

**brigil**

# 265 Catherine Street, Ottawa

Design Brief

For Brigil

Issued for Site Plan Approval (Resubmission)  
15 March 2024

**BDP.  
Quadrangle**



# Design Brief

## 1.0 Project Summary |

This submission for Site Plan Approval facilitates the redevelopment of the former bus depot site on 265 Catherine Street. The development consists of a 32, 36 and 34-storey tower on two 6-storey podiums with a 3-storey townhouse block, park dedication and retail uses split into two phases. The redevelopment of the site is a great opportunity to introduce a mixed-use development.

The proposed development will include, two levels of underground parking and retail at the ground floor along Catherine Street, Lyon Street North, Kent Street and along Arlington Avenue in the form of market space. The proposal also includes bicycle storage for residents at a 1:1 ratio per suite located in secured bicycle storage rooms within the below grade parking garage. Visitor bicycle parking spaces will be provided on ringed bike pins in the exterior open spaces around the site at grade. The buildings are proposed to contain indoor and outdoor amenity spaces located throughout the buildings on the Ground Floor and Seventh Floor including the podium roofs which will be connected by a pedestrian bridge. Additionally, there will be a 'sky lounge' located at the top of Tower 2 with views of the city.

## 2.0 Subject Property |

The subject site is located at 265 Catherine Street in Ottawa, Ontario. Located in the GM(1875) S271 zone and the Central and East Downtown Core Secondary Plan. The lot is approximately 9943 square metres with a frontage of 92.3m along Catherine Street and 60.7m along Kent Street. The site is bordered by four streets, Catherine Street, Kent Street, Arlington Avenue and Lyon Street North. The property is currently occupied by the former Bus Depot.

## 3.0 Surrounding Area |

To the south of the site are commercial land uses along Catherine Street, Highway 417 (with an exit at Kent Street) and the northern edge of the Glebe. Low rise residential dwellings are located to the north with a mixed of residential uses along Catherine street and Bay Street to the west of the site. Glashan Public School is located to the east of the site with commercial and residential land uses along Bank Street.

Key destinations around the site include Arlington Park, Glashan Public School, McNabb Recreation Centre and Central Park. The Rideau Canal and Canadian Museum of Nature are east of the property. The subject site is located a block west of Bank Street, which provides access to commercial and retail businesses.

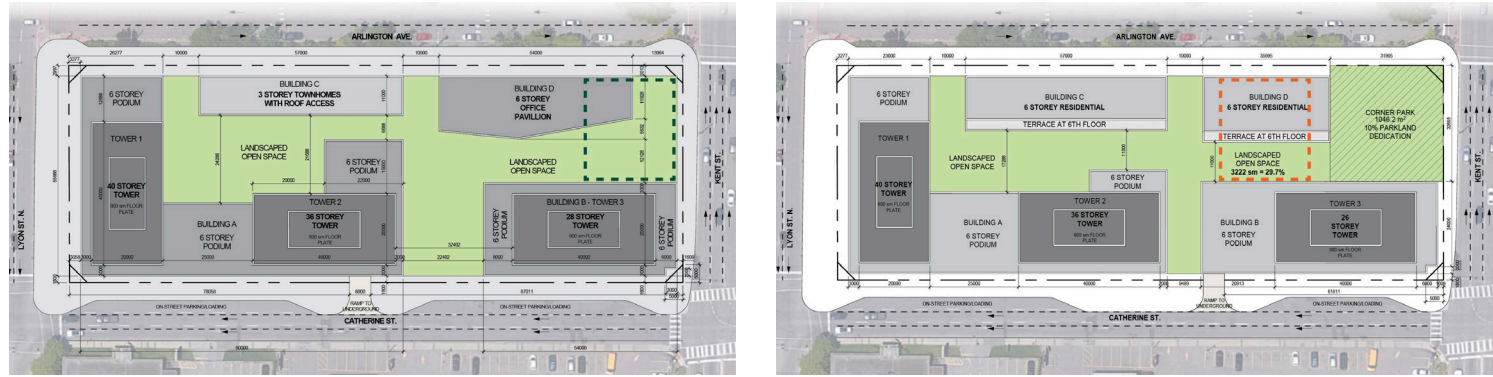




## 4.0 Site Plan Configuration |

### 4.1 Site Plan Development

The proposed site plan carefully addresses the four-sided nature of the block. The aim is to provide a site with no typical 'back-of-house' areas. As a result, multiple circulation studies were undertaken to achieve the optimal experience within the public realm for users, residents and vehicles required for solid waste management and residential move-ins.



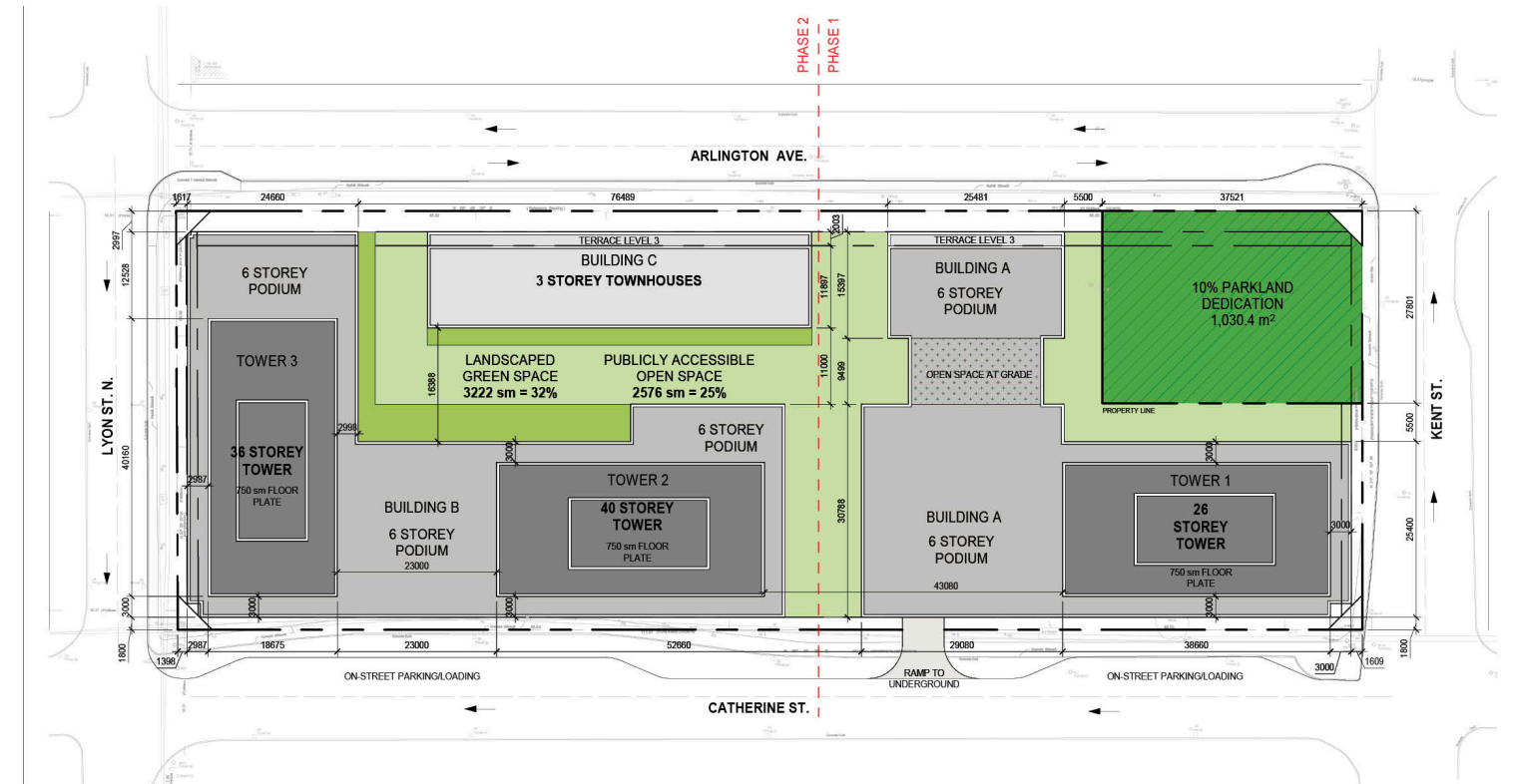
Early Site Plan Iterations

Initially, the first iteration of the site plan proposed four separate buildings that included an office use at the northeast corner of the block. After a pre-consultation meeting with the City, it was suggested to provide parkland dedication equating to 10% of the overall site area at the northeast corner of the site instead. The revised site plan that included the park was presented at a subsequent meeting with City staff where a further suggestion to rotate the north-east building and connect it to the podium of the building at the south to provide a wing or building façade to frame the park.

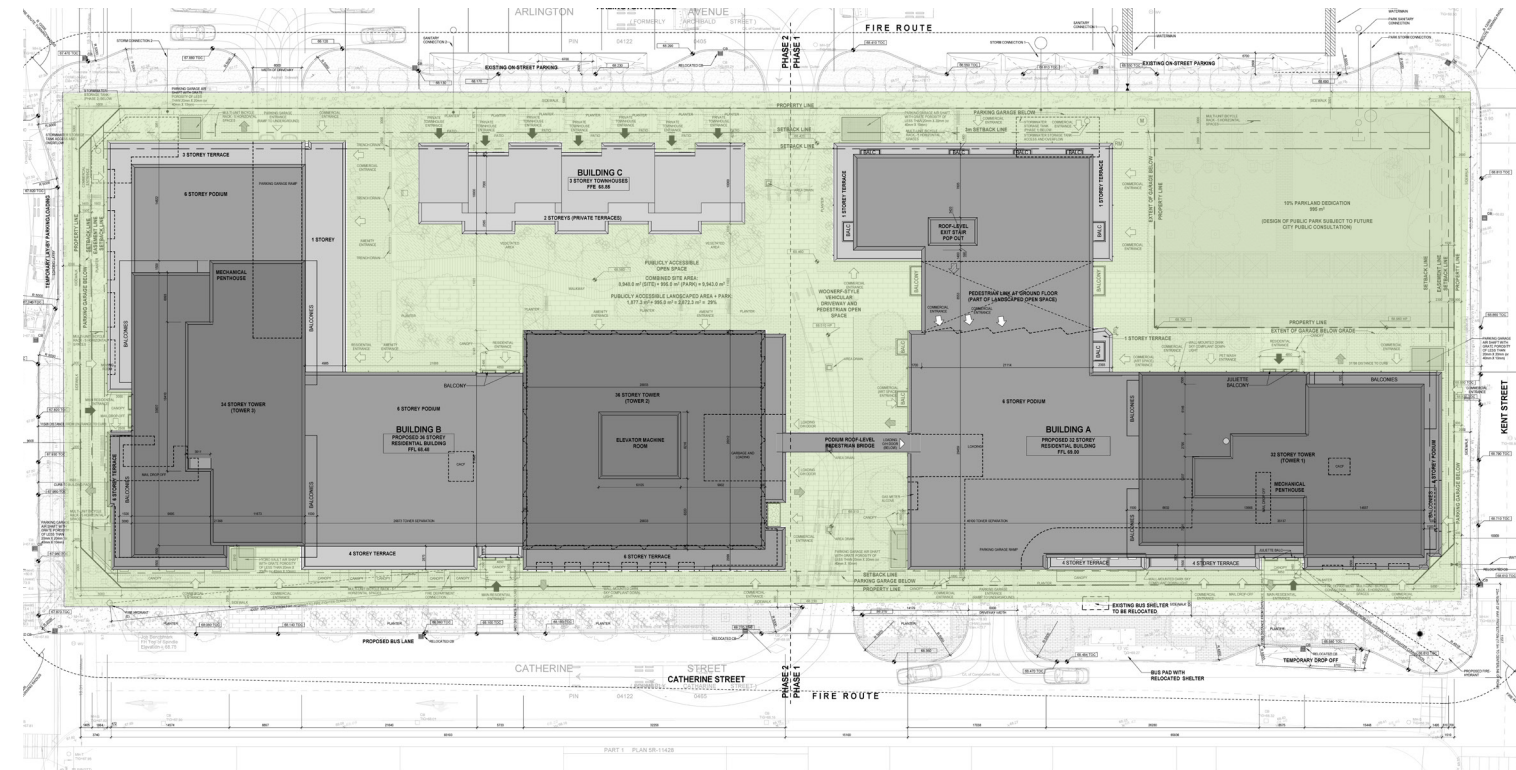
Following these changes, the new proposed site plan maintained both a contiguous east-west and north-south landscaped open space connection across the site by implementing a pedestrian link under the newly connected buildings to provide access to the park from the entire site. This resulted in a publicly accessible open space representing 30% of the area of the total site - surpassing the 25% minimum required in the initial zoning bylaw. The park and its property boundary has been carefully integrated into the design of the overall site. The adjacent buildings are setback from the park boundary to allow for pedestrian circulation at grade and windows as unprotected openings on the building façades.

The required setbacks along each street are compliant per the zoning bylaw. A 1.5 m easement has been provided on both Lyon and Kent Streets. As per the Ottawa Urban Design Guidelines for High-rise Buildings, the proposal complies with the maximum tower floor plate size of 750 sm and surpasses the recommended tower separation distances.

The current site plan incorporates all these previous suggestions and elements, yet simplifies and refines the building massing to frame the public realm to optimize the amount of daylighting on the site.



Site Plan at the time of the Informal UDRP Session



Current Site Plan

## 4.2 Site Plan Access: Solid Waste Collection, Loading, and Vehicle Strategy

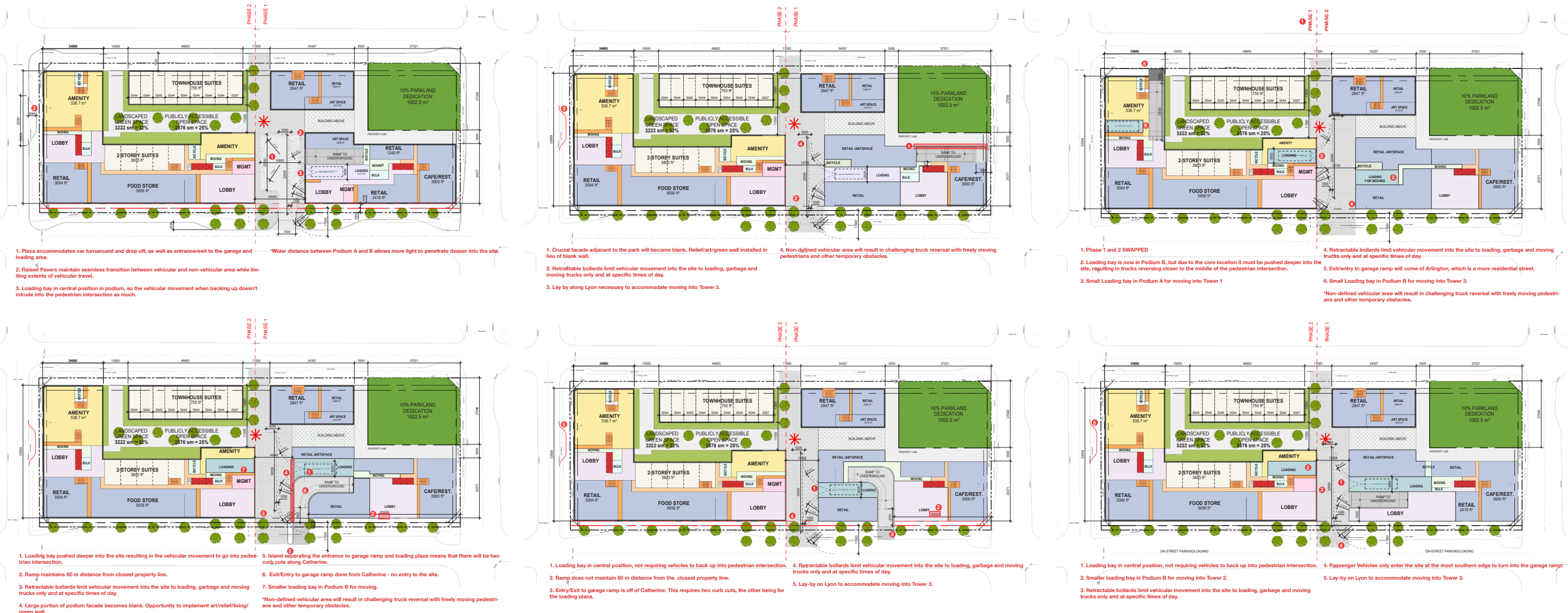
As this site is accessible in the round on all four sides, a number of different strategies were considered to study how private and public vehicles enter and exit the site for solid waste management, loading, moving, drop-offs and parking garage access. Since the City does not permit loading vehicles to reverse onto a public street and because of the planned dedicated bus lane along Catherine Street there are limitations as to where solid waste management collection and loading or move-ins can occur.

The proposed strategy for vehicle access utilizes a north-south connection through the site as a one-way woonerf-style designed access lane from Arlington Avenue south to Catherine Street allowing loading vehicles to access the site and leave in a forward motion. This internal connection will only allow vehicular loading and solid waste management on a controlled basis, while the remainder of the time the access is reserved for pedestrian use. Furthermore, this one-way movement through the site avoids the reversing of large vehicles into tight pedestrian spaces and therefore, solid waste collection is proposed to occur outdoors. Solid waste is collected from all the buildings in the P1 Level of the underground garage and brought up to an interior staging room on the Ground Floor adjacent to the lane. Two interior loading bays are reserved for smaller moving vehicles to allow residents to move in and out of Buildings A and B (Tower 2) in a secured service corridor leading to the elevators. These loading bays connect to the elevators via a separate internal access corridor.

The parking garage is accessed by two vehicular ramps accessed from Catherine Street and Arlington Avenue to mitigate traffic volume and car queuing. Both ramps are designed to provide visual clarity when entering and exiting the site. The existing on-street parking along Arlington Avenue will remain while a smaller drop-off area and City-proposed dedicated bus lane is planned for Catherine Street.

A layby is proposed on Lyon Street to serve as a drop-off space for move-ins for Tower 3 and is located near a secured service corridor leading to the elevators. Due to the configuration of Building B with two separate tower cores, it is not possible to provide internal access to both towers from the loading bay located under Tower 2 adjacent to the internal lane. Since the core of Tower 3 is not close the internal lane, vehicles are not be able to access this tower from the internal part of the site without either reversing onto Arlington Avenue from a separate exterior loading space that could otherwise be located between Buildings B and C (townhouse), or an internal loading bay that could be located adjacent to the parking garage ramp along Arlington Avenue, or driving through the entire site to reach the internal lane to be able to leave in a forward motion.

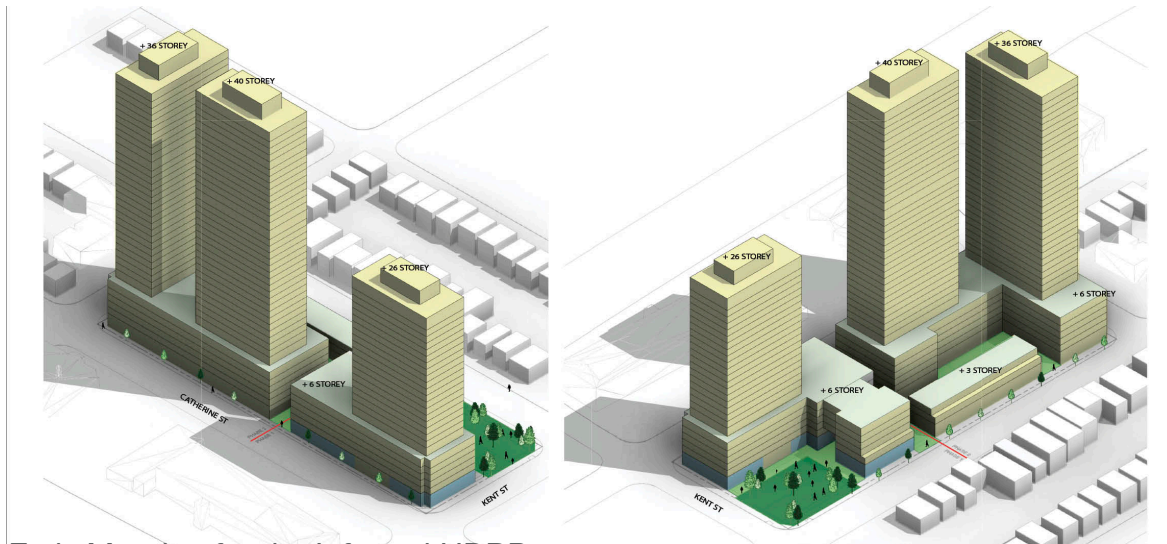
The landscaped open space provided throughout the site has been designed to minimize vehicles and favour pedestrians. Additionally, the buildings have been designed to minimize blank façades or 'back-of-house' type functions such as loading bays, garbage rooms etc., and instead have been designed to favour the pedestrian realm by providing as much animation and visibility around the entire site.



## 5.0 Massing Development |

### 5.1 Overall Massing and Height

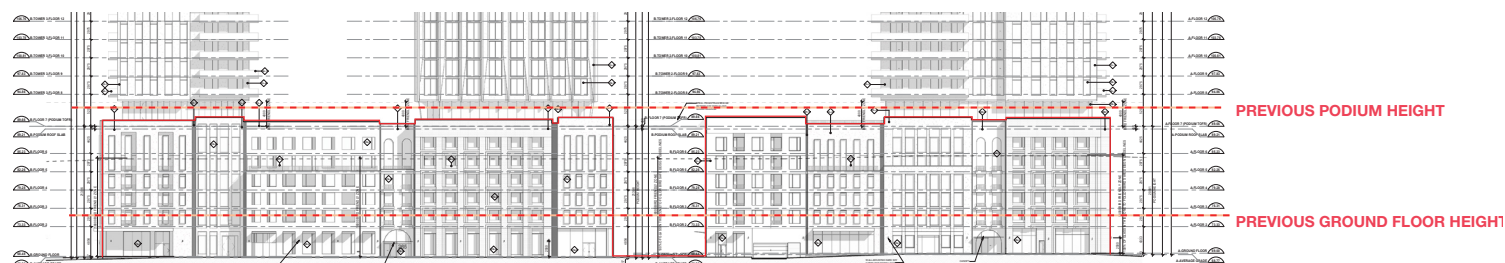
Early versions of our massing consisted of Building A Tower 1 as a 26-storey tower, Building B Tower 2 as a 40-storey tower, and Building B Tower 3 as a 36-storey tower with podiums that were more or less uniform at 6 storeys.



Early Massing for the Informal UDRP

After a series of internal design charrettes and consultations with the Urban Design Review Panel and City staff, the councilor and the community, the massing and tower heights were revised to accommodate transition, scale, daylighting and the public realm. As a result, Building A Tower 1 has been increased from 26 to 32 storeys, Building B Tower 2 has been reduced from 40 to 36 storeys, and Building B Tower 3 has been reduced from 36 to 34 storeys. The podiums were also reshaped to include some stepping that range in height from 4 to 6 storeys along Catherine, Lyon and Arlington Street.

The overall height of the podium was also reduced as the design continued to develop. The bicycle storage rooms that were initially located between the ground and second floors was relocated to be below grade, allowing the overall height of the podium to be reduced by approximately 2 m. This revision also provides a more human-scale retail experience at a height of 4.5 m (as opposed to 6 m) to tie in with the finer-grained retail concept.

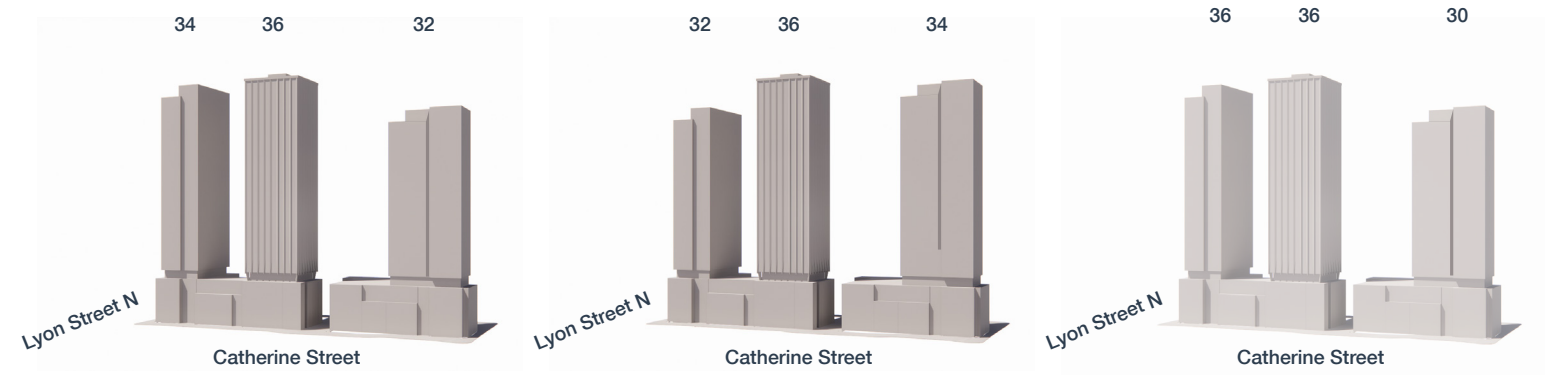


South (Catherine Street) Elevation Showing the Previous Podium Heights

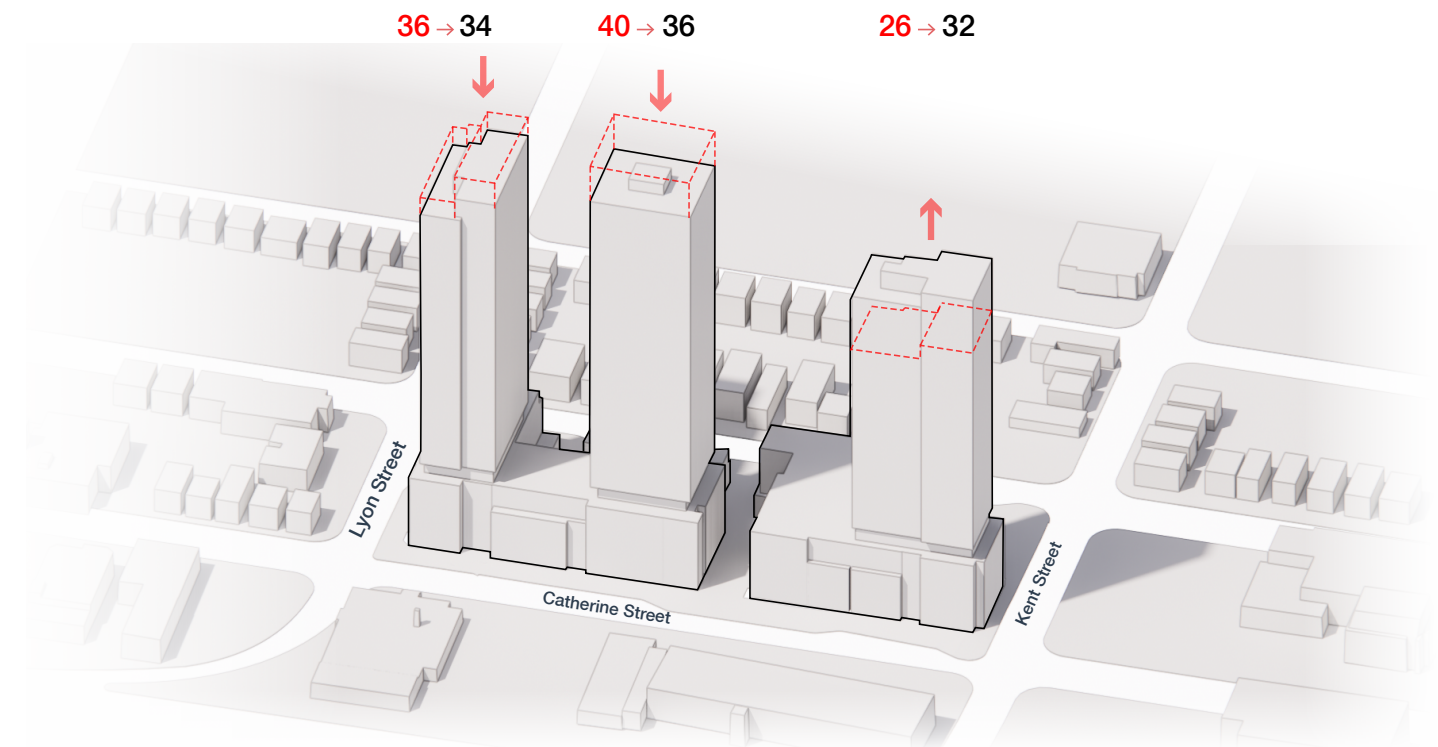
Option 1

Option 2

Option 3



Different Massing Height Options in Collaboration with the City of Ottawa Staff



Preferred Massing Option 1

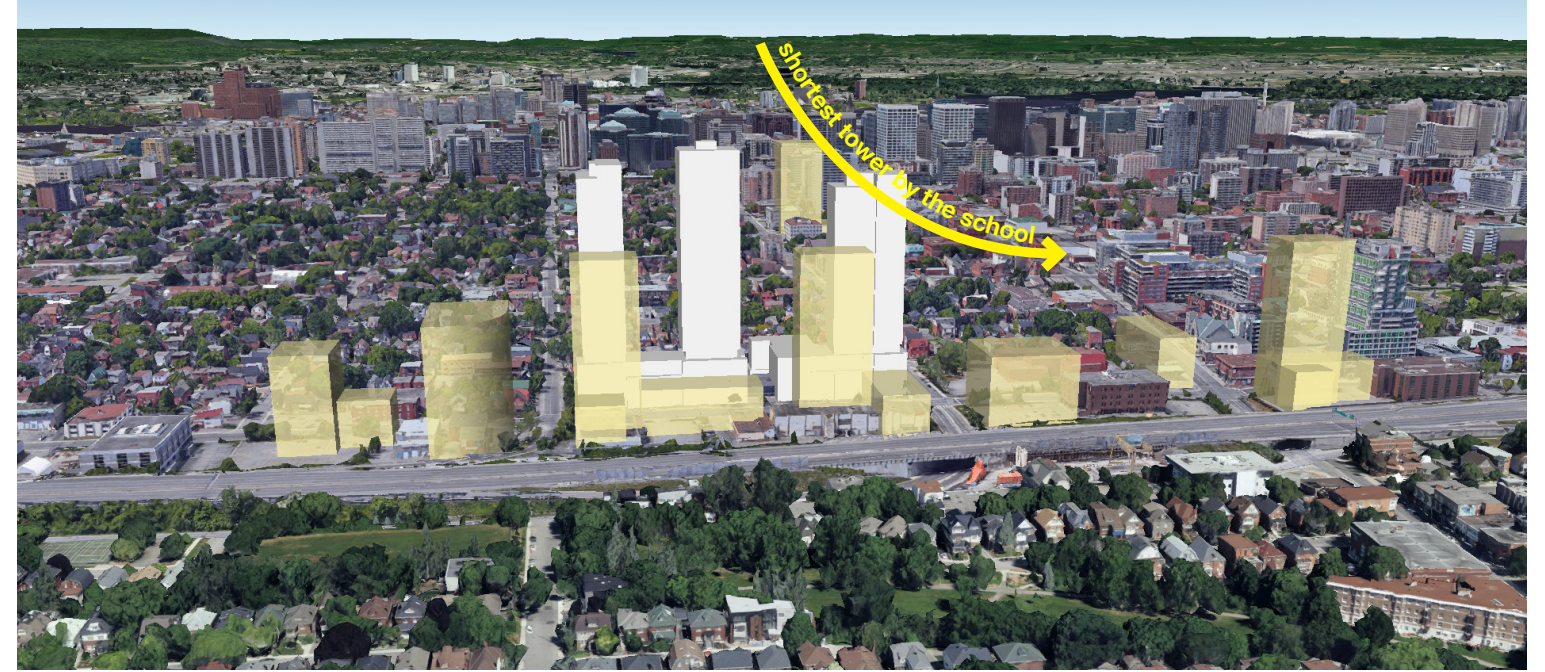
Option 1 shown above was preferred for the reasons below:

- It is a more balanced approach to tower heights, as the towers no longer overpower the podium.
- The shorter tower on Kent is maintained to provide a better visual transition to the school and park.
- Based on tower positioning, setbacks and other constraints, the two towers flanking the middle tower share a similar footprint and cladding approach which allows the center tower to become a differentiated 'feature' tower, that is ultimately the tallest of the three.

The site is located within the Southern Character Sub-Area in the New Official Plan, which encourages high-rise development that will provide a buffer between the Queensway and the established neighbourhood to the north. The proposal is the first development in the area to introduce high-rise development with low-rise and open space areas that will reflect the vision of the Official Plan.

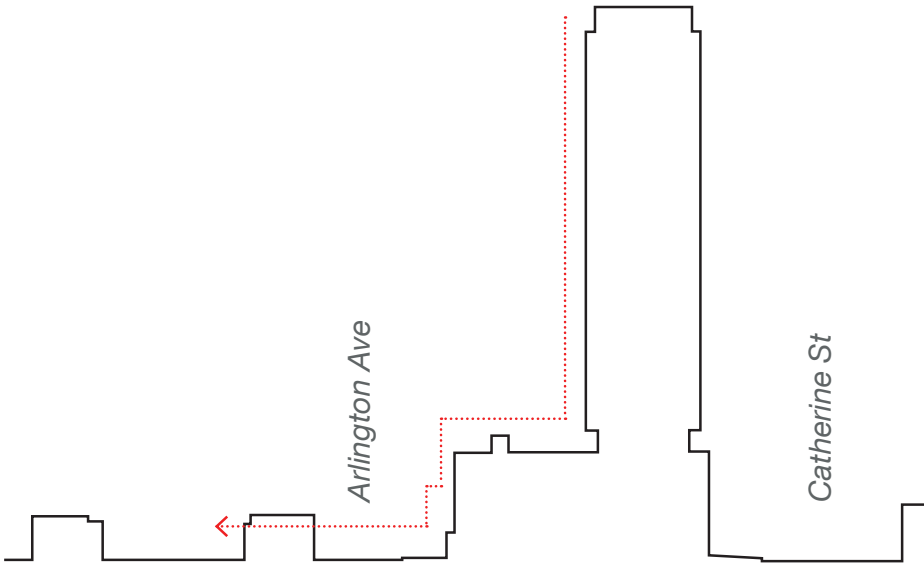


Proposed Development in the Existing Context

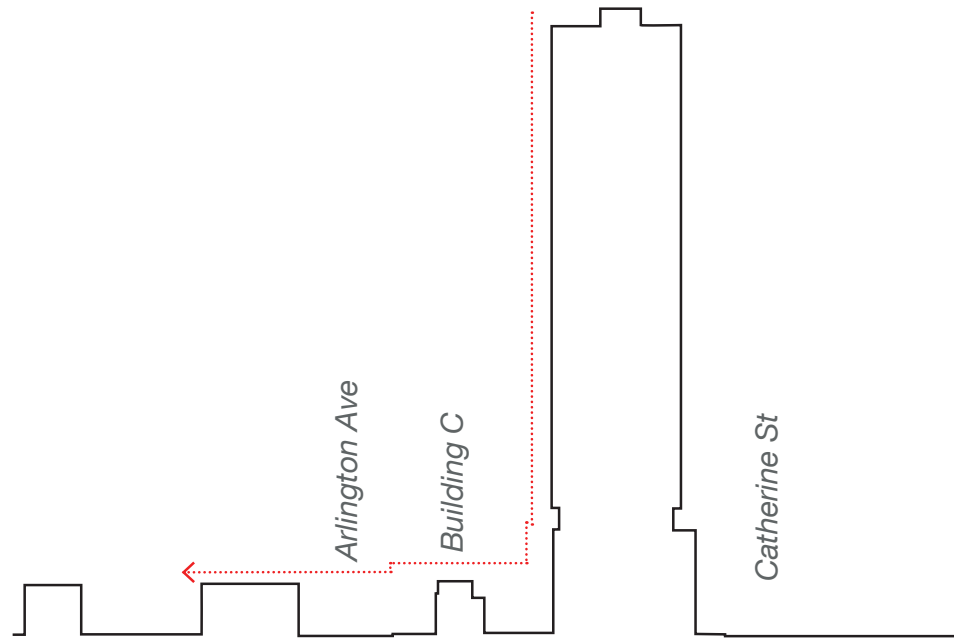


Proposed Development in the Planned Context

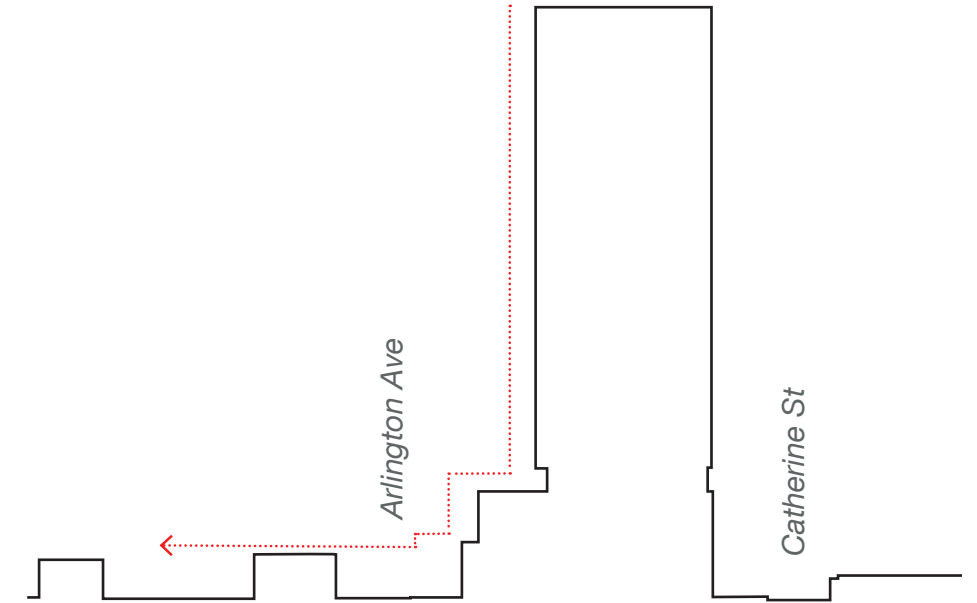
Building A - Tower 1



Building B - Tower 2



Building B - Tower 3



Diagrams Showing the Built Transition towards Arlington Ave

The diagrams shown in the previous pages, as well as the rendering below show how the podium was adjusted to provide a better transition to the residential areas north of the site along Arlington Avenue and beyond. A combination of podium stepping, tower setbacks, and built-in buffers in the form of outdoor spaces, building separation and smaller building blocks are used to stitch the block into the fabric of the adjacent neighbourhoods more respectfully. The overall building height datum interacting with the length of Arlington Avenue is much lower than the full 6-storey height proposed for Catherine Street.



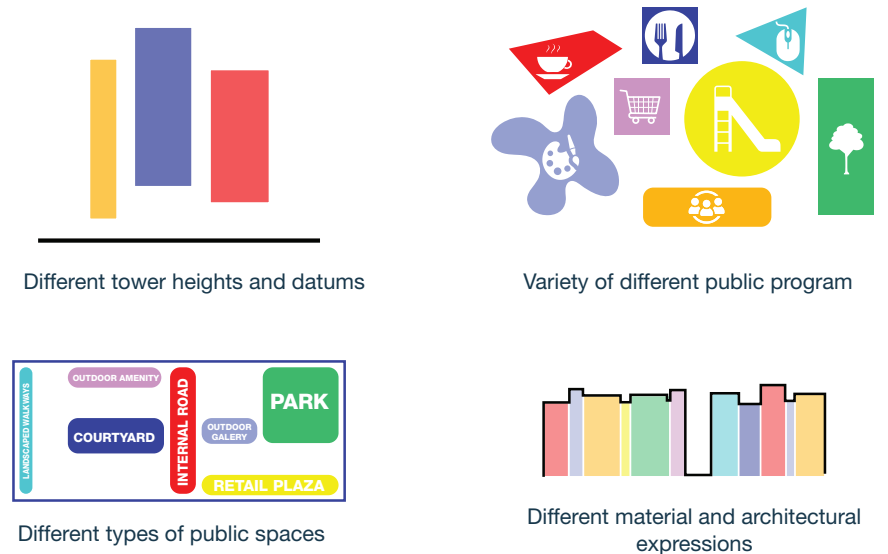
North Elevation along Arlington Avenue Showing the Lower Height Building Datum and Distribution of Open Spaces



Rendering Looking Southeast Showing the Built-form Transition Towards Arlington Avenue and Lyon St

## 6.0 Design |

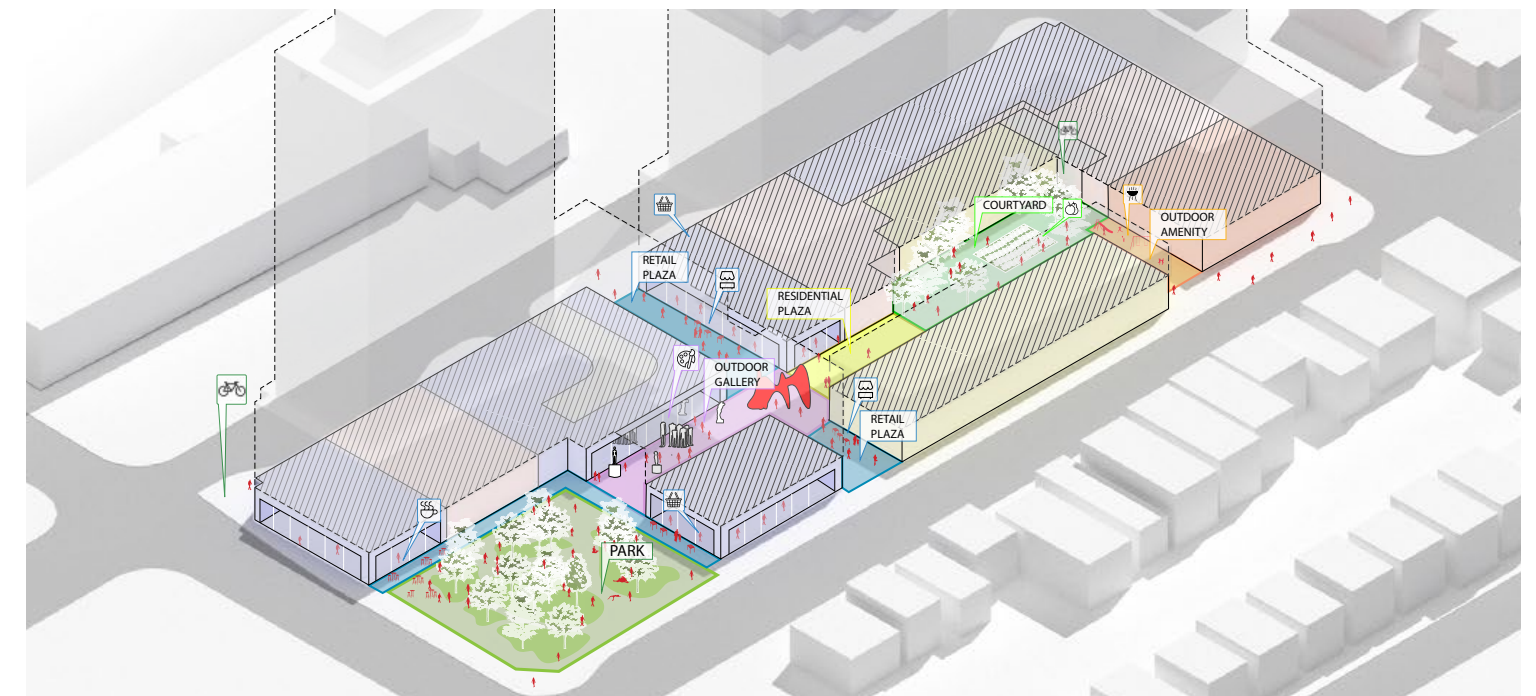
The Design of this project is rooted in variation and differentiation in the micro and macro scale. This is evident in the podium articulation, the tower grouping and expression, the use of materials and in the programmatic distribution.



The design of the project can be broken down into three distinct categories: the ground plane and public realm; the podiums; and the towers.

### 6.1 Ground Plane and Public Realm

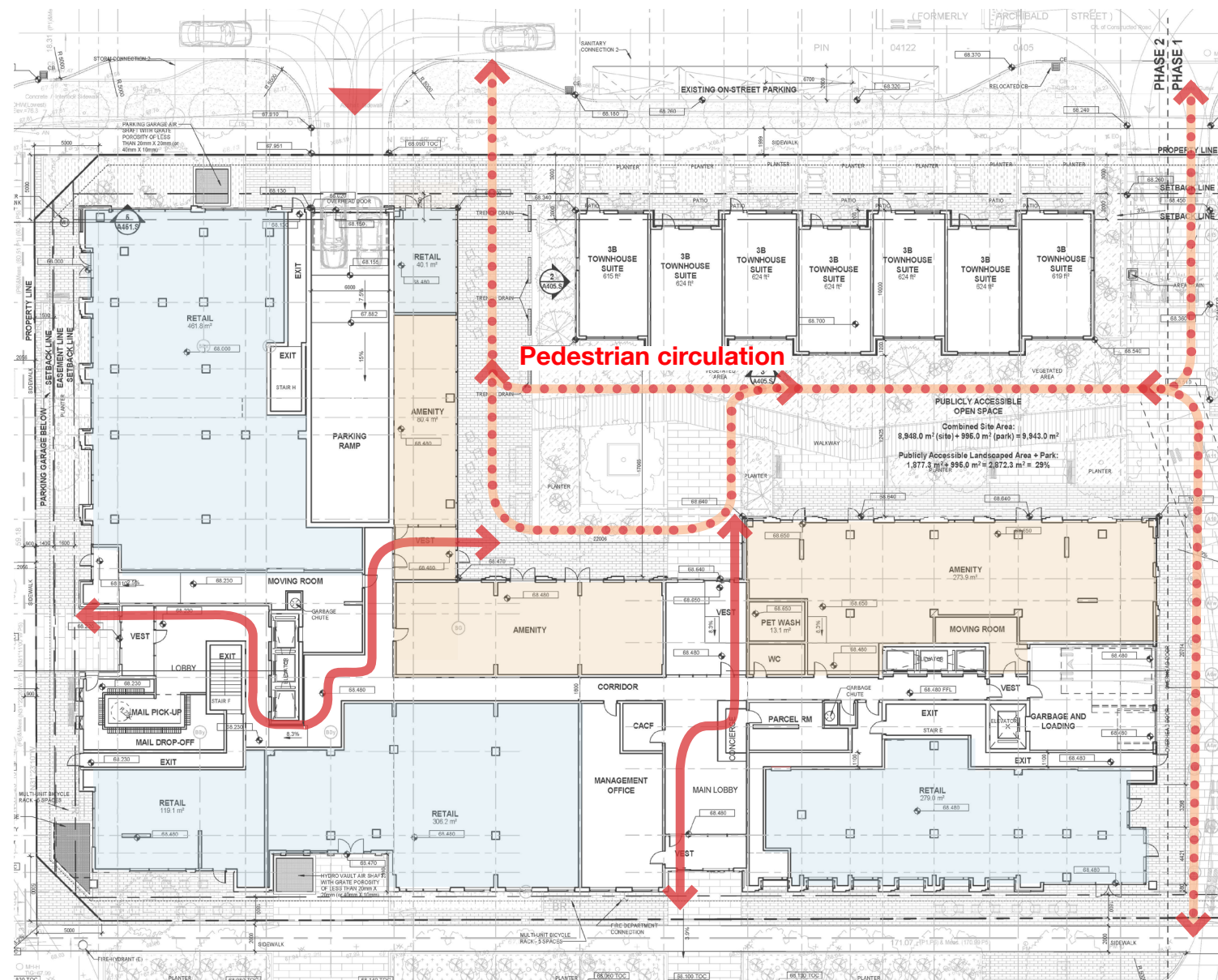
A unique component of the proposal is how porous or accessible the development is. A chain of different outdoor public spaces weave through the site, guiding pedestrians through the use of paving, greenery, public art, and programming.



Note: \* This diagram illustrating the Ground Floor area is an early concept from the initial Urban Design Review Presentation and may not represent the current layout.

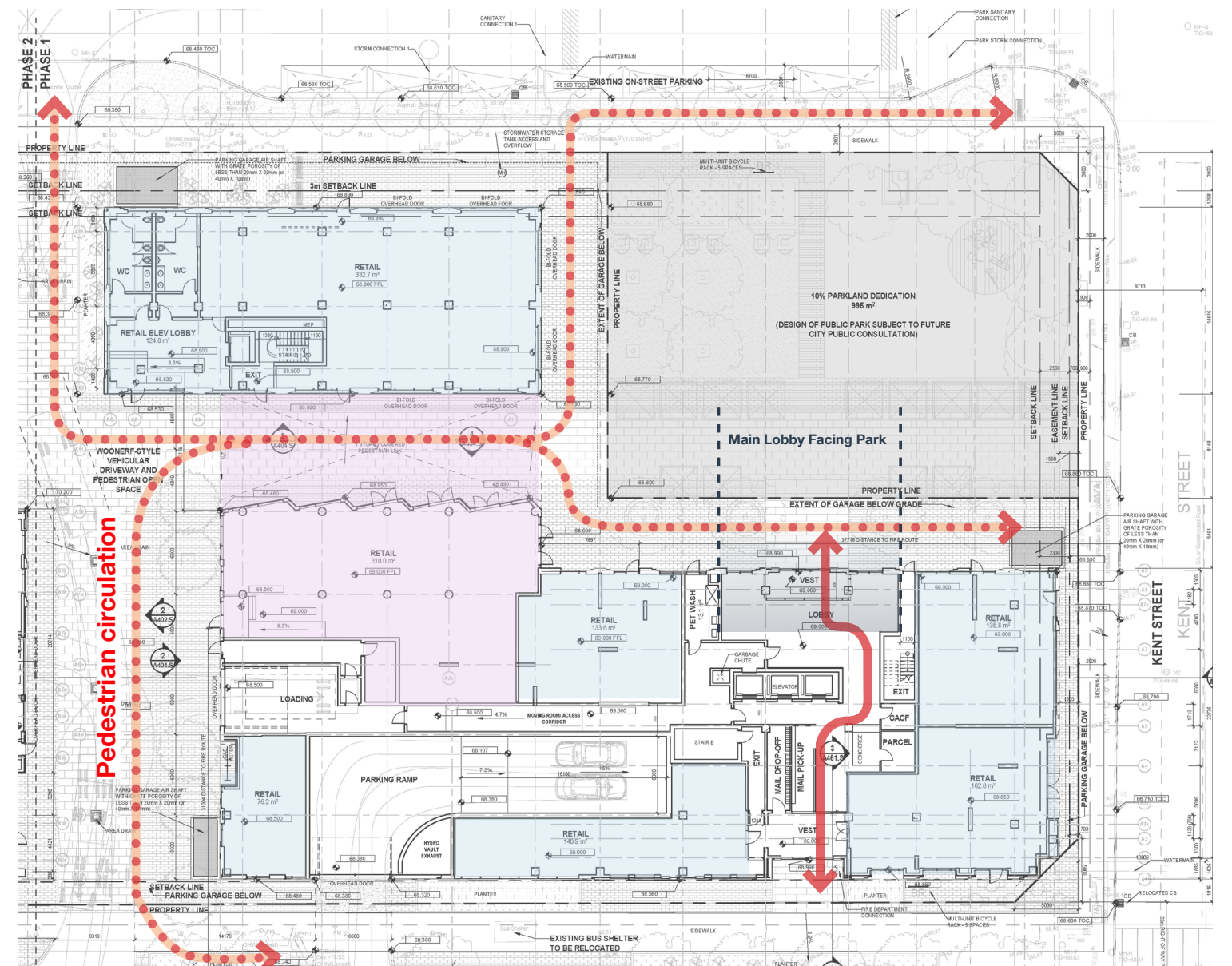


The ground floor of the development is designed with pedestrian accessibility and privacy in mind. The north-south publicly accessible lane (woonerf) will provide a sense of openness and security with an ease of access for pedestrians, so that they do not have to walk around the entire site to reach their destination. The east-west pedestrian link connects the west side of the site (which is more residential in nature) to the park at the east side of the site by way of a one-storey exterior passage flanking the planned market and art space. The east side of the site acts as the public side with connections to retail, open spaces and the market building framing the park.



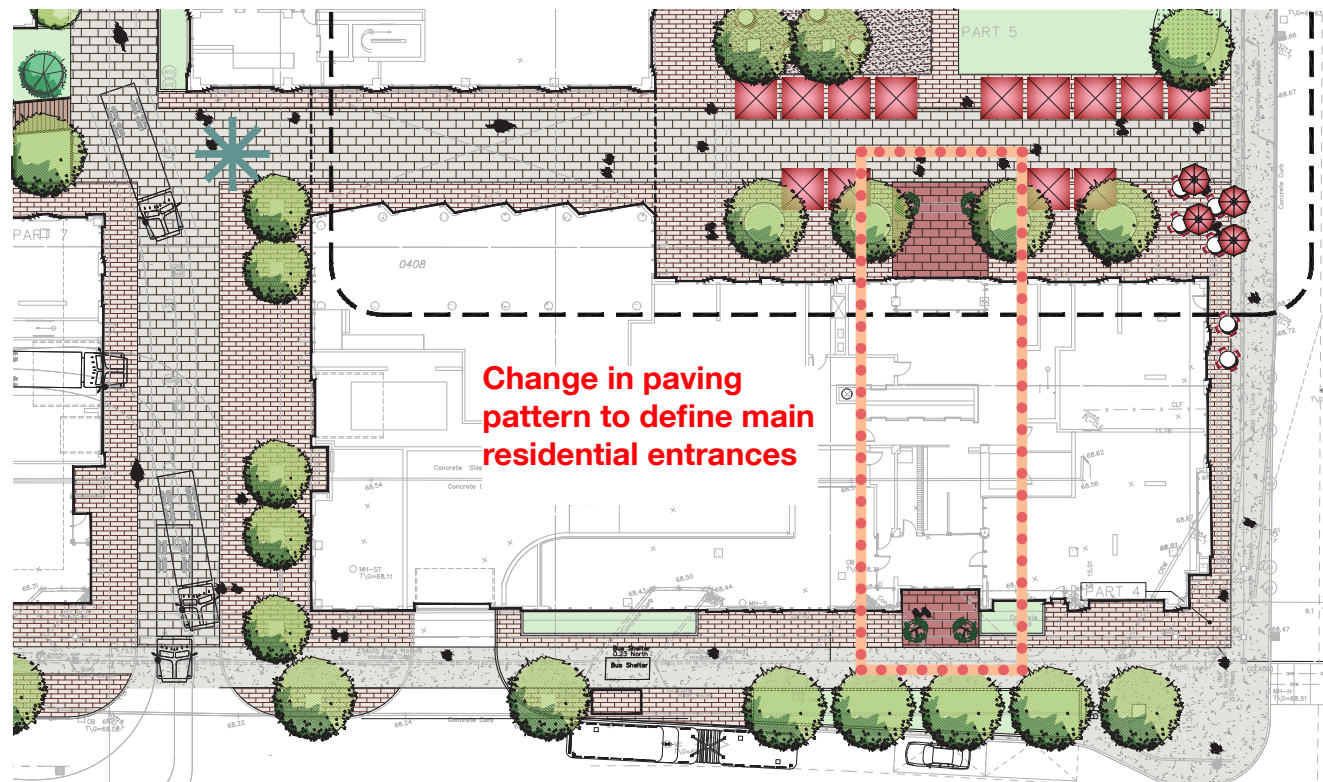
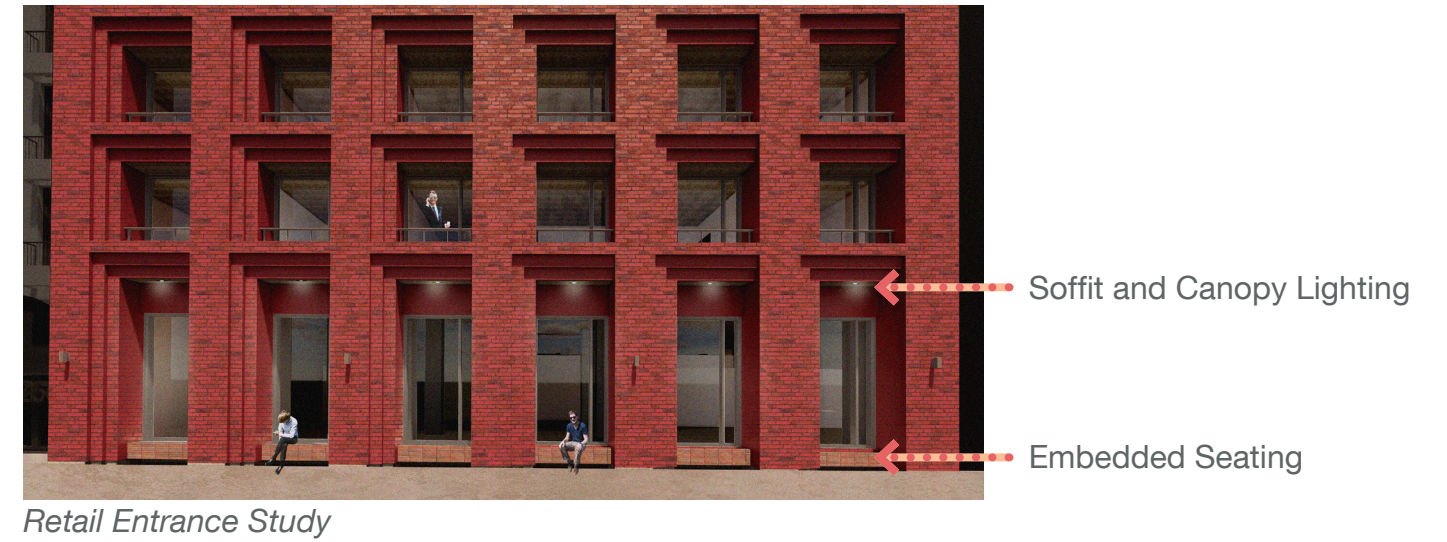
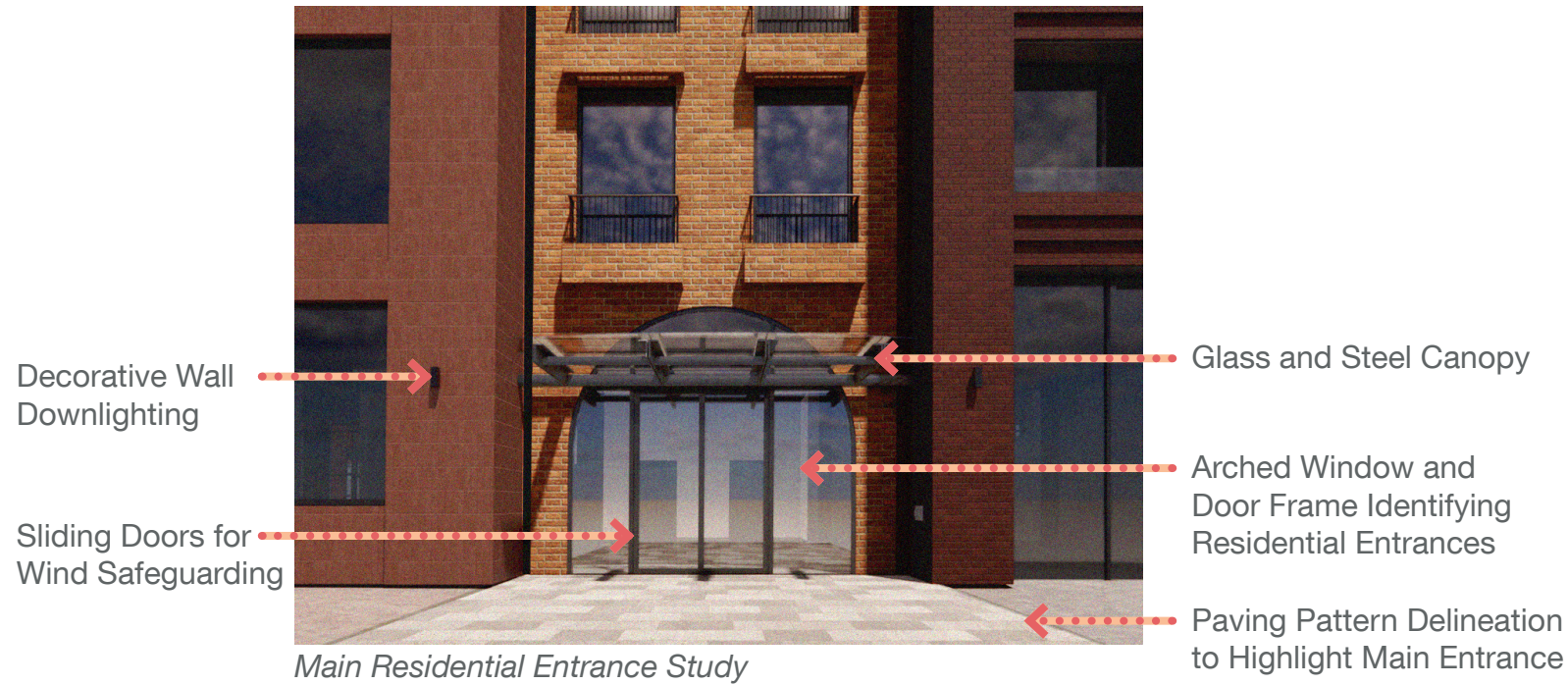
Phase 2 Ground Floor Plan - Note:\* This diagram illustrating the Ground Floor area is an earlier concept from the final Urban Design Review Presentation and may not represent the current layout.

In both phases of the project, through-lobbies allow for an internal mode of access through the site in parallel with the outdoor connections. In Phase 1 specifically, the main lobby opens up to the park, while the Catherine Street entrance remains a fast moving in and out. Retail is found on all sides of the building. In phase 2, retail or amenity are also located on all sides of the building, but in this case the amenity is concentrated towards the interior face, connecting to a residential-style courtyard in the middle, where the amenity can spill out, away from the fast moving outer edges.



Phase 1 Ground Floor Plan - Note:\* This diagram illustrating the Ground Floor area is an earlier concept from the final Urban Design Review Presentation and may not represent the current layout.

To provide an approachable, and personalized pedestrian street experience, different architectural strategies are introduced along the façade on Catherine Street, with large expanses of glazed curtain wall windows minimized to provide the independent retailers with a unique storefront. Main residential and retail entrances are highlighted with canopies to define their entrances, enhance wayfinding and ensure a safe, friendly and weather-protected pedestrian zone.





Section Showing the Art Space and Exterior Passage

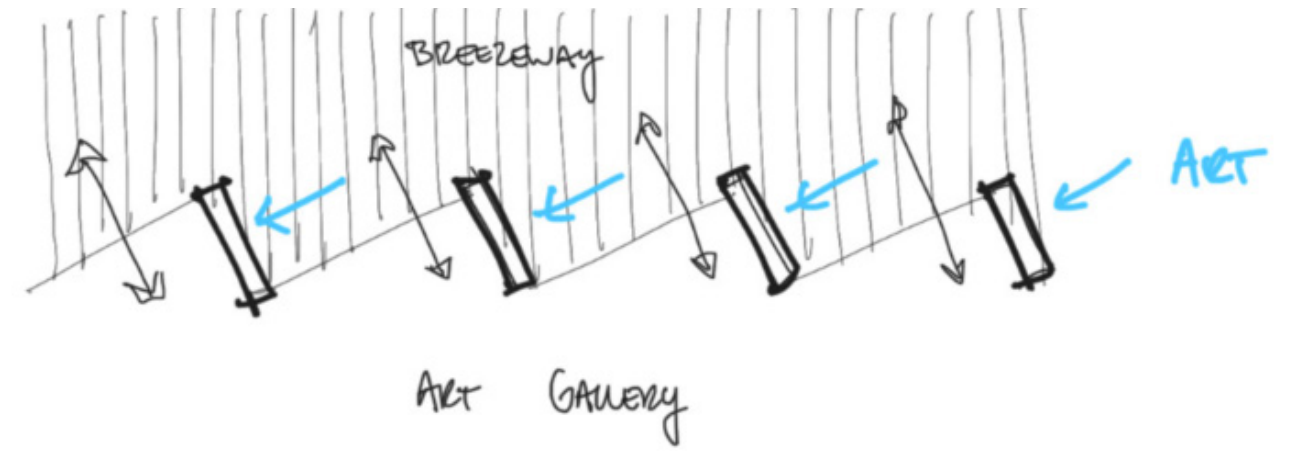


Diagram Showing the Sawtooth Concept

One of the main programmatic elements that has been embedded into the project from the beginning was this concept of an industrial-style market space that abuts Arlington Avenue and the park. Architecturally, this market component plays on Ottawa's industrial heritage, hinting to the past in its design details. This market functions as a base for the building above and has large bi-fold doors that open up, allowing for the market to spill out into the park. The aim for this market is to become a destination for the neighborhood and beyond.

Another unique element that has been planned, is a designated space for art. The art space has exterior access from the east lane and on the west side next to the park with a feature wall along the exterior pedestrian passage. This feature wall within the exterior passage is envisioned as a sawtooth wall with solid fins and glazed windows to allow for a seamless transition between the interior space and the exterior passage that can house art exhibitions, murals, and feature lighting.



Vignette showing the Market Concept



Vignette showing the Art Space and Pedestrian Underpass

## 6.2 Landscape Design and Public Realm

The proposed landscape design thoughtfully contributes to an active and community based public realm that is structured at the core of this project. Inspired by its impactful location and direct access to an active and engaged community in the downtown core, the landscape design supports a highly porous and accessible development with extensive tree planting, unit paving, public art, and opportunities for events and programming.

Designed in conjunction with the architecture, the landscape design and public realm promote pedestrian connectivity and porosity through the site with direct and complimentary uses between interior and exterior spaces.

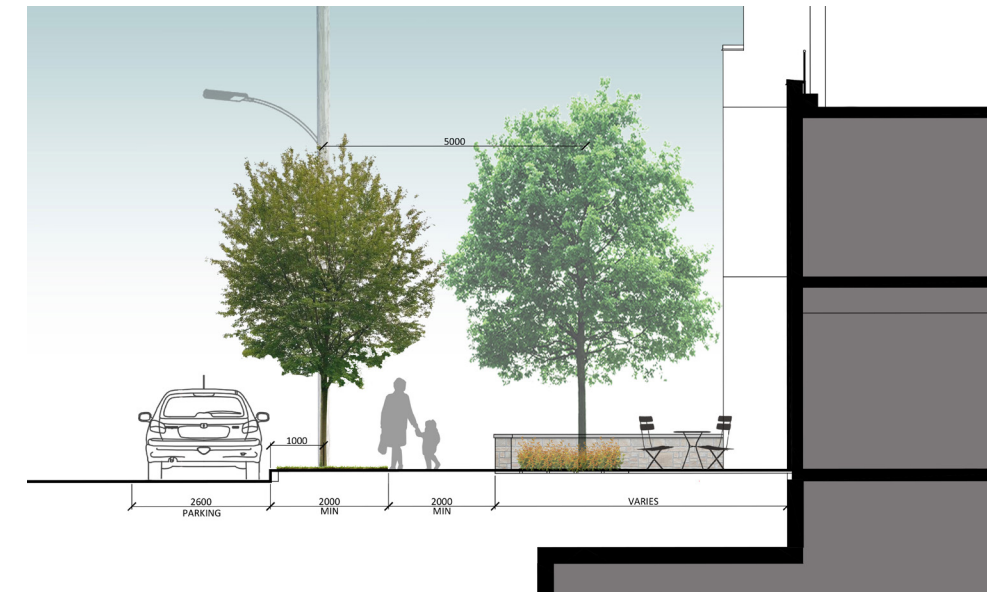
Beginning at the eastern most end of the site, the site design responds to a proposed public park on the northeast corner. From the edge of the park, the design begins to knit the public realm and architecture together, connecting a greater perimeter streetscape and adjacent community with a central landscaped spine that supports an active and evolving program for the ground floor.

Key design features and destinations throughout the site are linked with swaths of planting and proposed large canopy trees to contribute to the overall green targets for the site and contribute to the City of Ottawa's overall urban forestry targets. Large, native tree species are proposed to enhance and provide a dense urban tree canopy cover and shade for warm seasons.

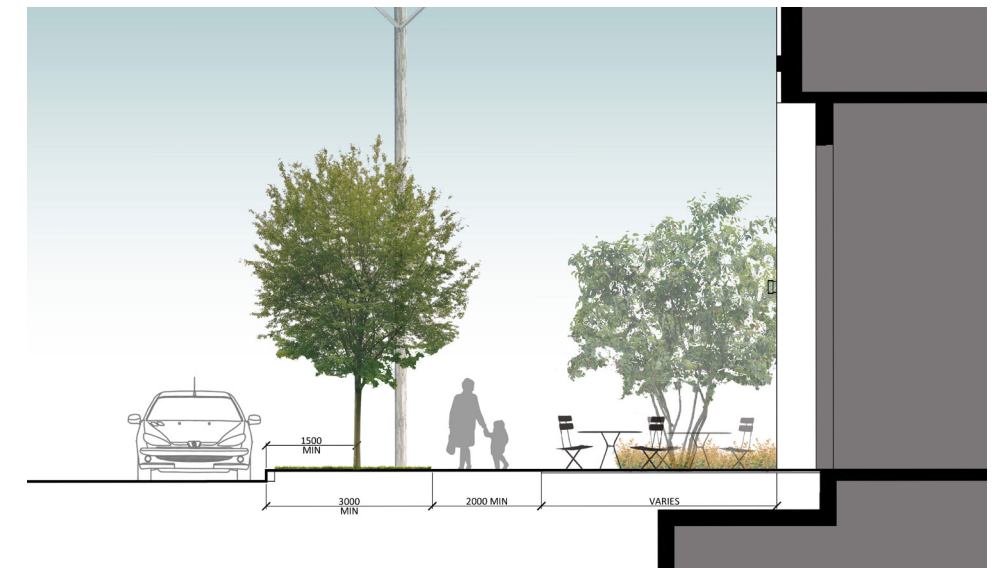
Flexible and adaptable spaces are designed in compliment to the park block to allow for structured and unstructured programming and events, while smaller seating spaces are seen throughout to provide solace and tranquility for individual users and residents.



Landscape Plan



Arlington Avenue Boulevard Section

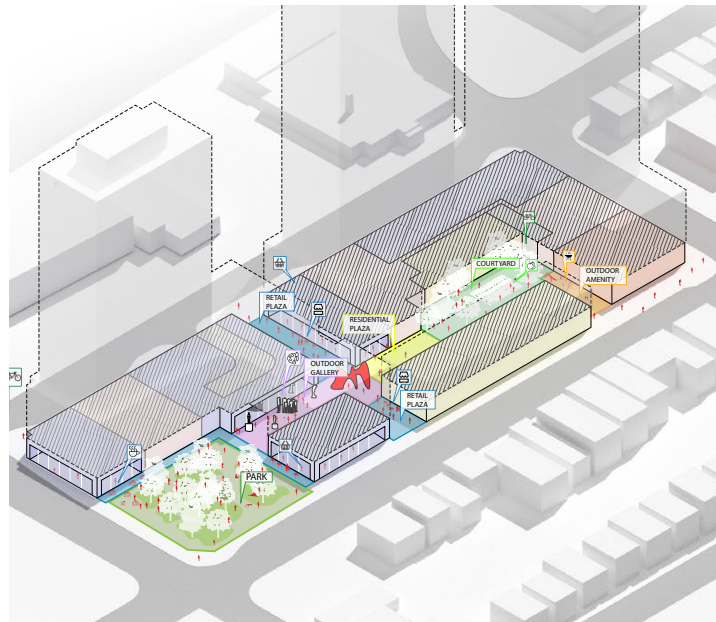


Lyon Street Boulevard Section



Catherine Street Boulevard Section at Residential Entrance

6.3 Public Realm Design Guidelines



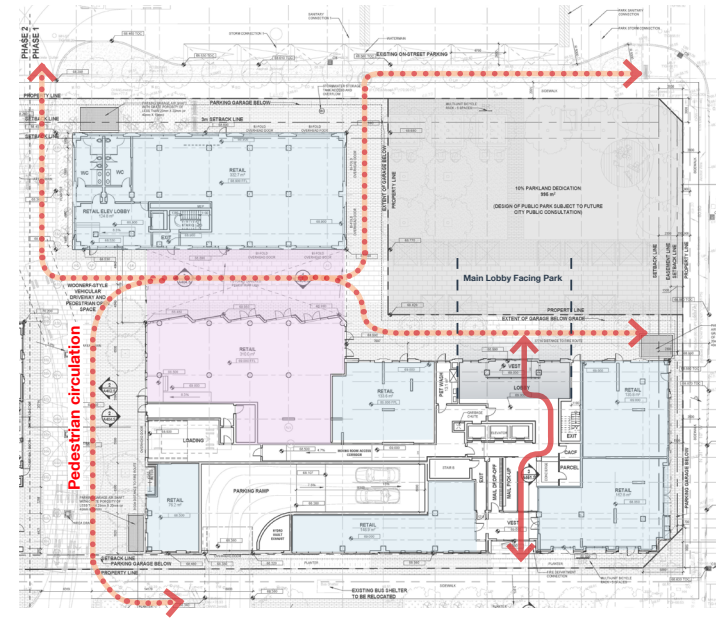
**CONNECTIVITY**

*Provide clear connections between places for sustainable transportation modes - including walking, cycling and transit.*



**SAFE**

*Ensure a safe, protected pedestrian zone that defines entrances, gateways and transitions of space. Reduced speed limits for vehicular traffic.*



**ACCESSIBLE AND INCLUSIVE**

*Provide defined and accessible paths for all residents and visitors that are both functional and attractive spaces.*



**IDENTITY OF PLACE**

*Create distinctive and inviting places that strengthen a local identity and create a sense of community.*



**FLEXIBLE AND ADAPTABLE**

*Flexibility in design to allow community growth and evolution of space. The public realm will provide meaningful and pedestrian friendly spaces that have versatility in use and function.*



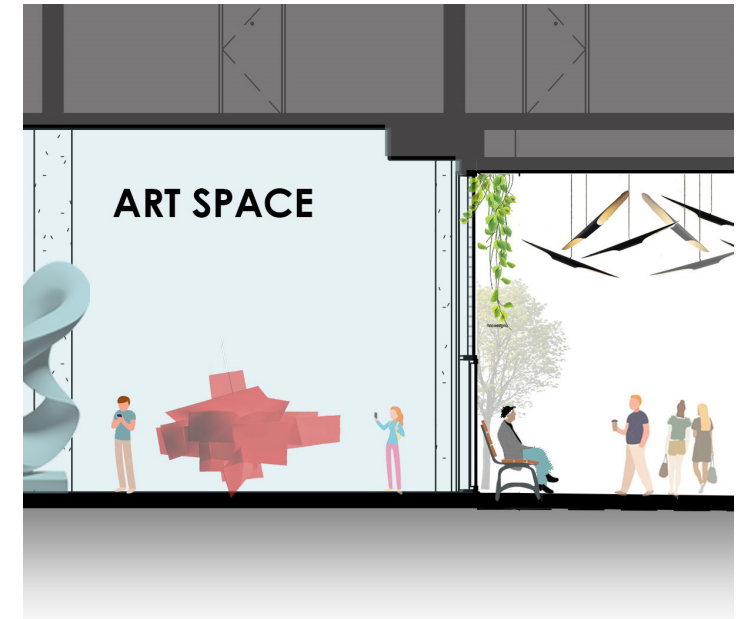
**ENVIRONMENT**

*Native and drought tolerant plant material will be used to reference adjacent natural lands and limit the need for irrigation. Design will provide infrastructure for healthy, mature trees.*



**MULTI-SEASON**

*Design spaces for four season use and programming to encourage healthy living and improve quality of life.*



**PLAY AND ACTIVATE**

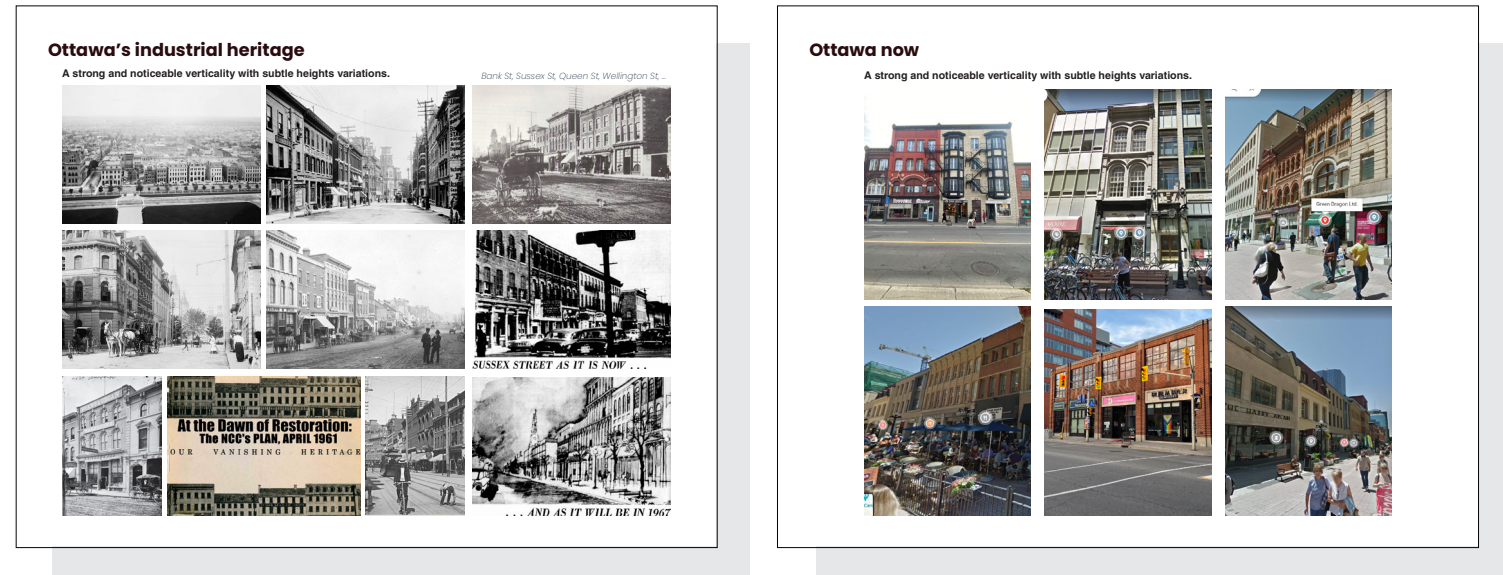
*Play can be introduced to city streets and public spaces with elements that invite all generations to explore and discover place in an urban environment. From small temporary interventions to permanent displays.*



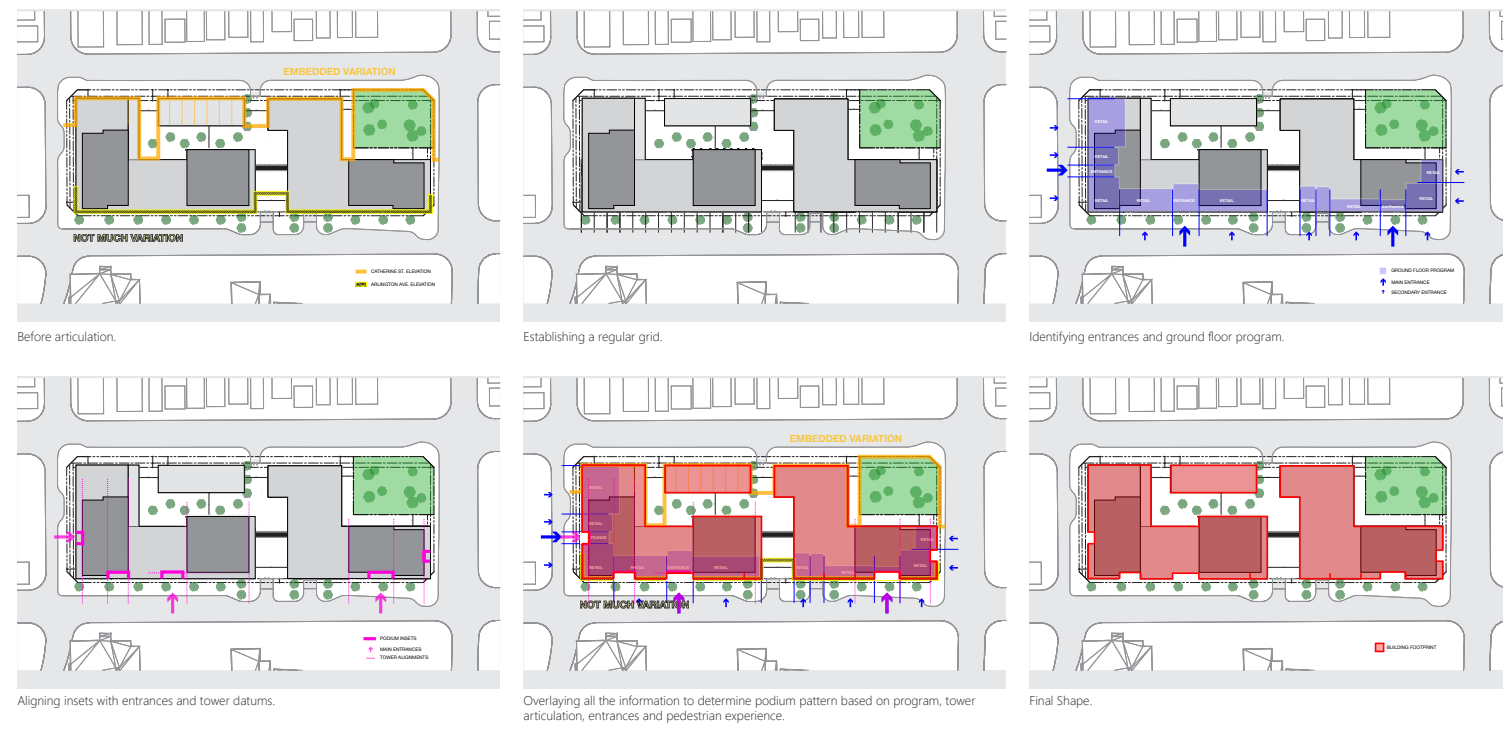
*Rendering Looking Southwest, Showing the Public Park*

### 6.3 Podium

The podiums in this proposal took inspiration from the architectural history of Bank, Sussex and Queen Streets in Ottawa. The rhythm and scale was studied which inspired the articulation of the podiums. The remnants of these historical precedents are still found in contemporary developments in Ottawa.



Maintaining a streetwall condition along Cathrine Street was desired, but in order to keep visual interest and walkability, the massing was fragmented using a toolkit of different architectural motifs and materials. This fragmentation was derived by overlaying different layers of information that correspond to at-grade programming, entrances, tower positioning and an established grid.



Podium Articulation Diagrams



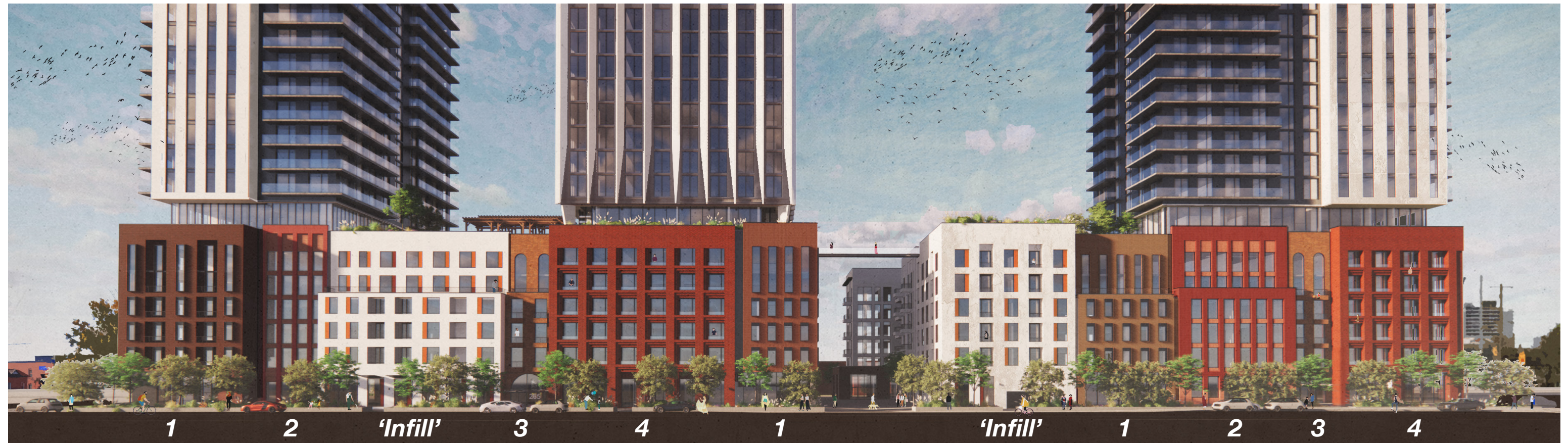
In terms of materiality, the podium largely consists of masonry cladding. Similar red and brown tones were clustered together under the towers to create a base that grounds the towers above. The residual space is treated as infill and will be clad in a lighter toned brick material.



View Looking Northwest Along Cathrine Street

The cladding toolkit categorized each of the five main façade treatments into different material and colour palettes. Each repeated motif has the same designated material color and look, creating a consistent pattern and rhythm.

Podium Toolkit



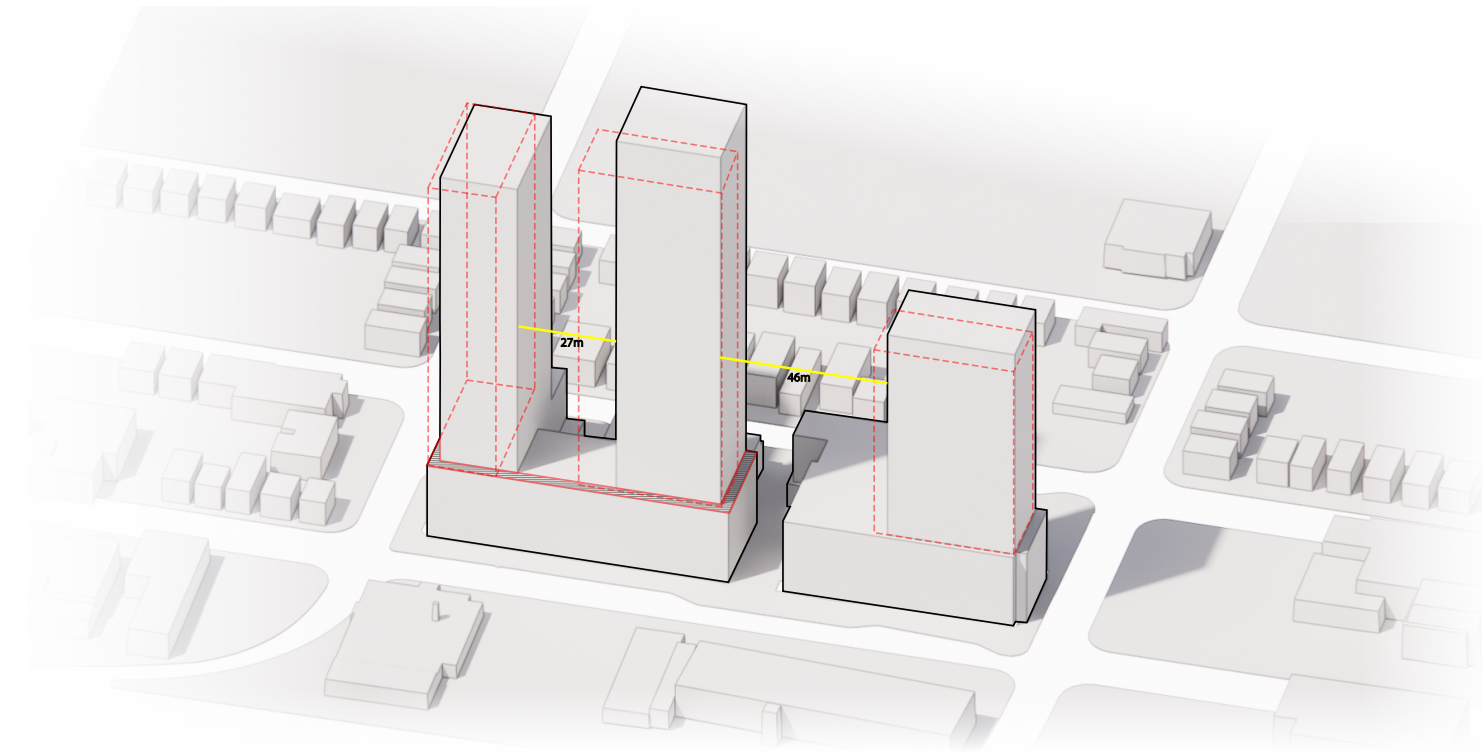
South elevation along Catherine Street



## 6.4 Towers

The original tower massing and position incorporated a significant setback from the edges of the podium below which resulted in undesirable, long, slab-like towers that were too close together. To achieve more daylighting and less shadow impact, the middle tower was converted into a square so that the distances between the towers could be optimized. Additionally, having three similar towers did not reiterate our parti regarding differentiation.

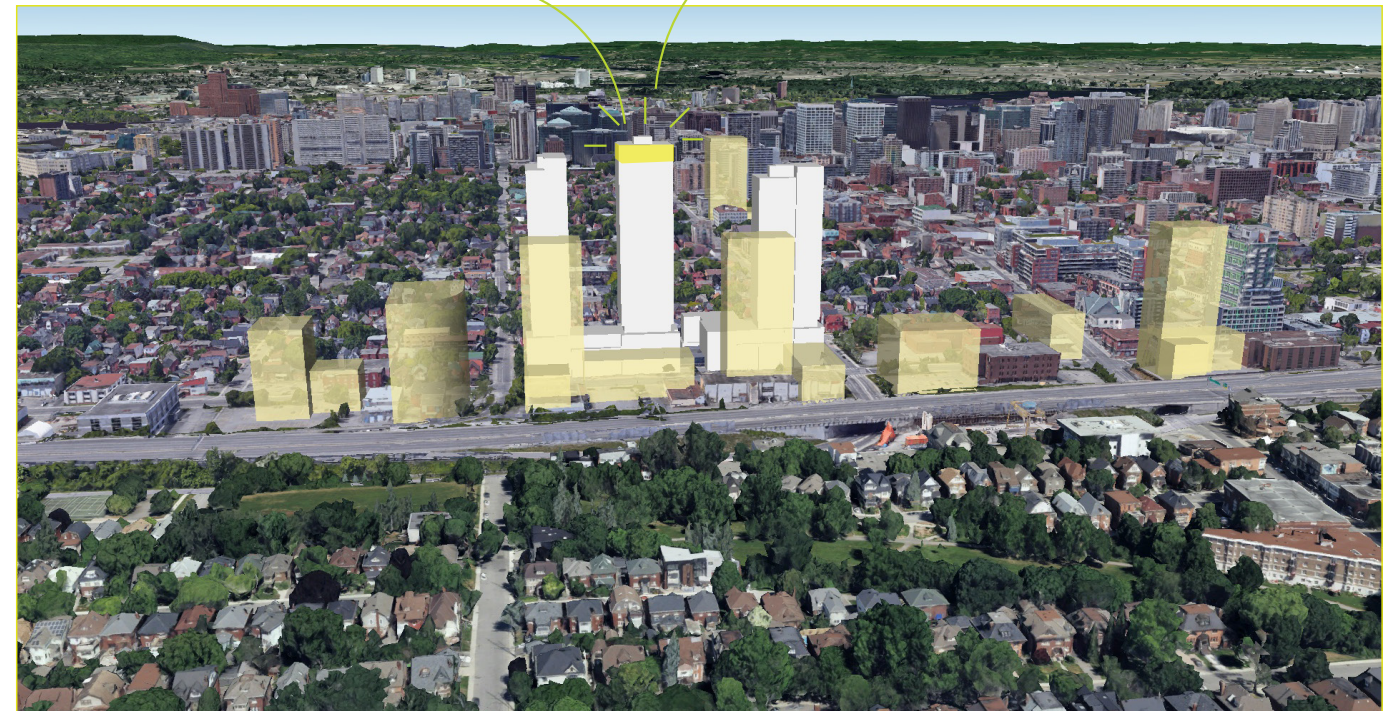
Differentiating the north and south faces of the two main podium blocks allowed us to examine alternate tower-podium conditions. On the outer edges of the project, desired setbacks from the podium to the towers were maintained as means of good urban design fronting the streets and to minimize wind impact at grade. While the interior faces have a more 'flush' condition between the tower and podium faces. To scale down the appearance of long slab-like towers, a shift or splinter in the rectangular form was introduced in the two outer towers to generate a slender and elegant composition.



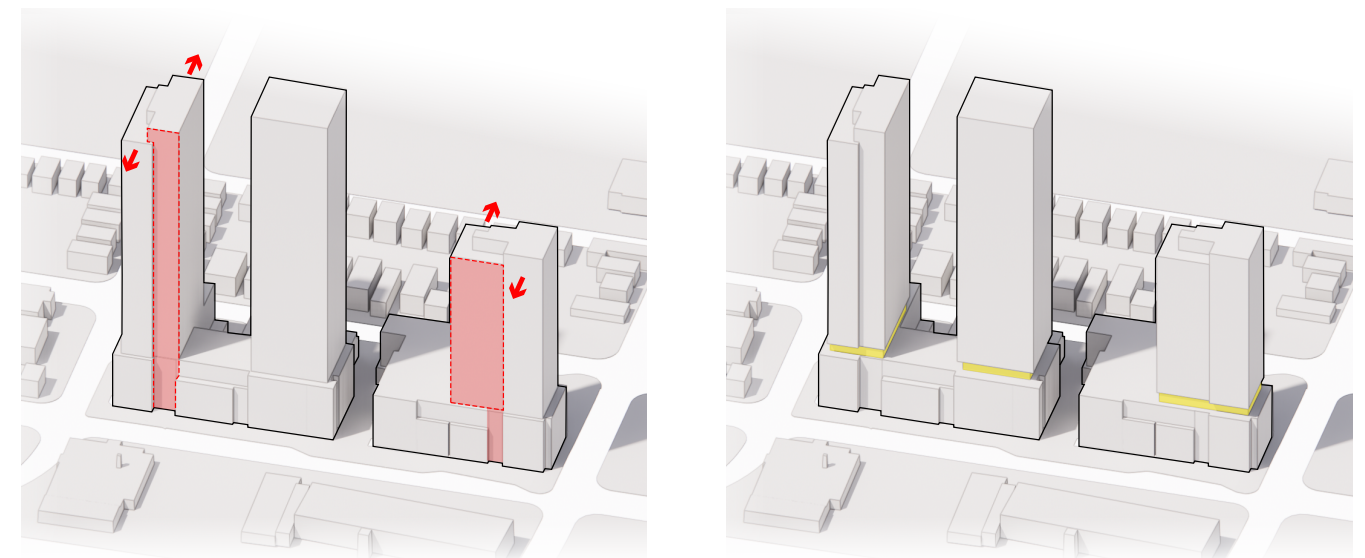
The updated tower composition resulted in two 'sister' towers flanking the taller square middle tower. As a result, the middle tower was developed into a 'feature' tower in design and programming. To enhance this contrasting tower idea, a rooftop amenity 'skylounge' was introduced on the top floor (and consolidated into the mechanical penthouse level) as a shared amenity for residents to access views of the city. This rooftop amenity is imagined as a beacon-like element, envisioned to be lit up, reinforcing the height of the middle tower element and signaling that something special is housed at the top and on the site.

The middle tower also houses a unique program on its roof - a 'skylounge' that can be lit differently and expressed architecturally as a beacon.

The middle tower has a unique and elegant architectural expression, which is bolstered by being the tallest tower as well as being book-ended by towers of a similar expression.



Lastly, the relationship between the towers and the podium has been calibrated. For the flanking towers, the split in their form was lined up with the insets in the podium below to create a visual connection between tower and podium. All three towers have an inset base, providing a sense of relief.



To reinforce the concept of the central tower as a landmark element, the the two side towers were designed to be similar to each other. The two halves of the split form were treated differently to create a visual illusion of an even more slender form. A light-coloured vertical expression was maintained on the outer sides of the side towers to compliment the middle tower. Originally, a two-storey jogged window pattern was considered. Later, a four-storey jogged pattern was explored while finally, an elongated linear approach was applied as a means to simplify the design and relate more to the middle tower to provide a more elegant and cohesive design approach overall.





*Updated View Looking Northeast Along Catherine Street*

## 7.0 Accessibility & Sustainability |

The proposed development has incorporated sustainable measures such as barrier free accessibility, site connections, bicycle parking and bird friendly guidelines into the design.

The following features are to be considered for this project:

**Accessibility:** 15% of the residential units will be provided as accessible, barrier free-style units. These units will be designed to include zero step entrances, larger washrooms and wider doorways with clear passages to washrooms and bedrooms.

**Site Connections:** Pedestrian pathways have been placed into the publicly accessible open space design along all site frontages with links to the public realm and adjacent roadways. The sidewalks will be continuous and wide, with access to barrier-free podium entrances along Catherine Street, Lyon Street North and Kent Street and will be in accordance with the Accessibility for Ontarians with Disabilities Act & City of Ottawa Standards.

**Bicycle Storage:** Bicycle parking for residents at a 1:1 ratio will be provided in weather-protected areas below grade. The bicycle storage rooms will be accessed by the ramps or building cores.

**Bird-Safe Design Guidelines:** Clear dotted glass panes will be used at a minimum of 90% for the first 16 m of glass located above grade in accordance with the Bird-Safe Guidelines for Ottawa. The glazing transparency and reflectivity will be minimized. Along rooftop terraces a 4 m glazing treatment will be included from the surface of the roof or the height of adjacent mature vegetation.

**Cladding:** The proposed towers will have reduced window-to-wall ratio and fewer balconies to reduce thermal bridging and provide more fully insulated walls.

**Vehicle Strategy:** The development minimizes the amount of vehicles on the site by limiting parking, while car share vehicles and parking spaces will also be provided.

**Energy Modelling:** An energy modelling consultant has been retained by the client to provide energy modelling consulting services to advise on achieving Ontario Building Code requirements and the CMHC energy performance standards.

**Stormwater Management:** A stormwater storage tank is provided in the parking garage to capture, store and slowly release stormwater collected from area drains around the site over the parking garage roof and from roof and terrace drains on the building.

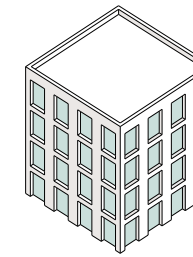
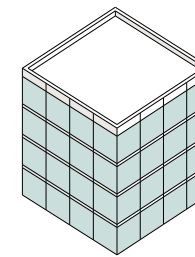
CMHC

Brigil intends to achieve CMHC standards, which involves aiming for an overall energy performance of 20% better than compliance with the 2017 National Energy Code.

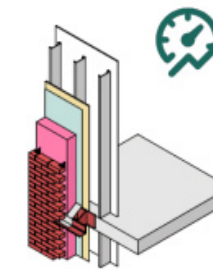


Bird Friendly

Bicycle Culture



Keep the window to wall ratio to 40-50% to increase thermal performance



Improve effective R-value of envelope

Passive Sustainability

Car Share

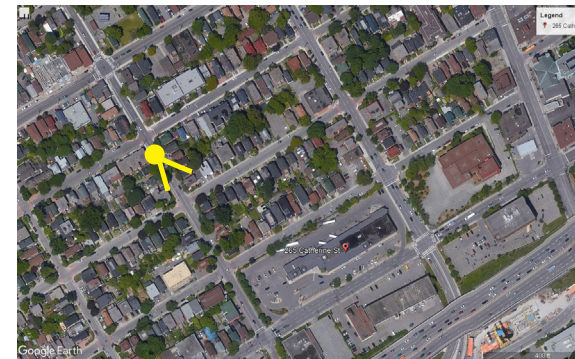


# NEIGHBOURHOOD VIEW ANALYSIS

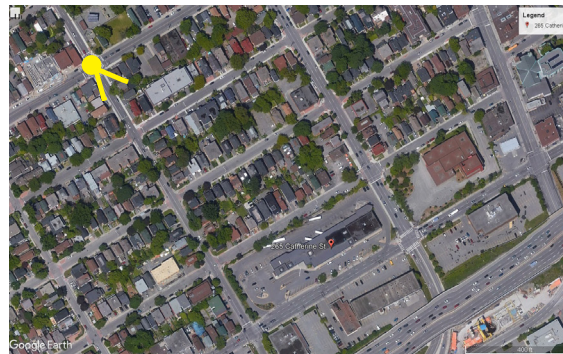
# View Looking South Along Lyon 1



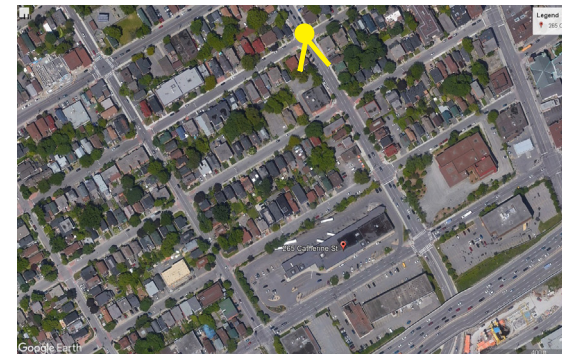
# View Looking South Along Lyon 2



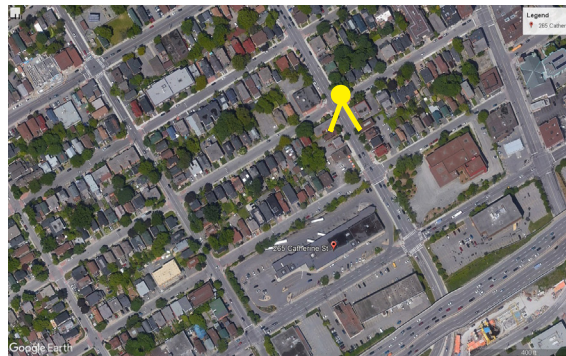
# View Looking South Along Lyon 3



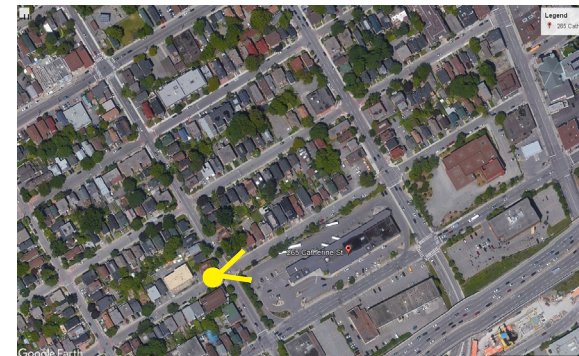
# View Looking South Along Kent 1



# View Looking South Along Kent 2

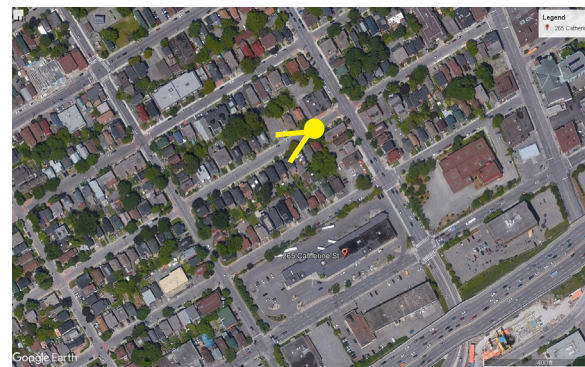
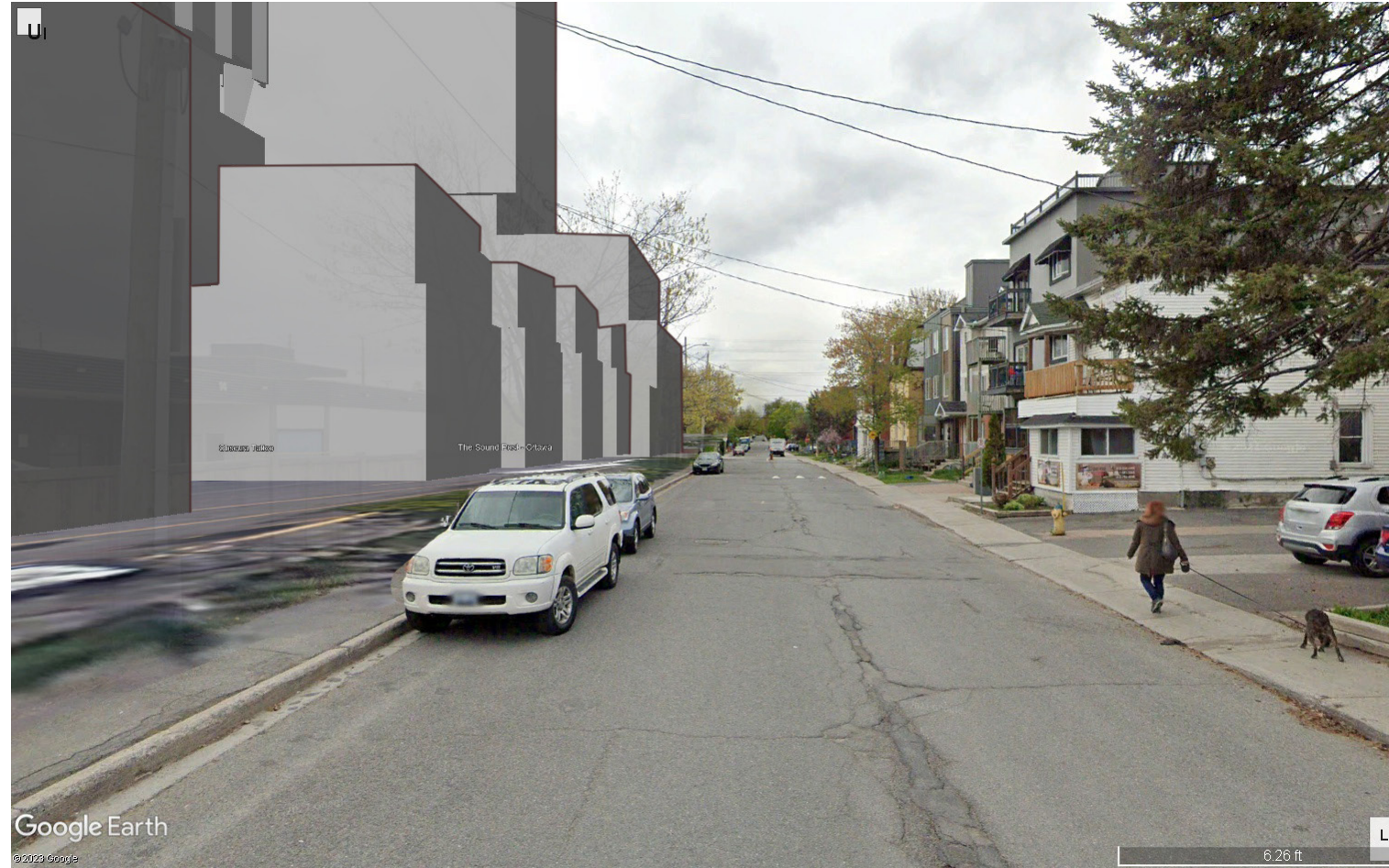


# View Looking East Along Arlington 1

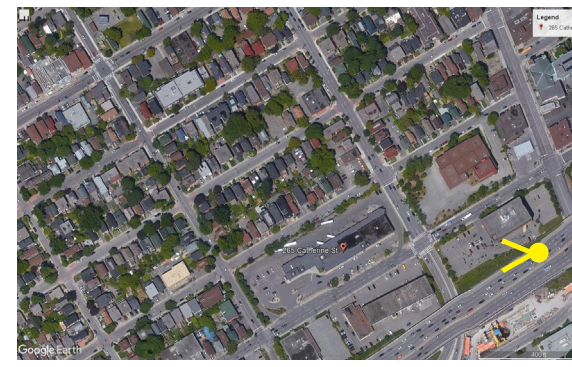




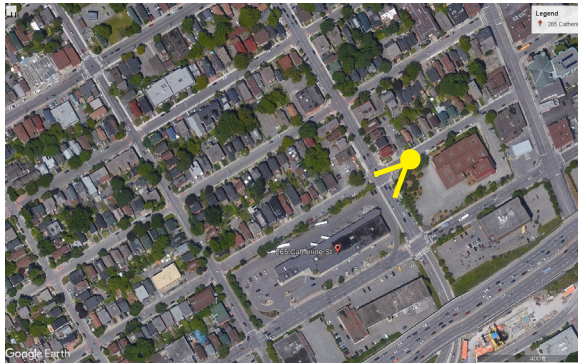
# View Looking West Along Arlington 2



# View Looking West Along the Highway



# View Looking East from the Glashan Elementary School Yard



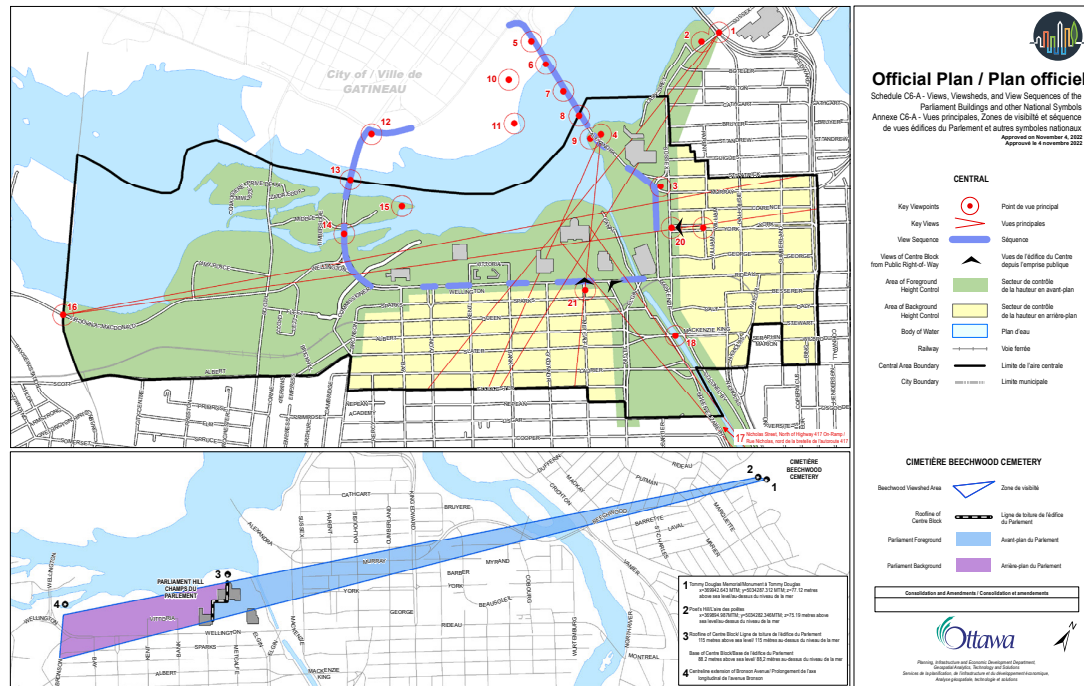
# View From the Entrance of the Museum of Nature



# PARLIAMENTARY VIEW ANALYSIS

# View Analysis

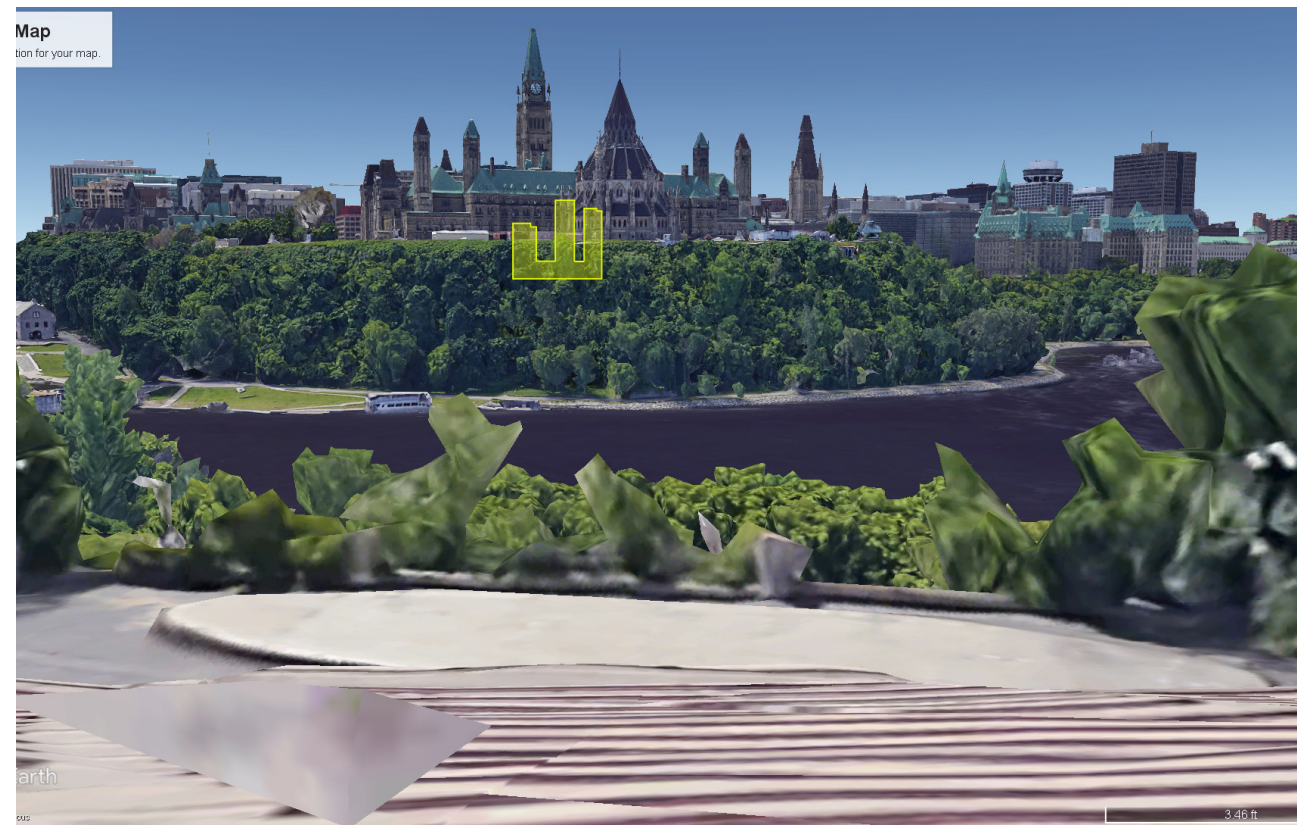
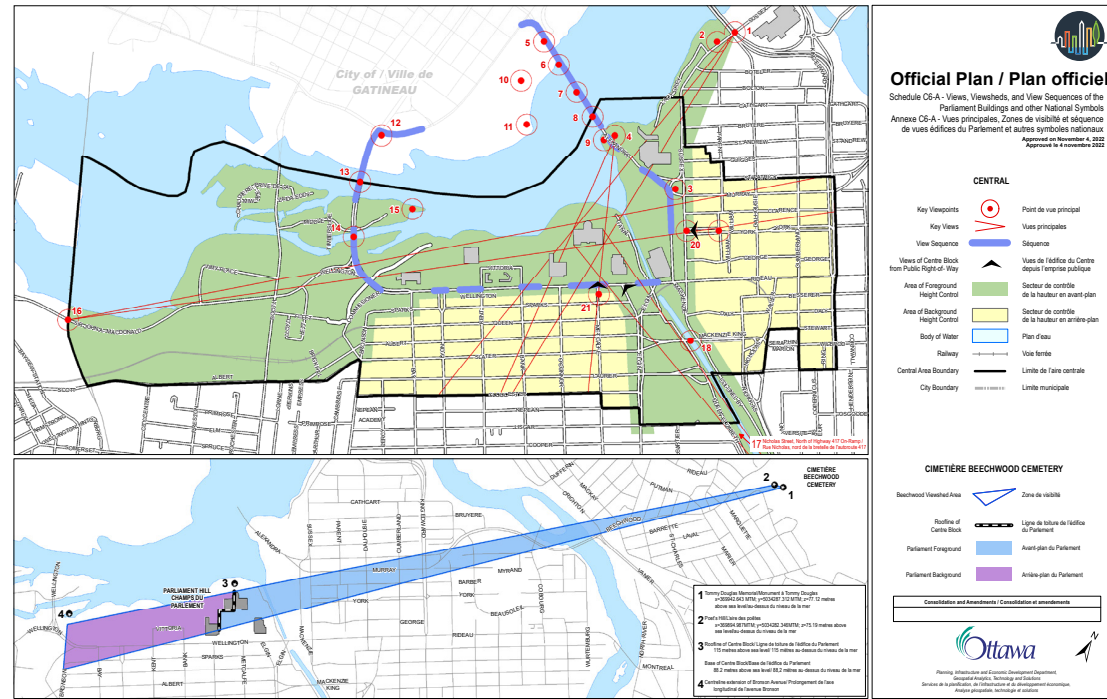
## Viewshed 1



 **PROPOSED DEVELOPMENT FROM VIEWSHED**

# View Analysis

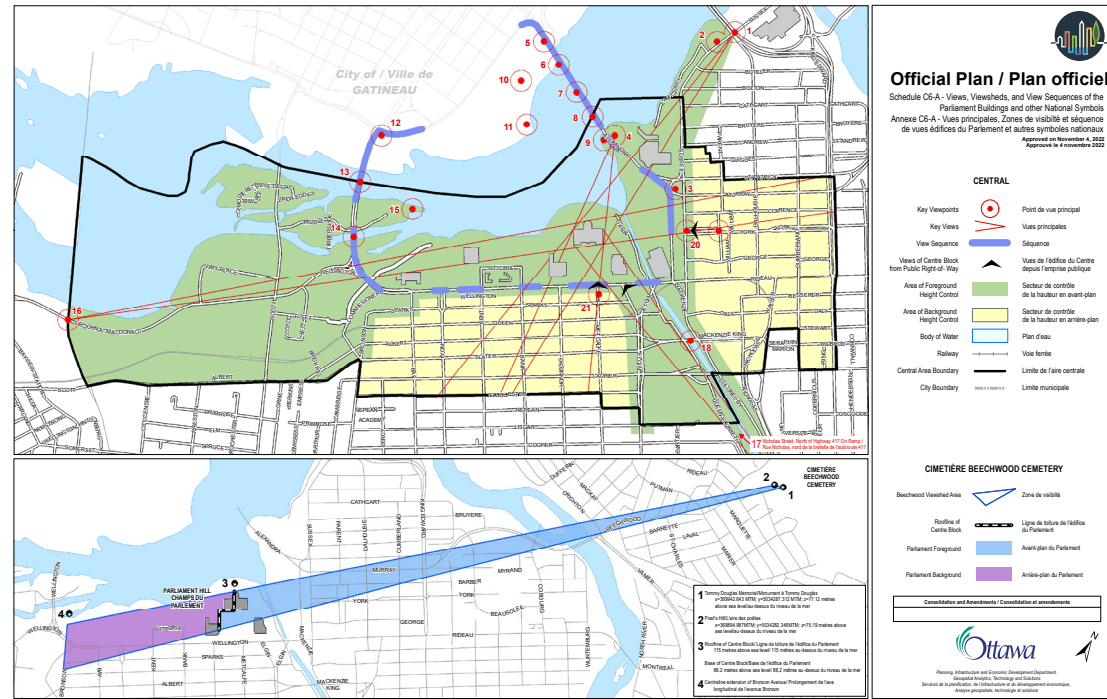
## Viewshed 4



**PROPOSED DEVELOPMENT FROM VIEWSHED**

# View Analysis

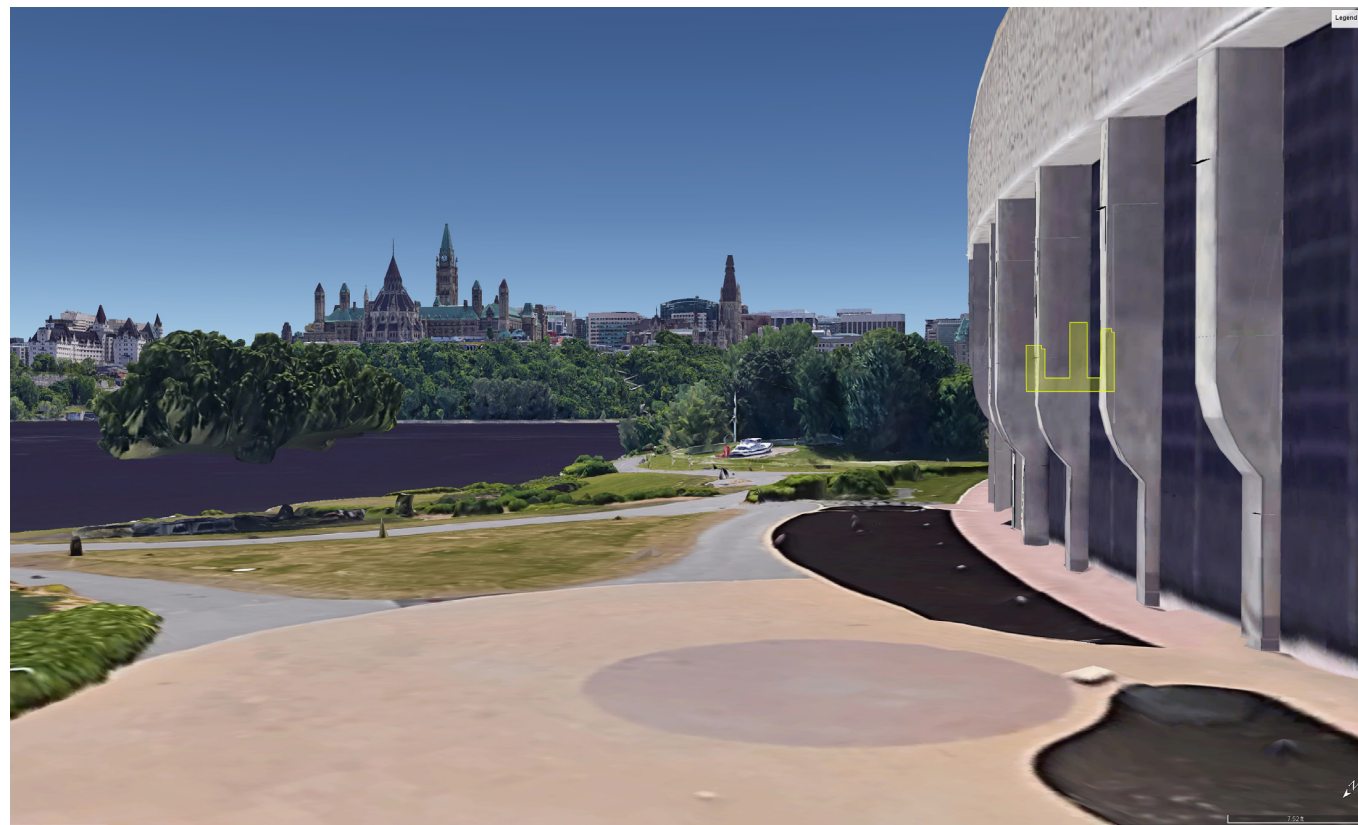
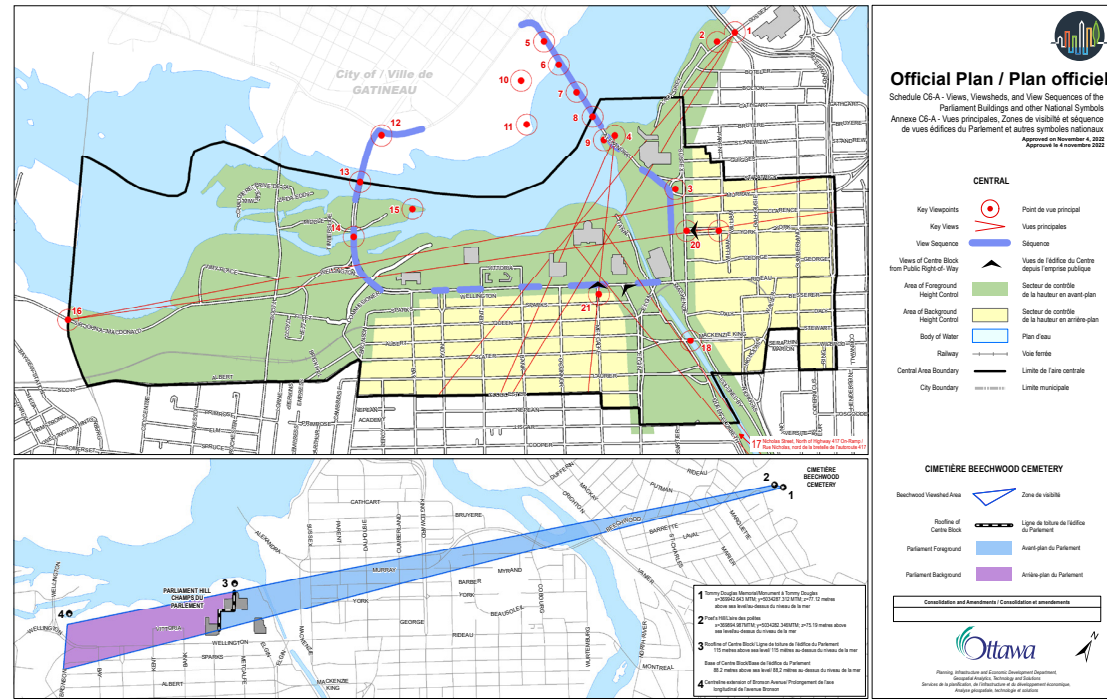
## Viewshed 9



**PROPOSED DEVELOPMENT FROM VIEWSHED**

# View Analysis

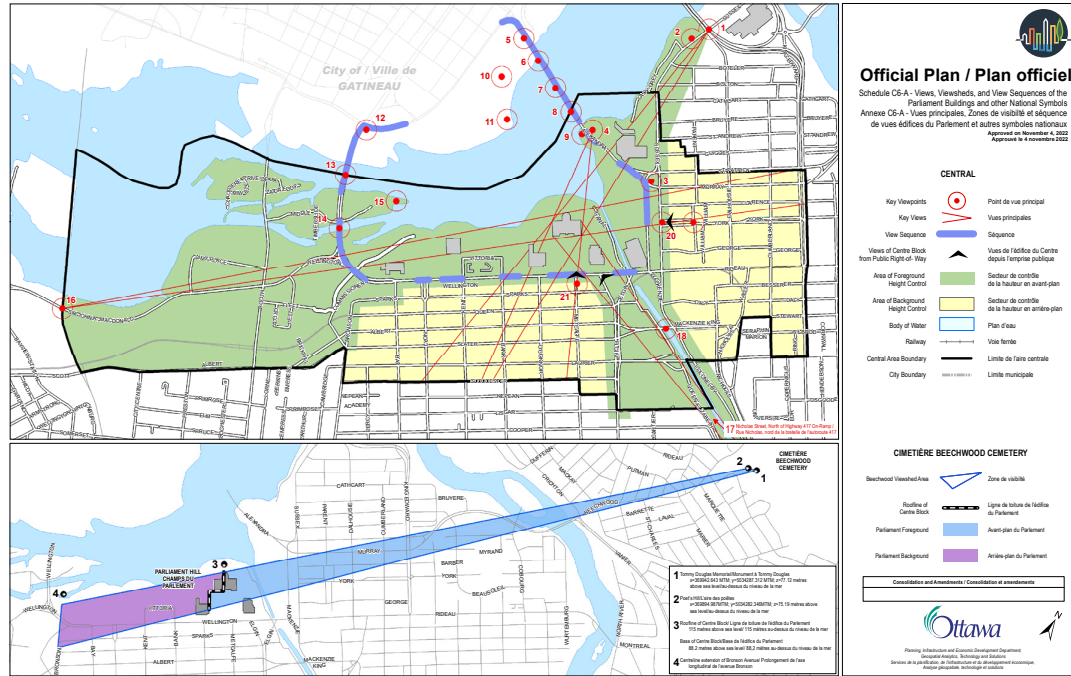
## Viewshed 10



**PROPOSED DEVELOPMENT FROM VIEWSHED**

# View Analysis

## Viewshed 11



 PROPOSED DEVELOPMENT FROM VIEWSHED



# SHADOW STUDY EXCERPT

## 8.0 Shadow Impacts |

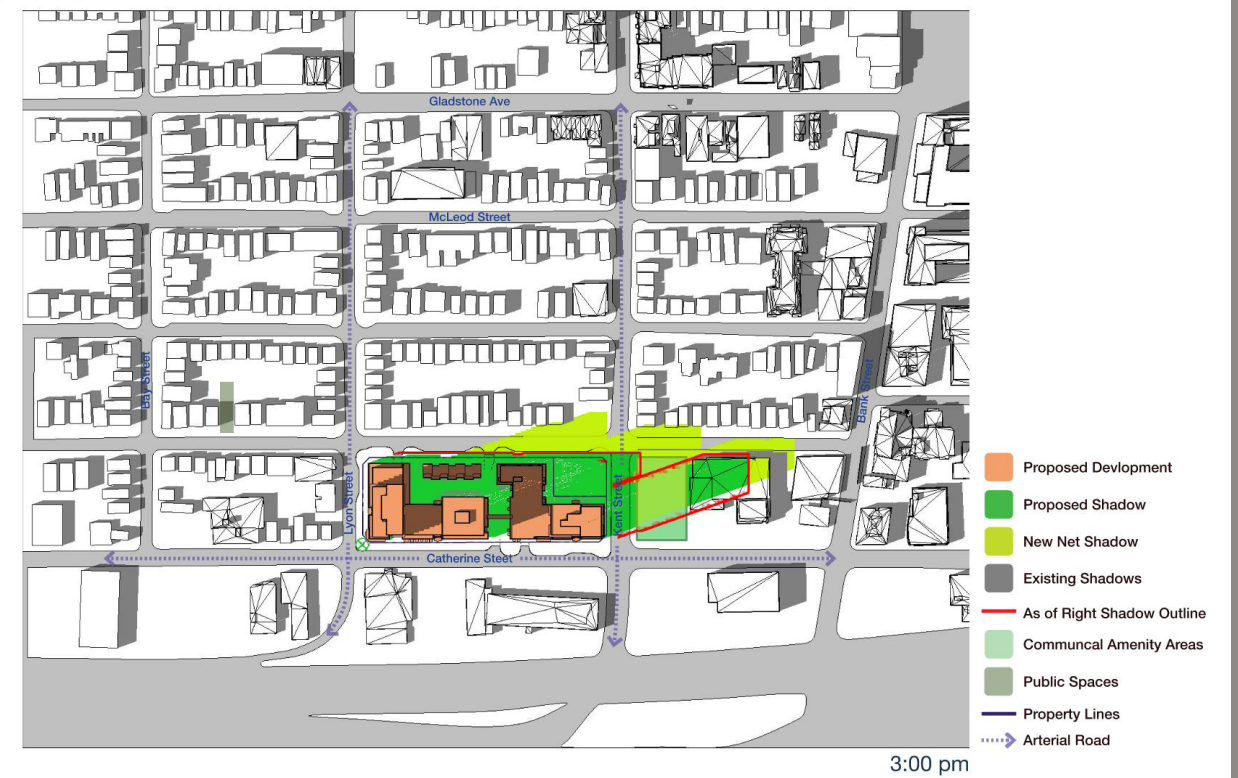
The towers are positioned to be along the southern edge of the site to minimize the shadow impact on the blocks to the north and to allow for increased access to light.

In September, the shadows cast by the towers stretch across two blocks to the north starting around 10:00 am, but are fast-moving and no longer impact these blocks after 3:00 pm. Furthermore, the shadowing of the towers begins to approach the school yard at 1:00 pm with significant shadowing that occurs at 2:00 pm, nearing the end of the school day. Regardless of the height, the as-of-right shadows stretch across the complete width of the schoolyard by 2:00 pm as well.

Shadow Study - September 21<sup>st</sup>



Shadow Study - September 21<sup>st</sup>



In June, the shadow impacts are minimal, especially between 11:00 am and 4:00 pm. The shadows also begin to approach the school yard at 1:00 pm.

In all instances, the decision to not build out to the full height of the as-of-right zoning along Arlington Avenue, minimizes shadowing on the street, to the neighborhood to the north, and within the proposed development and dedicated park area.

### Shadow Study - June 21<sup>st</sup>



### Shadow Study - June 21<sup>st</sup>

