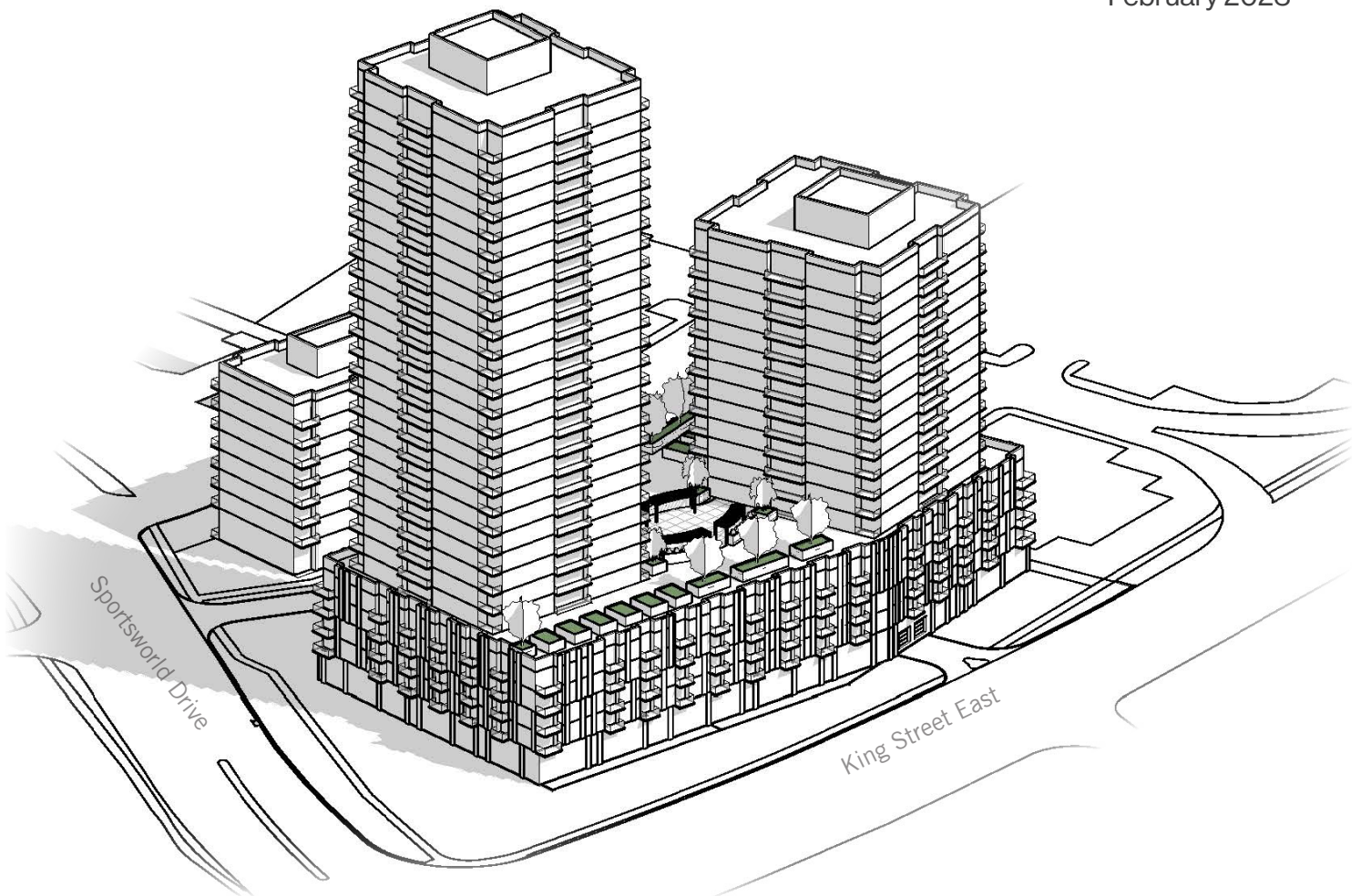


REVISED URBAN DESIGN BRIEF

4396 King Street

City of Kitchener
Official Plan Amendment
Zoning By-law Amendment

February 2023



Prepared for:

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Aerial view of the Site

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Overall Site Context - Aerial view

1. BACKGROUND AND PURPOSE

1.1 Project Background

Taylorwood Construction Limited owns 4396 King Street East (a small strip commercial development) at the corner of King Street East and Sportsworld Drive as well as 25 Sportsworld Drive (property immediately to the north that previously contained the Pioneer BBQ restaurant. The Site is approximately 1.05 hectares in area and is part of the Commercial Campus in the Sportsworld Drive area.

In late 2017 and 2018 Taylorwood began a Site Plan Approval process for the northern property (formerly the restaurant) and looked at options to develop the Site for drive through restaurants and commercial developments in demand to market needs at the time. After working through a variety of options with City of Kitchener planning staff, Taylorwood concluded that the best option for the Site is to consolidate the two parcels and consider a more intensive development that looks beyond short term commercial opportunities and starts to create a more complete community in this area building on the proposed rapid transit system.

In May of 2018, The Region of Waterloo confirmed an alignment for the extension of the ION LRT system from Kitchener to Cambridge which includes traversing this area along King Street East and establishing a station about 300 metres west of the subject Site on King Street East.

A higher density redevelopment of the Site recognizes a number of factors at play, both contextually and with respect to the Site, including:

- The King/Sportsworld area is maturing and the area is no longer between Kitchener and Preston.
- Commercial markets are changing and there is less demand for “bricks and mortar” as evidenced by the vacancies in the area as well as the inability of Sportsworld Crossing to complete its retail component.
- In addition to the retail space in the area, there is an office component and in total a lot of jobs are available close to the Site. The Cambridge business park is also located very close and easily accessed from Sportsworld Drive.
- The Site is very close to Highway 401 for residents who may need to commute out of town for work.
- The extension of the LRT service as well as the nearby local and regional bus terminal gives this area significant transit infrastructure.

An Official Plan amendment and zoning by-law amendment are required to facilitate this development. The proposed Official Plan Amendment seeks to redesignate from Commercial Campus to Mixed-Use (MIX-3 zone). The MIX-3 Zone permits a wide range of commercial uses, such as retail, restaurants, and offices. Dwelling units are permitted in both mixed-use buildings as well as multiple residential buildings.

1.2 Project Scope

This Urban Design Report is prepared for an Official Plan amendment as well as a Zoning By-law amendment for the Proposed Development, required per the December 2019

Pre-Submission Consultation. The Kitchener Official Plan defines an Urban Design Report as follows: *“an urban design document that may be required of an owner/applicant to demonstrate how a development application implements the City’s Urban Design Manual”*.

1.3 Subject Site

The Site is approximately 1.05 hectares in area, located at the intersection of King Street East and Sportsworld Drive. The Site has dual frontages and is trapezoidal in shape, with approximately 118 metres of frontage along King Street East and approximately 126 metres of frontage along Sportsworld Drive.

The southern portion of the Site - 4396 King Street East - is currently occupied by a 1-storey commercial retail building containing approximately 1,400 m² (72m length by 20m depth), set back approximately 37m from King Street East, and 25m from Sportsworld Drive. The building is serviced by a parking lot of an approximately similar size to the building footprint, as well as additional parking perpendicular to Sportsworld Drive. A drive through lane, parallel to King Street East, offers drive through access to the Tim Hortons restaurant located at the south east corner of the building.

The northern portion of the Site - 25 Sportsworld Drive - is currently vacant, with the footprint of the former building (Pioneer BBQ restaurant) still visible, along with surrounding parking areas. An asphalt road and row of coniferous trees demarcates the transition between the two sites.

1.4 Proposed Development

The Proposed Development is a high-density mixed-use project comprising of residential and commercial uses at-grade, with a total of 616 dwelling units. Phase 1 of the Proposed Development includes a 8-storey residential building at the north end of the Site, containing 88 units. Phase 2 includes a podium tower development fronting King Street East, featuring two residential towers of 30-storey and 18-storey, with a combined total of approximately 528 units, siting atop a 5-storey podium with commercial frontages. The Proposed Development features indoor and outdoor amenity areas for resident use. Vehicular access is from Sportsworld Drive for Phase 1 and Phase 2 and this driveway access leads to a drop off area. The access from King Street East is for Phase 2 that leads to structured parking, integrated into the podium and out of public view.

1.5 Content

Taylorwood Construction Limited is currently proposing a mixed-use development on the property at 4396 King Street East (“the Site”) in Kitchener. The Urban Design Report reflects the scope identified in the pre-submission consultation record of the December 19th, 2019 Pre-Submission Consultation Meeting, including:

- A full Wind Study including snow deposition analysis;
- A complete Shadow Analysis;
- A Tall Building Analysis including a discussion of how the proposal meets City design requirements and rationale;

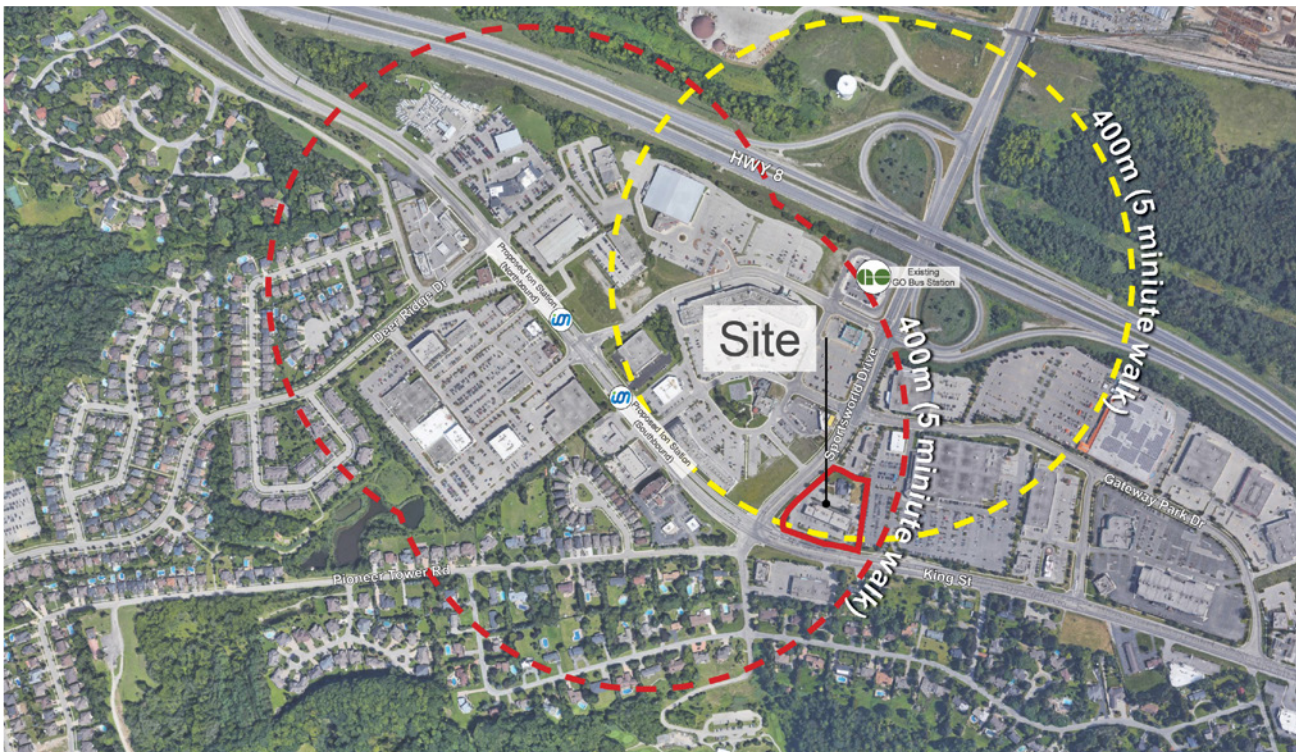
- 3D massing model including preliminary building elevations and anticipated building materials;
- Discussion and assessment of compatibility and contextual fit of the proposal into the existing and planned neighbourhood including a discussion of overlook/ privacy concerns, contribution to city skyline and impacts to views and sightlines;
- Discussion of the proposed massing, scale, design and character including distinction of the base / middle / top portions of the building, articulation, stepbacks/ projections and property setbacks;
- Assessment of functional considerations such as private and common amenity space;
- Discussion and assessment of proposed sustainability measures for the development;
- Preliminary Noise Assessment to inform building design and amenity space location.
- Fosters walkability by creating pedestrian-friendly environments that allow walking to be a safe, comfortable, barrier-free and convenient form of urban travel
- Supports high quality public realm to enhance the identity of the area and create gathering points for social interaction, community events and other activities
- Provides access from various transportation modes to the transit facility, including consideration of pedestrians, bicycle parking, and passenger transfer and commuter pick-up / drop off areas
- There is a serious deficiency of accessible parkland to serve this development, and therefore on-site amenity space should be maximized both at-grade and within available rooftop spaces. At-grade spaces will need to be protected from both King St. E. and Sportsworld Drive, which are both heavily traveled and very wide streets.

KEY POINTS - RECORD OF PRE-SUBMISSION CONSULTATION

- Support for high density development since Site is within a Major Transit Station Area due to being within approximately 300m of a planned ION station platform (Sportsworld Cross Rd @King Street East)
- There is very little local park spaces, especially play areas. On-site amenity spaces should be maximized.
- Lack of public parks / amenity space in this neighbourhood, means there is a higher value placed on-site amenity space. Private amenity space should be maximized.

Transit Oriented Development (Integrated Transportation System section) provisions including:

- Interconnected and multi-modal street pattern that encourages walking, cycling or the use of transit and supports mixed use development



2. CONTEXTUAL FIT

2.1 Neighbourhood Context

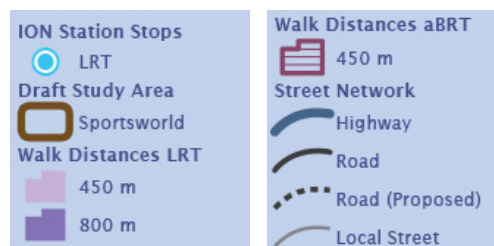
The Site is part of the Sportsworld Draft Station Study Area, included in the Planning Around Rapid Transit Stations (PARTS) study by the City of Kitchener.

This area “encompasses approximately 40 hectares of land south of the Sportsworld ION Station Stop and generally extends to Gateway Park Drive and Heldmann Road and is intersected by Highway 8. There are currently no people living within the draft station area and, using the assumptions employed by the Kitchener Growth Management Strategy, it is estimated that there are 512 jobs located within the draft station study area for a calculation of an average of 13 jobs per hectare (p.103).

The PARTS Sportsworld Study Area identifies the following existing conditions in the area: 37% of land within the Sportsworld Draft Station Study Area is designated Business Park and 63% of land designated Planned Commercial Campus in the current Official Plan and is generally in consistent with the existing zoning; buildings cover approximately 5% of the land within the focus area which are mainly dominated by low rise, large format commercial and office uses with large areas of surface parking and underutilized retail uses with limited sidewalks that adds little to a quality streetscape; there are no parkland and a City owned community facility (Sportsworld Arena) currently exists within the station focus area; 13% of land within the Sportsworld draft station study area is designated Natural Heritage System; and an increase in transit ridership is anticipated, hence the Sportsworld draft station study area will be served by existing and future transit services.



PARTS Plan: Sportsworld Station Study Area



2.2 Immediate Context

1 North

The Site abuts two 1-storey retail buildings serviced by a parking lot to the north. There are two entry/exit points to the property: one from Sportsworld Drive and other from Gateway Park Drive. The Site also offers a drive through ATM service at the corner of Sportsworld Drive and Gateway Park Drive.

2 East

The abutting property to the east 4438 King St East is a 1-storey Costco building, with a large paved surfaces and parking lot that extends the length of the whole block between King Street and Gateway Park Dr. The Costco building is located at the rear end of the property with back facing to Gateway Park Dr. and is surrounded by surface parking on all sides and a 1-storey retail store closer to the access point along Gateway Park Drive.

3 South

Immediately to the south is a commercial plaza similar in scale to the Site. Adjacent to and beyond this plaza is a residential neighbourhood, primarily comprised of single detached houses. These houses do not have frontage along King Street East and are accessed by side streets.

4 West

Directly abutting the Site to the west is Sportsworld Drive. The existing cross section of Sportsworld Drive at this location has two-lanes with sidewalks on either side.

Across Sportsworld Drive is the Sportsworld Crossing Plaza which includes a few restaurant and retail spaces, all fronting along King Street East. There is a single storey Mc Donald's , situated at the corner of Sportsworld Drive and Gateway Park Dr.



Immediate Context - Aerial view



View looking from King Street East sidewalk.



View looking from the internal driveway at the south-east corner of the Site.





View looking from the corner of Sportsworld Drive and King Street East towards the Site.



View looking from the south-west corner of the Site towards Sportsworld Drive and King Street East intersection.





View looking from north-west side of the Site at 25 Sportsworld Drive.



View looking from north-east side of the Site at 25 Sportsworld Drive.





View looking from Sportsworld Drive sidewalk towards the Site.



View looking from the Site towards Sportsworld Drive.



3. DESIGN POLICY AND GUIDELINE REFERENCES

3.1 Official Plan

The City of Kitchener Official Plan (2014) designates the Site as “Commercial Campus” (COM-4 Zone). The COM-4 Zone does not permit residential uses, therefore a Zoning By-law Amendment is required to facilitate the proposed development.

The Official Plan Amendment proposes to change the designation of the Site from Commercial Campus (COM-4 Zone) to MIXED USE (MIX-3) ZONE. The MIXED USE policies are intended with flexibility to permit a broad range of uses at different scales and intensities. The Mixed Use policies (15.D.4) specifically indicate that *“development and redevelopment of properties will be encouraged to achieve a high standard of urban design, be compatible with surrounding areas, be transit-supportive and cycling and pedestrian-friendly”*.

The proposed redevelopment supports the policy direction by providing further uses and density to the site, that are compatible with the surrounding area and supports alternative modes of transportation.

3.2 General Urban Design Policies

Section 11 of the Official Plan contains general urban design policies that are used to evaluate movement patterns, the relationship between built form and open spaces, integration of natural and cultural resources and development impacts. They include:

- General urban design policies that speak to the city’s skyline, CPTED principles, fire prevention, barrier-free accessibility, and shade.
- Site Design policies speak to the building’s street relationship landscaping to improve the streetscape; developments to improve aesthetic quality and be safe, comfortable, functional and provide circulation for all transportation modes; and site servicing and utilities to be screened from view from the public realm.
- Building Design, Massing and Scale design policies speak to human-scale proportions to support a comfortable and attractive public realm, including attractive building forms, facades, and roof designs; complementary design of new buildings; and architectural innovation and expression.

Section 17.E.10.5 identifies that urban design briefs together with other design-related are meant to be used to

a) demonstrate that a proposed development or redevelopment is compatible;

b) address the relationship to and the privacy of adjacent residential development; and,

c) ensure compatibility with the existing built form and the physical character of the established area and/or neighbourhood.

3.3 Urban Design Manual

PART A – Design Guidelines

Part A contains design guidelines on various land uses, built types, geographic areas, and urban structure elements. The following topics of design guidelines are relevant to the Site and the proposed building.

a) City-Wide

The City-Wide design guidelines apply to Kitchener as a whole. The main objective of these guidelines is to ensure Kitchener is designed as an inclusive, safe, accessible, comfortable and appealing place to live, work and play. Guidelines are divided into Community Design and Site Design. The Community Design guidelines are primarily used by the City in designing the form and structure of communities through the application of design best practices in a range of topics. The Site Design guidelines address built form, open space and site functionality.

b) Nodes & Corridors

The Nodes & Corridors design guidelines apply to specific areas marked within Kitchener servicing as community focal points. These guidelines have general objectives to support high-quality sustainable development and are broken down into node and corridor classification. The Site is identified within a Neighbourhood Node, projected to serve commercial needs for the surrounding residential areas.

c) Major Transit Station Areas

The Major Transit Station Areas guidelines apply generally for areas surrounding ION Stations. The Site is within such an area, being 300 to 400 metres to the Kitchener Market

Station. Although the guidelines indicate they do not apply to sites subject to the Downtown guidelines, they are germane to the Proposed Development and inform design.

d) Structured Parking

The Structured Parking guidelines apply to the development of above-grade parking structures within Kitchener. The Proposed Development includes six levels of podium parking. The Guidelines are to ensure promote compatibility with the surrounding built form and address materials, articulation, massing and public realm design.

e) Tall Buildings

The Tall Buildings guidelines guide the design of tall buildings in the city, which are defined as those greater than 8 storeys in height. These guidelines are meant to be read in conjunction with the policies of the Official Plan and guidelines of the Urban Design Manual and are meant to be applied on a case-by-case basis.



URBAN DESIGN GUIDELINES MANUALS - PART A

4. SITE AND BUILDING DESIGN OVERVIEW

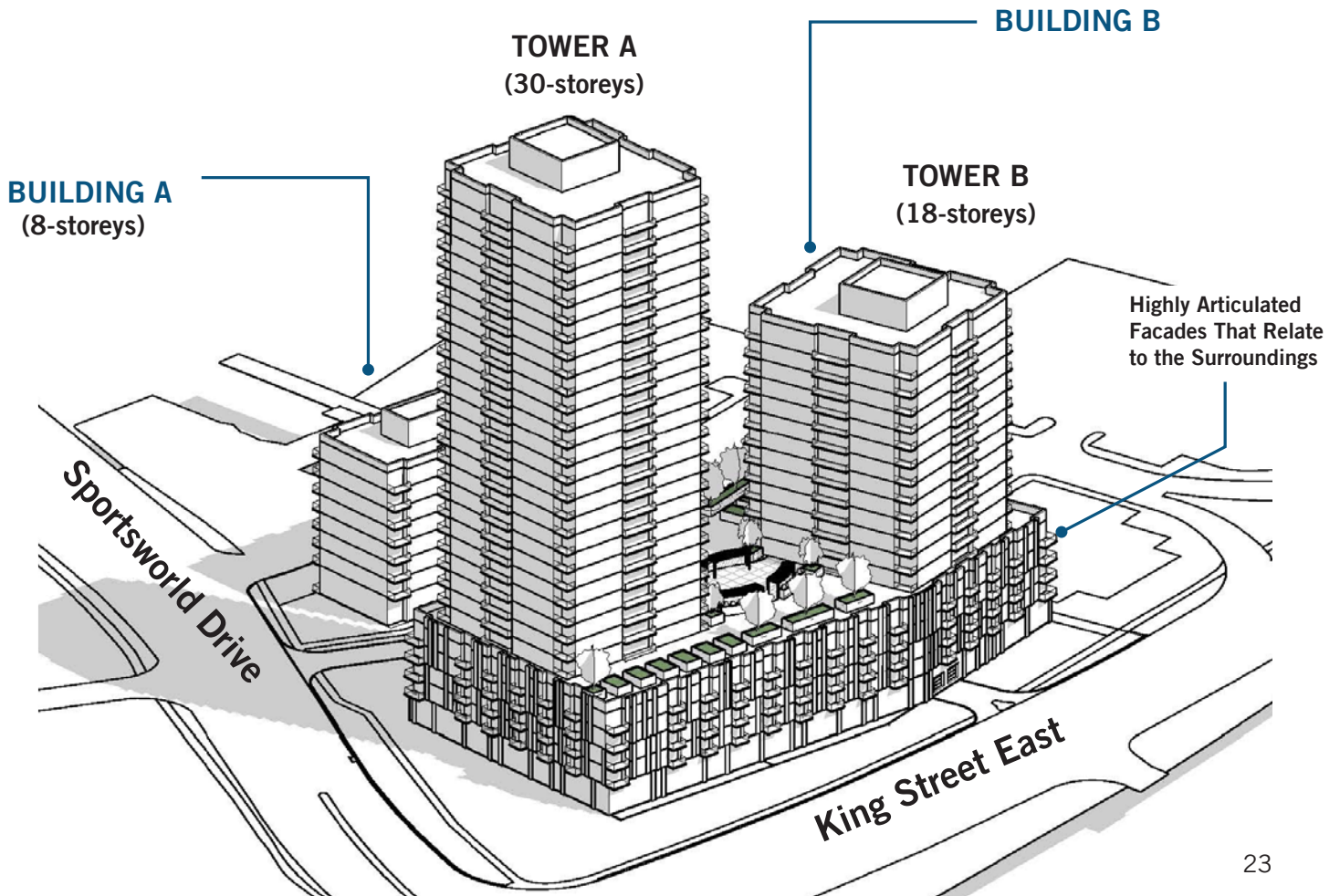
4.1 Building Positioning

The Proposed Development (Buildings A and B) is developed on a trapezoid-shaped Site with two different axes, measuring approximately 120 metres along King Street and Sportsworld Drive. Building A is positioned on the northern portion of the Site, set back 3.3 metres from the property line fronting Sportsworld Drive and 7.5 metres from the northern property line.

Building B is positioned at the intersection of King Street and Sportsworld Drive, set back between 3 and 4 metres. The proposed building (Building A and B) are set back 6.4

and 3 metres, respectively, from the eastern property line shared with adjacent property.

The building's positioning sets the envelope for the building's architecture and ground floor uses to assist in creating a vibrant streetscape along King Street East and Sportsworld Drive. The proposed at-grade retail and lobby functions close to the street will assist with animating the street edges. The highly transparent ground floor exterior on the activity focal points along King and Sportsworld, outlined in the following sections, provides visibility between building interiors and public sidewalks.



4.2 Building Scale and Massing

The Proposed Development's massing and height are generally focused in the southern portion of the Site, along King Street and Sportsworld Drive. The Proposed Development (Buildings A and B) has a collective gross floor area of 64,128.5 square metres (above grade), resulting in an FSR of 6.1.

Phase 1 of the Proposed Development (Building A) includes a 8-storey, residential building measuring 26.4 metres from ground floor to the 8th floor top (plus 4.0 metres to a recessed mechanical penthouse). The proposed Building A has a total of 88 units, a mix of 1-bedroom and 2-bedroom typical floor plans ranging from 540 square feet (50 square metres) to 940 square feet (87 square metres). Building A features dwelling units on all floors, with a small portion of the first floor dedicated to a lobby, amenity areas, bike storage, garbage, move-in space and utilities.

Phase 2 includes a podium tower development (Building B) fronting King Street, including two residential towers of 25-storey and 13-storey atop a 5-storey podium.

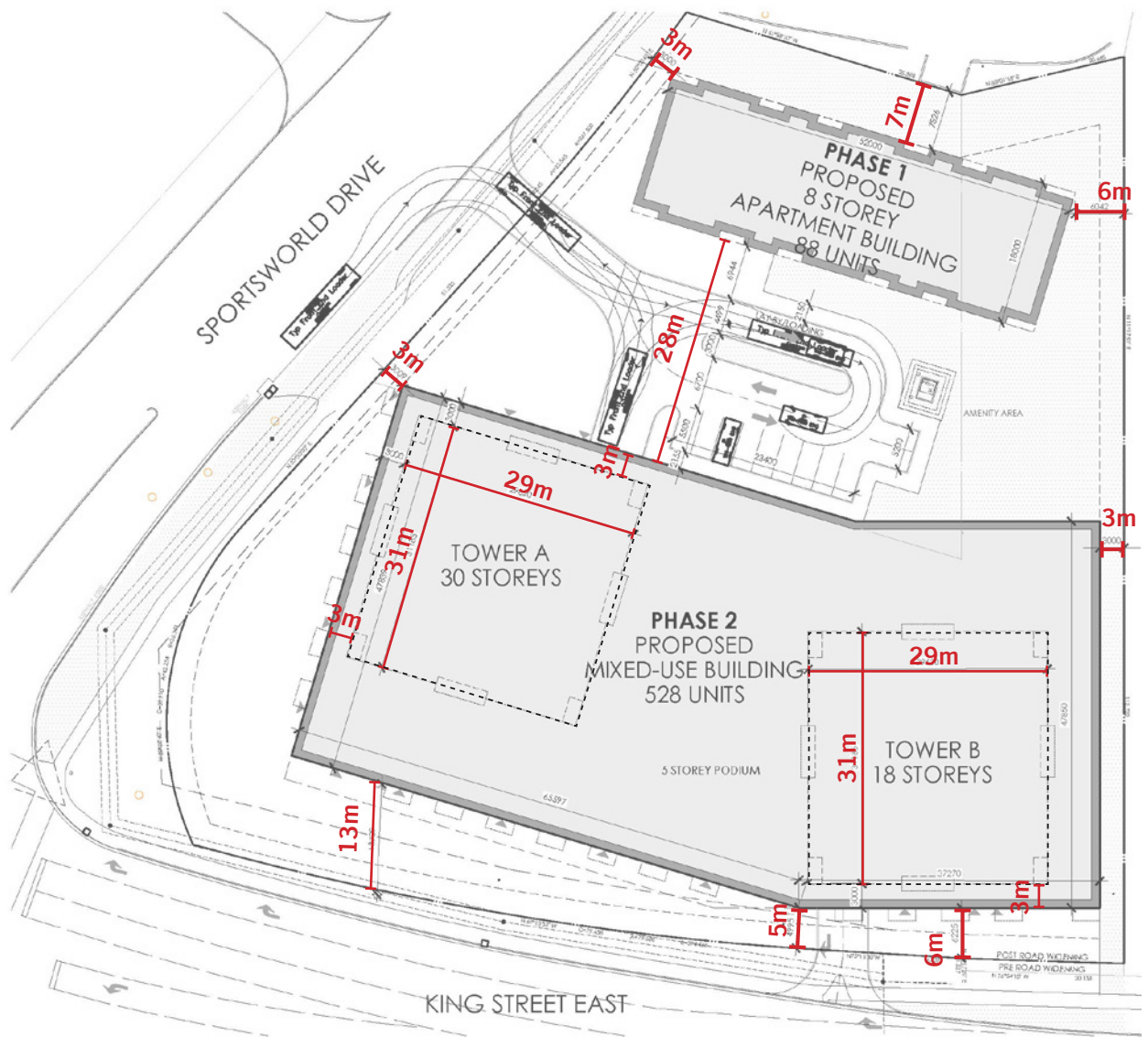
The 5-storey mixed use podium measures at 18.9 metres from ground floor to the 5th floor roofline with at-grade commercial units along King Street East and Sportsworld Drive. The podium's ground floor along King and Sportsworld is lined with continuous commercial units. The commercial area will be comprised of a series of individual units with direct accesses to the sidewalk.

The proposed Building B has two distinct towers to break up the building mass which

contributes to an interesting skyline, and minimize impacts on surrounding properties. The towers (A and B) are positioned atop the podium with a substantial setback from King and Sportsworld. The two towers rise in a slender fashion with a square-shaped, 878.9 square metres footprint, measuring 31.2 metres by 29.6 metres wide. This slender form coupled with towers setbacks minimize shadow and wind impacts per the supporting assessments.

The towers (A and B) contain 509 residential units (528 units in total, includes podium and towers) with a mix of 1-bedroom and 2-bedroom units, typical floor plans ranging from 540 square feet (50 square metres) to 1455 square feet (135 square metres). Preliminary floor plans show individual unit balconies for both podium and towers.

The building has a communal rooftop terrace on the podium rooftop, wrapping the tower base on all sides. It will provide a range of recreation, activity and relaxation opportunities for residents.



SITE PLAN SHOWING SETBACKS AND STEP-BACKS

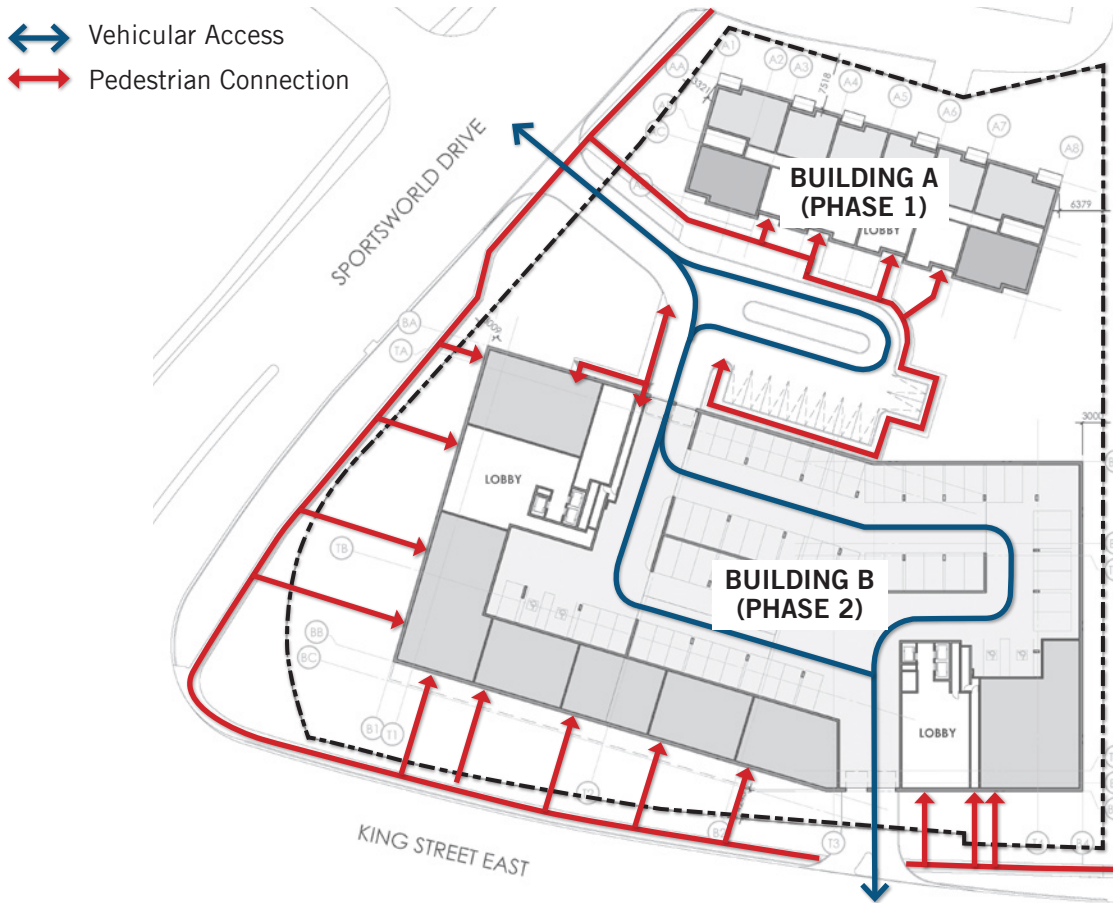
4.3 Access and Circulation

Building positioning on the Site provides direct vehicular and bicycle access to the buildings from the bounding streets and sidewalks. Vehicular access to the Site is proposed via two driveways: one from King Street and; other from Sportsworld Drive. These two driveways provide vehicular access to the surface and below-grade parking. Building entrances (commercial and residential) are easily accessed by public sidewalk along the King Street and Sportsworld Drive.

The Site, including Phase 1 (Building A) and

Phase 2 (Building B), provides an integrated walkway system and barrier-free pathways are proposed to connect building entrances from the public sidewalk. The entrance to Building A lobby is mid-building, accessed from the internal driveway.

The Building B has two lobby entrances to the residential units which can be easily accessed from King Street and Sportsworld Drive. The entrance to the smaller commercial units are located along King Street and Sportsworld Drive, accessed from multiple walkways leading into concrete walkway lining the building.



PEDESTRIAN AND VEHICLE CIRCULATION THROUGH THE SITE

4.4 Loading and Service

Loading and services entrances for the Site are accessed from Sportsworld Drive, aligned with surface parking. An internal garbage, loading and service room is located on the ground floor of Building A facing the internal shared driveway. Emergency service vehicles are accommodated through the surface parking area. Storage areas are provided in the podium of Building B.

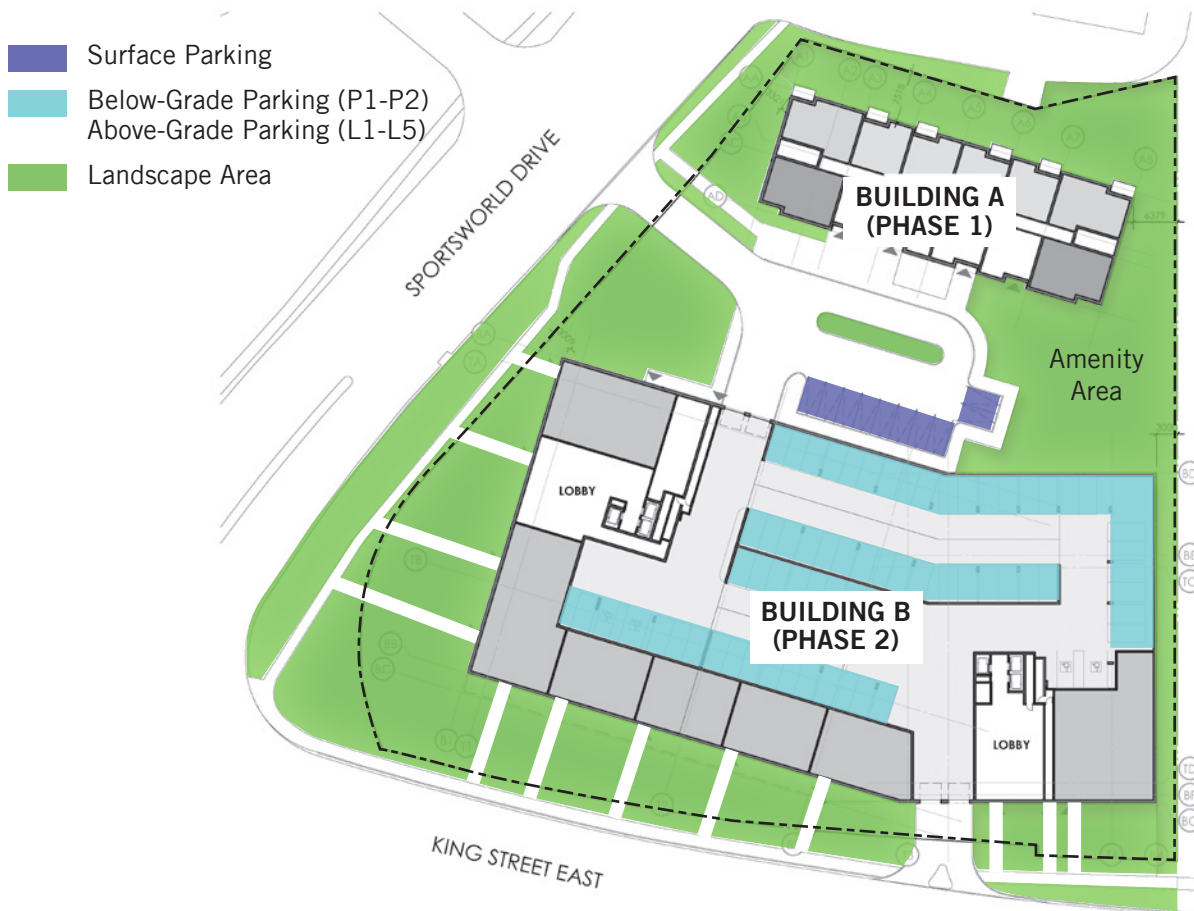
4.5 Car Parking

The Proposed Development includes at-grading parking along with two levels of underground parking and five levels above-grade parking

within the building podium.

Parking in Building B is contained within an integrated parking garage. The proposed parking plan consists of 11 surface parking, 228 on two levels of underground parking and 357 located above grade (Level 1-5) structured parking contained within the proposed building footprints. The parking garage is accessed from both King and Sportsworld.

The proposed parking spaces are inclusive of barrier-free spaces, visitors and commercial parking and electric vehicle parking. All parking are located behind the face of the building and not visible from the streets.

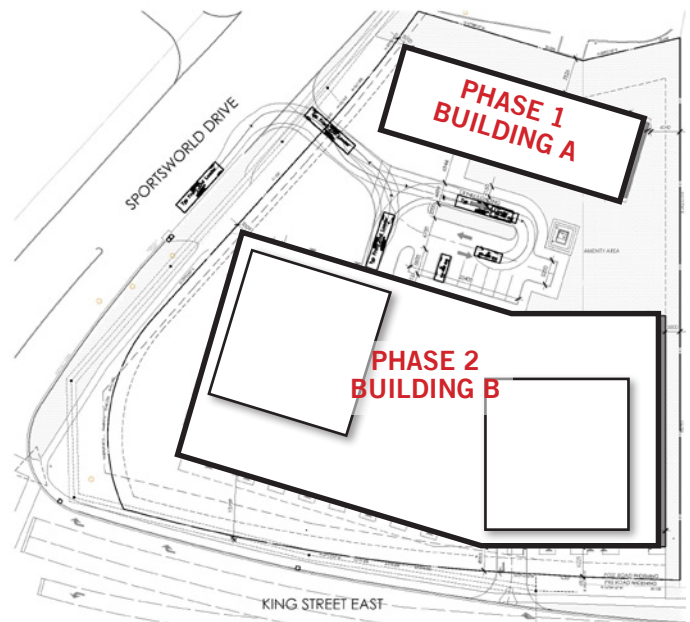
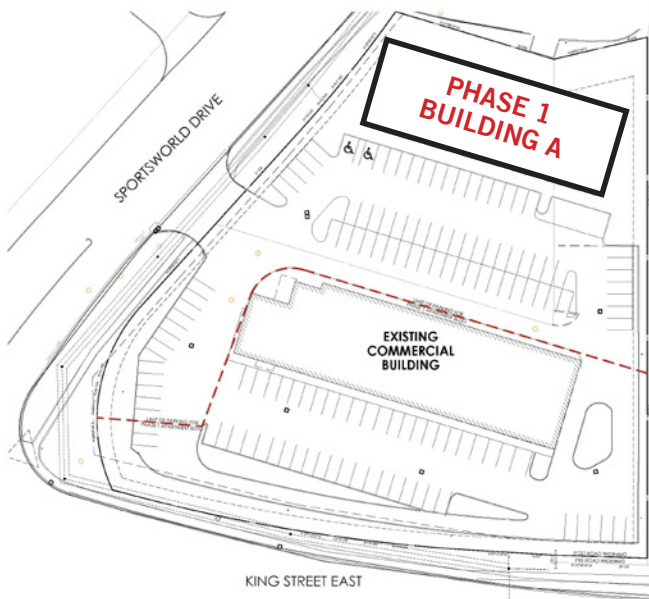


PARKING LAYOUT THROUGH THE SITE

4.6 Bicycle Parking

For Building A, an indoor bicycle storage room is provided at-grade, accessed externally by the pathway along the building's edge.

For Building B, the indoor bicycle storage rooms are provided within the integrated parking garage.



DEVELOPMENT OF THE PROPOSED BUILDING (A AND B) PHASES

4.7 Streetscape and Landscape Design

Detailed landscape plans have not been explored at this time. The building positioning, ground floor commercial units, and glass transparency support an animated streetscape along King Street and Sportsworld Drive. There are opportunities for comprehensive landscape treatments that contribute to an attractive, pedestrian-oriented streetscape.

The streetscape will be designed to encourage pedestrian connectivity to the public realm and create emphasis at the commercial and lobby entrances. The building design provides pedestrian protection from weather elements through extended overhead canopies at grade, strategically placed and designed across the site to further enhance the pedestrian

experience. In addition, there will be a high concentration of windows and entrances along both the King Street East and Sportsworld Drive streetscape to further activate the streets and provide visual interest.

Conceptually, this includes street trees in curbside boulevards along Sportsworld Drive and building foundation plantings lining the two street-facing edges with planted beds of trees, shrubs and perennials. The substantial width along Sportsworld Drive between building edge and curb edge allows for street trees and foundation plantings bed in depth as well as hardscaped spaces with seating elements for outdoor use.



CONCEPTUAL ROOFTOP TERRACE PLAN - BUILDING B
Source: ABA Architects

The provision of indoor and outdoor amenity spaces offers private open space for building residents that supplement park and open space requirements. Outdoor amenity features are intended to provide space for play, gathering, sitting, and activity. The intervening space at grade between the two buildings provides opportunities for outdoor amenity area for passive and active social gatherings for the residents. Building A's ground floor contains two indoor amenity rooms of 87 square metres each, with access to the outdoor space. The outdoor space will provide a range of recreation, activity and relaxation opportunities for residents such as space for a shade structure and cluster seating to accommodate various group sizes and families, with the remainder of the space proposed as a playground for children to use and enjoy.

The above-grade amenity areas consist of the rooftop communal terrace on the 6th floor and indoor amenity space on every floor of the towers (for both Towers A and B) ranging in size from 55 to 59 square metres. The towers are spaced around the podium which will assist in allowing natural light to spill into the rooftop amenity areas. The rooftop outdoor amenity space is directly visible and accessible from the indoor amenity rooms. A detailed landscape design plan for the rooftop terrace has not been explored at this time. Conceptually, this rooftop amenity area is principally a hard surface treatment of deck pavers for durability and ease of maintenance. Soft landscape treatments are added through raised massed planted beds, including deciduous canopy trees within the beds and standalone, together with movable planters around the perimeter of the

terrace. A large pergola structure in the middle is proposed, to promote the dispersement and deflection of wind and create a suitable microclimate within that area.

Indoor amenity uses shall be determined at Site Plan application. At a minimum, indoor amenity spaces shall include a gym and theatre/party room. Indoor amenity space on the ground floor provides larger spaces for residents to gather and use for socializing and relaxation.

Overall, the Proposed Development includes a combined total of 2,300 square metres of amenity areas (exceeding the required 1,230 square metres of amenity area). Of this, approximately 1000 square metres is outdoor amenity areas; 900 square metres is at-grade landscaped amenity area; approximately 174.6 square metres of indoor amenity area for Building A; and approximately 231.8 square metres of indoor amenity areas for Building B.



Representative example of Galet Seating Arrangement



Representative example of Podium furnishings with Shade Structure to support passive/social recreation



Representative example of Children's Outdoor Play Structure



Representative example of Raised Planters Beds

PRECEDENT IMAGES OF OUTDOOR ROOFTOP AMENITIES

4.8 Building Materials and Articulation

Building materials are preliminary at this time and will be refined as the detailed design progresses.

transparency is accommodated along all building elevations, with a particular emphasis on the ground floor plane.

The following pages illustrate the design inspiration that will inform the detailed design at the Site Plan Approval stage. The architectural style is intended as a clean, contemporary look for the building. The images show a masonry-based or metal panel emphasis with aluminum framed window system and guardrails. Combinations of lighter and darker natural colours set the base with an emphasis on symmetry and a grid-like pattern to provide texture to the elevations. A high degree of

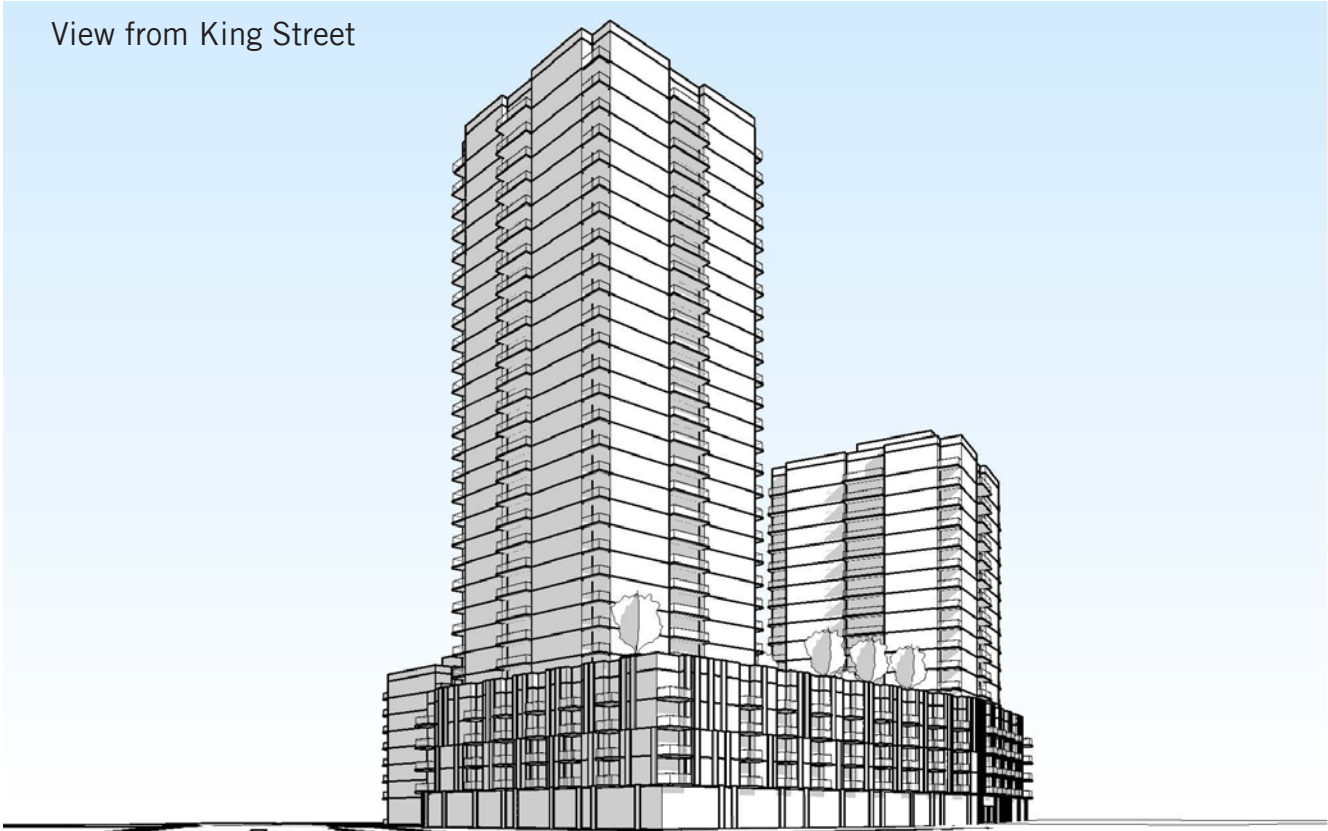


MATERIALS AND DETAILING INSPIRATIONS

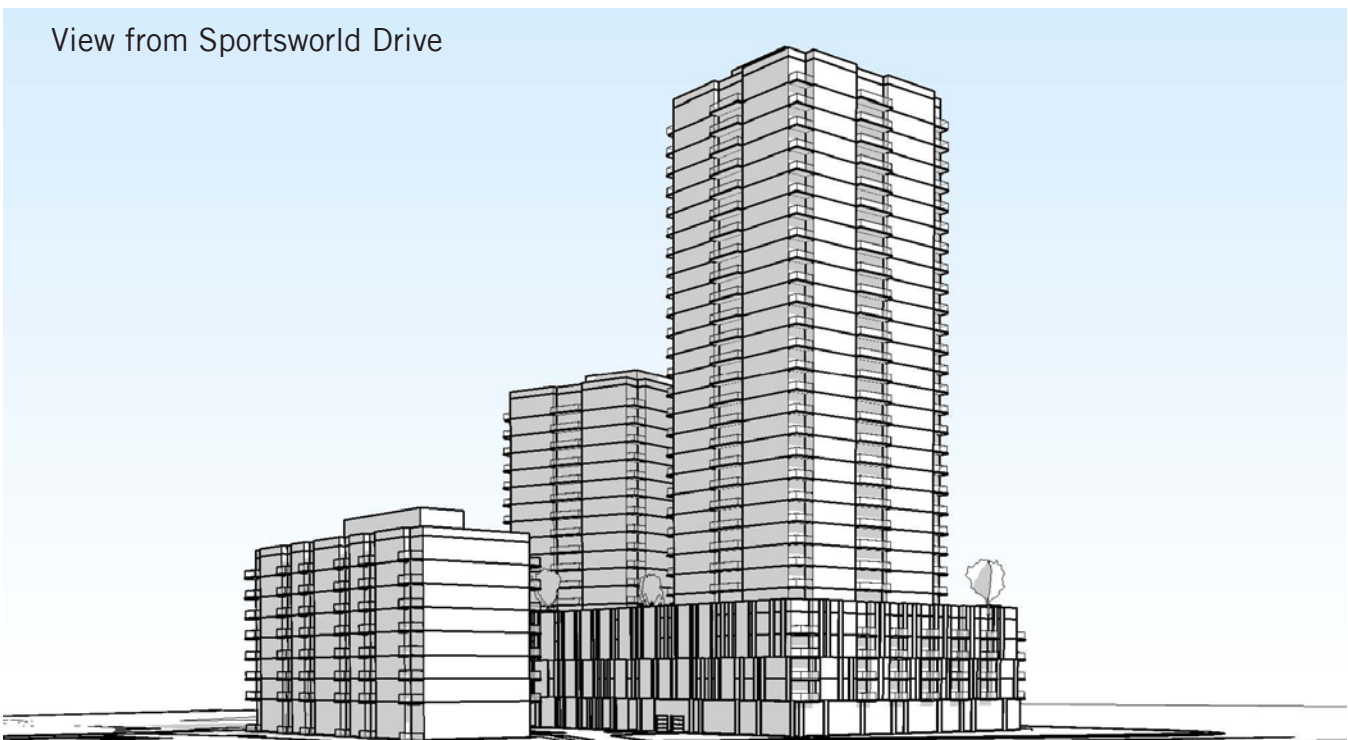


MATERIALS AND DETAILING INSPIRATIONS

View from King Street



View from Sportsworld Drive



PERSPECTIVE VIEWS

Source: ABA Architects



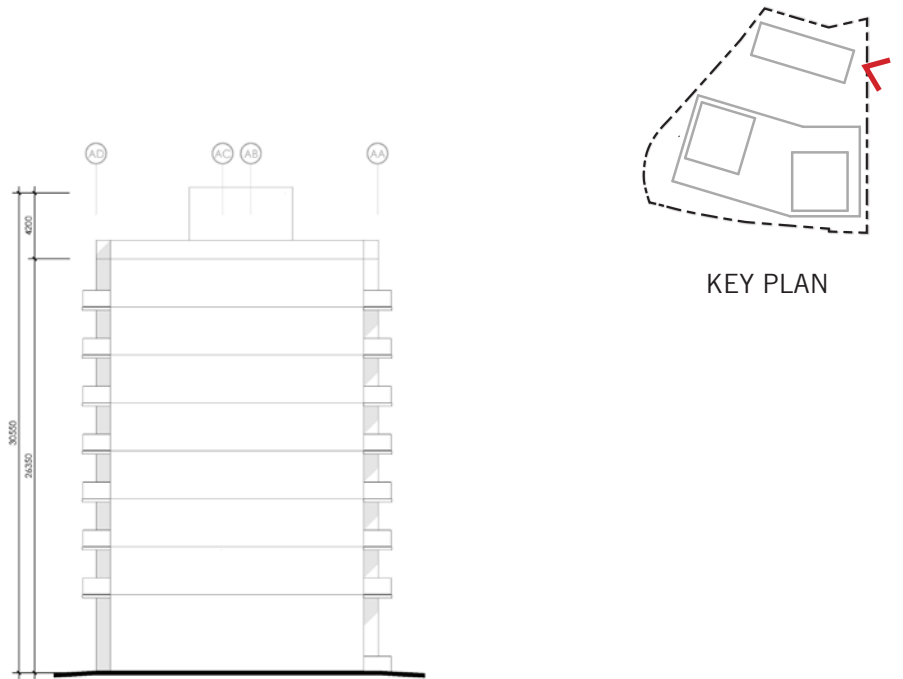
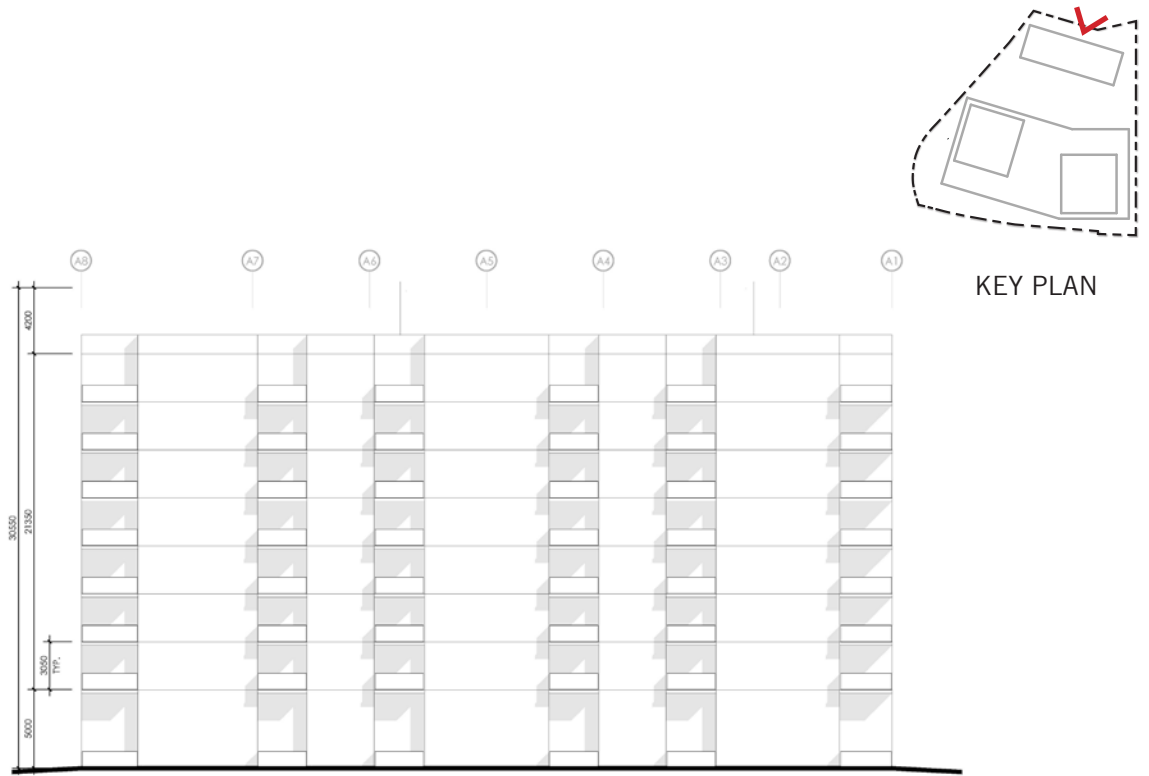
GROUND FLOOR PLAN (LEVEL 1) - BUILDING A

Source: ABA Architects



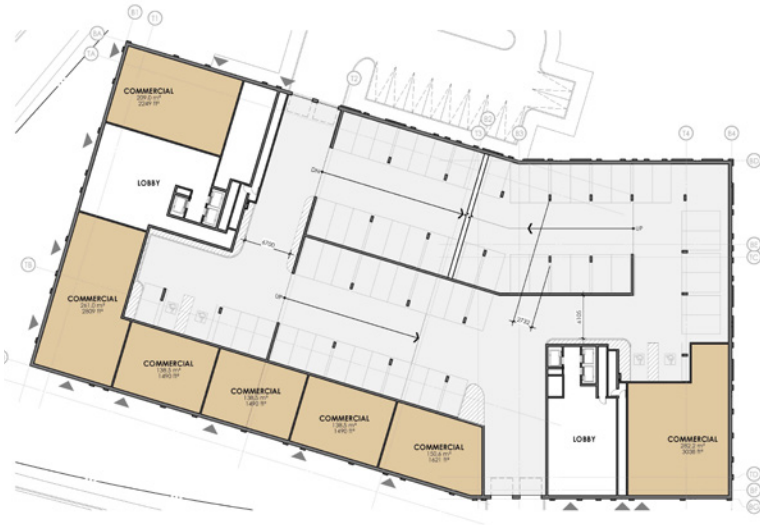
TYPICAL FLOOR PLAN - BUILDING A

Source: ABA Architects



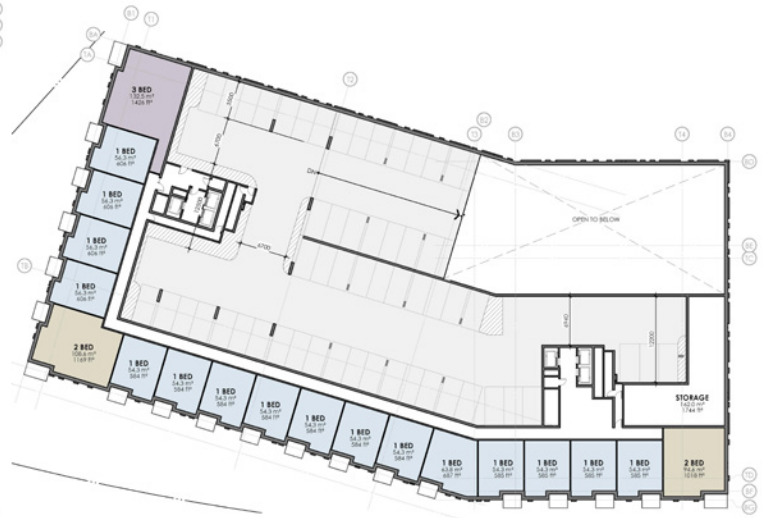
MASSING ELEVATIONS - BUILDING A

Source: ABA Architects



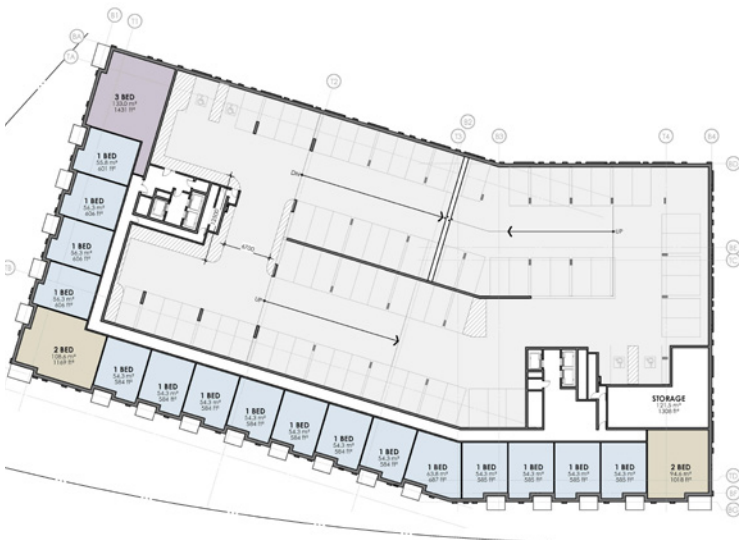
GROUND FLOOR PLAN (LEVEL 1) - BUILDING B

Source: ABA Architects



TYPICAL PODIUM PLAN (LEVEL 5) - BUILDING B

Source: ABA Architects



TYPICAL PODIUM PLAN (LEVEL 2-4) - BUILDING B

Source: ABA Architects



TYPICAL TOWER A PLAN (LEVEL 6-30) - BUILDING B

Source: ABA Architects

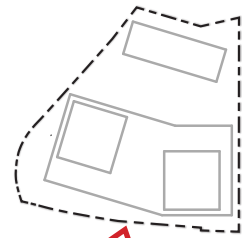
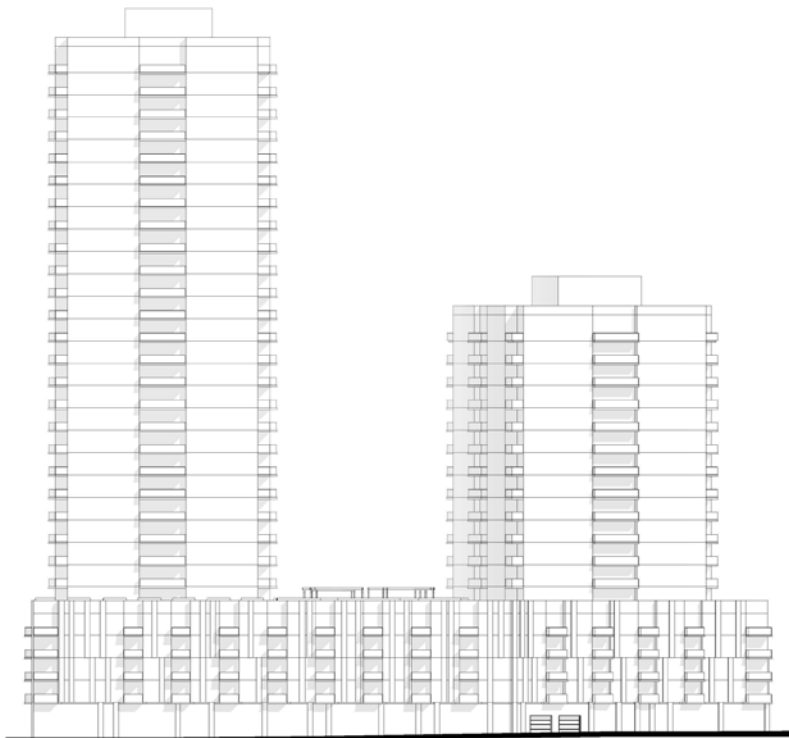
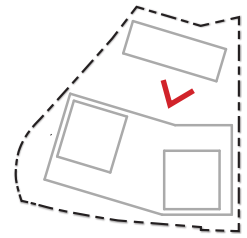
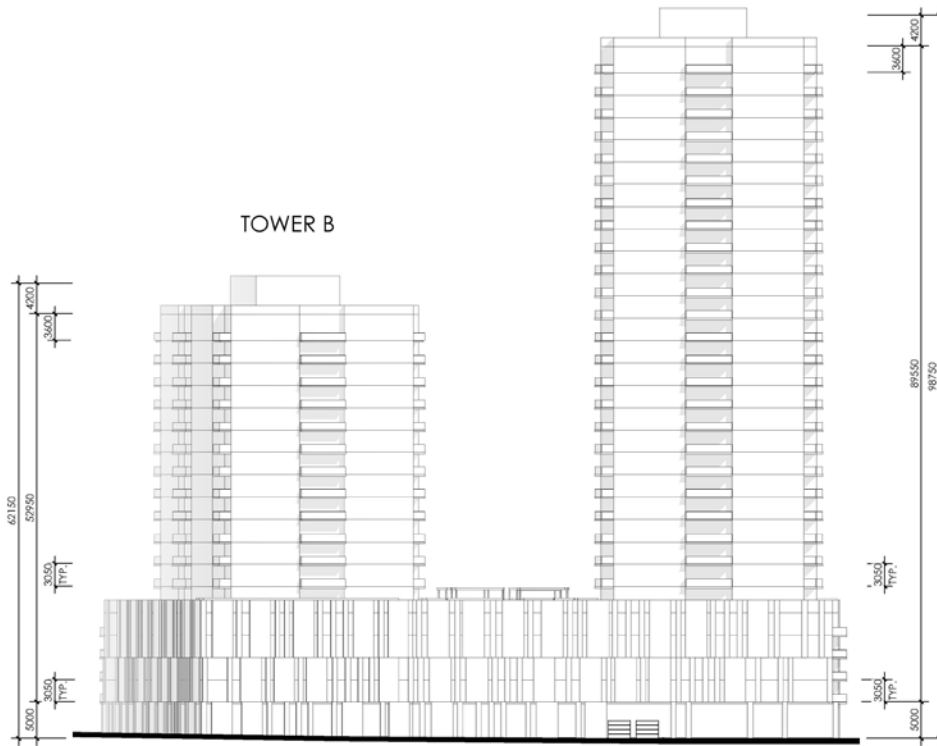
TYPICAL TOWER B PLAN (LEVEL 6-18) - BUILDING B

Source: ABA Architects



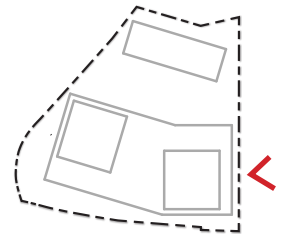
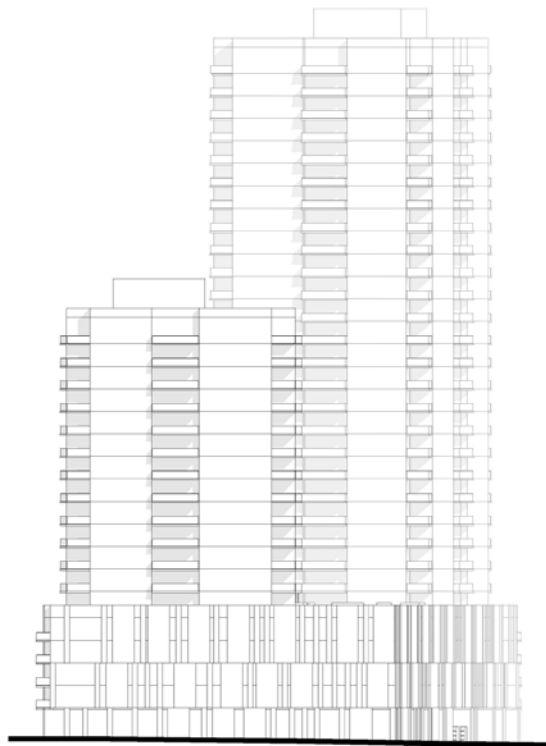
TYPICAL TOWER PLANS (LEVEL 6) - BUILDING B

Source: ABA Architects

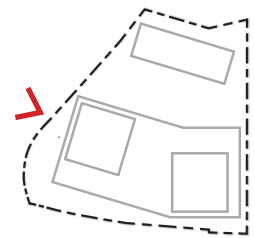
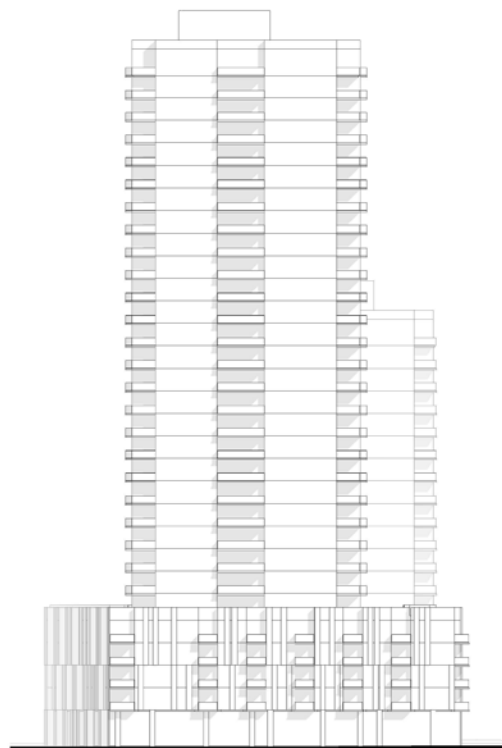


MASSING ELEVATIONS - BUILDING B

Source: ABA Architects



KEY PLAN



KEY PLAN

MASSING ELEVATIONS - BUILDING B

Source: ABA Architects

5. MICROCLIMATE ANALYSIS

5.1 Shadow Analysis

A Shadow Analysis is a complete application submission requirement per the Site’s Pre-Submission Consultation meeting. The Tall Building Guidelines identify that such shadow analysis is meant “to demonstrate how a proposed development is designed to mitigate unwanted microclimatic impacts”.

Generally, acceptable conditions maintain 3 to 4 hours of sunlight on public sidewalks, private amenity areas / rear yards, and public parks and spaces.

Analysis of these shadow impact graphics provided in Appendix A demonstrates the impacts are acceptable and provide sufficient sun exposure to affected properties. Summarizing the graphics, the proposed building:

- Maintains more than 4 hours of sunlight on abutting properties and does not affect any structures or sidewalks.
- Maintains at least 4 hours of sunlight on affected public sidewalks on both sides of Sportsworld Drive on March 21, June 21 and September 21st.

Building Impacts On	Commercial Property (north)	Costco Property (east)	King Street Sidewalk (south)	Sportsworld Sidewalk (west)
March 21	No impacts between 10am to 2pm: partially shaded between 2pm - 6pm (likely 4 hours)	No impacts from 10am to 2pm (4+ hours)	Opposite - No impacts from 10am to 6pm Adjacent - No impacts from 10am to 6pm	Opposite - No impacts generally from 2pm to 6pm Adjacent - No impacts generally from 2pm to 6pm: partially shaded between 10am - 12pm
June 21	No impacts between 10am to 6pm	No impacts between 10am to 2pm: partially shaded at 4pm (likely 4 hours)	Opposite - No impacts between 10am to 6pm Adjacent - No impacts between 10am to 6pm	Opposite - No impacts between 2am to 6pm Adjacent - No impacts generally from 2pm to 6pm: partially shaded between 10 am and 12pm
September 21	No impacts between 10am to 12pm: partially shaded between 4pm to 6pm	No impacts generally between 10am to 2pm: partially shaded at 4pm (4+ hours)	Opposite - No impacts between 10am to 6pm Adjacent - No impacts between 10am to 6pm	Opposite - No impacts between 2am to 4pm : partially shade at 6pm Adjacent - No impacts generally from 2pm to 6pm: partially shaded between 10 am to 12pm

5.2 Pedestrian Wind Analysis

SLR Consulting prepared the Pedestrian Wind Assessment (February 18, 2021) as part of the complete application requirements for the Proposed Development. The Assessment investigated the potential wind comfort and safety conditions resulting from the Proposed Development, based on a qualitative numerical analysis of existing and proposed conditions, and recommends mitigation measures as necessary.

Generally, it concludes that the future wind conditions at-grade within and surrounding the Proposed Development are generally expected to be suitable for the intended usage year-round in the proposed configuration. Strong winds are anticipated near the northwest and southeast corners of the Phase 2 building in the winter, for which mitigation is recommended.

Additionally, the outdoor amenity terrace on Level 6 are expected to be windier than desired in some areas, particularly between the towers, in the summer, for which mitigation is recommended. Satisfactory wind speeds can be achieved through mitigation measures, which will be addressed through Site Plan Approval. Mitigation measures may include recessed retail entrances, installation of canopies or pergola, fences and/or trellises.



Figure 9a: Proposed Configuration – Pedestrian Wind Comfort – Summer – At Grade

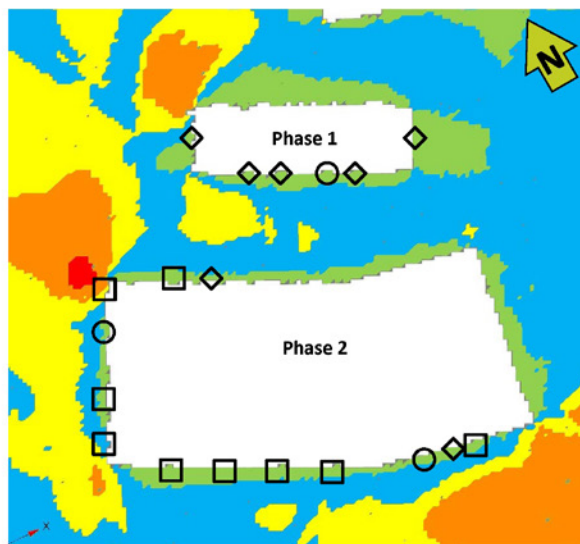
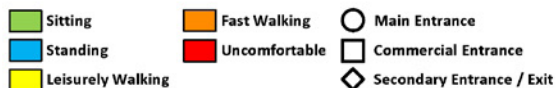
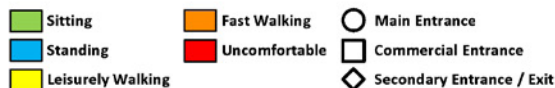
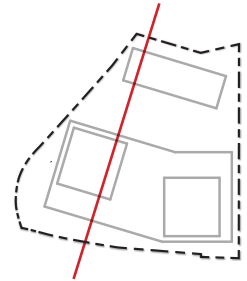


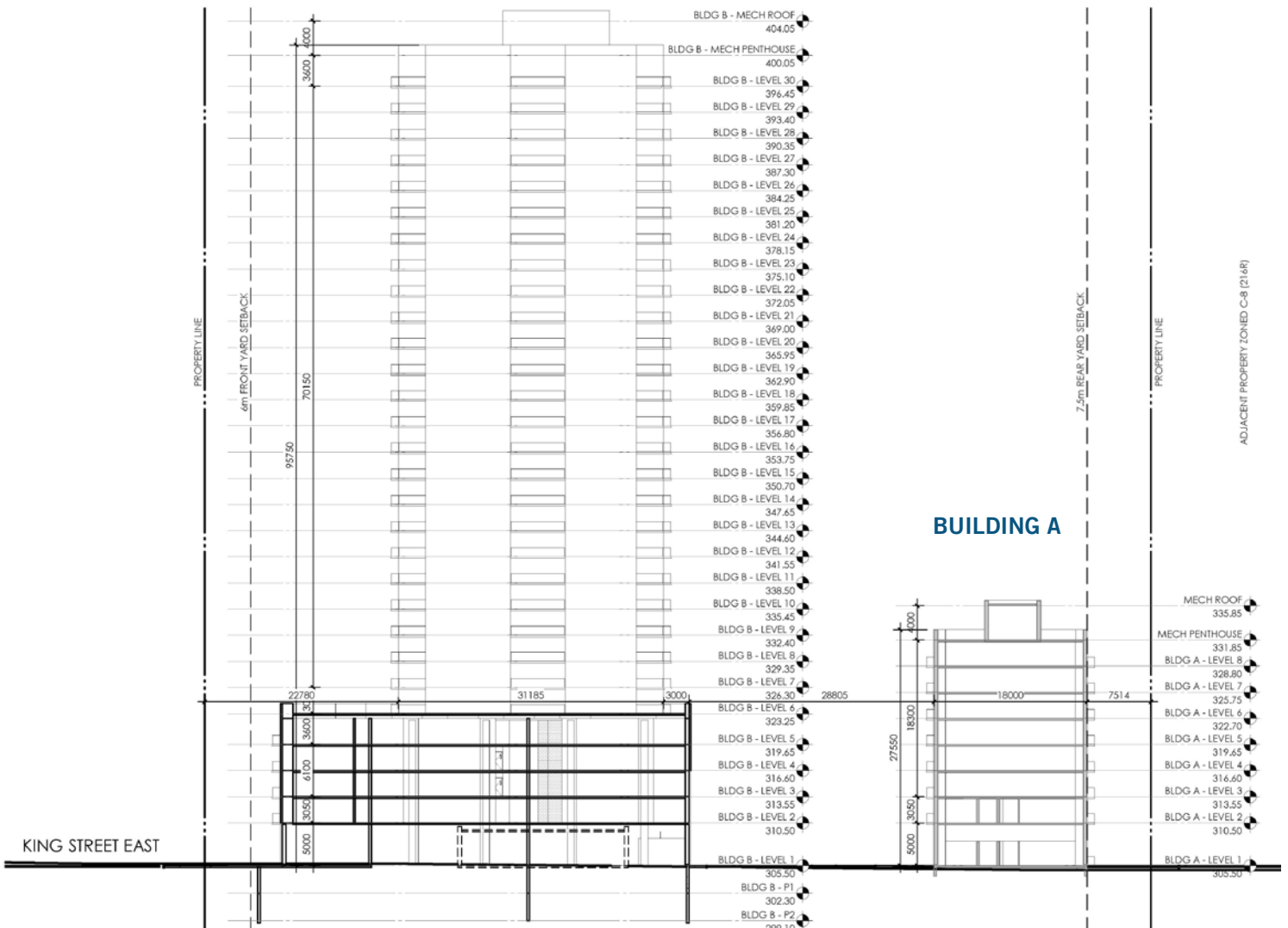
Figure 9b: Proposed Configuration – Pedestrian Wind Comfort – Winter – At Grade





KEY PLAN

BUILDING B



CROSS-SECTION - BUILDING A & B

6. RESPONSE TO POLICY AND GUIDELINE FRAMEWORK

6.1 Response to Official Plan Policy

The Proposed Development supports these urban design policies as it:

- Aids in achieving appropriate mix of uses with a mix of commercial and residential units within the Proposed Development (Building A and B).
- Infills an underutilized strip type of commercial development that adds little to a quality streetscape with a new development that is positioned, articulated and containing ground floor commercial uses to support the public realm of King Street.
- Fits within a desired condition of more intense development surrounding transit stations, scaled to respect the proportions of King Street through upper storey setbacks and demonstrating no adverse shadow or wind impacts.
- Enhances streetscape conditions along both public frontages with proposed landscaping.
- Contributes to pedestrian comfort with a high transparency on the ground floors and commercial entrance facing the street
- Provides articulated built form with recessed and projecting balconies and a well-defined base.

The proposed tall buildings are designed in keeping with the design policy direction of Official Plan Section 11, as further explored in detail as part of the Urban Design Manual analysis in the following section.

6.2 Response to Urban Design Manual Guidelines

Inclusive Design

CITY-WIDE

NODES & CORRIDORS

MAJOR TRANSIT STATION AREAS

- Direct connections between the building interior and residential or commercial spaces and the abutting public sidewalks on King Street and Sportsworld Drive.
- Pedestrian-scale lighting to be defined at detailed design stage.
- Uninterrupted sight lines from the building faces to public sidewalks along King Street and Sportsworld Drive, featuring a highly transparent building elevations at the ground floor and above for natural surveillance purposes.
- Ground floor commercial units fronting directly onto King Street or Sportsworld Drive, animating the street with people and activity.
- Prominent and large lobby entrance to the individual commercial units from street and residential lobby.
- Accessible routes that will be universally designed at the time of detailed design.
- A mix of different sizes of one-bedroom and two-bedroom units to provide flexibility of housing choice.
- Outdoor rooftop amenity areas, individual unit balconies and indoor areas for residents' use.

Site Function

CITY-WIDE

MAJOR TRANSIT STATION AREAS

TALL BUILDINGS

- All parking areas accessed from King Street and Sportsworld Drive.
- Small surface parking for commercial units

and visitors situated between the Proposed Development (Building A and B).

- Two levels of below-grade and structured parking proposed within Building B.
- Two driveways proposed to the Site's parking area, with access from either King and Sportsworld.
- Proposed design provides for on-site utility equipment and elements to be away from public frontage, which is to be addressed at the time of detailed design.
- Private realm between Proposed Development (Building A and B) and King and Sportsworld frontages coordinated with plantings, trees and continuous walkway connections to street-facing commercial units.
- Commercial unit entrances along the public street frontages for the mixed-used Building B.
- All residential entrances located prominently on proposed building development (Building A and B), also recessed on the ground floor to provide weather protection and landing space for entrance and exit.
- Functional areas (garbage, loading, moving) positioned away from the public street frontage.
- Interior bicycle storage room provided inside Building A secure and easily accessible location.
- Entrances and landing spaces in front of entrances to be designed to universal accessibility standards.

Design for Sustainability

CITY-WIDE

MAJOR TRANSIT STATION AREAS

TALL BUILDINGS

- Compact intensification of undeveloped

site within an area that is served by existing transit, commercial and community uses.

- Support for high density development since site is within a Major Transit Station Area due to being within approximately 300m of a planned ION station platform (Sportsworld Cross Rd @King Street East)
- Minimal surface parking with most parking contained within an integrated parking garage, reducing associated heat island effects.
- Indoor bicycle storage room providing secure location and supporting active transportation opportunities.
- Stormwater on the Site will be controlled through on-site measures to reduce peak flows to existing conditions levels, limiting pressures on the existing King Street sewer.
- Architectural features (such as canopies) and building envelope considerations (Increased insulation, high-performance glazing and lower window-to-wall ratio) to be explored through detailed design.
- Material choice and detailing addresses bird collision avoidance guidelines, which can be further explored through detailed design.
- Internal waste collection areas to encourage the collecting and recycling of waste produced by residents and tenants.

Design of Outdoor Comfort

CITY-WIDE

MAJOR TRANSIT STATION AREAS

TALL BUILDINGS

- The Pedestrian Wind Assessment demonstrates acceptable safety and comfort conditions met at all areas at grade on and surrounding the Proposed Development. Wind conditions on outdoor amenity and at commercial entrances is an exception,

for which mitigation is recommended. Satisfactory wind speeds can be achieved through mitigation measures, which will be addressed through Site Plan Approval.

- The Shadow Analysis demonstrates satisfactory sun exposure conditions for surrounding streets, public spaces and properties.
- Building design to address pedestrian weather protection through recessed vestibules from public sidewalks and covered landing spaces through detailed design.
- Lighting and landscape plans at the time of detailed design will address pedestrian comfort guidelines.

Street Design

CITY-WIDE

MAJOR TRANSIT STATION AREAS

- Detailed landscaped design will explore opportunities for blending surface treatments between private property and public sidewalks.
- Consideration of movable planters and furnishings in certain locations to add to the streetscape will be explored through detailed design.

Shared Spaces

CITY-WIDE

MAJOR TRANSIT STATION AREAS

TALL BUILDINGS

- A rooftop outdoor terrace atop the 5th storey of Building B will provide shared amenity space for residents. It will provide a range of recreation, activity and relaxation opportunities for residents.

Parks and Open Spaces

CITY-WIDE

MAJOR TRANSIT STATION AREAS

- Lack of public parks / amenity space in this neighbourhood, means on-site amenity space should be maximized both at-grade and within available rooftop spaces.
- Private amenity space to be refined through the detailed design stage.

Compatibility

CITY-WIDE

MAJOR TRANSIT STATION AREAS

TALL BUILDINGS

- The proposed building is placed and massed to both public street frontages, with architectural response to multiple commercial unit entrances.
- Provides a mixed-use development within a Neighbourhood Node, accessible to pedestrian and transit infrastructure.
- 5-storey podium base scaled to reflect pedestrian-scaled King Street corridor.
- The two towers along King Street have visibly distinct heights when viewed from ground level demonstrating transition in height and scale through appropriate design of the project's built form.
- Human scaled-relationship along King Street and Sportsworld achieved through ground floor height, uses and activities, and exterior wall transparency as well as paved pedestrian entrances and landing areas.
- Contemporary architectural style, detailing and materiality to be refined through the detailed design stage.

Cultural & Natural Heritage

CITY-WIDE

MAJOR TRANSIT STATION AREAS

TALL BUILDINGS

- There are no immediate or relevant heritage resources affecting the Site's design.
- There are no natural heritage areas in the vicinity.

Building Components

(Ground Floor and Base Design)

TALL BUILDINGS

- Ground floor respects intent of guidelines with taller ground floor height, 5 metres along King Street and Sportsworld.
- Most of the ground floor facing King Street and Sportsworld Drive is designed as commercial area, with small portion on garage and residential lobby entrances.
- The 5 metres ground floor height will contain highest proportions of transparency, supporting materials and detailing associated with the commercial units.
- 5-storey pedestrian-scaled podium (Building B) along King Street distinguished by tall towers step-backs and intended architectural treatment.
- Weather protection for ground floor units (Building A and B) to be explored at the time of detailed design.
- Balconies for individual units are provided along the building's (Building B) King and Sportsworld elevations to reinforce the streets
- Servicing elements and utility equipment, where required, can be accommodated in the rear area away from the King and Sportsworld.

Building Components

(Building Design)

TALL BUILDINGS

- Proposed design includes a 8 storey, residential building (Phase 1 - Building A) at the north end of the Site, and a podium tower development (Phase 2 - Building B) fronting King Street East, including two residential towers of 30 and 18 storeys.
- Tower Size is a “Large Slab” (tower floor plate of 878.9 square metres and tower proportion of 1.1)
- Tower A step back from the podium at approximately 13.66 metres (from King Street East) and 3 metres (from Sportsworld Drive) and; Tower B step back at 3 metres (from King Street East) to minimize impacts of overlook, shadowing and wind.
- Physical Separation calculation per guidelines for proposed building (Tower 1 & Tower 2) is 25.2 metres.
- Physical Separation for Tower A (15.4m) and Tower B (9.7m) to the eastern property line is achieved.
- Proposed relative height accommodates human scaled built form along streetscapes while accommodating compatibility matters.

Building Components

(Materials and Details)

TALL BUILDINGS

- Detailed elevation plans have not been prepared at the time of OPA/ZBA submission.
- Articulation, details, materiality and colours to be addressed at the time of detailed design stage, recognizing the guidance offered by the relevant design guidelines documents of Part A.

Urban Corridors Specific Guidelines

NODES & CORRIDORS

MAJOR TRANSIT STATION AREAS

- The Proposed Development addresses the bounding public streets through building placement close to the street edge, active ground floor commercial and lobby entrances, and pedestrian connections between the building and public sidewalks.
- The mixed-use buildings continuously line the street edges with a consistent private realm landscape treatment of planted beds with street trees.
- Proposed parking is provided is contained within an integrated parking garage (includes surface parking, below and above-grade parking areas. The surface parking spaces are located between Building A and B. Two levels of below-grade parking and structured parking within the podium are proposed for Building B.
- Access to the Site is limited to a single driveway from each public street frontages.
- Pedestrian access to the Site is provided by walkways leading to public sidewalks along King Street and Sportsworld Drive.
- Promotes walkability by creating pedestrian friendly environment and improve connectivity since Site is within a Major Transit Station Area due to being within approximately 300m of a planned ION station platform (Sportsworld Cross Rd @ King Street East)

7. SUMMARY

The Proposed Development will see the intensification of the Site with a 8-storey apartment building (Building A) and a mixed-use building (Building B) consisting of a 5-storey podium and two residential towers of 30 and 18 storeys, containing commercial and residential units.

The Proposed Development will establish a 8-storey, residential building at the north end of the Site as part of the Phase 1 of the design, accommodating approximately 88 units. Phase 2 includes a podium tower development fronting King Street East, containing two residential towers of 25-storey and 13-storey atop a 5-storey podium (30 and 18 storeys in total), with a combined total of 528 units.

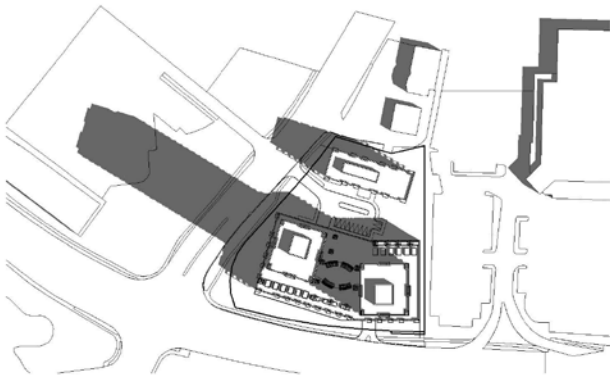
The proposed building's (Building B) podium provides a street-oriented and pedestrian-scaled building form. The building's lot line setbacks from the public street edges appropriately to frame the public streetscapes. Active retail uses in the podium's ground floor line the King Street frontage and Sportsworld Drive frontages with multiple direct entrances to the sidewalks. The bulk of the podium's elevations, including most of the ground floor elevations, is transparent glass maximizing transparency and animation to the street edge. All parking is contained within an integrated parking garage. The proposed building's point tower rises in a slender fashion from the podium. The narrow, square tower footprints, coupled with tower setbacks minimize shadow and wind impacts per the supporting assessments.

Based on the review contained in this Urban Design Report, the proposed design is well-designed and supports the intent and spirit of the Official Plan policies and relevant guidelines of the Urban Design Manual as it:

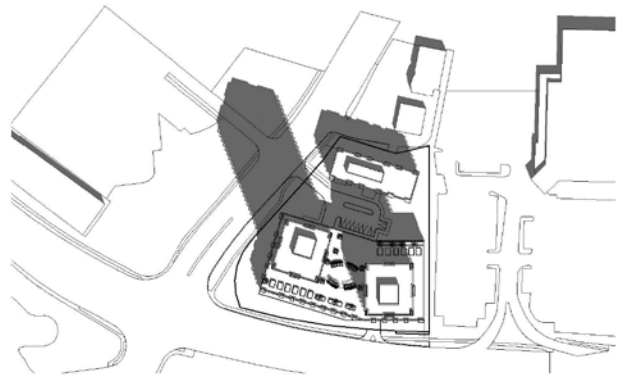
- Adds further ground floor commercial activities to the urban corridor along King Street East and surrounding business environment, together with upper storey residential uses to support these businesses.
- Accommodates the bulk of parking within an integrated parking garage for residents with a small surface parking area for commercial uses and visitors;
- Links the Site, entrances and functional areas through a safe and connected circulation pattern for pedestrians
- Establishes a pedestrian-scaled base defined by an intimate relationship to the street, upper storey step backs to distinguish, and an active and transparent commercial ground floor;
- Provides massing that respects urban street conditions along King Street with tall towers set back to respect angular plane considerations to the street.
- Does not create unacceptable micro-climatic conditions from a wind and shadow perspective, as concluded by supporting studies; and
- Will establish a clean, contemporary architectural aesthetic featuring masonry and transparent glass, which will be explored and refined through the detailed design stage.

APPENDIX A

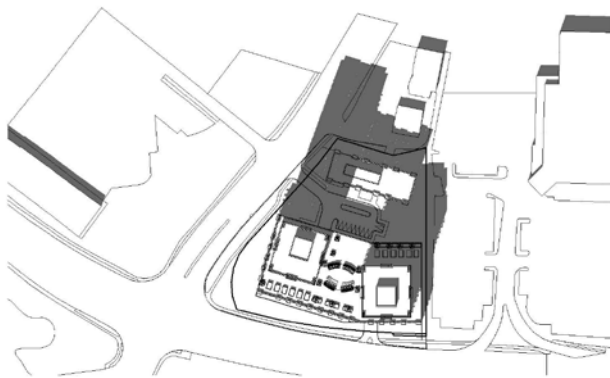
Shadow Impact Graphics



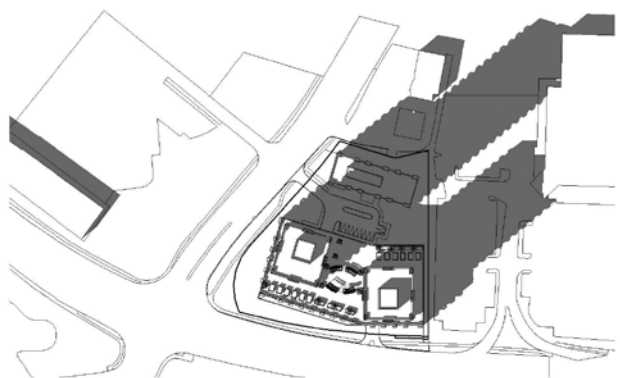
March 21, 10am



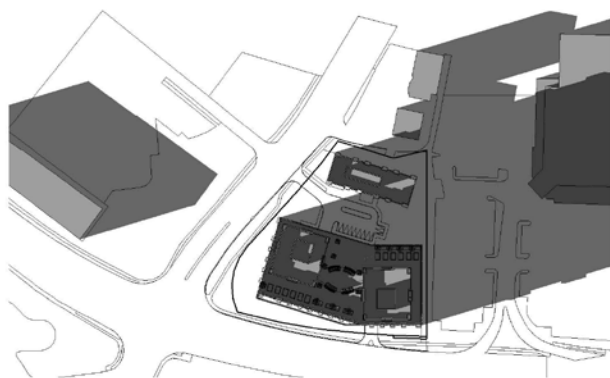
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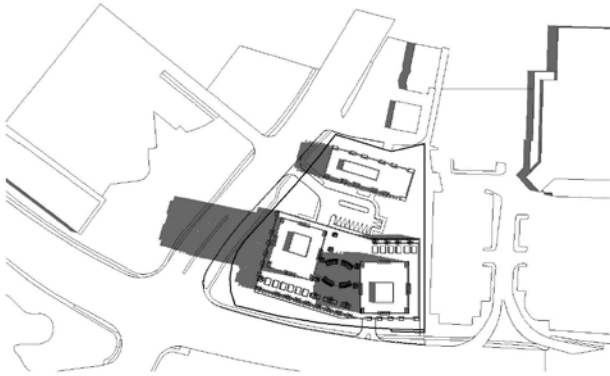
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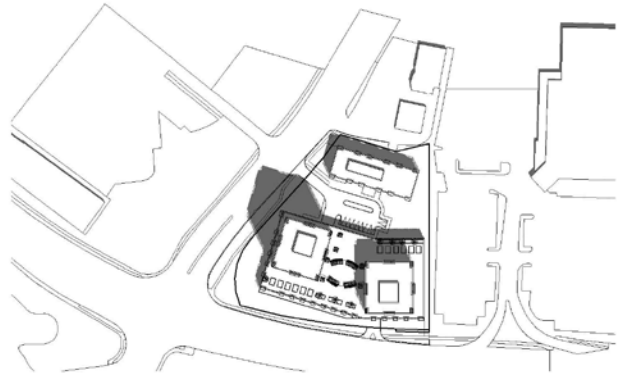
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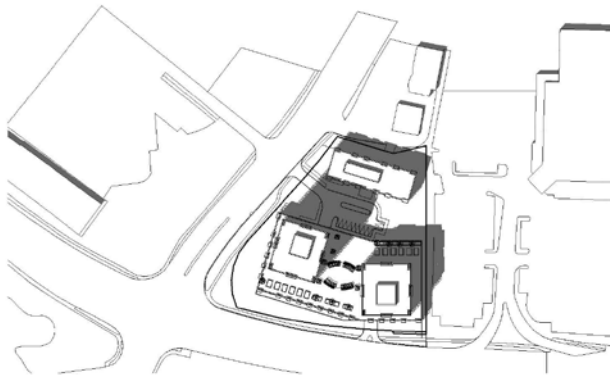
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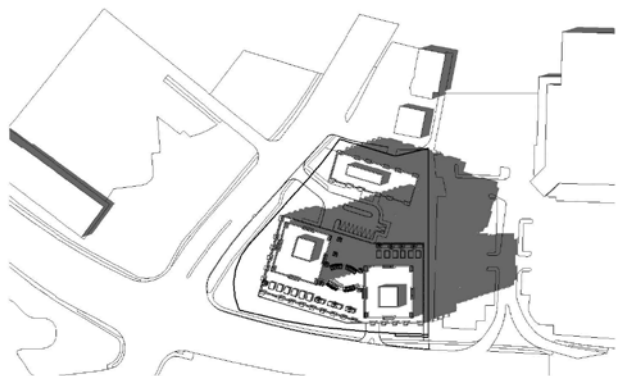
June 21, 10am



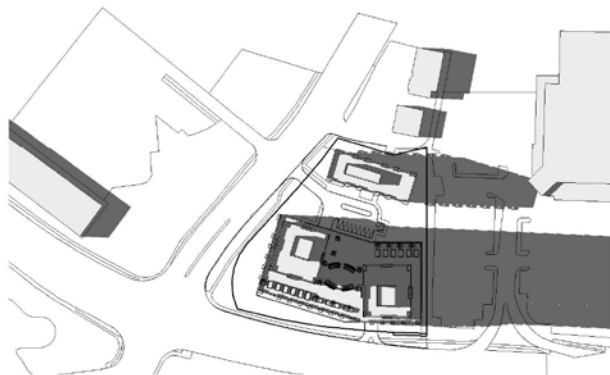
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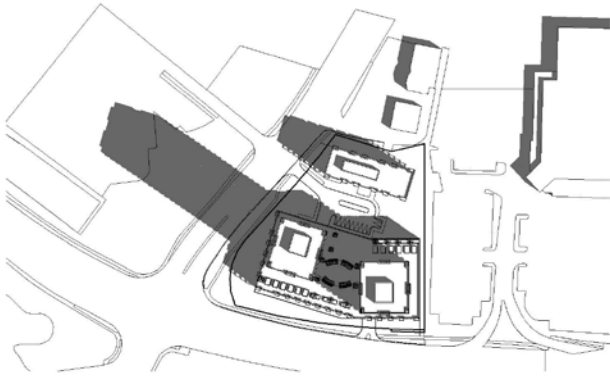
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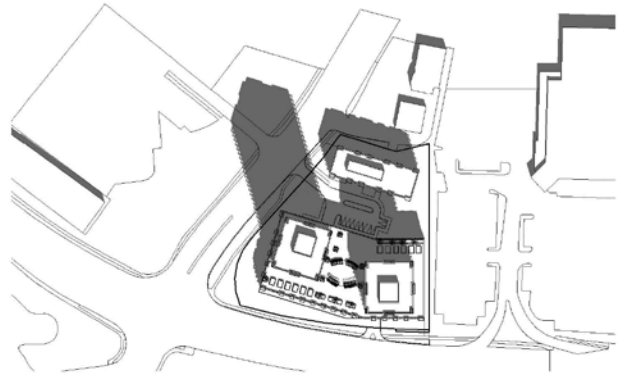
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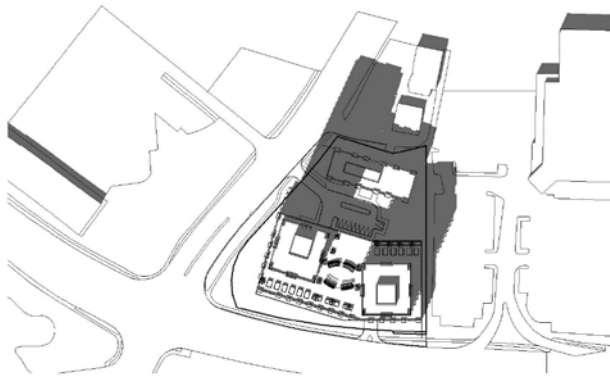
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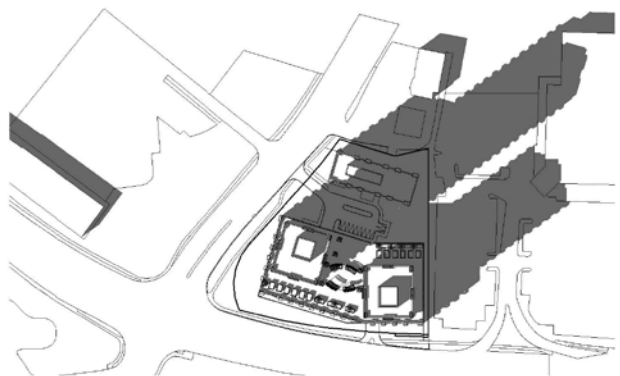
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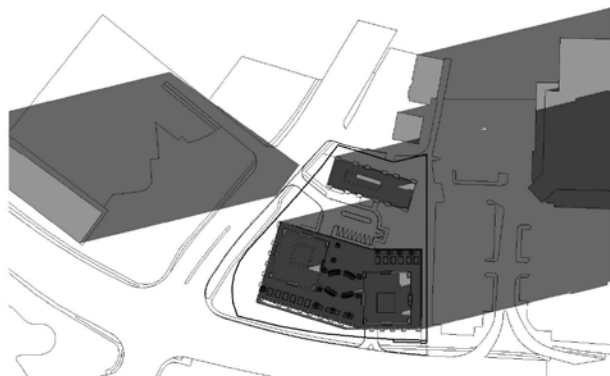
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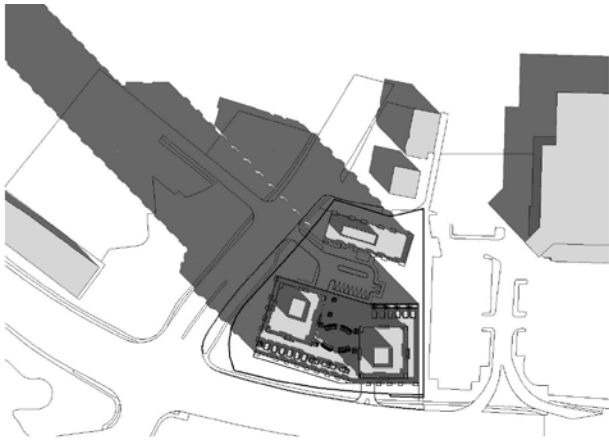
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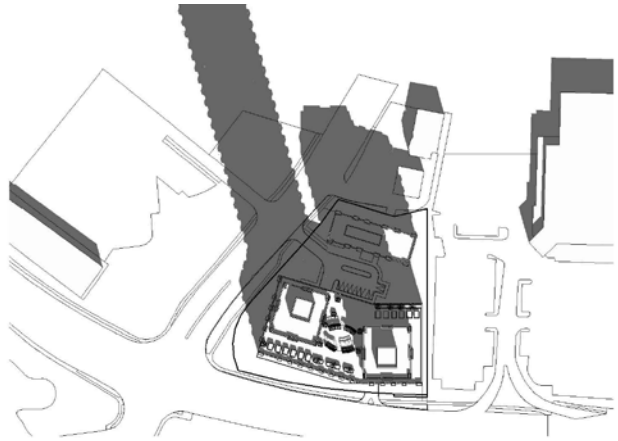
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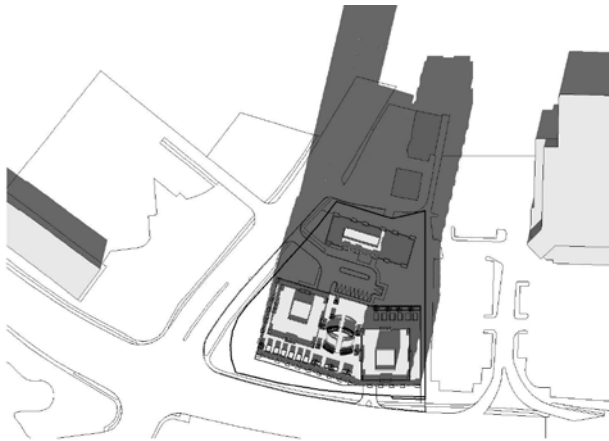
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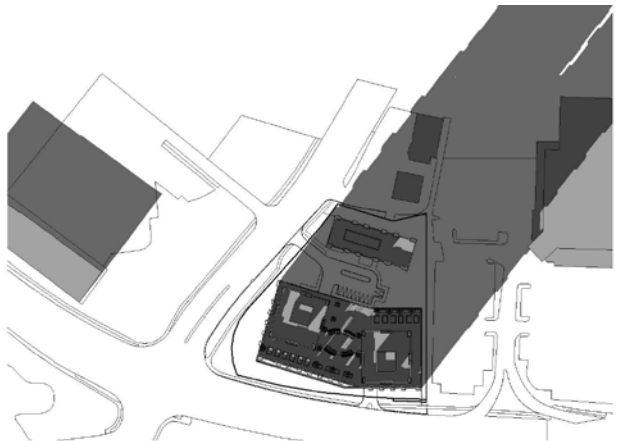
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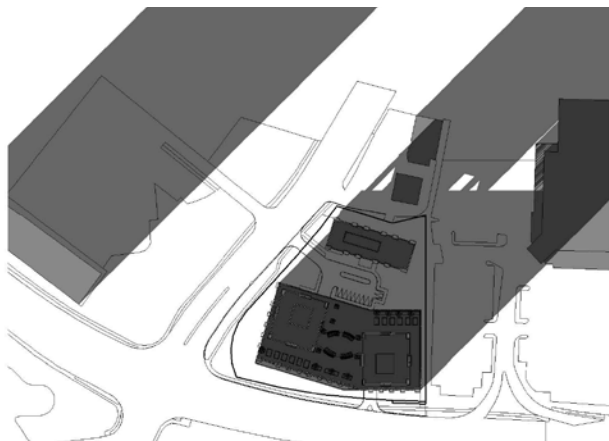
December 21, 12pm



December 21, 2pm



December 21, 4pm



December 21, 6pm