



# 84 & 100 Gloucester Street

Design Brief Zoning By-law Amendment Application March 29, 2023 1.0

# Introduction

Fotenn Consultants Inc. and EVOQ Architecture were retained by Claridge Homes to prepare a Design Brief in support of a Zoning By-law Amendment application to permit a development proposal located at 84 & 100 Gloucester Street. The intent of the application is to facilitate the development of a 27-storey mixed-use building containing residential apartment uses and ground-floor commercial uses.



Figure 1 Proposing massing of building looking south.

# 1.1 Application Overview

#### 1.1.1 Summary

The proposed development is a 27-storey mixed-use building on a five & six-storey podium. A total of 315 dwelling units are proposed including a mix of 1- and 2-bedroom units with 98 underground parking spaces accessed from a vehicle ramp on Gloucester Street. The proposal also provides for 315 enclosed bicycle parking spaces both within the underground parking levels as well as within the ground floor with direct outdoor access. The ground floor of the building includes 144 square metres of retail spaces. A total of 1,761m² of amenity space is included throughout the building including on the ground floor, at-grade in the rear-yard, private balconies, and rooftop amenity areas.

### 1.1.2 Required Application

To facilitate the proposed development, a Zoning By-law Amendment Application is being submitted. The subject site is currently zoned Residential Fifth Density, Subzone B, Exception 482, Maximum Floor Area Ratio 3 (R5B [482] F(3.0)). The submitted Zoning By-law Amendment proposes to retain the Residential Fifth Density zone while amending the performance standards of the subject property with site-specific zoning provisions to

permit the built-form of the development as proposed. The site-specific provisions would also permit a range of non-residential uses for the at-grade retail space, consistent with the policies of the Centretown Secondary Plan.

A Site Plan Control Application for the proposed development will be submitted in the future to resolve site-specific design considerations such as landscaping, servicing locations, and building materiality.

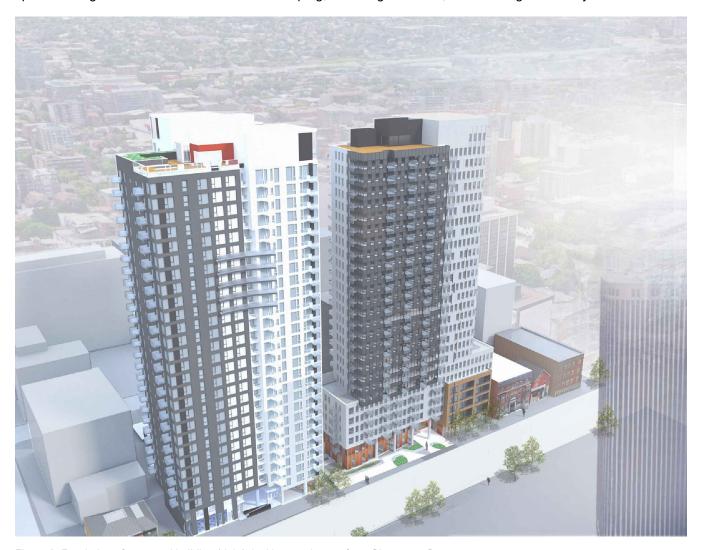


Figure 2: Rendering of proposed building (right), looking south-west from Gloucester Street





East view West view





Street view Gloucester South view

# **Site Context and Surrounding Area**

# 2.1 Site Context

The subject site, municipally known as 84 & 100 Gloucester Street, is located within Downtown Ottawa in Somerset Ward (Ward 14). The two properties encompass the interior portion of the block with 60 metres of frontage along Gloucester Street to the north with a total combined area of 1,835 square metres.



Figure 3: Aerial picture of the immediate site context of the subject property, outlined in blue. The subject property consists of 2 parcels: 84 & 100 Gloucester Street to east and 160 Laurier to the west.



Figure 4 Aerial View looking south-east.

3.0

# **Design Brief**

#### 3.1.1 Overview

The proposed development is a 27-storey mixed-use building on a five & six-storey podium. A total of 315 dwelling units are proposed including a mix of 1- and 2-bedroom units with 98 underground parking spaces accessed from a vehicle ramp on Gloucester Street. The proposal also provides for 315 enclosed bicycle parking spaces both within the underground parking levels as well as within the ground floor with direct outdoor access. The ground floor of the building includes 144 square metres of retail spaces. A total of 1,761m² of amenity space is included throughout the building including at-grade in the rear-yard, private balconies, and rooftop amenity areas.

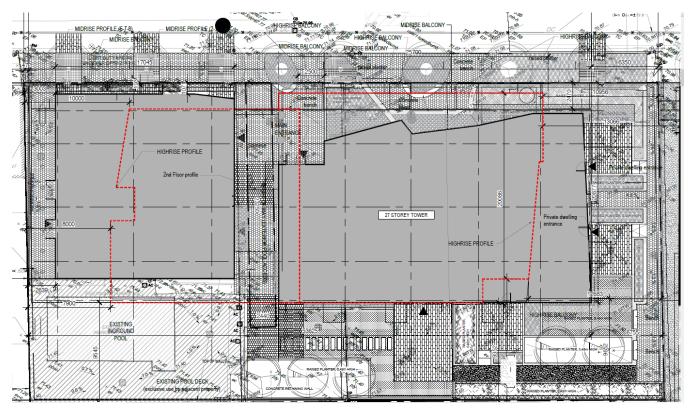


Figure 5: Site Plan Excerpt

In designing the proposed development, many components were considered in order to respond to the existing and planned context, and to ensure liveability for future residents of the development. The following sections outline and describe these considerations.

#### 3.1.2 Planned Context and Surrounding Area

In accordance with the planned context for the area, the proposed development is among many existing, underconstruction, or planned high-rise developments. High-rise buildings exist, are planned, or under construction along both sides of Gloucester Street immediately adjacent to the east of the subject property. Further, recent high-rise developments are located to the south and east of the proposed development.

As such, the proposed development is 27 storeys in height, which is in keeping with the planned context for this portion of Centretown as further described herein. This area of Centretown is seen as an area of transition between the Central Area to the north and low- to mid-rise development to the south. As illustrated in Figure 9 below, within the Centretown CDP, Gloucester Street is envisioned for 27 storeys with gradual height transition to the south.

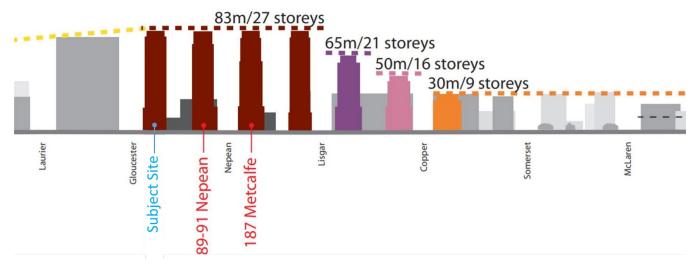


Figure 6: Suggested Building Heights as per the Centretown CDP

The Centretown Community Design Plan also describes that where blocks are very narrow, which is defined as less than 63 metres, transitions between the base and tower may be accomplished through design techniques such as creating a gap, varying building materials, or articulation where the tower meets the podium, rather than providing setbacks.

As discussed in greater detail below, the proposed development employs several design techniques which respond to the narrow block condition, including differentiated building materials between the tower and podium. These architectural details respond to the narrow site conditions and surrounding context where setbacks may not be appropriate, contributing to the existing character and planned function of the surrounding area.



Figure 7: Minimal or no setbacks provided within the existing context along O'Connor Street, north of Gloucester Street

In response to the existing and planned context, the proposed development has been designed to frame the streetscape along Gloucester with minimal setbacks while also enhancing the pedestrian realm.

# 3.1.3 Massing and Scale

As referenced above, the proposed project is a 27-storey tower with floor plates of 750m<sup>2</sup> in area, resting on a varied podium structure of 6 or 7 storeys. Podium floor plates vary from 780 to 965 square meters – the smaller plates at grade and second floors to 'carve out' and sculpt pedestrian-related spaces facing Gloucester.



Figure 8 Proposed building massing from Gloucester and O'Connor intersection to west.

The overall massing of the project has been articulated to respond to urban conditions around the project, to provide an animated tower profile and a dynamic street experience. The building form and position on its site allows for a garden space to the south, linking with the existing landscaped amenity area located between the towers of Claridge Loop; common space which will be shared between the projects.

A key component of the massing composition along Gloucester is found in the replacement of the 6 ½ storey office building with a **new commercial block** of a similar scaled element, occupying more or less the same footprint as the previous building component.







Figure 9 Design iterations leading to eventual submitted design.

The 4.5m high fully glazed ground floor facing Gloucester will be occupied by a commercial unit which will address the street. Above, aligning with the adjacent frontage line will be four residential floors contiguous with the general floorplate, but distinctively clad. This street-anchoring element of the project will read as an independent structure, assisted by being disengaged on both east and west sides from neighbouring structures at grade. The new component will be roughly one storey lower than its predecessor, offering a better transition to the heritage building to the west.

The eastern portion of the ground and 2<sup>nd</sup> floor Gloucester frontage is irregularly set back from the property line and is clad in glass and metal panel, creating a contemporary 7.5m high portico at the building base. This component houses the main entrance, amenity space, lobby and residential units which are protected from the sidewalk by a level change, raised planters and landscaping. This 2-storey high element turns the corner on the west side to define the landscaped areas, pathway and unit accesses in the private pedestrian *laneway* shared with Claridge Loop at 70 Gloucester Street directly east.

The dominant massing component, raised above the 2-storey street-related base and the 5-storey **new commercial block**, reads as an expressed volume. Facing Gloucester, a single plane extends nearly the width of the site; its first 2 storeys above the new commercial block cantilever to less than 1 metre from the eastern property line and rises to express the western third of the tower on the same plane and surface expression.



Figure 10 Render of proposed building massing looking north from O'Connor and Lisgar to south.

The cantilever which is the same depth as the tower, projects a 'wide-screen' proportioned panel supporting a mural or artwork towards the heritage building. This is intended to address pedestrians and motorists on Gloucester and O'Connor, framing the heritage building with an element of visual interest, and providing a 'frontal' signal component to the lateral elevation. To the west, the podium structure extends slightly beyond the 2-storey base, and rises to six storeys in height, set back a minimum of 6.35 metres from the east property line,

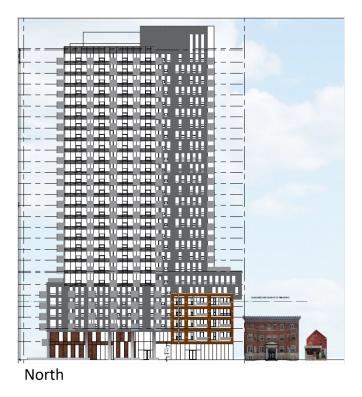
defining the pedestrian garden **laneway** which leads to the rear gardens shared between this project and Claridge Loop.

The eastern section of the tower is treated as a series of fully glazed bays separated by balcony recesses. This component sits proud of the base and western tower component and turns the corner on the east to present a slender volume in contrasting colour and material rising 21-storeys above the base.

Flush with the podium, the western third of the tower as viewed from Gloucester rises 21 storeys above podium set back from the western property line by 10 metres at Gloucester to 7.8m at the south face of the tower. A closed mechanical floor and a screened roof-top space for mechanical equipment extends above the general roof level to reinforce the expression of this volume and to give the building a slender crown.

From the south, the volume reads as more cleaner slab-type tower with voided corner to the southeast. The new commercial block is expressed as a distinct volume by material change and setback at the base floors on the southwest corner.

Both east and west facades of the tower are subtly sculpted to open views and modulate light and shade on their surfaces.



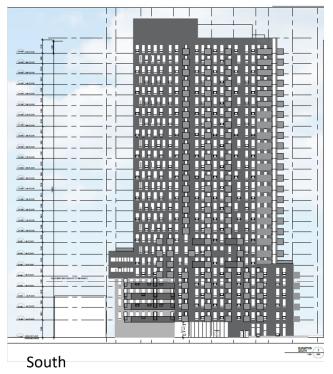


Figure 11 Proposed North and South Elevations.





Figure 12 Proposed East and West Elevations.

#### 3.1.4 Vehicular Access

The project includes a 3-level underground parking structure designed to accommodate 98 vehicles and 165 bicycle storage spaces. The parking structure is adjacent to the 5-level below grade structure of Claridge Loop (70 Gloucester/89 Nepean), and access will be provided from the current 70 Gloucester parking ramp through new openings connecting the garage levels.

As such, there is no new ramp or garage door at street level of 100 Gloucester, freeing the building's sidewalk façade and benefiting the pedestrian street experience of the project. The sharing of the existing ramp structure permits a more efficient and less wasteful below ground structure. Traffic studies are being conducted based on the current usage of the existing parking structure to verify the feasibility of this approach.

#### 3.1.5 Views to the Project and Scale Transition

The project occupies a site on bordering on downtown Ottawa which has generally targeted for densification. The scale of the proposal is in keeping with precedent structures to the east of the site and consistent with the height of the buildings on the north side of Gloucester while introducing slenderer profiles. From the south and

west, the project will extend the new high-rise profile of the northern end of Centertown, visible over existing nine-storey residential buildings. The new project will complete a 3-tower 'complex' with Claridge Loop, with similar scale and related treatment. Along Gloucester from the corner of O'Connor, transition from the existing street scale of distinct blocks of 3 to 6 storeys is achieved through the reintroduction of the volume of the commercial block, the treatment of the podium structure and its projecting mural, and the tower's western setback.

# 3.1.6 The Public Realm and Open Space

The treatment of open space around the building is an important consideration in the overall design of the project. Facing Gloucester, the project features a distinct and varied street treatment which should provide a dynamic public realm. The absence of a dedicated parking entrance and ramp benefits the street treatment.



Figure 13 Proposed landscaping and at-grade public realm interface along Gloucester.

Importantly, an existing agreement requires a permanent exterior passage to the existing swimming pool described above which in the street-level design has been enhanced to create a 4.5m high, 4.2m wide **breezeway** connecting the public realm to the landscaped rear yards. At the node where the breezeway meets the sidewalk the main building entrance opens onto a protected **mini-plaza** which also faces the fully glazed ground floor commercial space at the base of the **new commercial block**. The commercial component facing Gloucester replaces those of the existing building, which currently are not street-accessible due to a raised ground floor. The new commercial space will directly address the street to ensure activity and vibrancy along the public realm.



Figure 14 Proposed Design Schematic.

Exterior seating on the public domain between newly planted trees can complement the commercial space, adding to street animation. A bend in the commercial space glazing – modulated by weathered steel fins - inflects towards the mini plaza and the breezeway. To the west, behind a colonnade, the two-storey base follows an articulated profile enclosing a double-height lobby space. Here, a more passive **civic rest stop** opens towards the sidewalk featuring raised planters which offer public seating, and a tree at its centre. At the southeast corner, a deeper raised planter and planting extending onto the public domain separate a dwelling unit from the sidewalk. At over 5.5m depth and extending over 16m along Gloucester, this planting zone offers privacy to the dwelling unit while providing a rare *green patch* along this sector of Gloucester, complementing the adjacent rest stop.

The side yard space between the new project and the 70 Gloucester tower of Claridge Loop is 9.3m wide at the building fronts and tapers gently towards the south. An existing passage on the western edge of 70 Gloucester's property is expanded to a 3m wide **laneway** which also provides main entrances to residential units located on the eastern side of the project at the ground floor level.

These units are gently raised above the sidewalk and **laneway** level and are separated from the walkway by private terraces, raised linear planters and vegetated zones. The program proposed is a greened residential mews, linking the street and the public realm to the semi-private realm found in the gardens of the south side of the property. These landscaped areas are designed to extend the existing courtyard of Claridge Loop, and will provide common green space, seating and patios serving ground-floor amenity spaces as well as private gardens and patios for ground floor residential units. Residents of both projects will be welcome into common areas of this networked landscaped space. The rear yard garden is linear in form and extends 63m from east to west when considered with the Loop courtyard; 40 metres measured from the existing swimming pool deck to the eastern property line. It visually terminates on the east at the fully glazed wall of the Loop swimming pool structure, and to the west by the ivy-covered brick eastern wall of the Heritage building. Concrete garden walls will separate the space from the parking deck of the Imperial building, and, partially, from the existing pool deck to the west.



Figure 15 Street view of proposed development looking south-east.

# 3.1.7 Design Intent

A large building, its scale is broken down into smaller components creating visually slenderer elements and gestures and to relate appropriately to the existing streetscape. The general canvas of the composition is the light-coloured plane/volume, treated with repeated vertically-oriented punch windows in a regular pattern – offset on the tower and aligned on the podium, yielding a vocabulary and texture which carries around the project. The vertical proportioning of the windows is accentuated by the introduction of metal panels which extend the masonry openings vertically. Where the regular, repeating window pattern is interrupted by structural elements or demising walls, *blind openings* of soldier-course brick are introduced to maintain the established façade rhythm. We are proposing a honed finish light-grey concrete masonry unit with a 90 x 390mm format for general cladding material. The colour will recall that of the lighter masonry of Claridge Loop.



Figure 16 Proposed podium and at-grade condition looking south-west from Gloucester.

Facing Gloucester, 2 planes of contrasting treatment project forward nominally 1.5m, aligning with the smaller existing buildings on Gloucester towards O'Connor:

- / the five-story base (new commercial block) on the western third of the Gloucester frontage clad in medium brown brick similar to the existing office building with broad openings for loggia type balconies and fenestration. It rests on a 4.5m high fully glazed base, intended for street-accessible commercial space. Where appropriate, the projected header Flemish bond brick pattern of the existing building will be replicated on the new cladding.
- A 21-storey glass-clad projection which turns the east corner to be understood as a distinct volume. This component sits proud over the 6 storey podium base and rises to the general roof level above the 27<sup>th</sup> floor. It is divided into regular vertical bays, separated by vertical balcony recesses. The easternmost recess extends through the roof, dividing the last bay from the others to produce a slender corner element, defined by the cornice line. The treatment is dark-themed charcoal coloured mullions and spandrel panels. Balconies project partially. Their front railings are fascia-mounted framed metal grating, forming a regular grid of squares, adding a floating layer of ornamental metal motif to the overall composition.

To the east of new commercial block, a recessed 2 storey high base is fully glazed at the principal entrance and lobby, with solid panels of weathered steel introduced gradually towards the east and the ground floor residential units. As mentioned above, the base follows an irregular angular path and presents a backdrop to the public realm spaces extending the Gloucester sidewalk.

The general light grey plane of the façade facing Gloucester weaves through these contrasting components, tying the composition together.

The two major transversal pathways – the **laneway** and the **breezeway** offer porosity and visual connection through the site to the common gardens behind. The breezeway becomes an important design element in

separating the commercial block from the rest of the building while offering an interesting and active exterior space.

A third connecting passageway has been introduced along the west property line which will provide a direct service access to the hydro vault and waste collection room, separating these functions from the public realm.

## 3.1.8 Integration with Heritage Building

The issue of the impact of the project on the building at 110 Gloucester Street has been analysed as part of a Cultural Heritage Impact Statement for this project, commissioned by Claridge Homes. Architectural approaches with respect to the projects relation with the heritage structure intend to transition the scale and to avoid massing that crowds or overwhelms it.

The following strategies have been employed:

- The new building, including its foundation walls are set at a minimum nominal distance of 3 metres from the east walls of the heritage building.
- The reintroduction of a defined building block similar in scale (although shorter) to the existing 100 Gloucester and at the same street alignment preserves a street dynamic in which the heritage building is central.
- The 6<sup>th</sup> and 7<sup>th</sup> floor cantilever projecting over the gap between the heritage building and the new structure is intended as an embracing gesture, presenting a smaller scaled component which will signal the presence of the older structure and an artistic treatment addressing the street rather than a typical sidewall.
- The tower above the cantilevered floors is set back (10 metres at Gloucester) and is articulated in form to reduce visual impact and to provide another main elevation rather than a typical sidewall.
- / The introduction of architectonic elements of harmonizing scale (the new commercial block and the cantilevered mural) to integrate the western side of the project to the Heritage building and its immediate context.



Figure 17 Proposed at-grade interface with existing streetscape form and character.



Figure 18 Exist material and Colour Palette.

#### 3.1.9 Sustainability Approach

The densification of the 1832 square metre site which will provide over 300 new residential units and associated amenity and commercial space in a high-density inner-city development. The introduction of dense residential developments within the existing city core should reduce the overall loss of open green space to development as part of a policy to discourage urban sprawl and avoid natural habitat loss.

The site presently offers within easy pedestrian reach a wide range of shopping and amenities, institutional, educational, cultural and recreational facilities including public schools and parks, virtually eliminating the need for private motor vehicle use for most tasks. Similarly, being adjacent to downtown Ottawa, it can be anticipated that many if not most residents will be working within walking or cycling distance of their homes. The site is currently occupied by an asphalt paved parking lot, a 6-storey office building and a swimming pool with a concrete deck. There is presently no soft landscaping or trees on the site including the public domain along Gloucester between the sidewalk and the property line. Open space at grade of the new project is almost completely landscaped (landscaped areas occupy over 50% of the total site surface), much of it vegetated, and 12 trees are included in the landscape design – 7 along the public domain in natural soil and 5 smaller species in raised planters in the rear courtyard of the project. As well, substantial planting beds have been proposed for the public domain on the street side of the building. Overall, the project offers a substantial greening of the immediate environment, despite its high density.

The project will share the parking entrance and ramp system with the adjacent Claridge Loop complex, permitting a highly efficient below grade structure, reducing excavation and material usage. There is no surface parking on the property and a zoning variance will be requested to reduces the number of indoor parking spaces so as to not exceed anticipated demand. Electric charging stations will be provided. Secure, indoor ride-in bicycle storage is provided below grade. Bicycle parking is provided in numbers as per municipal requirements and exceeding LEED standards.

Heat islands will be avoided through partial vegetated, occupied roofs and reflective roof treatments, and by the absence of asphalt surfaced surface parking and service access. Rain-water management principles will be strictly applied with consideration of using storm water collected in a sub-grade cistern for irrigation of landscaping. Exterior lighting will be designed to reduce light pollution to a minimum and be kept mainly at pedestrian level.

The building design including envelope and heating and cooling systems will optimize energy consumption through modeling to meet and exceed all provincial and federal requirements.

The building envelope will be over 70% masonry-clad rain screen composition with a continuous insulation layer, and punch windows, allowing for higher overall energy efficiency than can be achieved with all-glass wall systems. Where full glazing is used, the efficiency of glazing units and spandrel panels will be optimized to assure comfort and overall energy model performance. Pre-glazed curtainwalls will be considered to provide more energy-efficient envelopes. Where necessary for compliance, heat losses through balcony slabs, anchoring elements and other projections will be mitigated using thermally broken attachment systems although the design presented avoids continuous thermal bridging.

Construction will favour locally sourced, durable, sustainable and recycled materials. Contractors will be required to follow best waste-management principles. Interior finishes will also favour local sourcing and will be selected for durability and low-emissivity. HRVs will efficiently condition air within units and provide suitable fresh air into each unit, while operable windows will permit natural ventilation to all living and sleeping spaces. Units are designed for maximum penetration of natural light, and most corridors will open at various locations through the project – to natural light. These measures will reduce energy consumption and reliance on electrical and mechanical systems.

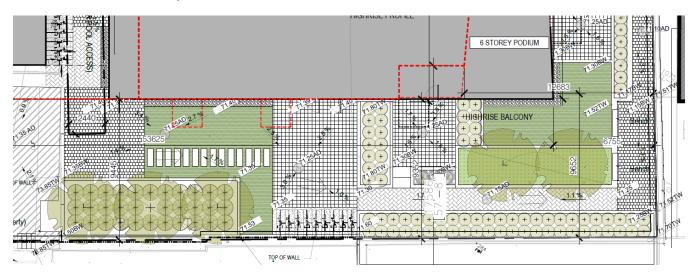


Figure 19 Proposed rear-yard landscape program.



Figure 20 Massing model and proposed rear-yard landscape program.



Figure 21: Concept Renderings

With consideration for the planned intensification of the Central Area, the subject property proposes tower heights appropriate for developments close to Rapid Transit Stations. The tower has been sensitively designed and sited with consideration to the City of Ottawa's Design Guidelines for Highrise Buildings to provide sufficient separation distances between the proposed tower and the planned and existing buildings on surrounding properties.

The subject property is in an area that is intended to support some of the highest density yields in the City. Given the subject property's immediate surrounding context, the proposed high-rise tower will not have any undue or adverse impacts on adjacent properties, including their development potential, and existing adjacent uses. Future development within the Central Business District will be of a comparable form to that of the subject property, given the direction from the Official Plan for development in close proximity to rapid transit and active transportation options.

The proposed tower location and floorplate will permit the redevelopment of adjacent properties with high-rise buildings that are appropriately distanced from the subject property and proposed development.

Cycling is strongly encouraged as an important lifestyle option for residents of the proposed development and is supported through a minimum of one bicycle space per dwelling unit, and access to the O'Connor Street protected cycle lane in very close proximity. Furthermore, the subject site is also conveniently located within a 450 metre walk to the Parliament Light Rail Transit station.

#### 3.1.10 Window and Shadow

#### 3.1.10.1 Wind

A Pedestrian Level Wind Study has been completed for the proposed development. The study involves simulation of wind speeds for selected wind directions in a three-dimensional (3D) computer model using the computational fluid dynamics (CFD) technique, combined with meteorological data integration, to assess pedestrian wind comfort and safety within and surrounding the subject site according to City of Ottawa wind comfort and safety criteria. The results and recommendations derived from these considerations are summarized as follows:

- / All grade-level areas within and surrounding the subject site are predicted to experience conditions that are considered acceptable for the intended pedestrian uses throughout the year. Specifically, conditions over surrounding sidewalks, walkways, the laneway and drop-off area, the existing pool area, the outdoor amenity, and in the vicinity of building access points are predicted to be suitable for sitting throughout the year, which are considered acceptable.
- / Conditions over the potential amenity terrace serving the proposed development at Level 8 are predicted to be suitable for sitting throughout the year, which are considered acceptable.
- Conditions over the amenity terrace serving the proposed development at the MPH level are predicted to be suitable for sitting during the typical use period, which are considered acceptable.

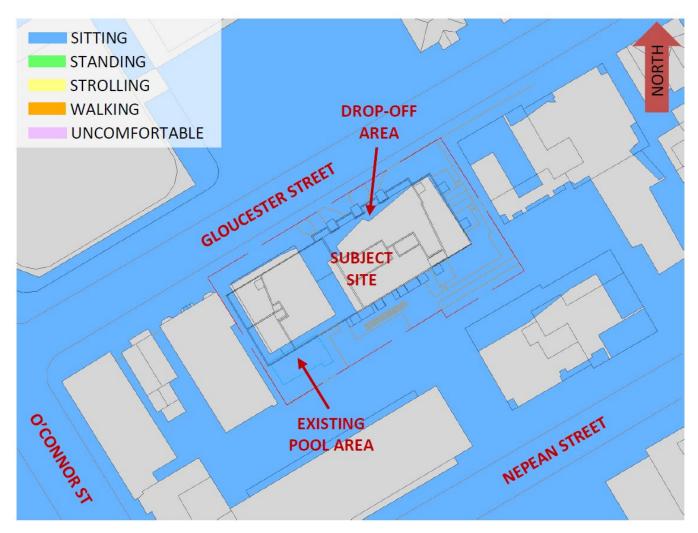


Figure 22 SUMMER - WIND COMFORT, GRADE LEVEL - PROPOSED MASSING

The study states that following the introduction of the proposed development, all grade-level areas within and surrounding the subject site are predicted to experience conditions that are considered acceptable for the intended pedestrian uses throughout the year.

Specifically, conditions over the adjacent sidewalk areas along Gloucester Street, Nepean Street, and O'Connor Street are predicted to be suitable for sitting throughout the year. Owing to the protection of the building façades, the existing pool area at the southwest corner of the subject site, the drop-off area to the north, the central north-south laneway intersecting the proposed development, along the walkways to the east and south, the outdoor amenity to the south, and in the vicinity of all building access points are predicted to be suitable for sitting throughout the year. The noted conditions are unchanged from existing conditions. For both proposed and existing massing scenarios, grade-level wind conditions surrounding the subject site are considered acceptable.

The wind conditions within the potential common amenity terrace serving the proposed development at Level 8 are predicted to be suitable for sitting throughout the year. The noted conditions are considered acceptable. Further, wind conditions within the common amenity terrace serving the proposed

development at the MPH level are predicted to be suitable for sitting during the typical use period. The noted conditions are considered acceptable according to the City of Ottawa wind comfort criteria.

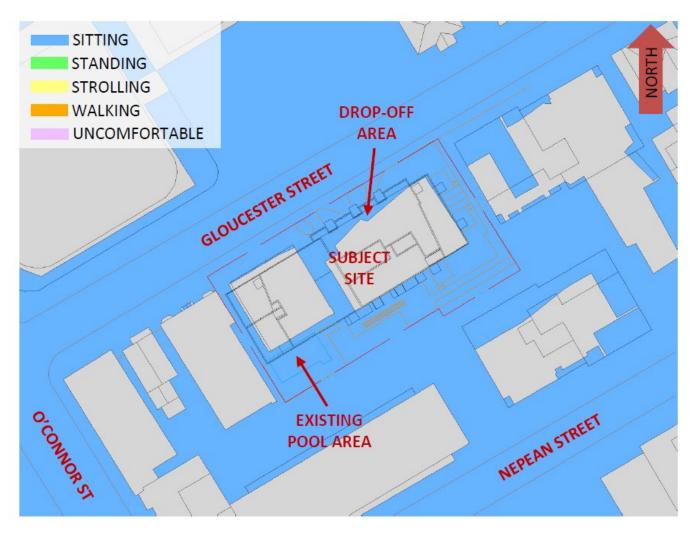


Figure 23 AUTUMN - WIND COMFORT, GRADE LEVEL - PROPOSED MASSING

### 3.1.10.2 Shadow Impacts

The immediate area is typical of a dense urban core typology with tall buildings closely located to one-another; downtown core areas are generally prone to additional shadowing due to this built form context. The proposed development does not result in any additional adverse shadow impact on an existing public realm and open space.

A Shadow Analysis has been prepared by EVOQ Architecture as part of the applications to assess the impact of the proposed development on adjacent properties. As shown in the study, the form of the tower ensures that shadows move across the landscape quickly. Given the nature of the developments surrounding the property, and the existing tight urban fabric of the area, and the fast-

moving shadows in other areas, the proposed development is not anticipated to result in undue adverse impacts.

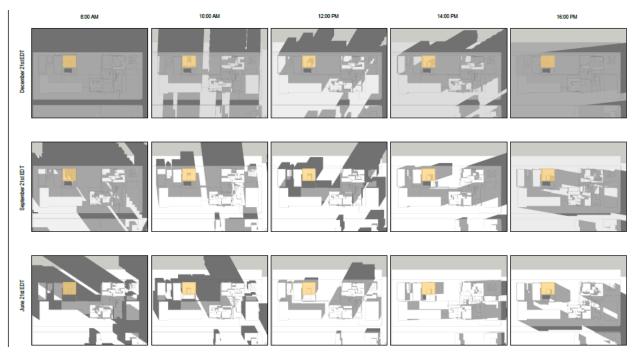


Figure 24 Existing Shadow conditions.

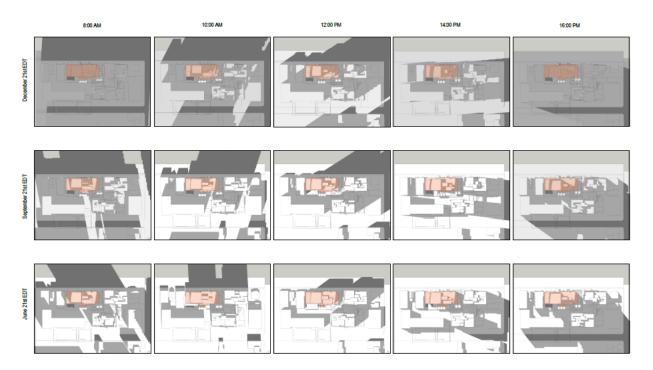


Figure 25 Proposed Shadow Conditions.