,580 m² of outdoor amenity space and 1,925 m² of indoor amenity space are proposed on the site; a total of 3,505 m². The outdoor amenity includes 852 m² of Privately Owned Public Space ("POPS") located between the two buildings. The POPS is intended to create a high quality public realm facilitating an attractive and natural connection between the LRT, GO Station and bus terminal.

Four levels of underground parking with 474 parking spaces are proposed, including 360 residential spaces and 114 shared visitor and retail spaces. The project is considering ten percent of parking spaces be EV-charger ready. A total of 740 bicycle spaces are proposed for residents, including 683 long-term parking spaces and 57 short-term spaces. Seven spaces will be provided for commercial uses.

Figure 12 | Rendering of the proposal

Development summary table:

Site Area	0.59 hectares (1.47 acres)
Height (floors / m.)	
Tower A	40 storeys / 131.81 m
Tower B	42 storeys / 138.66 m
Gross Floor Area (GFA)	
Residential	
Tower A	33,690 m² (362,640 ft²)
Tower B	38,085 m² (409,940 ft²)
Total Residential	71,775 m² (772,580 ft²)
Non-Residential	1,765 m² (19,000 ft²)
Total GFA	73,540 m² (791,580 ft²)
Number of Residential Units	
One-Bedroom	463 (41%)
One-Bedroom + Den	350 (31%)
Two-Bedroom	199 (17%)
Two-Bedroom + Den	127 (11%)
Total	1,139
Amenity Space	
Outdoor	1,580 m² (17,006.98 ft²)
Indoor	1,925 m² (20,720.53 ft²)
Total Amenity Space	3,505 m² (37,727.51 ft²)
Amenity Space per unit	3 m²
Floor Space Index (FSI)	12.36
Parking Spaces	
Residential	360 (0.316 per unit)
Visitor and Non-residential	114
Total Parking Spaces	474
Bicycle Parking Spaces	747

Figure 13 | Rendering of the proposal

6.0 SITE PLANNING AND DESIGN

Sajecki Planning

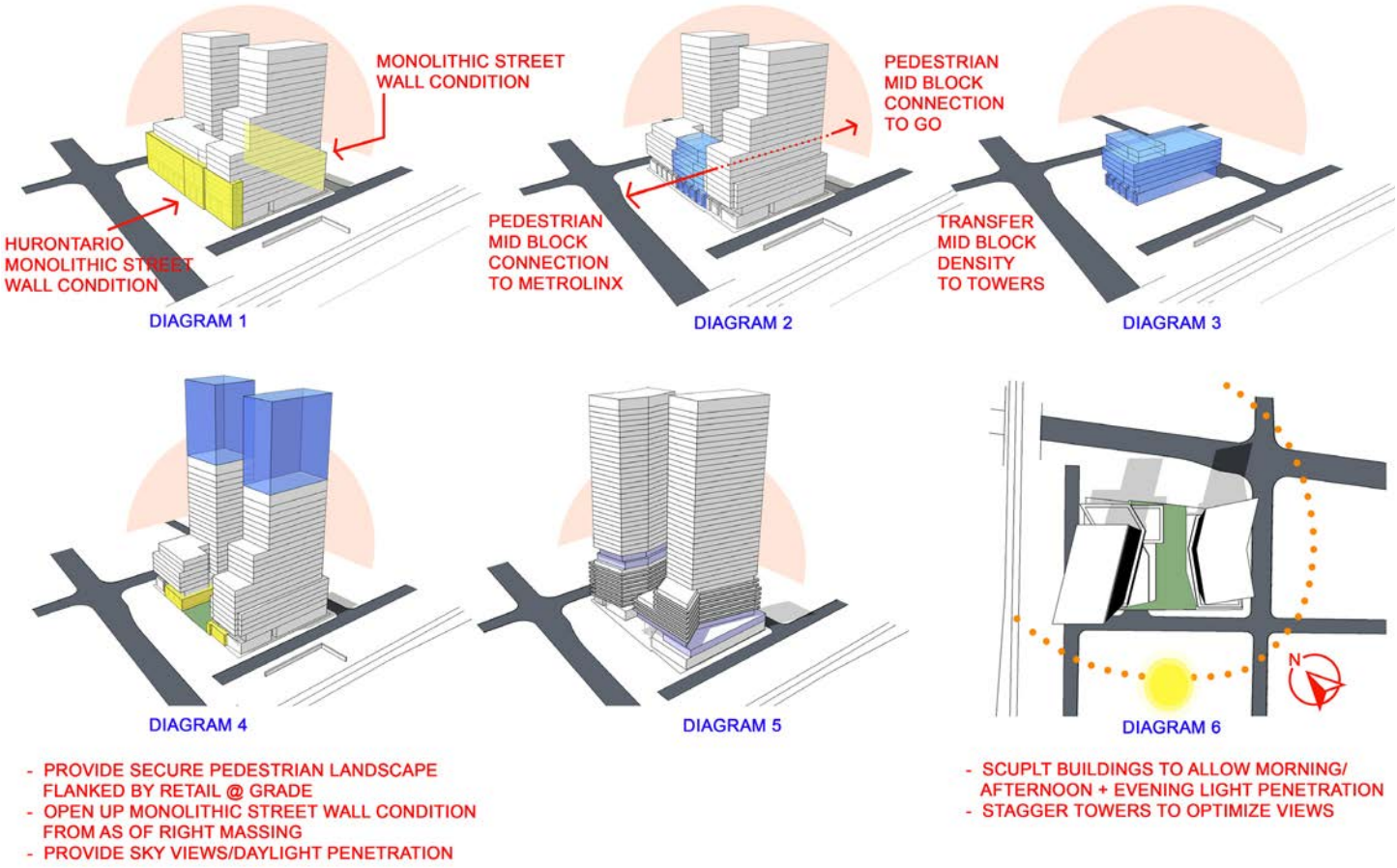


Figure 14 | Design rationale - image by CORE Architects

6.1 Vision to Design

The design of the site and built form have resulted from an extensive process, beginning with the as-of-right building permissions and working towards a more desirable vision for the subject site.

Diagram 1 represents development that would be permitted by existing policy and zoning. It is based on implementation of the Port Credit Built Form Guide and conceptual Metrolinx master plans. The imposing street walls are not conducive to a pleasant pedestrian experience and do not facilitate connections between the GO Transit and LRT stations. Large buiding footprints prevent the penetration of sunlight within the built form and create logistical issues.

Diagram 2 demonstrates how a midblock connection can break up the monolithic massing and implement guiding principles related to prioritizing transit connections and providing high quality public spaces.

Providing housing in a transit-oriented, intensification area is a priority for the City, Region and Province. In keeping with this vision, as-of-right density is relocated from the middle of the lot to provide a generous open publicly accessible space and is relocated to the towers (Diagrams 3 and 4). This design move provides more opportunities for commercial and public spaces on the ground level, and ensures daylight and views for more residents.

To enhance visual interest and provide a valued addition to the Mississauga skyline, the podiums and towers are articulated with detailing and additional above-ground amenity spaces (Diagrams 5 and 6). Sculpting and staggering the buildings implements the guiding principle of design excellence.

The design moves outlined in Figure 14 result in a proposed development that is visually interesting, provides a high quality pedestrian oriented public realm and facilitates transit connections.

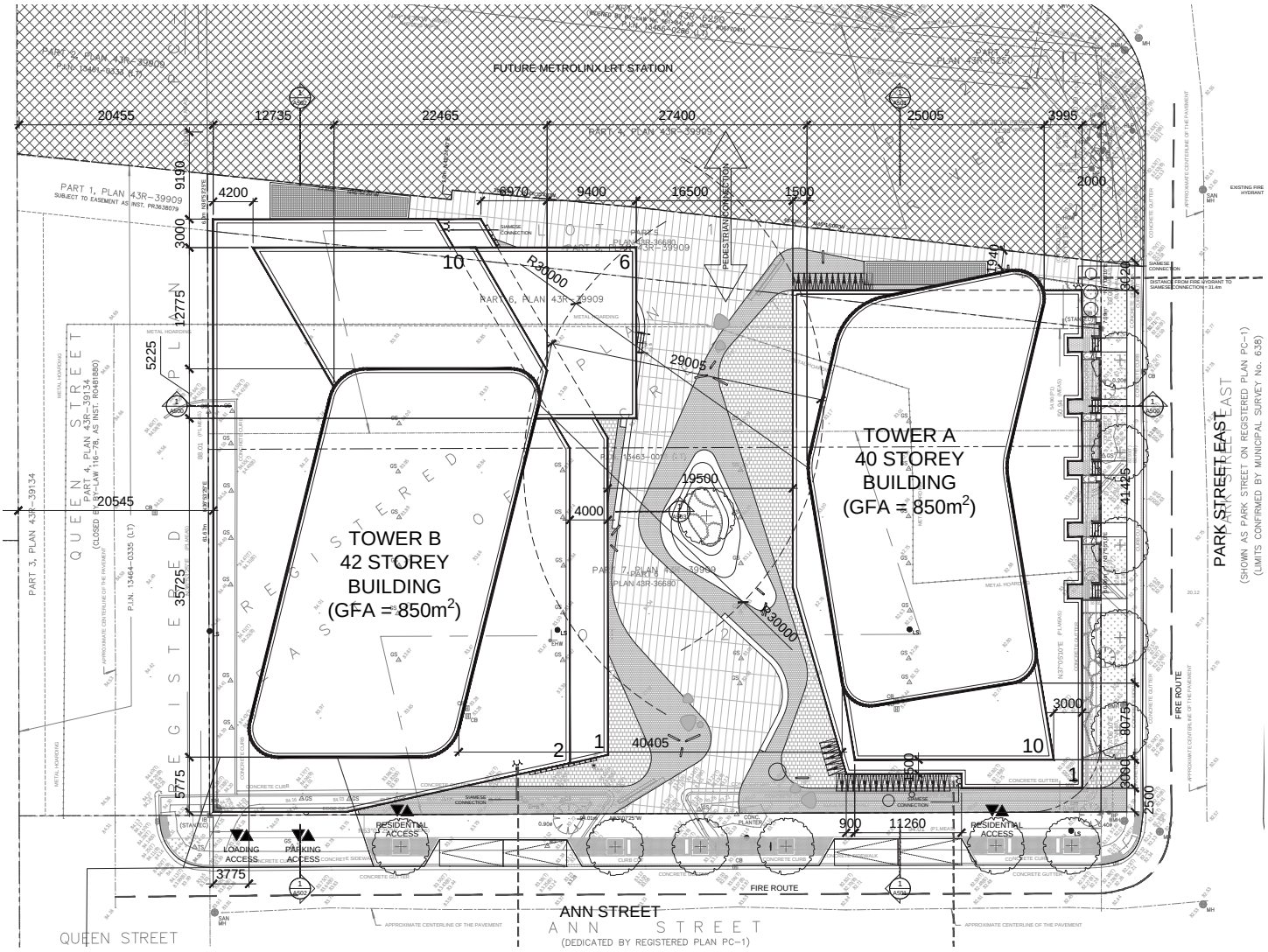


Figure 15 | Site Plan

6.2 Site Organization and Built Form

A driving force behind the site layout is its location between the GO and LRT Stations. The proposed design reconsiders the as-of-right streetwall in favour of relocating the built form from the podium to the towers to provide a mid-block connection.

The proposed built form features two buildings at the north and south portions of the site. At the ground floor, commercial space is positioned to face the mid-block connection, Ann Street and towards the LRT station. The location of commercial uses encourages an animated public realm and a pedestrian-friendly environment. Townhouses are located on the Park Street frontage, providing a connection with the primarily residential neighbourhood to the south. Servicing and loading areas are hidden at the rear of the property abutting the railway corridor. Visually interesting and appropriately scaled podiums, ranging 6 to 10 storeys in height, provide a strong street wall and additional commercial space, residential units, and indoor and outdoor amenity areas.

The residential tower portions of the buildings begin at the 11th storey. Tower A, the South Building, is 40 storeys. Tower B, the North Building, is 42 storeys. The separation distance between the proposed towers reaches 40 metres on the western side and converges towards the centre of the lot. The closest distance between the towers is 29 metres, which only occurs for a small portion of each building. The towers have a floor plate GFA of 850 m² that

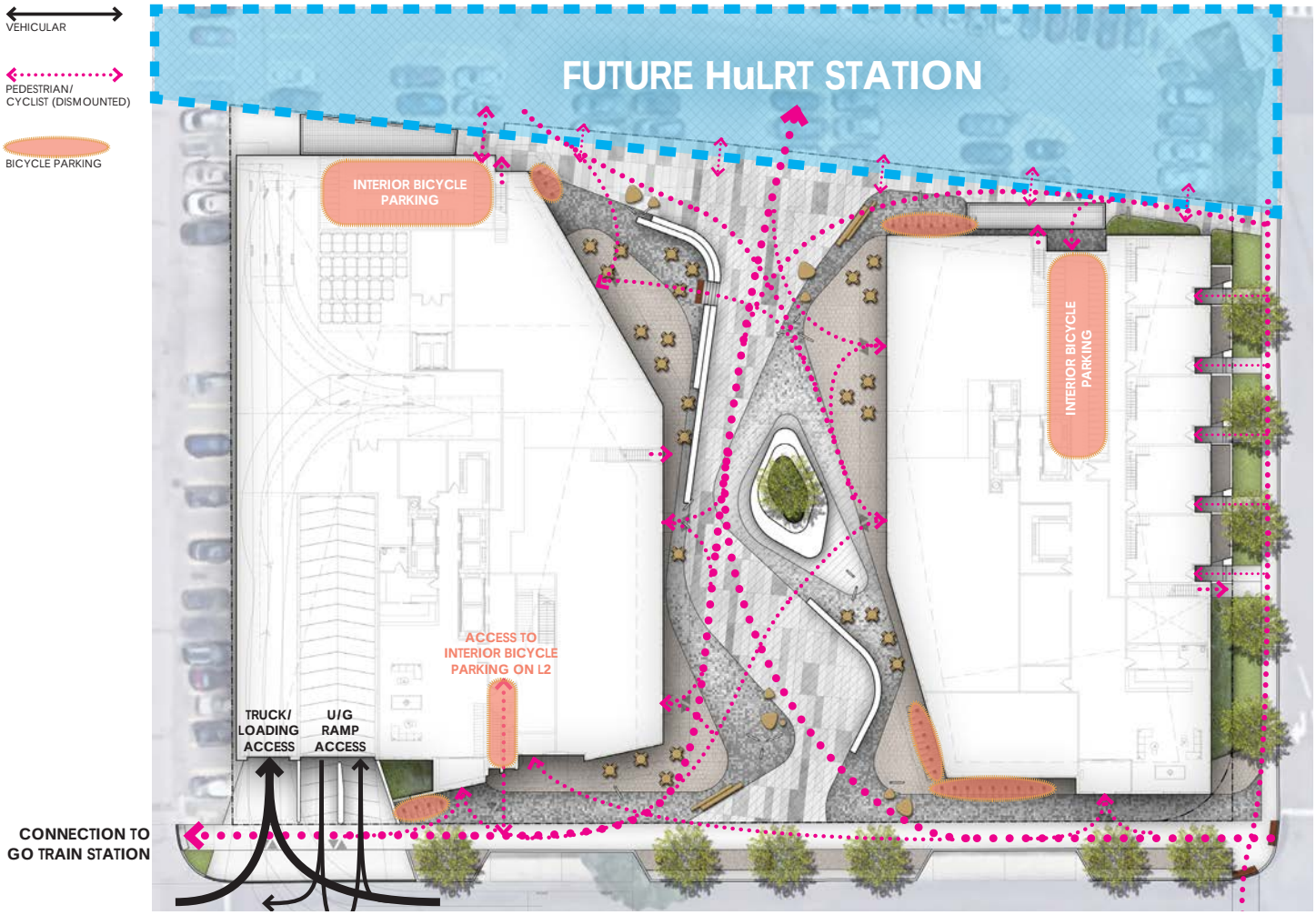


Figure 16 | Ground floor circulation

is consistent with developments of similar scale in urban intensification areas.

Appropriate setbacks (varied across layout) and separation distances have been provided, and the buildings have been designed to mitigate the potential impacts of wind and shadows. Large openings between the buildings will allow morning, afternoon and evening sunlight to illuminate the shared open spaces.

6.3 Pedestrian Circulation

The proposed development includes two buildings entirely separated above ground, at the north and south sides of the lot. The resulting open space between the buildings provides an attractive, functional, and accessible space for residents of the buildings, members of the broader Port Credit community, and transit users. The central landscape is kept clear to allow people to move easily and safely in a pedestrian-first space around the site and between the LRT and GO stations.

Main entrances to residential and retail areas are oriented along the street edges, with additional entrances to commercial units accessible from the mid-block connection. Enhancements to existing sidewalks are proposed along all public streets and the interface with the LRT station to create a pedestrian-friendly environment for residents, workers, community members and transit users.

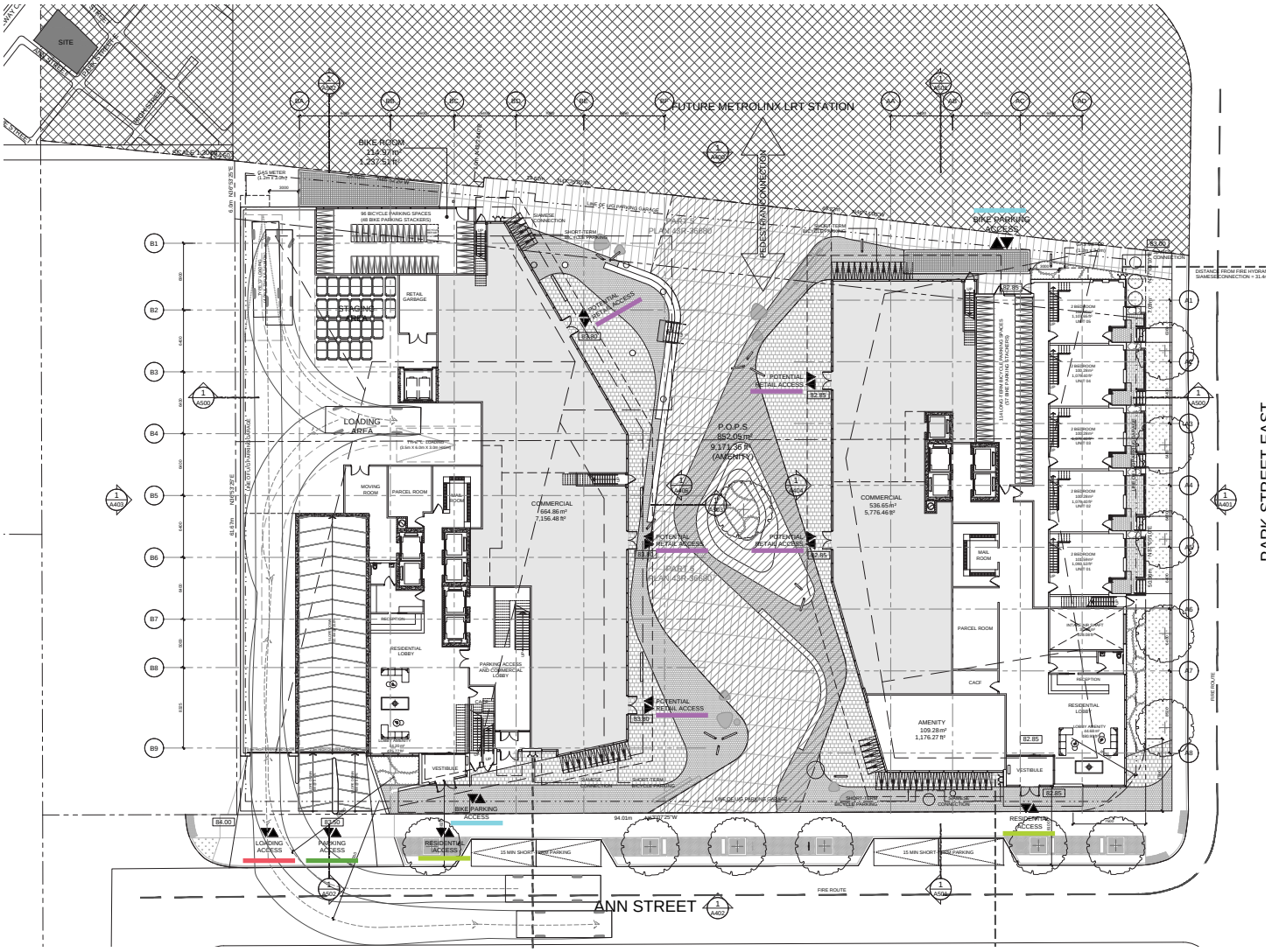


Figure 17 | Ground floor plan

6.4 Servicing and Vehicle Access

- Residential Access
- Potential Retail Access
- Bike Parking Access
- Parking Access
- Loading Access

Residential access for both buildings are from Ann Street. Ground floor commercial unit access points have been proposed with access from the midblock connection, and in close proximity to Ann Street and the LRT station.

A single entry point from Ann Street is proposed to facilitate vehicular access to the building for parking and servicing needs. Providing one location for vehicular entry reduces potential points of conflict between pedestrians and vehicles and prioritizes a safe and pleasant pedestrian experience of the site for residents and transit-users.

Bicycle parking is located in both buildings. One access point is located in the south-east corner of the South Building. The bicycle parking access for the North Building is from Ann Street, adjacent to the residential access.

Short-term vehicle parking is planned in the municipal boulevard on Ann Street without compromising a pedestrian footpath along Ann Street.

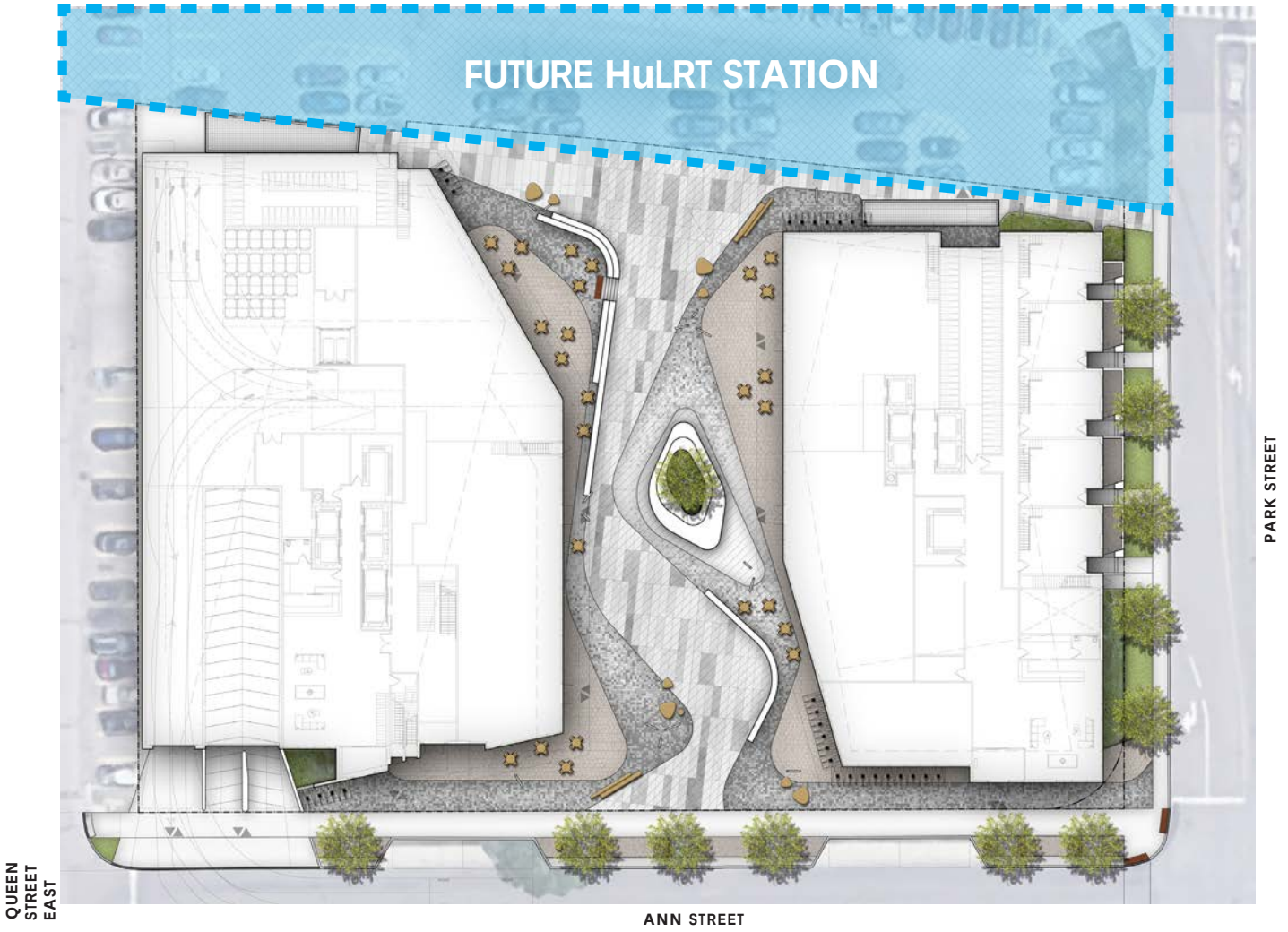


Figure 18 | Landscape plan

6.5 Landscaping

The landscape concept for the site is based on celebrating and facilitating the coming together of people, through a design that draws influence from the flows of the Credit River and creates spaces for gatherings both large and small.

Figures 16 and 18 to 24 visually demonstrate the landscape concept for the proposed development.

External Landscaping

The public realm and streetscapes along Park Street, Ann Street, and the interface with the LRT station will be upgraded in accordance with City standards and consistent with existing and planned streetscapes in the neighbourhood.

Internal Landscaping

Creating a mid-block connection and publicly accessible open space on-site provides opportunities for landscaped areas. The mid-block connection will be designed to increase connectivity between the LRT and GO Station while providing a valuable community asset. Approximately 1660m² of landscaping will be provided through the proposed development. The wide publicly accessible thoroughfare will offer a bright, safe, and pleasant space for residents, members of the community, and transit users.

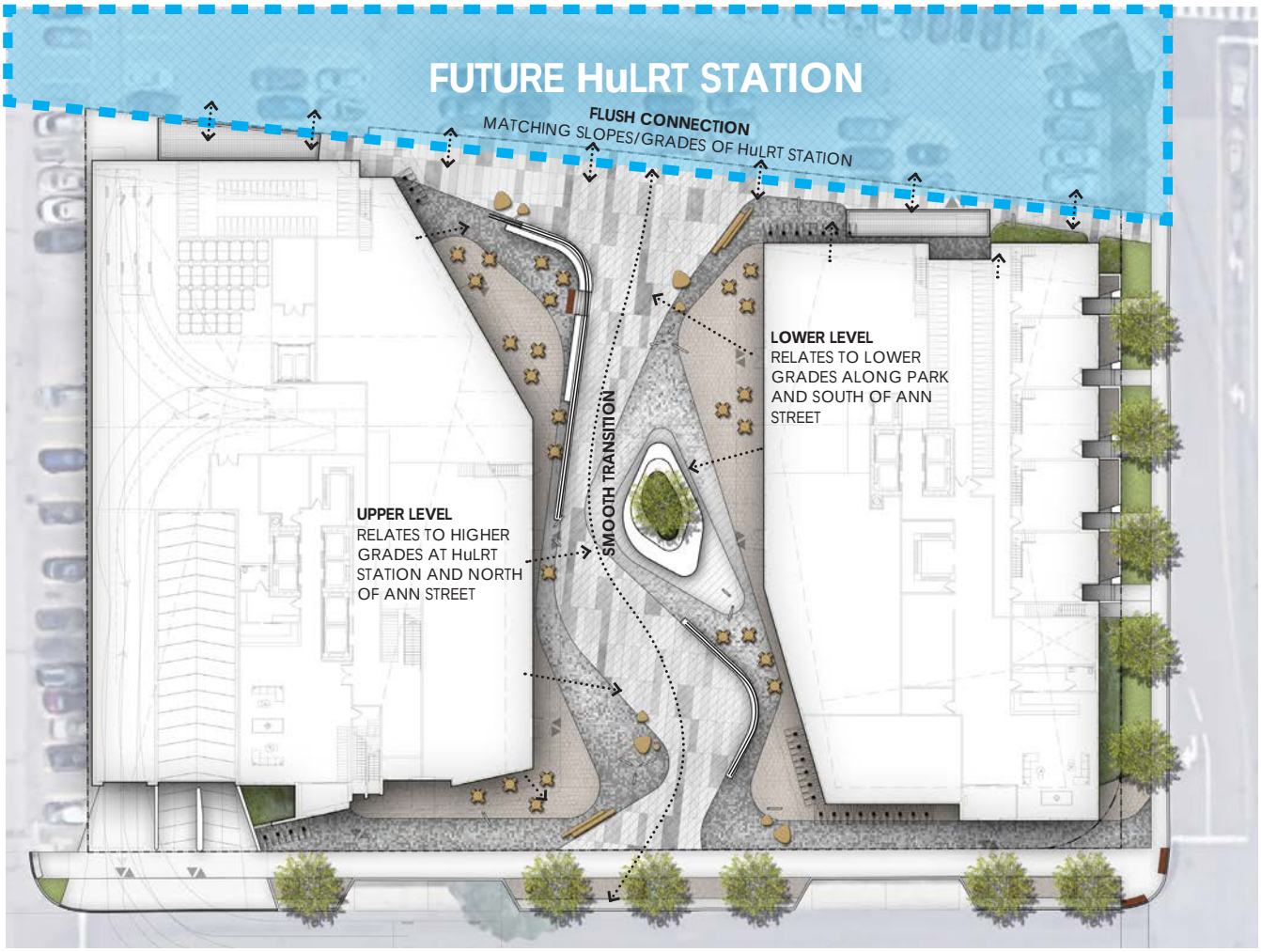


Figure 19 | Grading concept

6.6 Grading

The public realm experience is a priority for redevelopment of the subject property. To achieve this goal, smooth grade changes are planned across the site. North of Ann Street and at the Hurontario LRT station the grade is higher than the levels along Park Street and the southern portion of Ann Street. To facilitate the grade change, a curvilnear design provides a seamless connection between the higher and lower levels as shown in Figure 19. The eastern portion of the development is designed to be entirely flush with the Hurontario LRT station for smooth pedestrian and biking movement. The design responds to the surrounding grading and minimizes steps in building slabs.

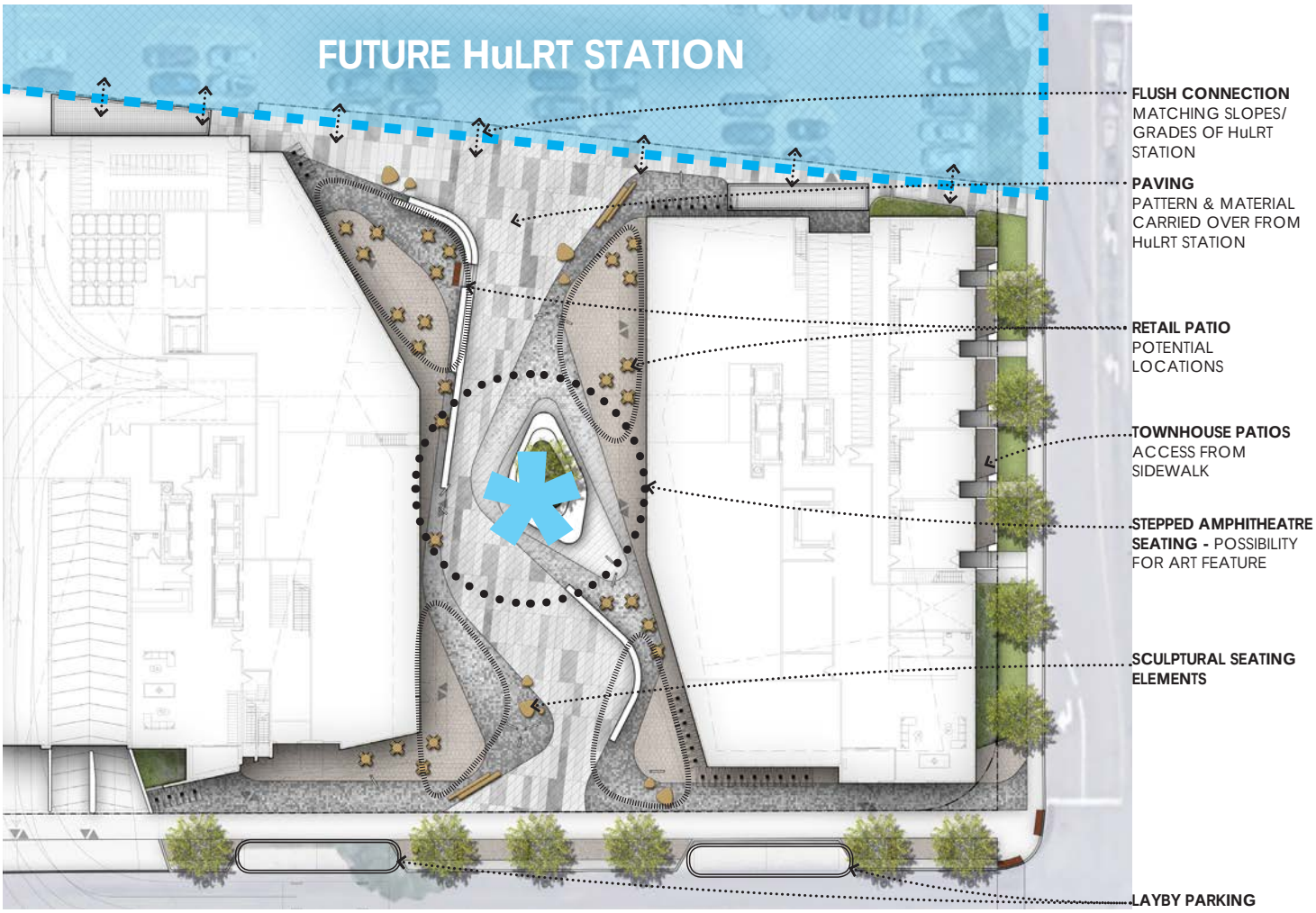


Figure 20 | Zones within the landscape plan

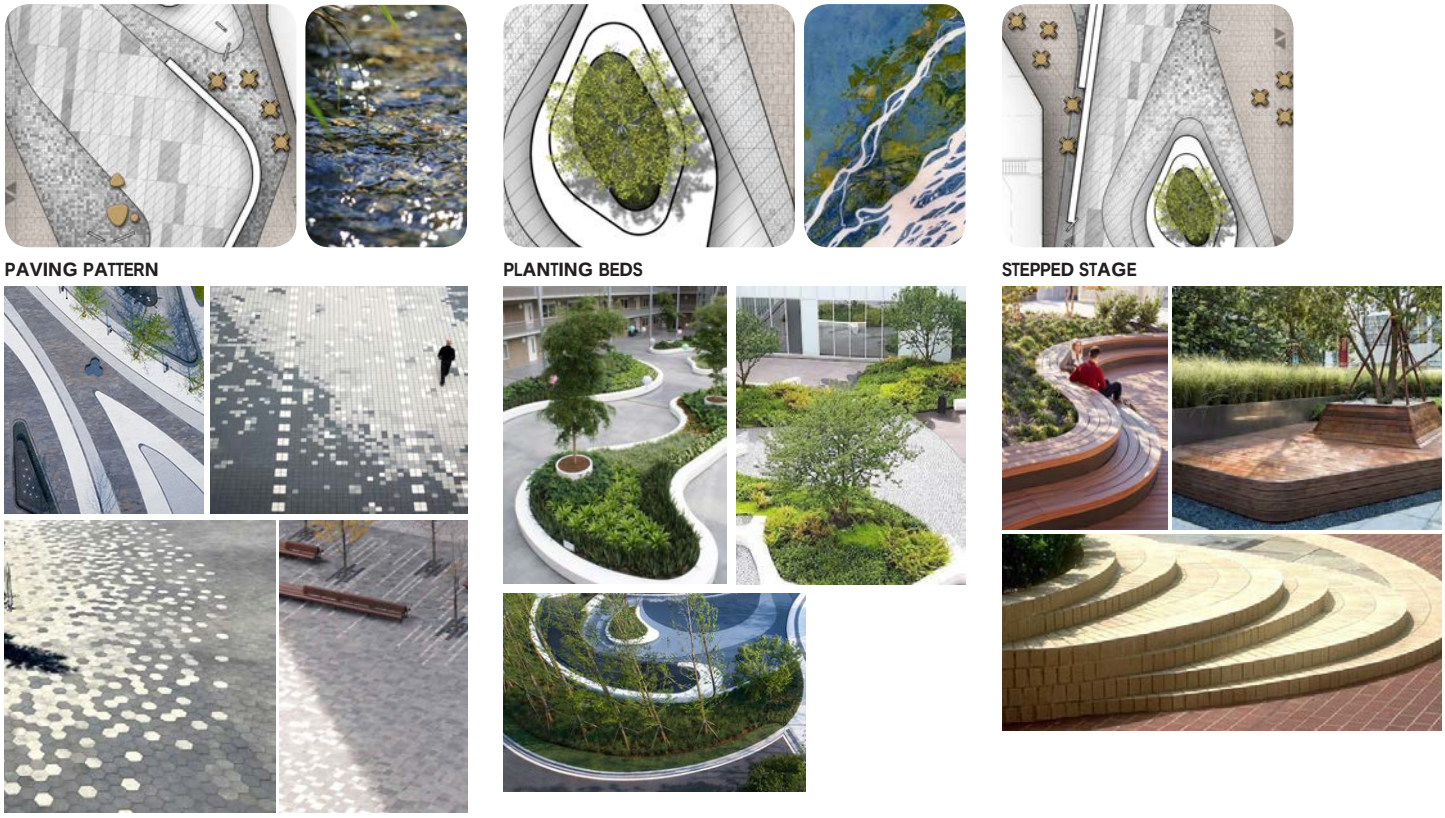


Figure 21 | Materiality concept for the landscape

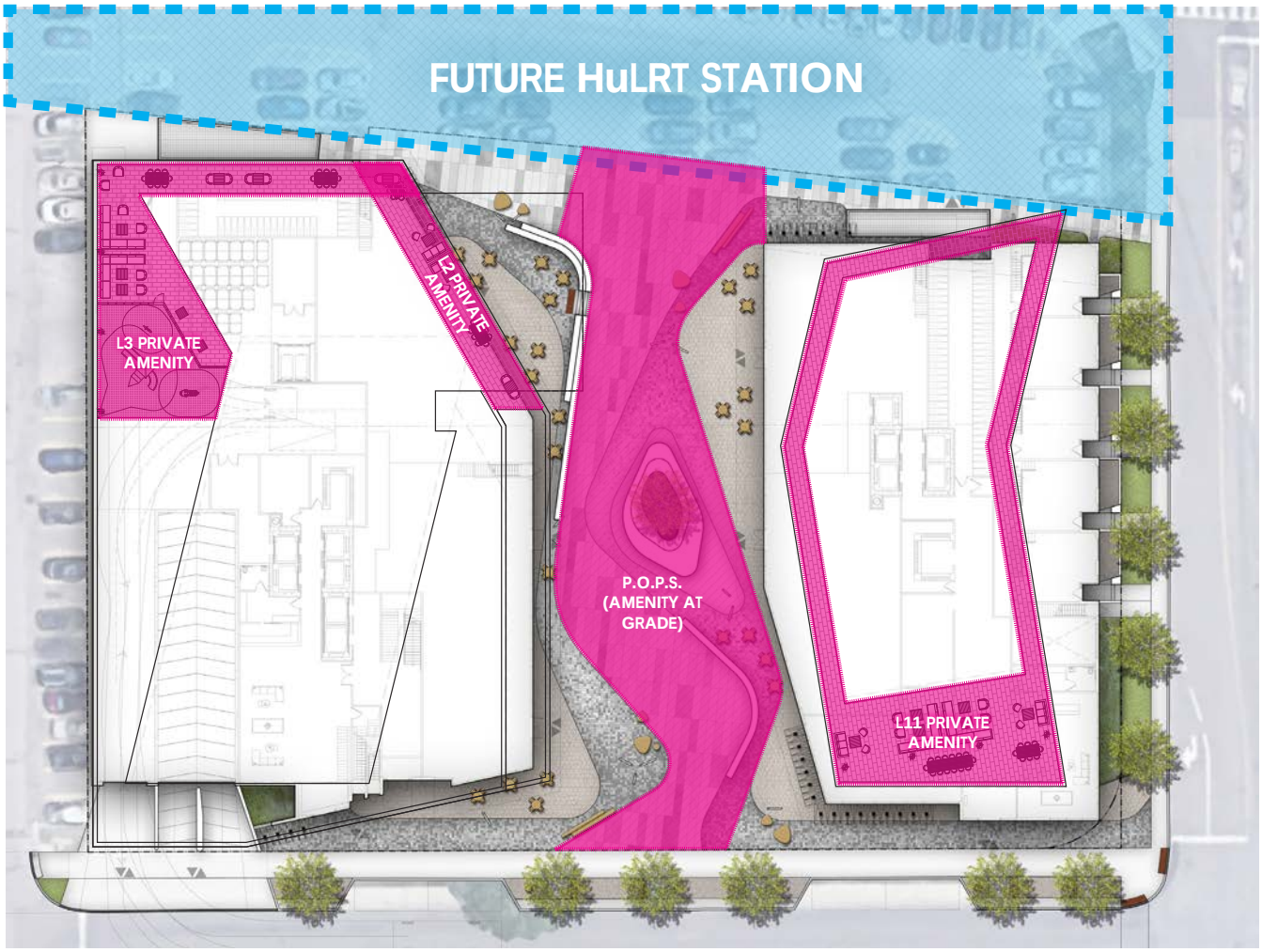


Figure 22 | Amenity areas

6.7 Amenity Areas

Indoor and outdoor amenity areas have been provided in both buildings. Tower A includes 725 m² indoor and 815 m² outdoor amenity space and Tower B includes 1,200 m² indoor and 765 m² outdoor amenity space.

Outdoor amenity area is split between terraces in both buildings and proposed POPS. The proposed POPS provides open space for residents, visitors and commuters and allows for a seamless connection between the GO Station and LRT Station.

Figure 23 | Rendering of the POPS looking east from Ann Street towards Hurontario Street

Figure 24 | Rendering of the POPS looking west from Hurontario LRT Station towards Ann Street

6.8 Elevations, Sections, and Massing

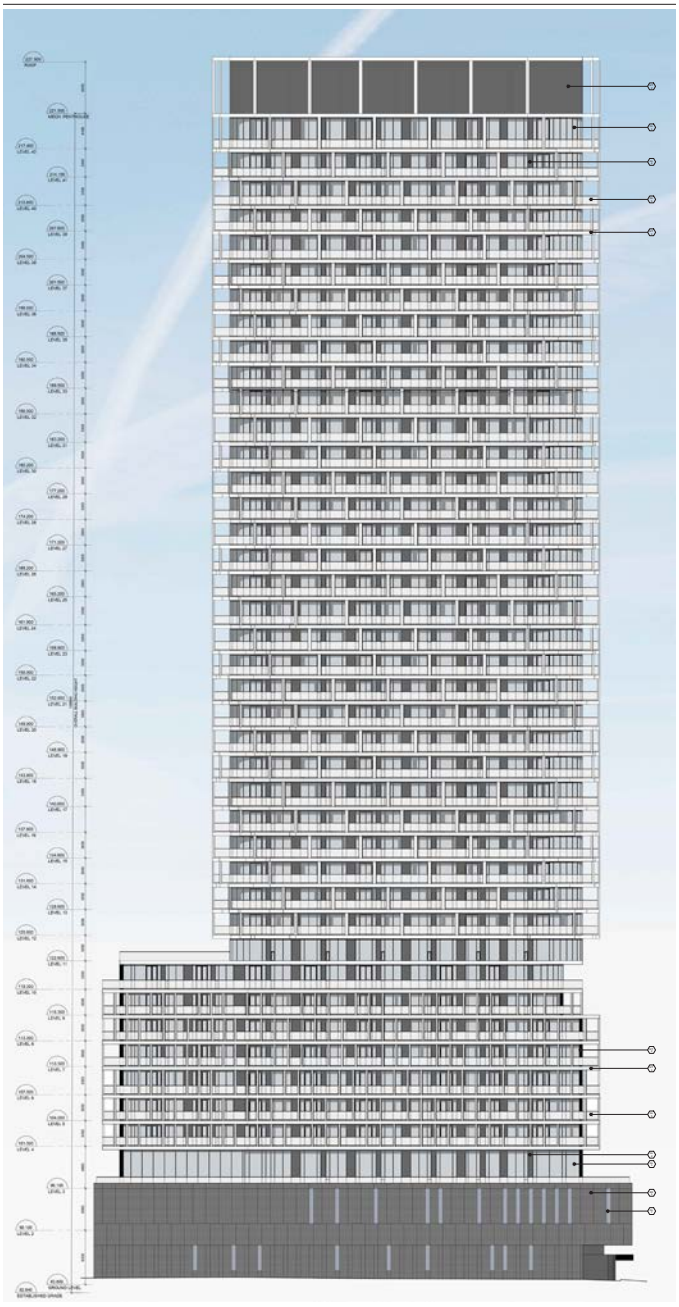


Figure 25 | Project West Elevation

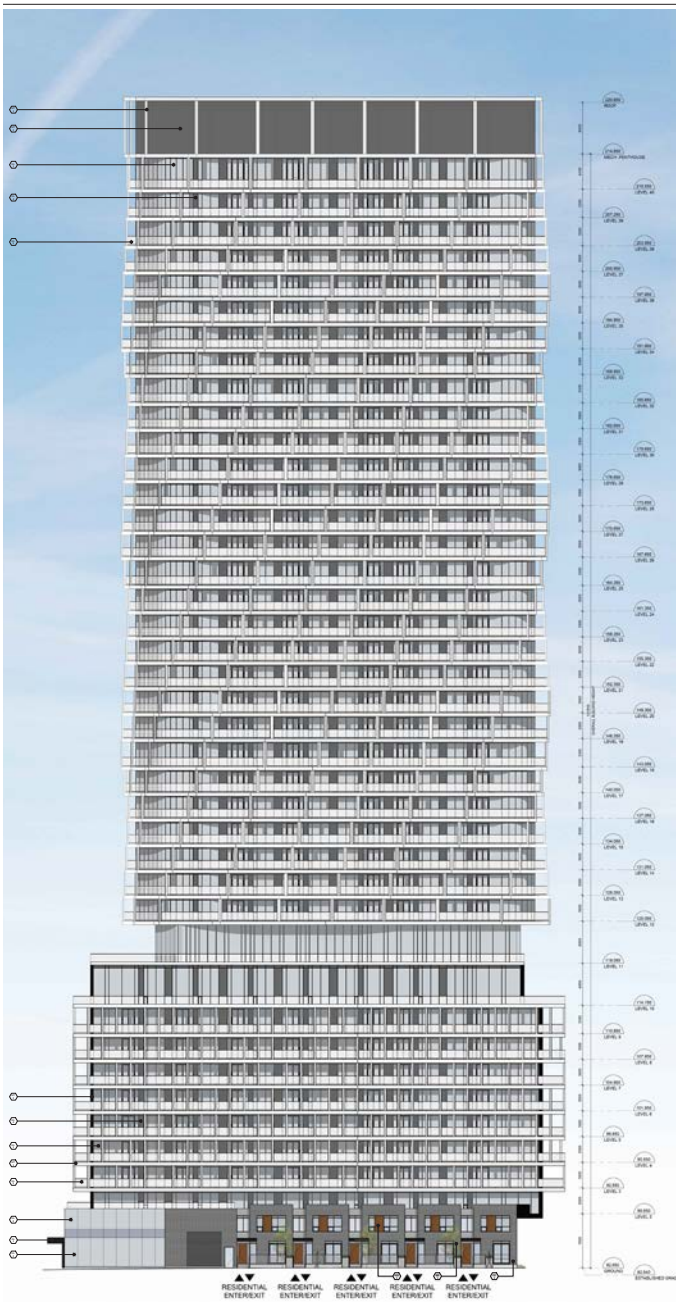


Figure 26 | Project East Elevation

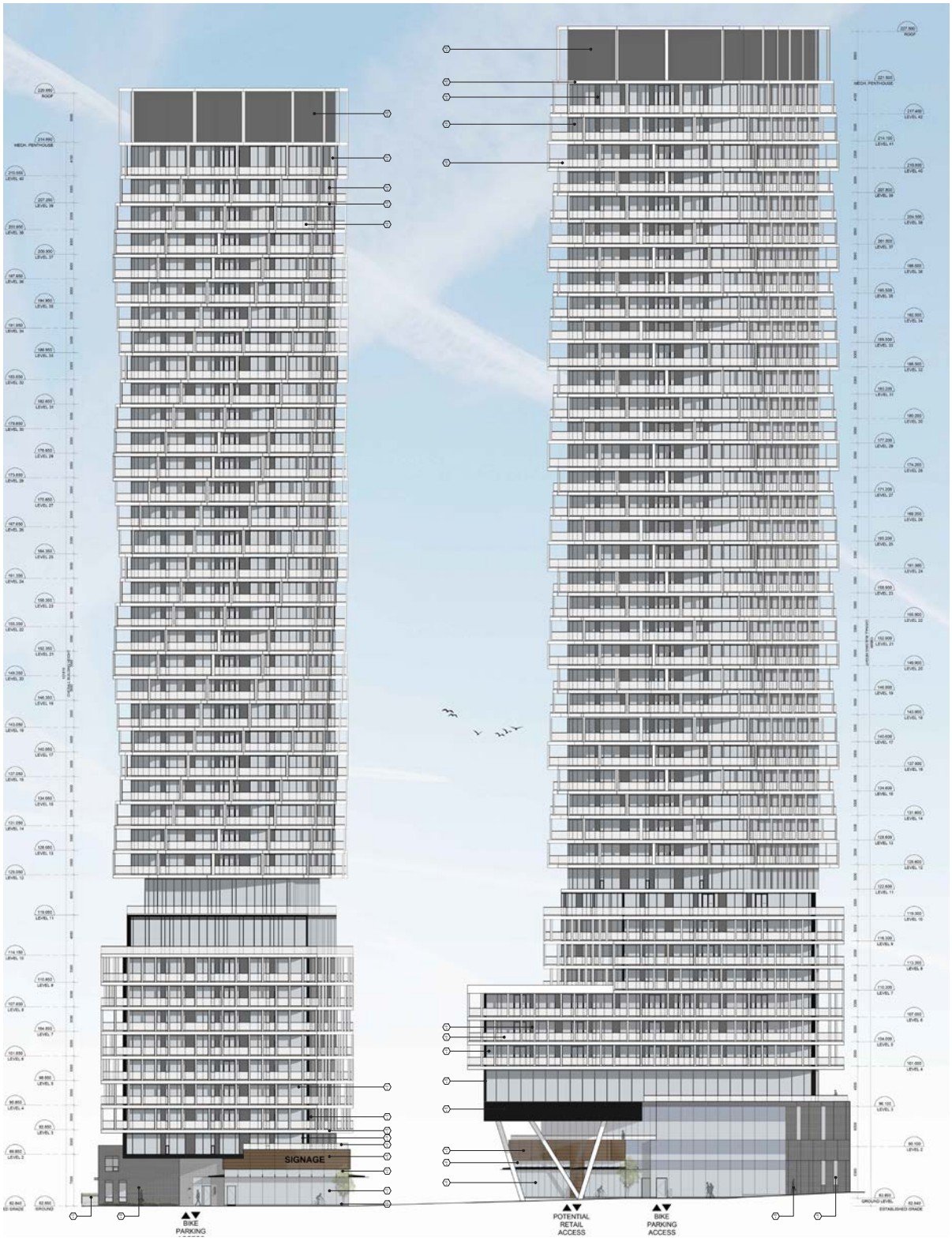


Figure 27 | Project North Elevation

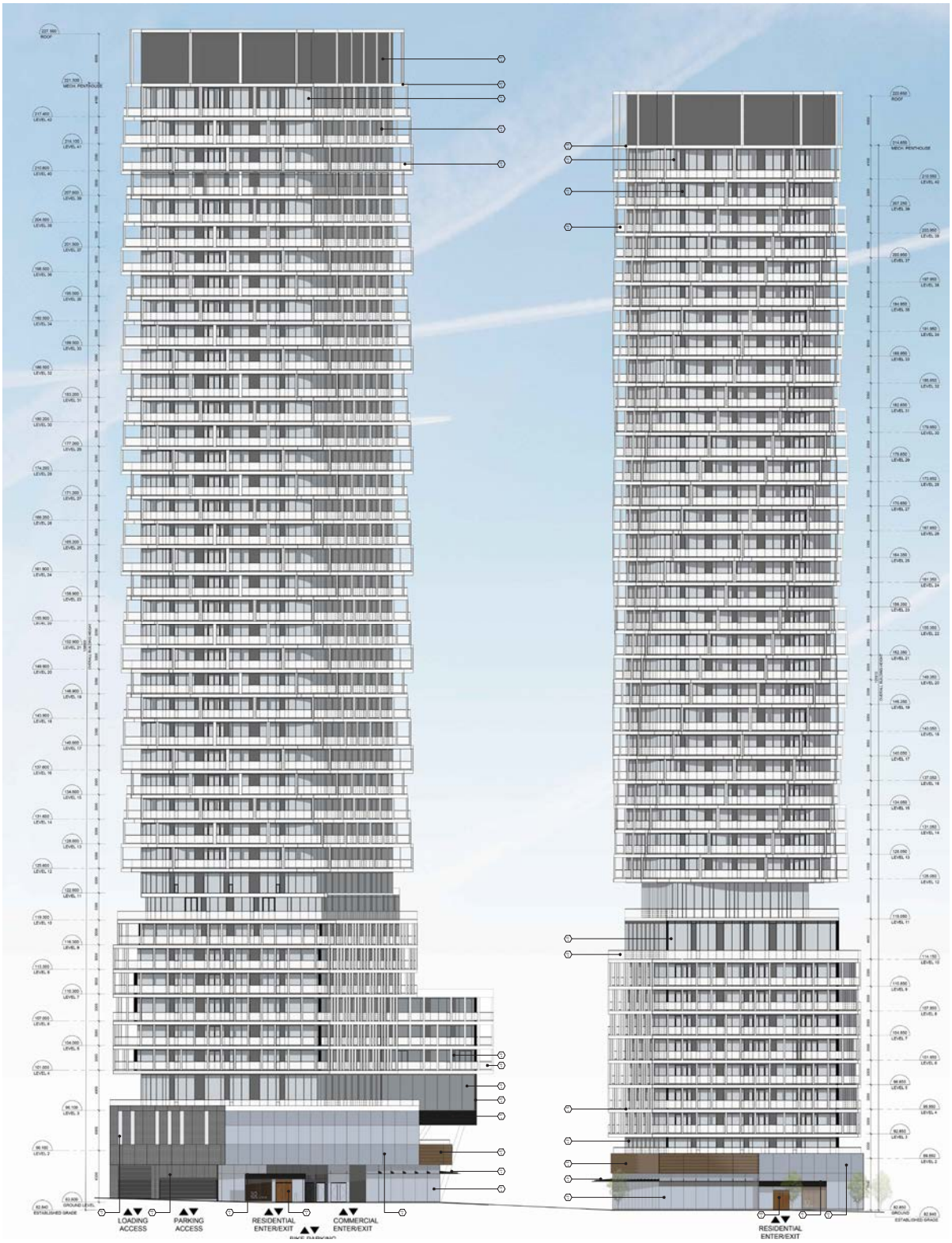


Figure 28 | Project South Elevation

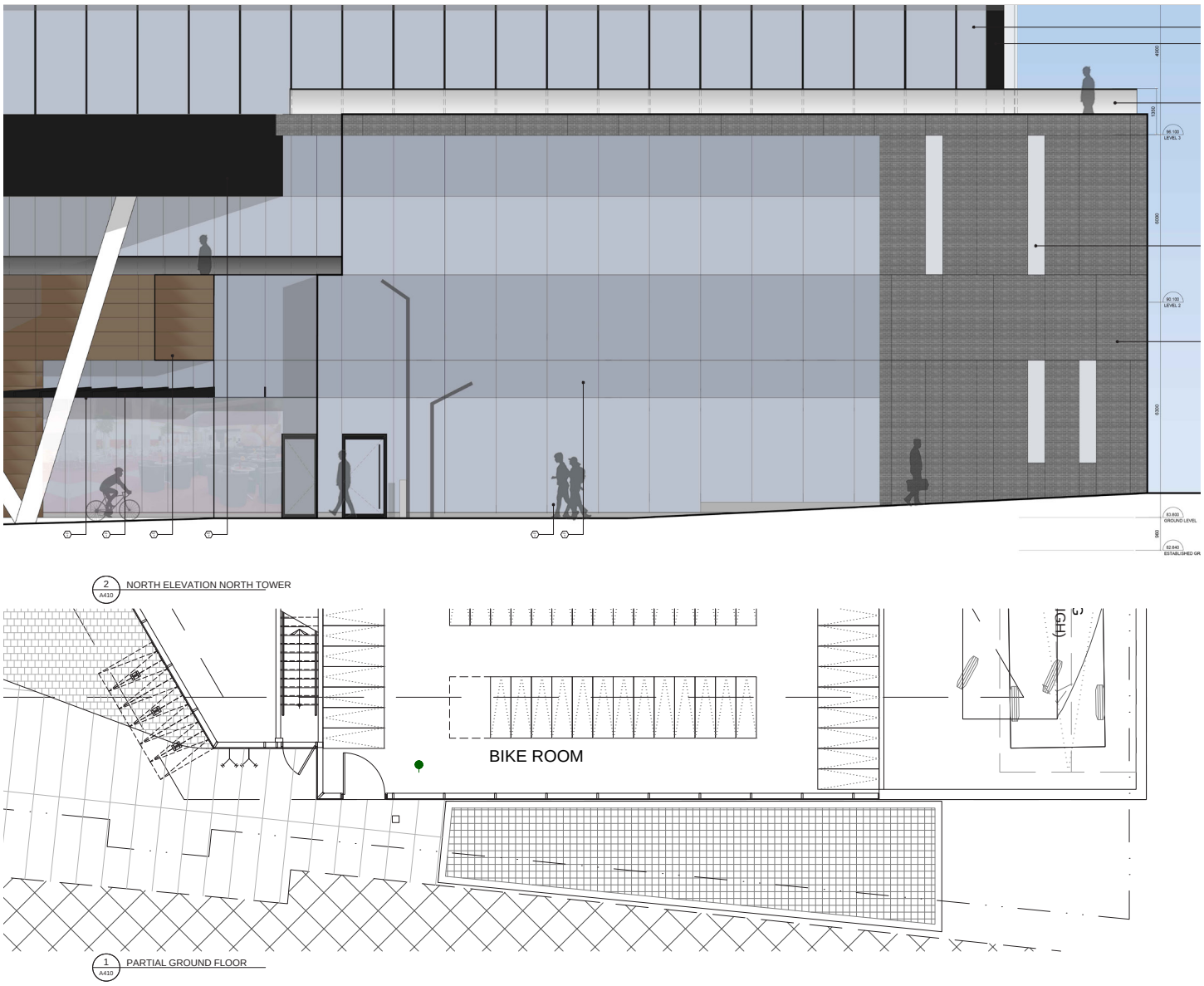


Figure 29 | Close-up of North Tower B, Project North Elevation

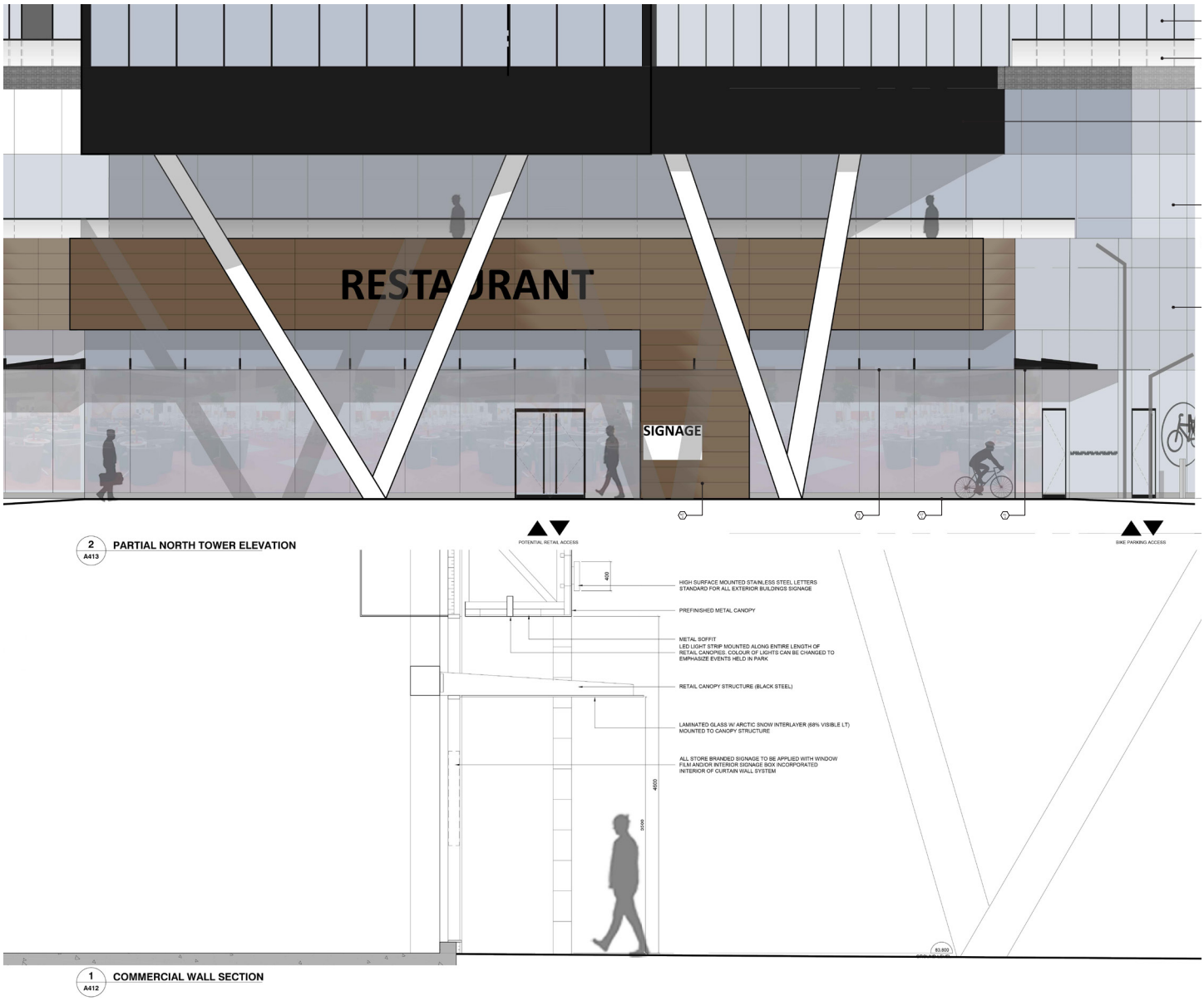


Figure 30 | Close-up and section of North Tower B, Project North Elevation

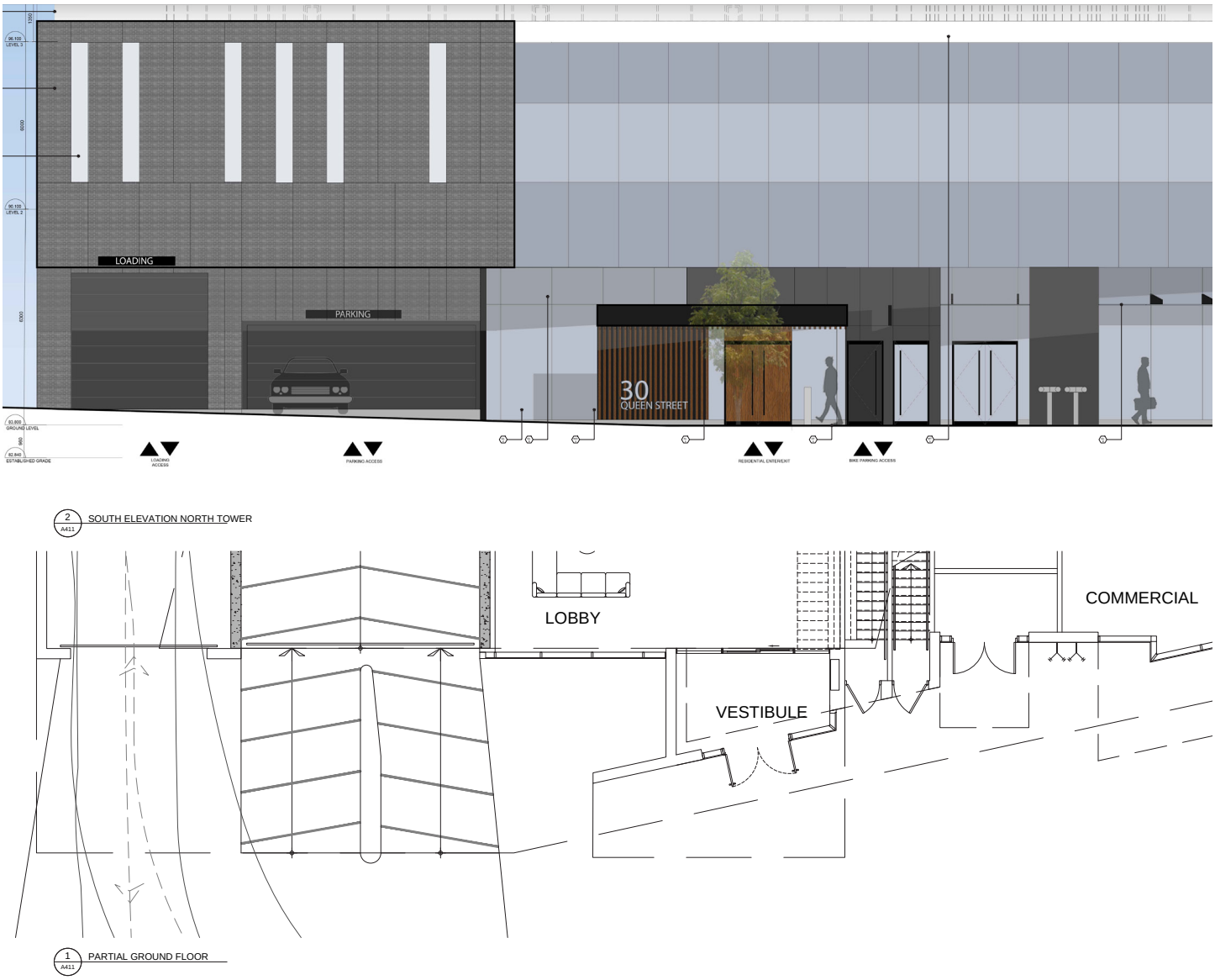


Figure 31 | Close-up and section of North Tower B, Project South Elevation

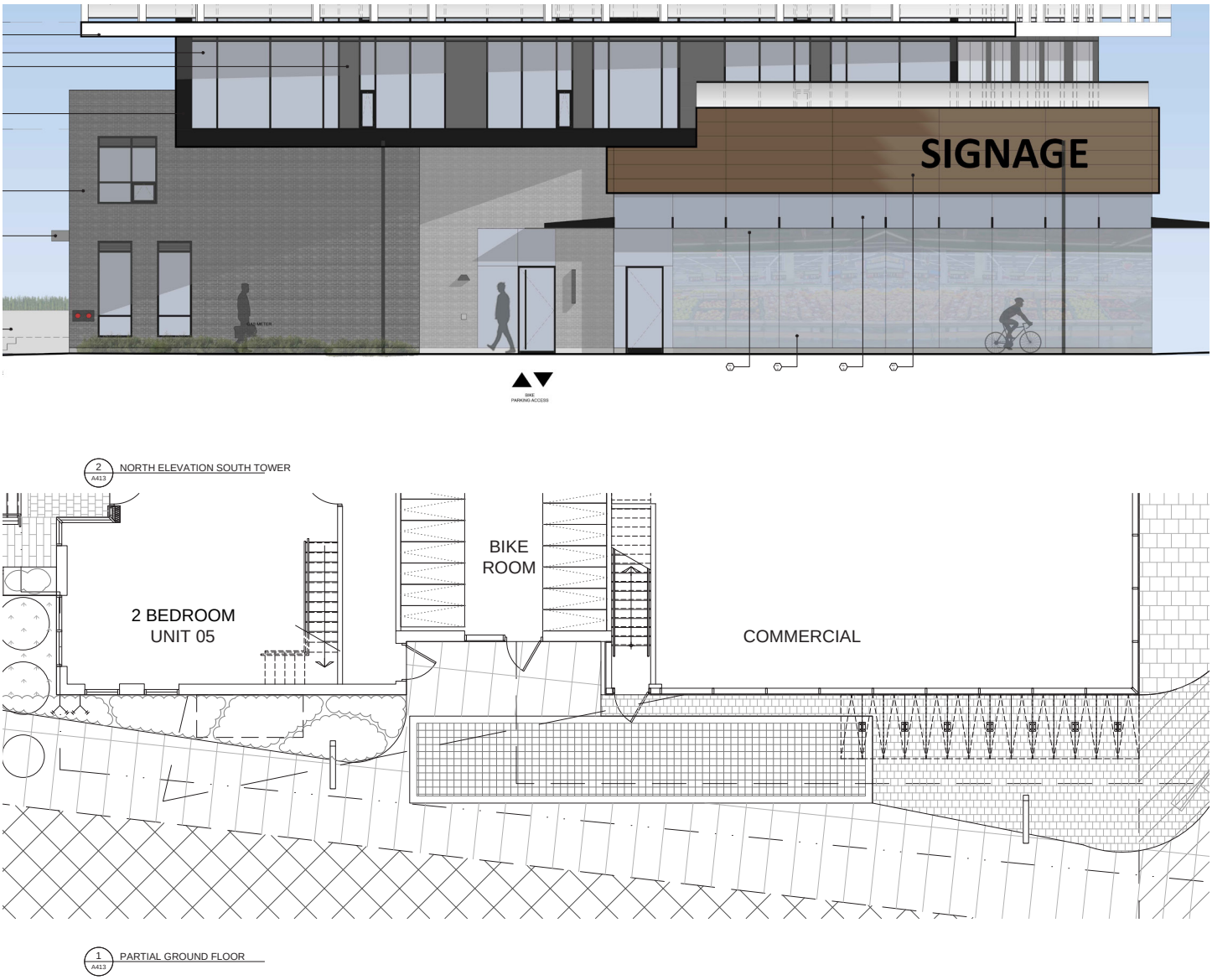


Figure 32 | Close-up and section of South Tower A, Project North Elevation

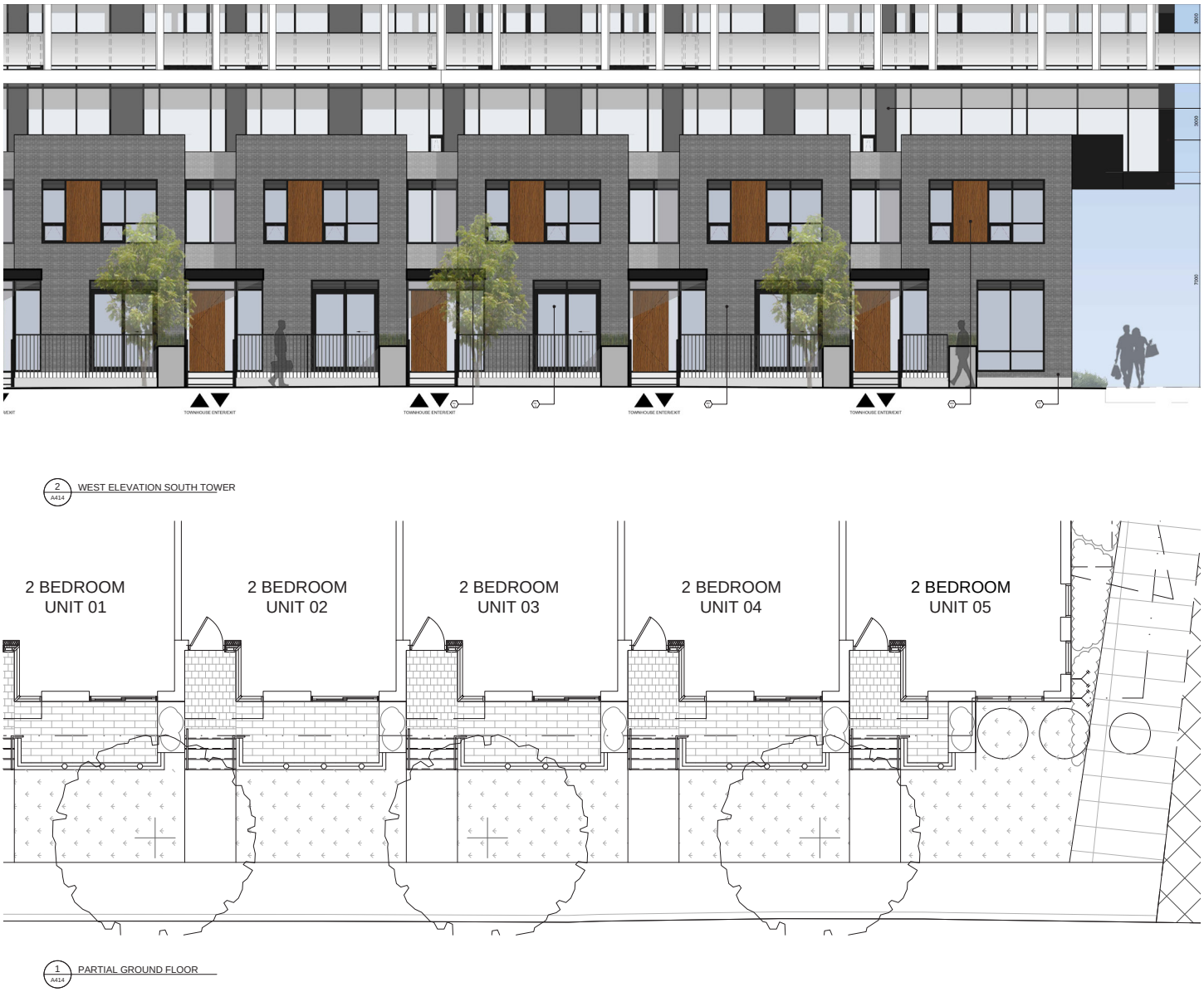


Figure 33 | Close-up and section of South Tower A, Project West Elevation

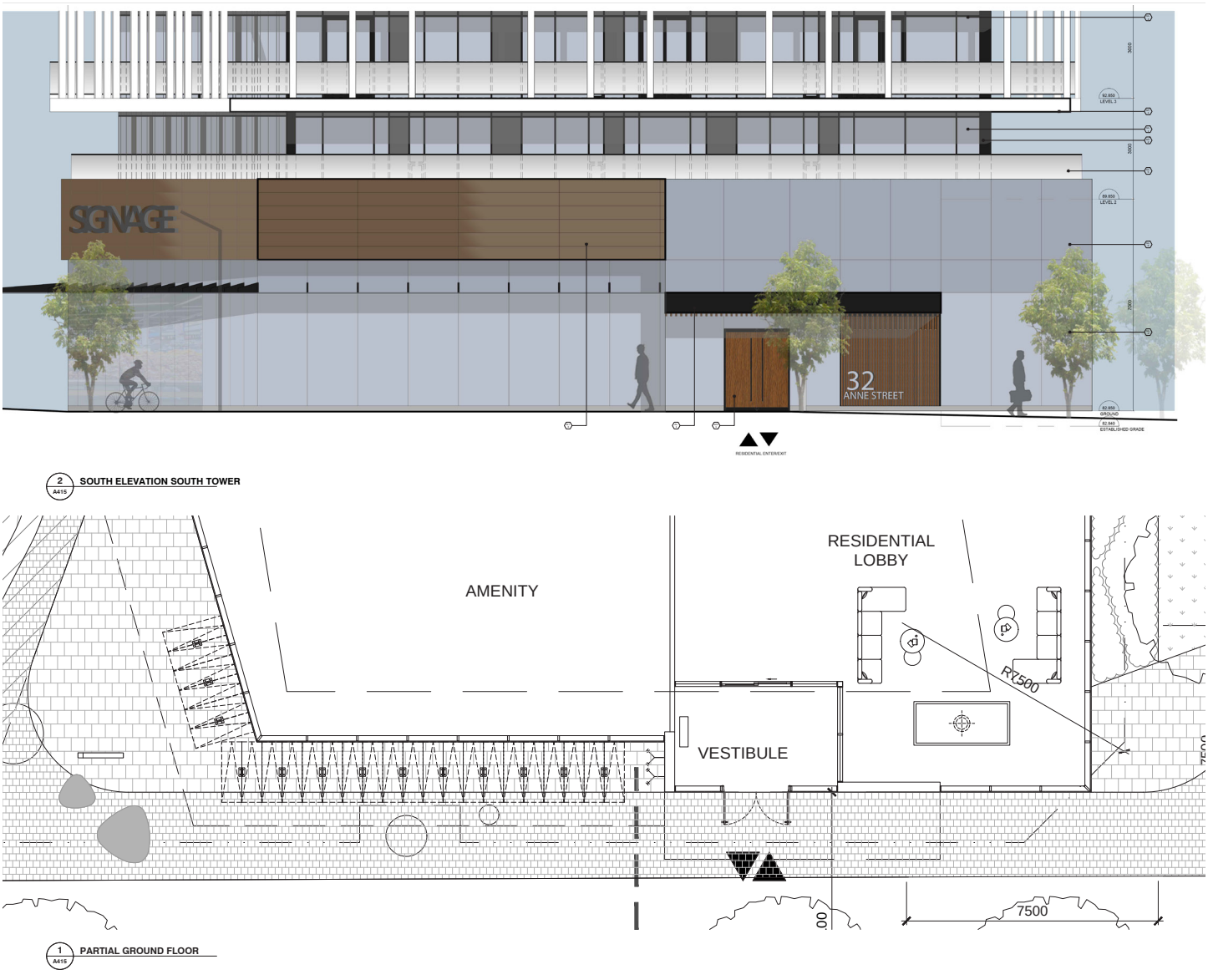


Figure 34 | Close-up and section of South Tower A, Project South Elevation

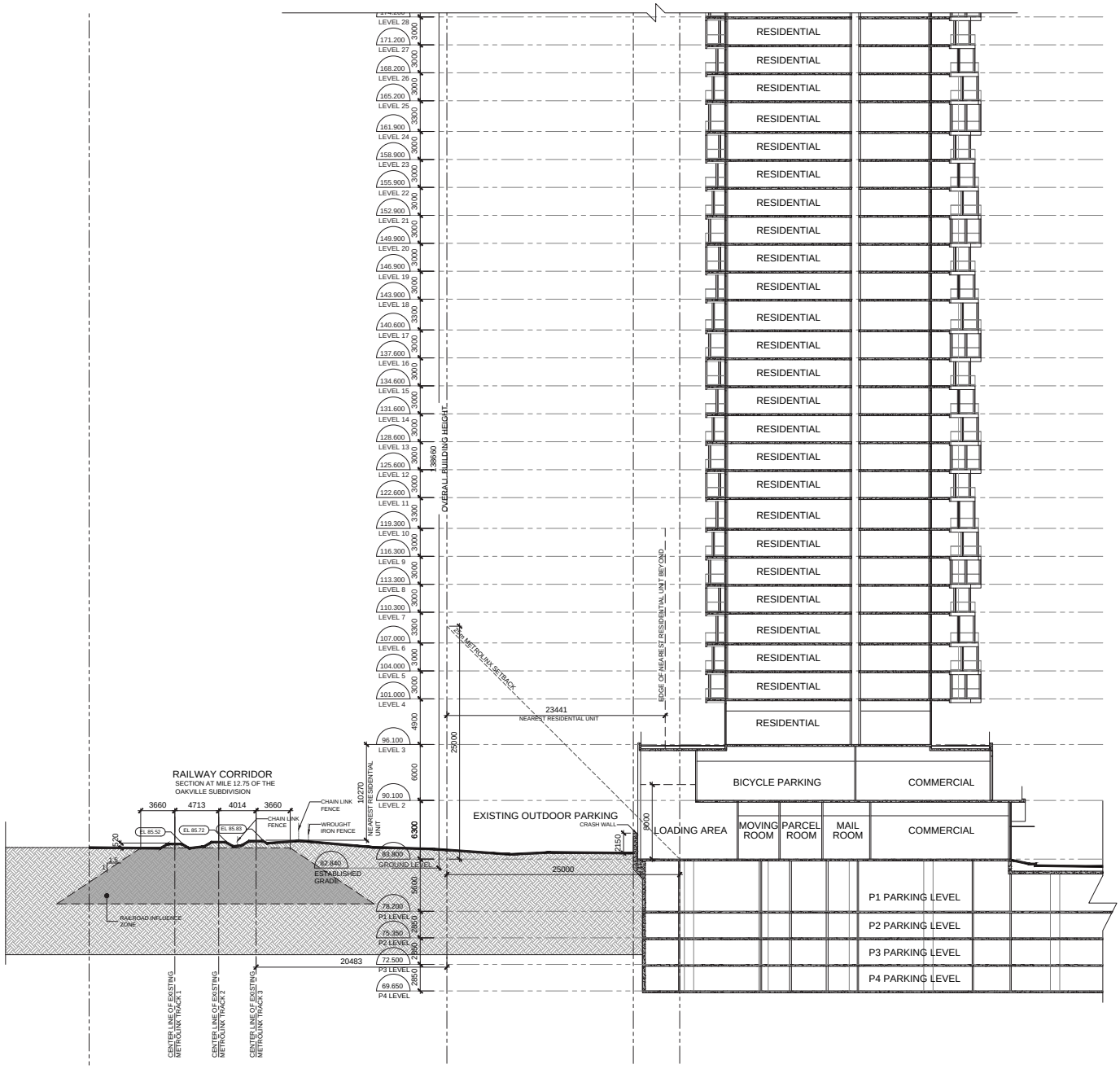


Figure 35 | Rail Corridor Section

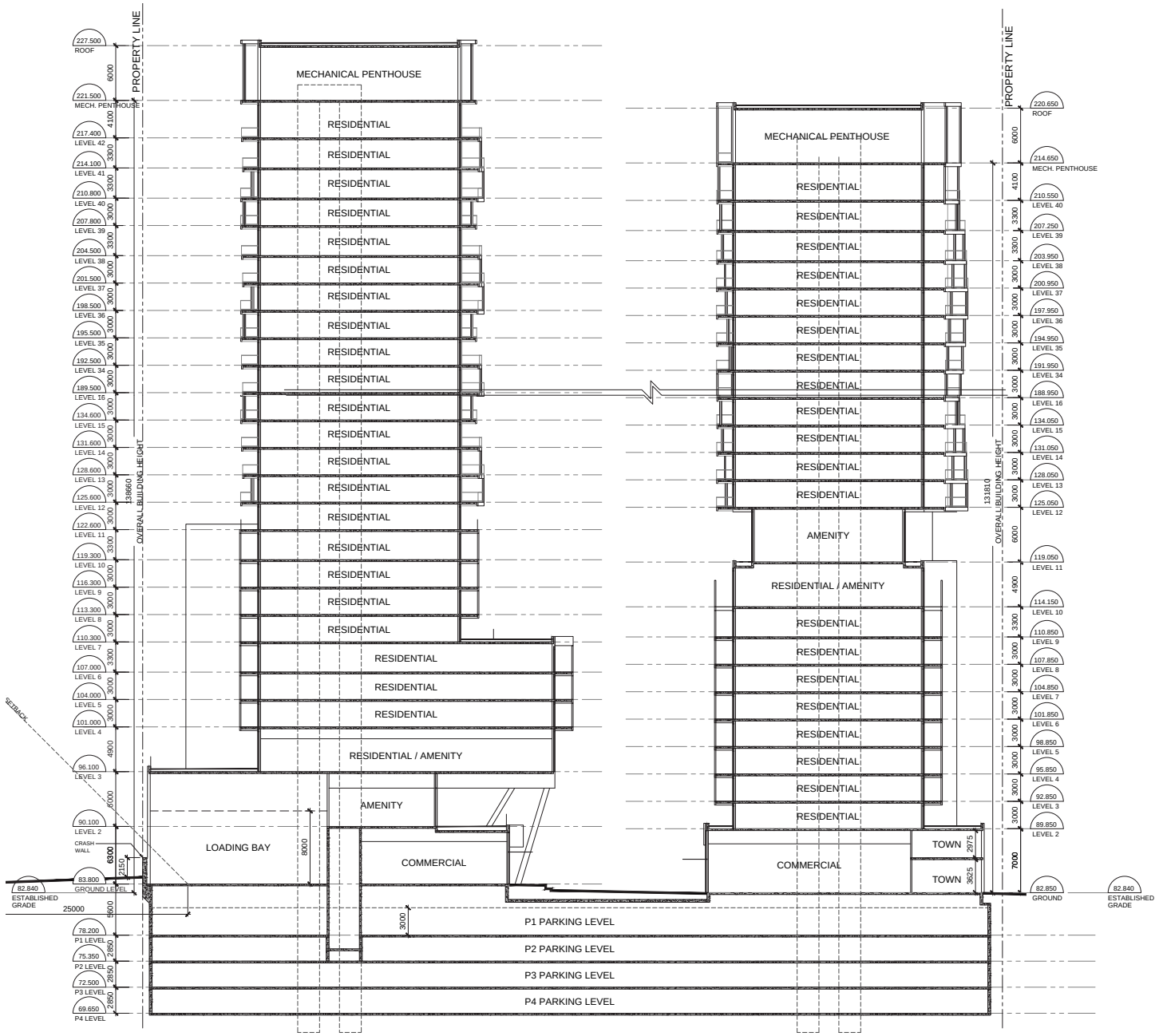


Figure 36 | Project South elevation section

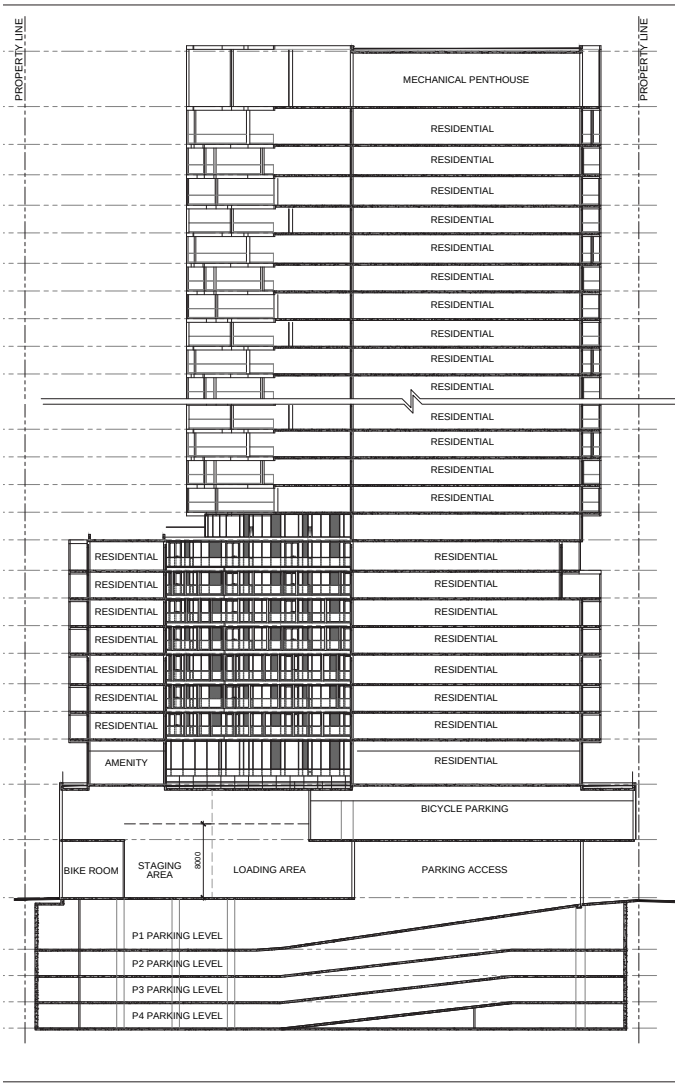


Figure 37 | Project West elevation section

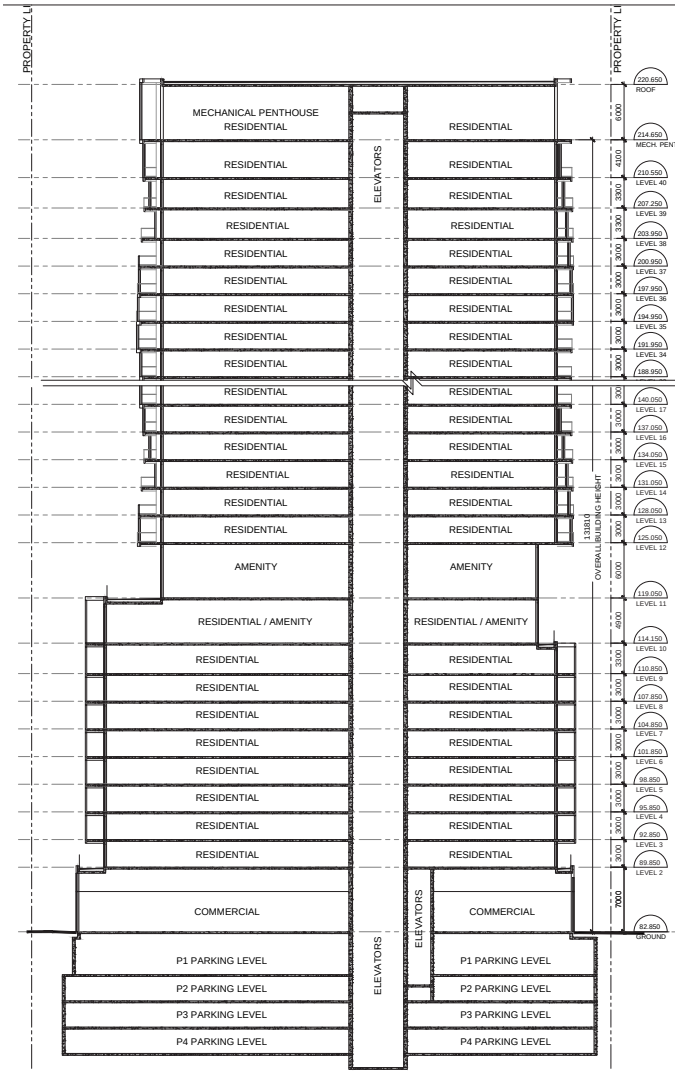


Figure 38 | Project East elevation section

Figure 39 | Massing view looking southeast

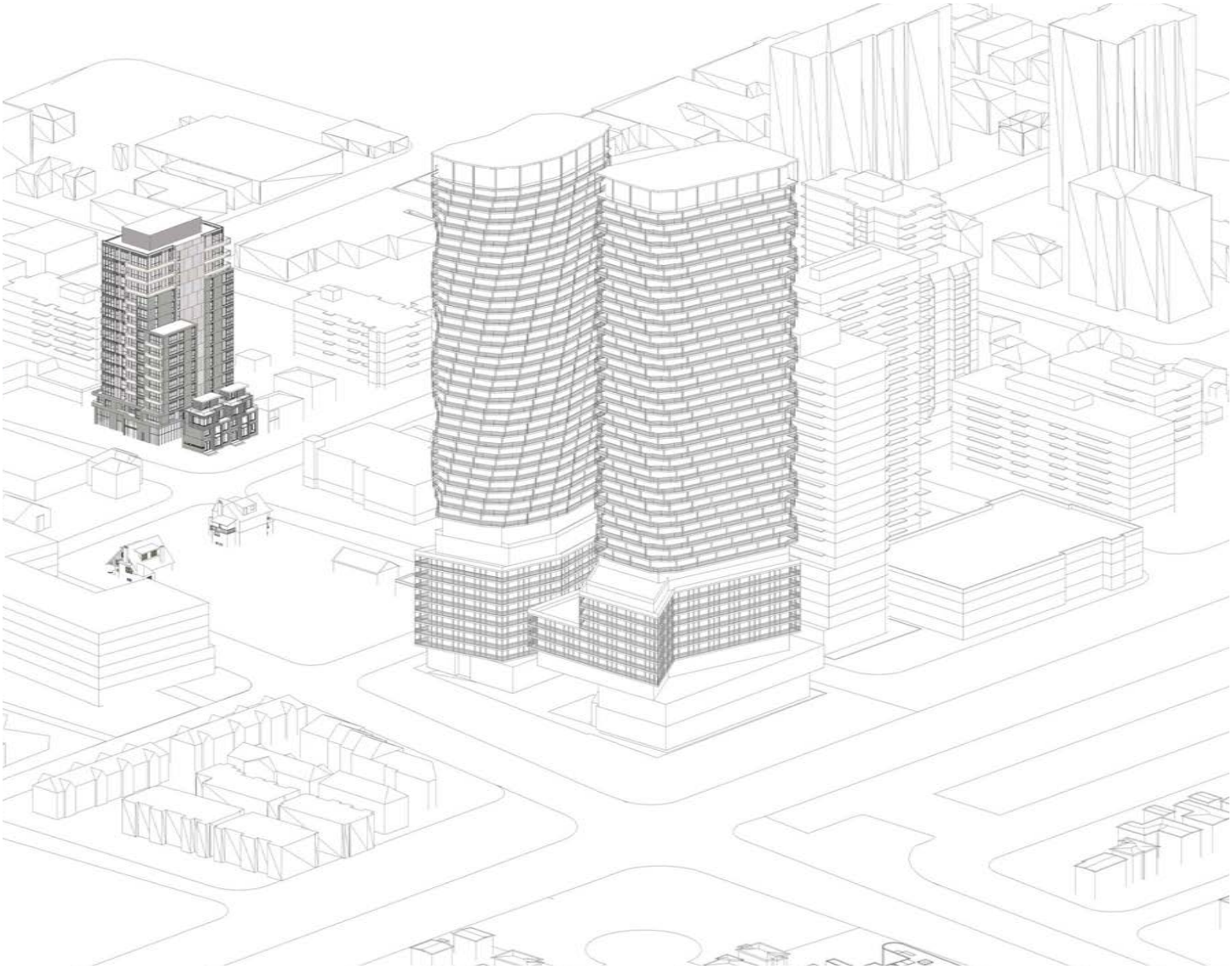


Figure 40 | Massing view looking southwest

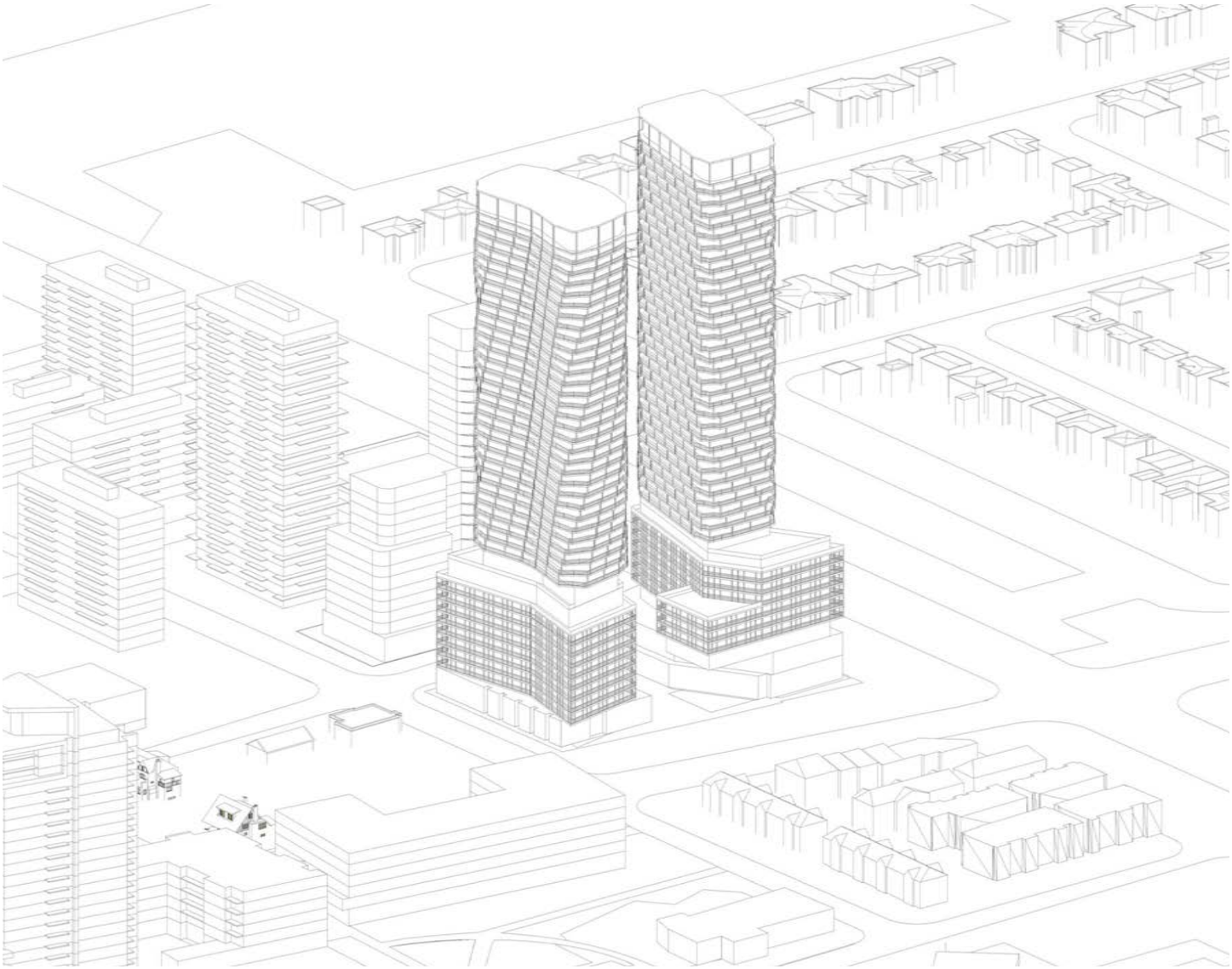
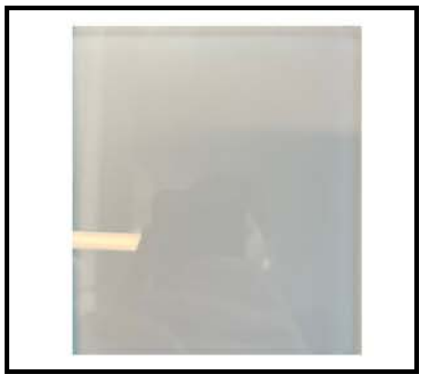


Figure 41 | Massing view looking northwest

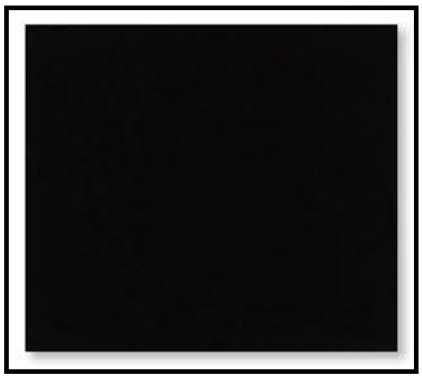
Figure 42 | Massing view looking northeast

[GL-1/GL-2] TYPICAL VISION GLASS
CLEAR ENERGY SELECT R42 (#2)



[GL-4] SPANDREL GLASS
COLOUR 'MARILYN'S DRESS'

[GL-5] TYPICAL TOWER BALCONY GLASS
CLEAR WITH WHITE FRIT PATTERN

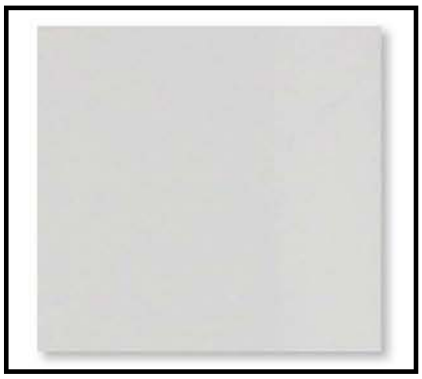


[MT-2] ACCENT METAL PANEL AND MULLIONS
COLOUR - BLACK

[MT-3] BENCHMARK ARCHITECTURAL WALL PANEL
DESIGNWALL 4000 SERIES
COLOUR - MEDIUM BRONZE

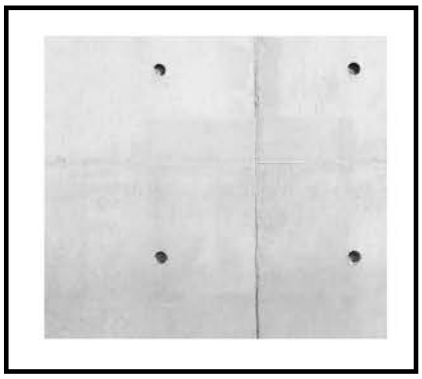
[WD-1] WOOD TYPE-1

[GL-8] 6MM KRYSTAL KLEAR FLOAT
LAMINATED CANOPY GLASS
(.03 ARCTIC SNOW 0009 - 68% VISIBILITY)



[MT-1] TYPICAL METAL PANEL
COLOUR - LILY WHITE

[BR-1] BRICK - THAMES VALLEY
MANGANESE IRONSPOT (SMOOTH)



[CF-1] CONCRETE FINISH

Figure 43 | Material Sample Board - Prepared by CORE Architects

6.9 Low Impact Design Features

CORE Architects Inc. prepared a list of Low-Impact Design Features. Proposed features will be analyzed by the applicant through the design review process. These include:

Landscape Features

- Project is proposing a central P.O.P.S with landscaped treatment.
- More than half of the plant species will be native or selections of native species;
- No invasive plant species will be proposed;
- All exterior lighting shall be shielded and dark-sky friendly;
- The project is considering using green roofs on lower roof levels;
- The project is considering irrigation systems that can be fed from a cistern to reuse stormwater on-site; and
- The project is considering a high-efficiency (drip) irrigation system to be specified instead of sprinklers.

Building Design

- No at-grade surface parking is proposed on-site. All parking spaces are located in enclosed below-grade parking garage;
- The parking rate reduction is being requested to encourage alternative forms of transportation;
- The project is considering 10 percent of parking spaces be EV charger ready;
- Residential long-term bicycle parking spaces will be located within the building;
- Canopies have been provided at the retail and residential entrances to provide covered waiting areas for pedestrian comfort and protection from inclement weather;
- The project will comply with the Ontario Building Code for Energy modeling requirements;
- The project will have a bi-sorter to deal with waste and recycling. All sorted waste arrives at a central collection area in the P1 level. The project will also provide an area for bulk garbage storage;
- The project is considering incorporating intake and exhaust vents from below grade garage into building façade and landscape treatments; and
- Full height glazing is proposed for ground-floor retail and amenity space located along the interior courtyard (POPS) and Ann Street to activate the public realm.

6.10 Shadow Study

CORE Architects Inc prepared a Shadow Study for the proposed development. The Shadow Study shows the site's proposed, Official Plan permissions, and existing shadows. The drawings are attached as Appendix A. The proposed development generally achieves the criteria outlined in the City of Mississauga Standards for Shadow Studies (2014) as follows:

• There is no shadow impact for more than two consecutive hours within the space between the exterior wall of a dwelling and the 7.5-metre line of impact assessment for any residential private outdoor amenity spaces adjacent to the site.

• The proposed building casts a shadow onto the rear yards of single family dwellings to the northwest in the mornings. The shadow cast clears each yard in two hours or less.

• There is very minimal shadow impact on the Forest Avenue Public School yard. The proposed building shadows a small portion of the school and in the late afternoon on September and December 21. However,

the shadow moves quickly across the school and clears within a couple of hours.

• Shadows from the proposed development shadow onto parts of Hurontario Street on September 21 between 12:12 pm and 2:12 pm.

• Shadows from the proposed development allow for a minimum of four hours of sunlight on Ann Street. No shadow from the proposal is cast on Ann Street, including the full width of the sidewalk on September 21 from 10:12 am onwards.

6.11 Pedestrian Wind Study

RWDI was retained to conduct a pedestrian wind assessment for the proposed development. Based on the wind-tunnel testing for the proposed project under existing and proposed configurations and the local wind records, the potential wind comfort and safety conditions are as follows:

- The existing wind conditions on and around the site are generally comfortable for the intended pedestrian use throughout the year. High wind speeds and uncomfortable conditions occur at localized areas on the site and along the sidewalks of Ann Street and along Park Street East.
- With the proposed development in place, wind conditions are expected to be comfortable for the intended pedestrian use at most grade-level areas throughout the year. Due to the seasonally stronger winds, higher wind speeds and uncomfortable conditions are predicted in the winter at multiple areas on site. The wind conditions at these locations can be improved with the use of localized wind control features such as wind breaks (hard or softscape features).
- Wind speeds at most areas on the Level 2 outdoor amenity area of Tower B are predicted to be comfortable for passive patron use during the summer when outdoor spaces are most used. Wind speeds at most locations on the Level 11 amenity area of Tower A, are expected to be higher than desired throughout the year.
- Existing wind speeds meet the safety criterion at all locations assessed. With the addition of the proposed development, the wind safety criterion is expected to be exceeded at grade-level locations between the towers, the northwest corner of Tower A and the southwest corner of Tower B. This criterion will also be exceeded at all areas on the Level 11 amenity area of Tower A.
- Suitable wind conditions can be achieved throughout the site by implementing localized hard and/or softscape features. Additional wind tunnel testing will be conducted as the design progresses to develop appropriate wind mitigation measures and confirm their efficacy.

6.12 Noise and Vibration Feasibility Study

For the proposed development, J.E. Coulter Associates Limited conducted the Noise and Vibration Feasibility Study. The Study includes recommendations to address noise and vibration issues that illustrate that applicable Ministry of the Environment, Conservation and Parks ("MECP"), Metrolinx, Canadian National Railway ("CN"), and City of Mississauga noise guidelines can be met with modest noise control measures. The recommendations also take into consideration the sound from the surrounding transportation sources.

A review of the area indicates there are no sources of stationary noise that would potentially affect the occupants of the future building itself. As a result, stationary noise sources are not considered further within the Study. The Study focuses on the transportation noise and vibration impacts.

To meet the requirements of MECP, the City of

Mississauga, Metrolinx, and CN, the following noise control measures are required:

1. All units will be supplied with central air conditioning. Warning Clause Type D will be inserted into the Agreements of Purchase and Sale or Lease for all units.

2. Terraces and private balconies greater than 4 metres in depth are currently not proposed. If included, such areas should be reviewed for noise control measures, where required. Given the significant ambient sound levels, such private terraces should be avoided.

3. All units within the development need to be supplied with Warning Clause Type B in their Agreements of Purchase and Sale or Lease.

4. General glazing and spandrel panel recommendations have been provided based on current suite layouts. An updated analysis should be completed if there are changes to the floor plans and window elevations that would affect the glazing requirements.

5. Tower B's 3rd floor amenity area should not be designated or planned for quiet use due to high sound levels. The south tower's 11th floor amenity area is predicted to meet the guidelines assuming a standard 1.1-metre tall noise barrier along the perimeter.

6. As the development is located within 300 metres of the railway corridor, all units should be provided with the standard CN and Metrolinx Warning Clauses in any case. The warning clauses are to be inserted into the Agreements of Purchase and Sale or Lease.

7. Vibration control is not required as the vibration levels were measured to be well below 0.14 mm/s RMS. The LRT vibration levels are similarly expected to be well below the limit.

8. Prior to the building permit application, or at such a time when the final design is completed, a review of the proposed development's mechanical and electrical equipment should be completed to ensure that applicable noise guidelines are met at the surrounding areas as well as at the future development itself.

9. The Hurontario LRT's Port Credit Station is located to the east of the site. The station is still being designed and final details on any equipment proposed have not been provided. Metrolinx will share more information regarding potential equipment from this station as it becomes available. An additional analysis will be completed once this information is received. Significant noise sources are not expected and would not affect the feasibility of the development as there is still time to implement noise control measures at the station itself. The significant ambient noise present also mitigates any potential impact from the stationary sources.

Page is intentionally left blank.

7.0 CONCLUSION

Sajecki Planning

It is our opinion that the proposed development delivers a sound design that demonstrates good practice in urban design. The proposed development duly considers key policies and guidelines contained within the Mississauga Official Plan and other guidelines, thoughtfully responding to site specific considerations.

The proposal represents an appropriate development in terms of its fit within the City's urban structure, its height and scale within its local context, and its architectural treatment with respect to the Hurontario Street and transit node at Port Credit GO Station.

The proposed development makes for an improved use of an underutilized greyfield site to respond to the growing demands for transit-oriented housing communities in the Greater Toronto Area. The design provides streetscape improvements along its frontages along the future Hurontario LRT stop, Park Street, and Ann Street.

The buildings have been massed to emphasize a seamless connectivity at the privately operated public space between the future Hurontario LRT station and the existing GO station. Active retail use is proposed along the central POPS to ensure both day and night animation on the ground plane. The siting and shape of the buildings ensure adequate privacy, sunlight and sky views are maintained.

Access to vehicular parking and the loading space has been directed away from the public roads to maximize pedestrian and cyclist safety and minimize the visual prominence of these features from the public realm. The design move also provides a continuous streetscape along Hurontario Street.

A shadow study found that the proposal generally meets the City's standards. Wind conditions are expected to be comfortable for the intended pedestrian use at most grade-level areas throughout the year. Due to the seasonally stronger winds, higher wind speeds and uncomfortable conditions are predicted in the winter at multiple areas on site. The wind conditions at these locations can be improved with the use of localized wind control features such as wind breaks (hard or softscape features) and will be explored throughout the design process. As per the noise feasibility study, a review of the area indicates there are no sources of stationary noise that would potentially affect the occupants of the future building itself and features will be incorporated into the design to mitigate other noise impacts according to Metrolinx guidelines.

For the reasons set out in this Study, we are of the opinion that from an urban design perspective, the proposal is appropriate and desirable.

APPENDIX A
SHADOW STUDY

Sajecki Planning

JUNE 21 - 7:07am (RISE + 1.5hr)

JUNE 21 - 7:20am

JUNE 21 - 8:20am

JUNE 21 - 9:20am

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY JUNE 21

February 4, 2022

COREARCHITECTS

CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 946 0400 • F +1 416 946 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

JUNE 21 - 10:20am

JUNE 21 - 11:20am

JUNE 21 - 12:20pm

JUNE 21 - 1:20pm (SOLAR NOON)

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY JUNE 21

February 4, 2022

COREARCHITECTS
CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 848 0400 • F +1 416 848 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

JUNE 21 - 2:20pm

JUNE 21 - 3:20pm

JUNE 21 - 4:20pm

JUNE 21 - 5:20pm

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY JUNE 21

February 4, 2022

COREARCHITECTS

CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 348 0400 • F +1 416 348 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

JUNE 21 - 6:20pm

JUNE 21 - 7:20pm

JUNE 21 - 7:33pm (SET - 1.5hr)

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY JUNE 21

February 4, 2022

COREARCHITECTS

CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 848 0400 • F +1 416 848 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

SEPTEMBER 21 - 8:35am (RISE + 1.5hr)

SEPTEMBER 21 - 9:12am

SEPTEMBER 21 - 10:12am

SEPTEMBER 21 - 11:12am

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY SEPTEMBER 21

February 4, 2022

COREARCHITECTS

CORE ARCHITECTS INC.
130 QUEEN'S QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 548 0400 • F +1 416 548 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

SEPTEMBER 21 - 12:12pm

SEPTEMBER 21 - 1:12pm (SOLAR NOON)

SEPTEMBER 21 - 2:12pm

SEPTEMBER 21 - 3:12pm

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY SEPTEMBER 21

February 4, 2022

COREARCHITECTS
CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 348 0400 • F +1 416 348 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

SEPTEMBER 21 - 4:12pm

SEPTEMBER 21 - 5:12pm

SEPTEMBER 21 - 5:48pm (SET - 1.5hr)

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY SEPTEMBER 21

February 4, 2022

COREARCHITECTS

CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 848 0400 • F +1 416 848 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

DECEMBER 21 - 9:19am (RISE + 1.5hr)

DECEMBER 21 - 10:17am

DECEMBER 21 - 11:17am

DECEMBER 21 - 12:17pm (SOLAR NOON)

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY DECEMBER 21

February 4, 2022

COREARCHITECTS

CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 548 0400 • F +1 416 548 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

DECEMBER 21 - 1:17pm

DECEMBER 21 - 2:17pm

DECEMBER 21 - 3:15pm (SET - 1.5hr)

30 QUEEN ST. E

Port Credit, ON
21-231

LEGEND

EXISTING CONTEXT

PROPOSED BUILDING

N

SHADOW STUDY DECEMBER 21

February 4, 2022

COREARCHITECTS

CORE ARCHITECTS INC.
130 QUEENS QUAY EAST, SUITE 700, WEST TOWER
TORONTO, ON CANADA M5A 0P6
T +1 416 348 0400 • F +1 416 348 0401
INFO@COREARCHITECTS.COM
WWW.COREARCHITECTS.COM

2022