

Urban Design Brief and Visual Impact Assessment

125 Napier Street

Official Plan Amendment / Zoning By-law Amendment

City of Hamilton

November 2021

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1. Introduction

1.1 Background

This Urban Design Brief and Visual Impact Assessment has been prepared in support of an application for an Official Plan Amendment and Zoning By-law Amendment on behalf of King West Crossing Ltd. to permit the redevelopment of lands known municipally as 200 Market St in Hamilton (referred to as the "Site").

The proposed development is comprised of four (4) residential towers with a 3-storey podium. Two towers are 27-storeys tall and the remaining two towers are 15-storeys tall. The podium is comprised of five (5) commercial units facing Queen St N, nine (9) residential townhouse units facing Market St, Seniors apartment units facing Napier St and 138 parking spaces, with an additional 231 parking spaces below ground in two levels of underground parking.

The following sections will describe the details of the proposed development and conduct an analysis with respect to the applicable design policies and guidelines.

1.2 City Context

The site is located at the intersection of Queen St N and Napier St. The site is also located very close to the King St corridor leading through Downtown and the Queen Street corridor leading between York Boulevard and the urban fabric of Hamilton to the south. The site forms part of Downtown's western edge and its

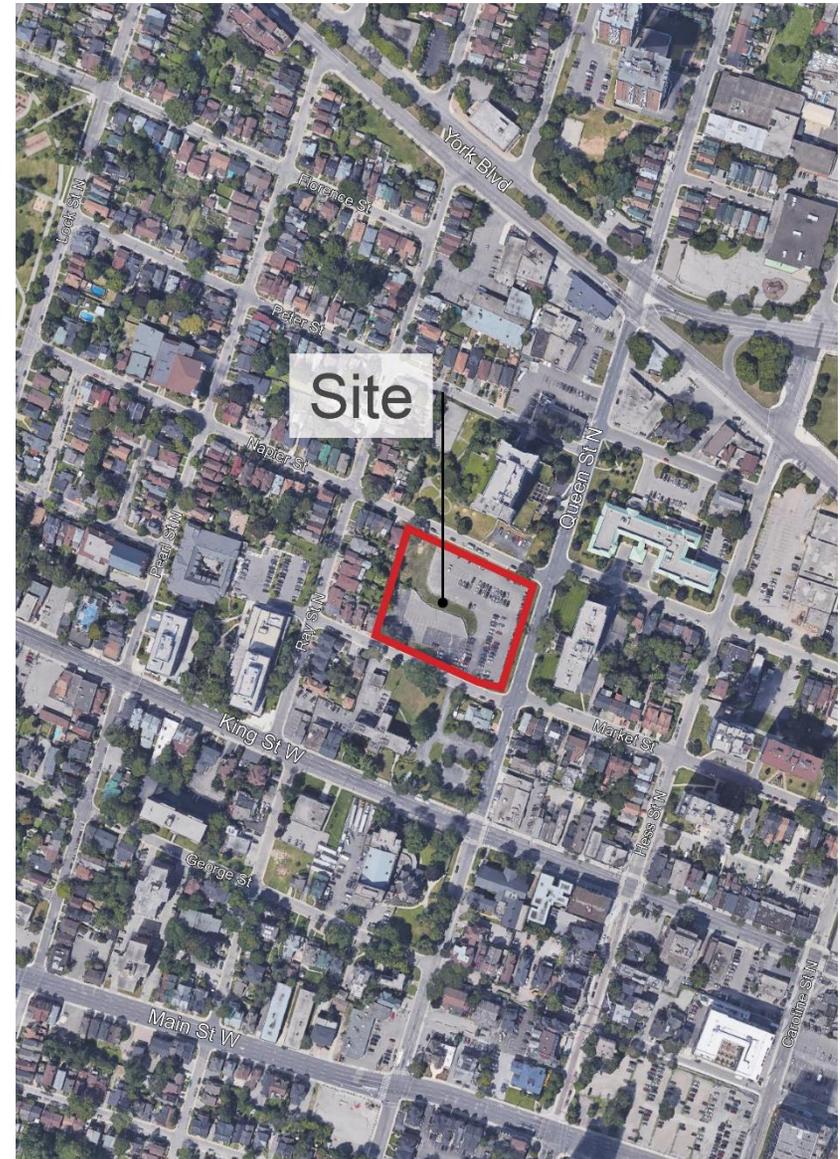


Figure 1: Site Location Map

mixed-use composition, employment and community uses. The site is a short walk to several mixed-use corridors and areas, such as the King St and Main St corridors and the eclectic mix of shops, restaurants, and bars of Hess Village. As well, it is a short walk to several significant destinations within Downtown Hamilton, such as Jackson Square Mall, Hamilton City Hall, the Art Gallery of Hamilton, and the First Ontario Centre.

1.3 Surrounding Area Context

The surrounding area has a mix of low-rise residential dwellings, mid and high-rise apartment buildings, community/institutional buildings, and commercial and mixed-use buildings along major roads. There are multiple taller apartment buildings ranging from 18 to 32 Storeys (Fig. 3) along Queen St and the east side of Queen St S leading into the Downtown fabric. Hess Village, a district containing several restaurants and bars established largely within converted residential dwellings, sits to the southeast of the site.

The surrounding area is well-served by existing public amenities and parks, and open spaces. Victoria Park is the most prominent to the west with tennis courts, a ball diamond, an outdoor pool, and community garden. This area contains a mix of retail shops, services restaurants, and other commercial uses along King St and Main St W.



Figure 2: City context map

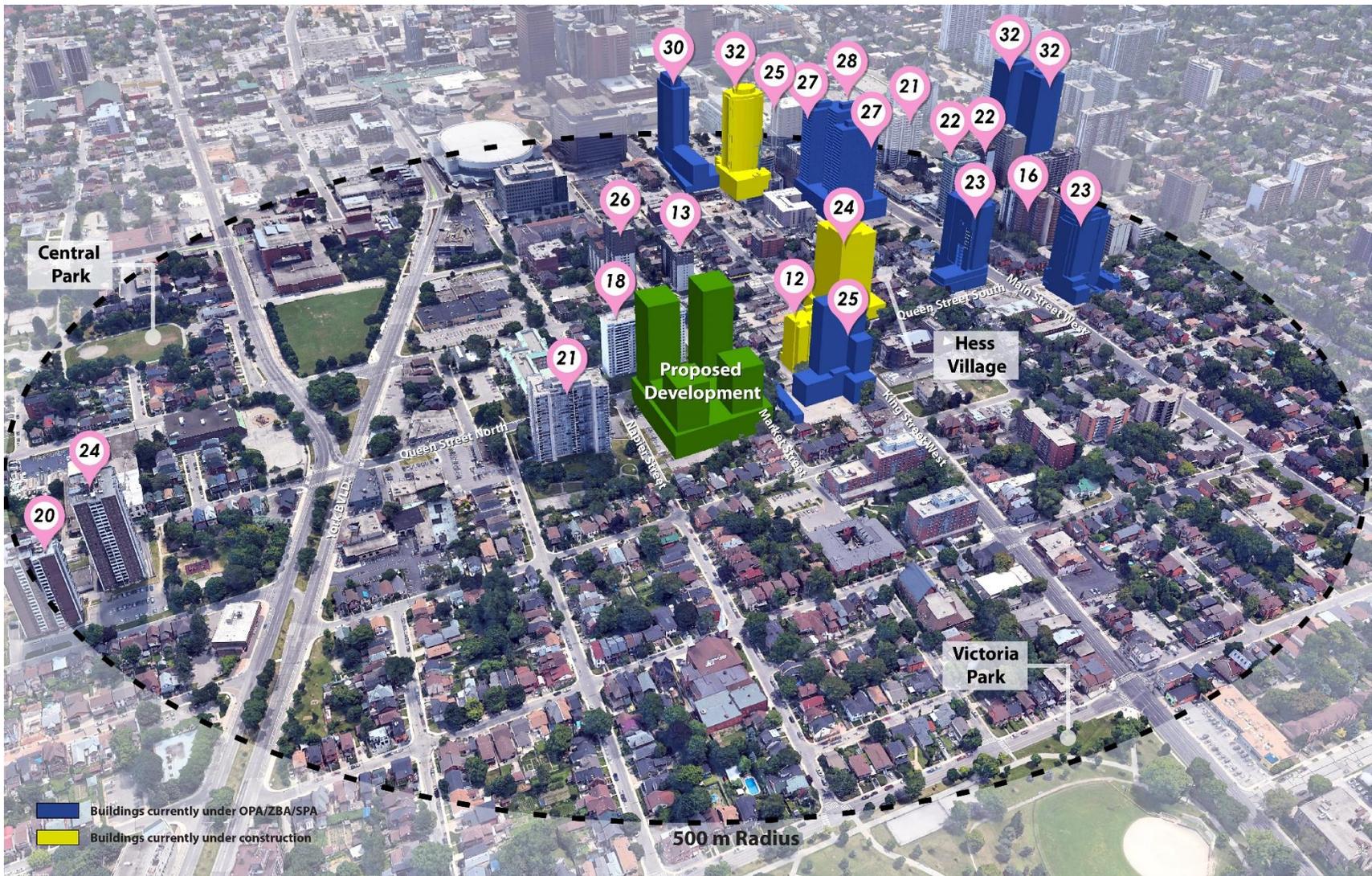


Figure 3: Immediate surrounding context

The area is especially well-served by city bus service (Fig. 4) provided by the Hamilton Street Railway (HSR) and regional bus service provided by Metrolinx. HSR transit routes with direct connections to the great transit network and the GO Transit are located within walking distance of the subject site.

2. Site Design

2.1 Site Design

Building Location

The building is positioned close to the edges of Market St (3.0m), Queen St N (2.0m) and Napier St (3.0m) to define the pedestrian realm and provide a sense of enclosure. The building is also set back 9m from the western property line to reduce negative impacts on the adjacent low rise residential dwellings. The podium includes residential townhouse units along the Market St frontage, and commercial units along the Queen St N frontage.

The proposed towers are located on the four corners (Fig. 5) of the podium with setbacks of 6.0m from Market St, 6.0m from Queen St N, 6.0m from Napier St and 12.5m from the western property line. The tower setbacks provide relief to the street and adjacent residential properties and matches the setbacks of the new high-rise residential buildings in the surrounding neighbourhood. The towers have a separation distance of 25m measured in an East to West direction, and a separation distance of 20m measured in a North to South direction.

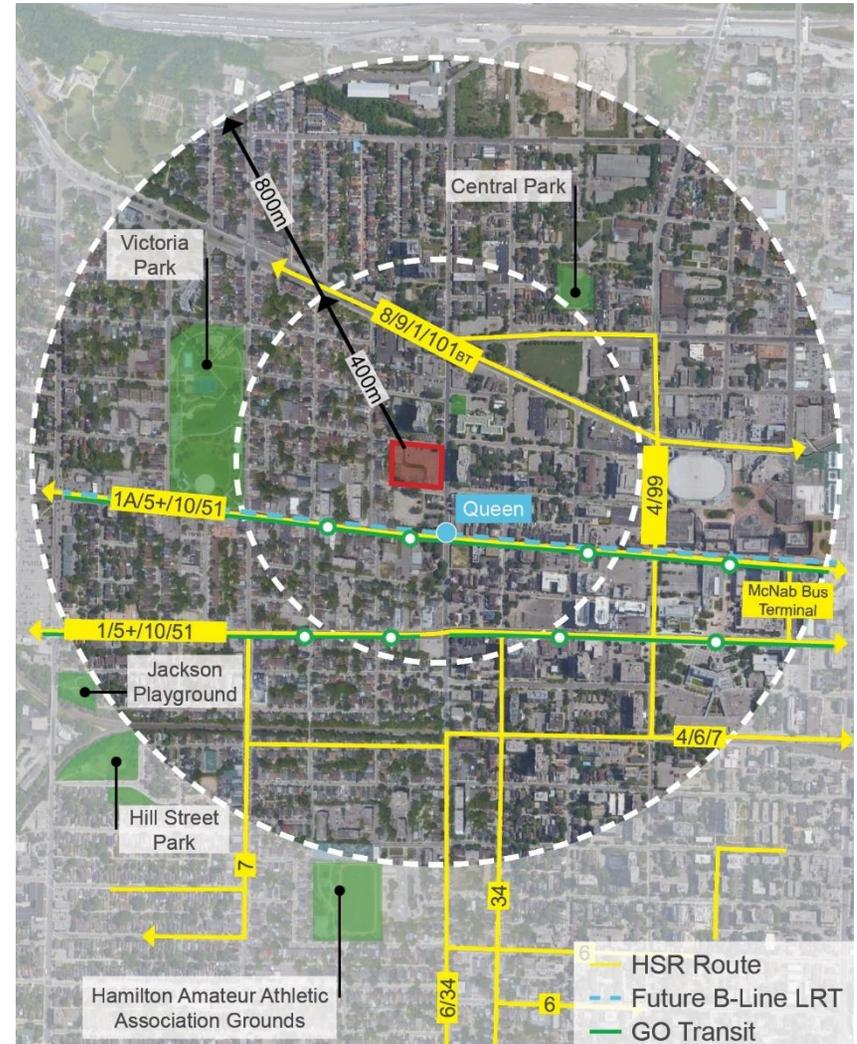


Figure 4: Transportation context

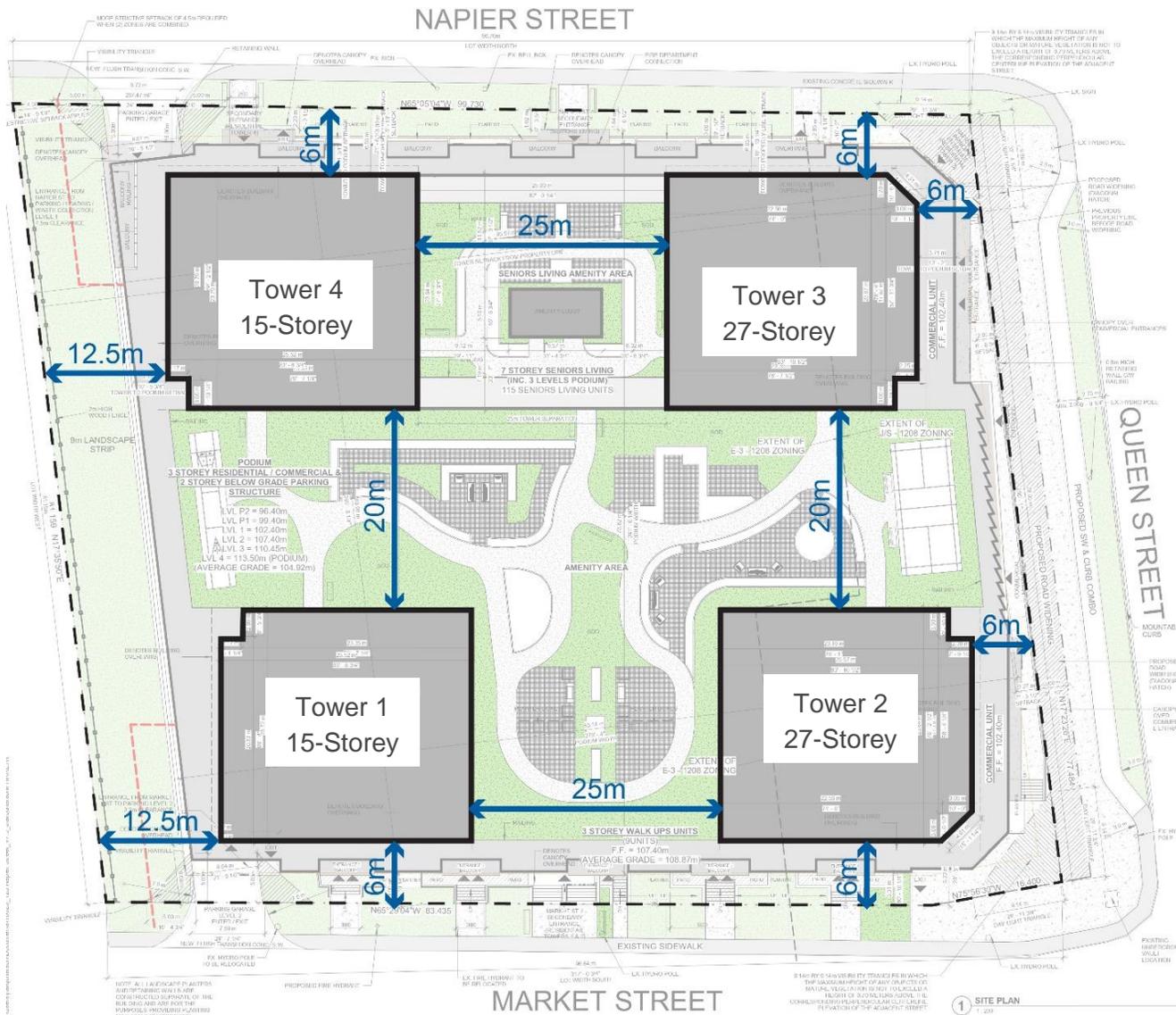


Figure 5: Proposed Site Plan prepared by SRM Architects

The tower separation mitigates privacy and overlook concerns between the towers and allows for natural light in the residential suites.

Pedestrian Access and Circulation

Residential units in the apartment towers are accessed through a total of three entrances, two on Napier St, and one on Market St located in the middle of the block. Flanking the entrance on the Market St façade, the townhouse units each have their own principal entrances facing Market St, with additional access through the internal building corridors. Each tower is accessed through its individual elevator lobby and stairwell leading to the parking levels and residential suites. Pedestrian exits from the podium levels are available on all four facades.

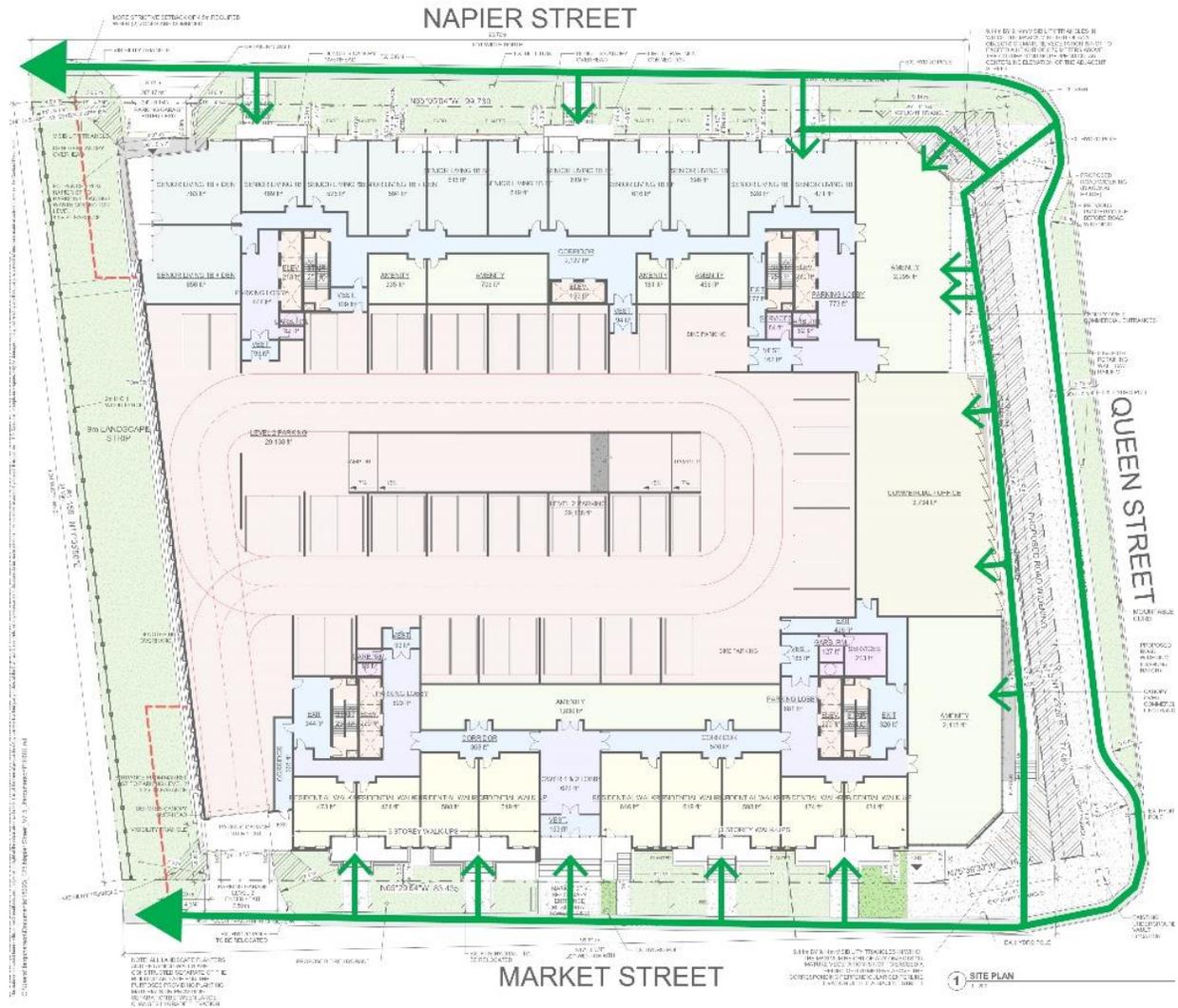


Figure 6: Proposed pedestrian circulation

Principal entrances to the commercial units are located on Queen St N. Due to the grade change between Market St and Napier St, a separate sunken walkway (see Fig. 6) adjacent to the Queen St N sidewalk is provided to allow level access to the units. Additional service access to the commercial units is provided through the internal pedestrian corridors.



Figure 7: Sunken walkway along Queen St N.

Vehicular Access and Circulation

There are two vehicular accesses to the building, one from Napier St. (Level 1), and the other from Market St (Level 2). Both accesses have a single two-way driveway entrance, leading to the podium structure and two levels of underground parking. All parking and vehicular circulation is provided within the podium structure and is screened from outside view. The Napier St. entrance, enters on the Level 1 garage level (36 total parking spaces), ramping down to the underground level below (114 parking spaces) and ramping up to P2 level (117 parking spaces). The Market St entrance enters on Level 2 (47 parking spaces) ramping up to Level 3 (55 parking spaces) and ramping down to lower levels. Loading and garbage functions for the commercial and residential uses is provided on the Level 1 garage level.

Bike parking is located securely inside the building on all the parking levels



Figure 8: Proposed vehicular circulation

and is close to the elevator lobby for easy access.

Loading and Waste Management Collection

The residential and commercial units have dedicated loading and waste collection spaces within the podium. The residential loading and waste storage room is located adjacent to the elevators for convenient access, while the commercial loading/storage space is located adjacent to the commercial units. Both are accessed through the internal driveway and are screened from outside view.

Grading

The site's Market St edge sits generally a full storey higher than its Napier St frontage, with the grade rising along Queen St N between the two side streets. The proposed design lines the Market St frontage with raised two-storey "townhouse" units which screens the parking garage in the back. The proposed design picks up the rising grade from Napier to Market with a landscaped

retaining wall (Fig. 9) that bounds an entrance walkway to the commercial units.

Lighting

Lighting plans have not been finalized at this the time. Appropriate lighting levels on the site are expected through wall-mounted and site lighting fixtures, emphasizing higher pedestrian activity areas near building entrances, surface parking areas and on-site walkways.

Signage

Signage detailed for the commercial units fronting Queen St N are not finalized at this time. The intent is that commercial signs will be positioned above the ground floor to reinforce this pedestrian zone in a character that meshes with the overall architectural intent. As well, garage entrance and municipal address signage is expected.



Figure 9: Landscaped retaining wall along Queen St N

2.2 Building Design

Heights

The proposed design incorporates four (4) residential towers, as shown on Site Plan (Fig. 5), Tower 1 and Tower 4 are 15-storeys tall and Tower 2 and Tower 3 are 27-storeys tall on a three-storey podium base, providing an appropriate transition to the street and adjacent properties. The podium portion of the building measures approximately 9m in height, with the tower portion measuring 87.35m to the top of mechanical penthouse. The height of the proposed tower is in keeping with the surrounding neighbourhood context and is adjacent to residential towers of 18 to 24-storeys in height.

Massing

The proposed podium design maximizes site coverage and provides a strong base for the residential tower (Fig. 10). The street edge is clearly defined by the podium with variable setbacks to provide a dynamic street wall and break up the overall façade. Townhouse units along Market St, seniors apartment units along Napier St and commercial units along Queen St provide animation and activity to the frontage.



Figure 10: Proposed massing

The four (4) residential towers have a sleek, point tower proportion to reduce shadow and overlook impacts. The towers are placed at the corners of the podium to maximize the tower separation distance between them. There is a mid-rise section of 7-storeys connecting the two towers along Napier St (Fig. 11). This mid-rise

portion is stepped back from the three-storey podium and its walls are in the same plane as the tower above, creating a cohesive design.



Figure 11: Building separation and massing transition from adjacent built form

Figure 12: Primary residential entrance on Market St with podium townhouses



Ground Floor Design

The ground floor is designed to activate the streetscape and to mitigate the impacts of the proposed development on the surrounding properties. The Market St, Napier St and Queen St N frontages are made up of uses that activate the streetscape. The Market St frontage (Fig. 12) contains nine (9) townhouses built into the podium structure, with entrances directly to the sidewalk. The remainder of the Market St podium is taken up by the pedestrian

entrance to the residential towers along Market St. The design will create a residential focus area that offers a seamless transition between the proposed development and the surrounding neighbourhood.

Figure 13: Commercial units along Queen Street



The Queen St N frontage (Fig. 13) contains commercial uses designed to activate the street. Four commercial units line the Queen St frontage and wrap around the corners of Napier St and Market St in order to enliven the corner and draw pedestrians.

The façade on Napier St (Fig. 14) is lined with apartment units in the podium, and pedestrian entrance to the residential towers along Napier St. Creating an active street frontage, providing eyes on the street, and screening the internal parking area from the pedestrian realm and adjacent properties.



Figure 14: Apartment units along Napier St

Podium Design

At three (3) storeys, the podium is compatible with the one (1) to three (3) storey height of the single detached and townhouse dwellings surrounding the Site and acts as a transition between the proposed tower and the adjacent properties (Fig. 11).

The material palette is designed to be a contemporary expression of the historic neighbourhood, including brick patterned brown and charcoal precast concrete, and wood grained aluminum panels. Generous curtain wall glazing is used to lighten the mass of the façade, provide views into the podium, and provide eyes on the

street. A consistent material palette is used across the four facades to present a unified design; however, each façade is designed to be unique in the use and placement of the materials, providing interest and identity at the pedestrian level.

Figure 15: Podium view from the corner of Queen and Market St





Figure 16: Aerial view of the 15-storey towers

Tower Design

The towers are setback from the podium edges to articulate the difference between the base and the tower. The taller 27 storey towers are placed along the Queen St and the smaller 15 storey

towers are placed along western property (Fig. 16) line with a setback of 12.5 m from the low-rise development on the west side to provide adequate transition and to mitigate overlook impacts.

The towers have a sleek profile with a GFA of approximately 600 square meters with a maximum tower width of only 25.6m. The minimal tower width serves to minimize the impacts on the surrounding residential properties, including shadows, overlook, and privacy impacts.

The tower material palette is similar to that used in the podium, with some variation to set the tower apart as a unique element. The tower design makes use of white and dark charcoal precast concrete panels, curtain wall glazing, coloured spandrel panels, precast concrete balconies with clear glazing and aluminum glass guards. The tower top is designed with recessed floorplate, translucent glazing panels and cantilevered overhangs creating a distinguishable toper top.



Figure 17: Tower view from corner of Queen and Market Street



Figure 18: Napier Street Elevation

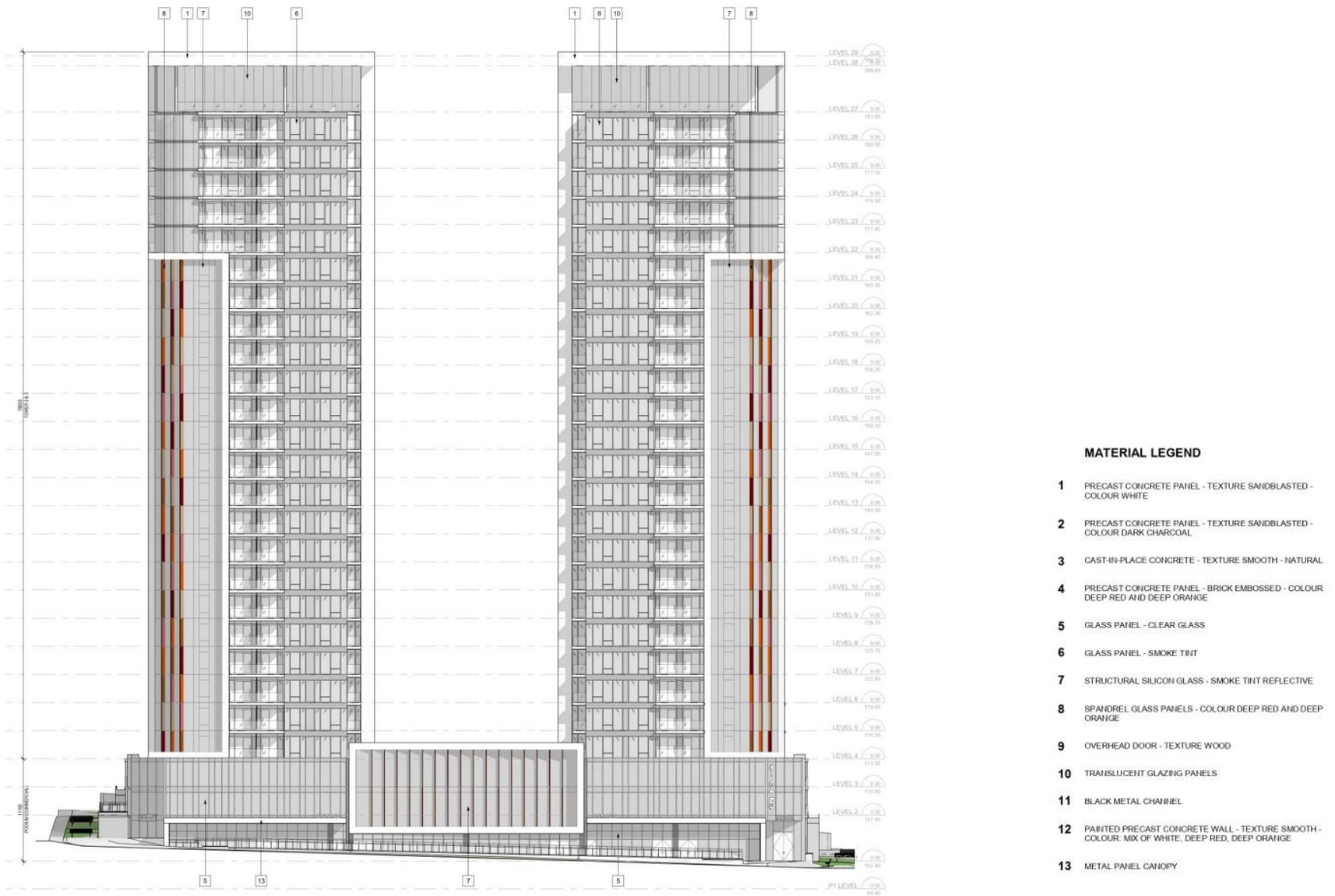


Figure 19: Queen St N Elevation

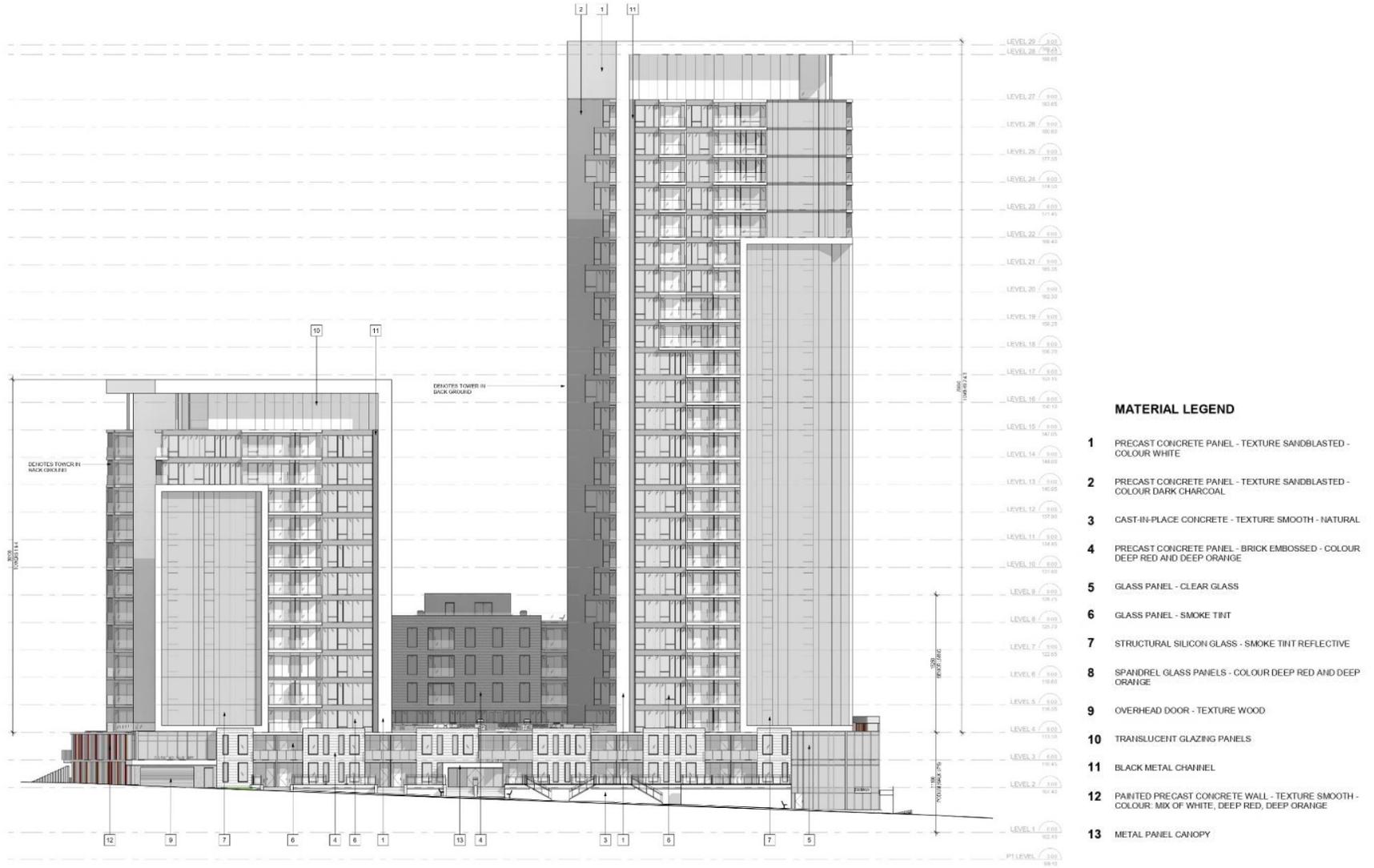


Figure 20: Market St Elevation



Figure 21: West Elevation with landscape strip

2.3 Landscape Design

Queen Street North

The Queen St N edge is proposed as a more commercial streetscape in nature as compared to the residential nature of the site's side streets.

Between the building's corners on Queen St N a rising concrete walkway parallel to the public sidewalk lines the building edge (Fig. 13). Where exposed to the Queen St N sidewalk, the walkway is lined with a wide sodded area containing a regular spaced pattern of trees.

Market Street

The Market St edge is formalized as a residential streetscape. Concrete walkways lead to stairs and raised entrances to the "townhouses" units directly from the public sidewalk. Raised entrance platforms to the "townhouse" units straddle the property line, with variation in height of the stairs along the block given variations in grades. The edges of the platform are planted with varied patterns of shrubs, ornamental grasses, and perennials to soften the edges (Fig. 22). This treatment of foundation plantings wraps around the western property edges surrounding the garage exit and concrete walkway leading to the public sidewalk.

Napier Street

Similar to Market St residential character, Napier St is proposed to be lined with a sodded boulevard with a regular pattern of street trees along the sidewalk. A planting bed with a combination of

shrubs, perennials, and grasses to soften the building elevations is proposed at this location.

Western property line

A 9m wide setback is proposed along the westerly property line for landscaping, screening, and separation to abutting residential properties to the west. Medium stature trees are proposed along the landscape strip to screen views. Screening is further assisted with the preservation of an existing cluster of trees on the property line on the abutting property edges, which contains a combination of deciduous and coniferous trees currently.

Rooftop Terrace

There are two rooftop terraces, one above the 3-storey building base and the other above the 7-storey mid-rise section along Napier St (Fig.22). By placing the towers at the corners of the site, the design takes advantage of the space in between the towers by creating a large outdoor courtyard space for residents. The space is designed with pavers throughout the area, trees, green roof, and concrete planters together with screens lining the perimeter. This design provides for open outdoor areas that are for flexible programming and use. The roof top above the 7-storey mid-rise section is intended for use by seniors and has paved walking paths, trees, and landscaped areas with seating.

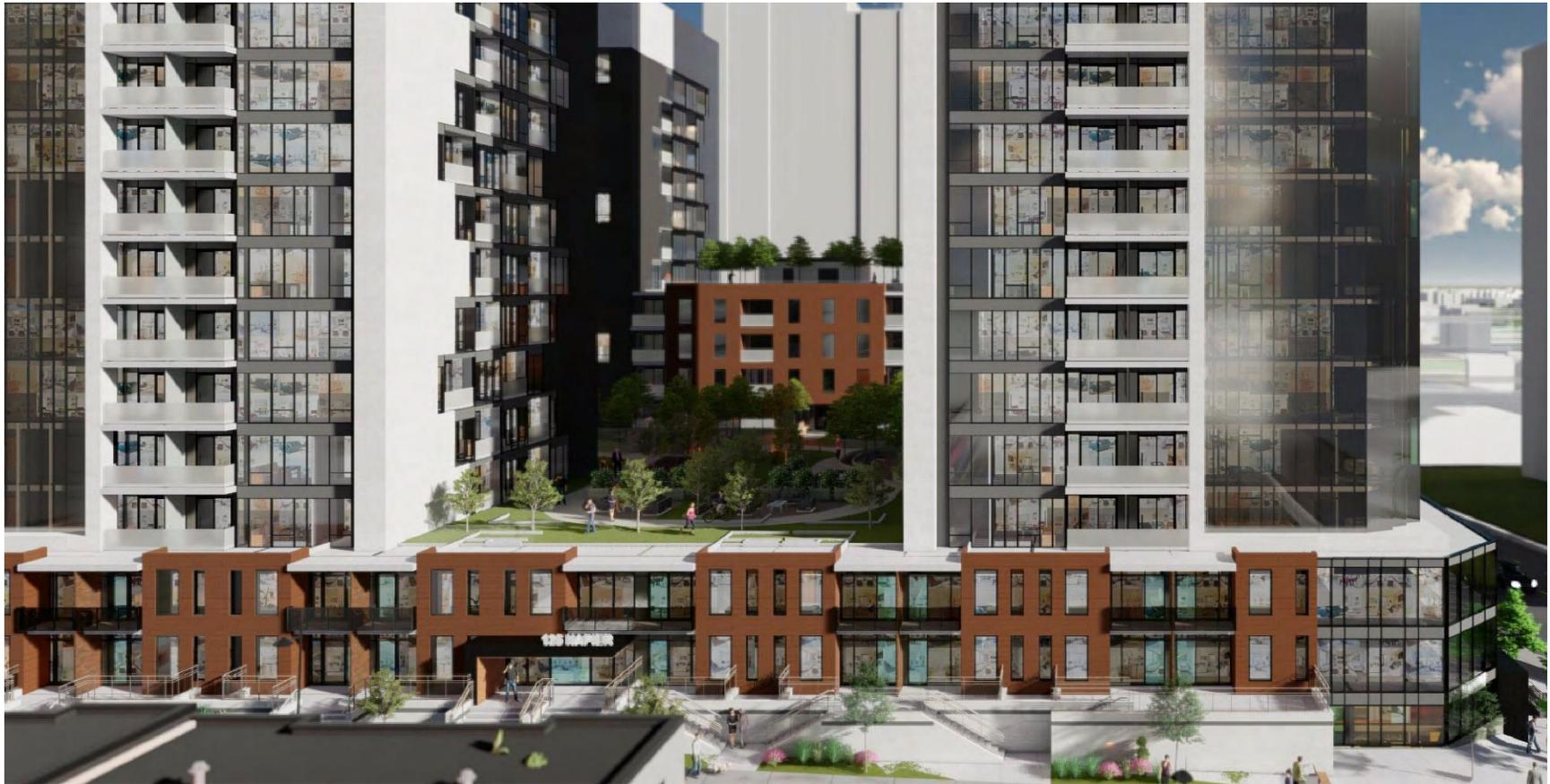


Figure 22: Rooftop amenity space

2.4 Constraints

The proposed development is situated on a large rectangular lot with frontage on three streets. The Site's western property line is bordered by single detached residential dwellings.

The site is located immediately adjacent to the Arnold's Survey of Cultural Heritage landscape in the Strathcona Secondary Plan (Fig. 23) and the historic Scottish Rite is located two blocks to the south at King St W and Queen St N.

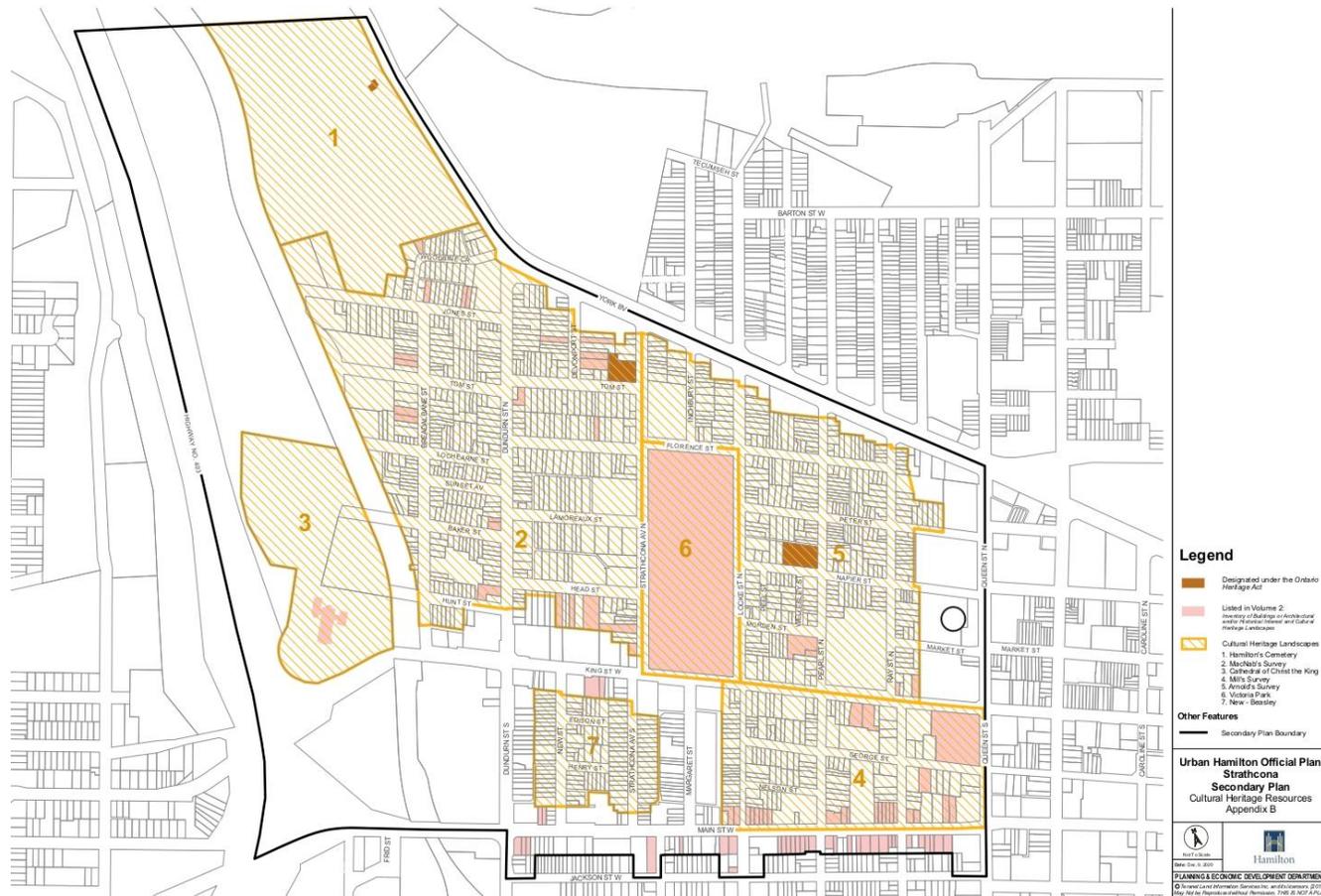


Figure 23 Strathcona Secondary Plan - Cultural Heritage Resources - Appendix B Urban Hamilton Official Plan

The site has minor grading constraints, with the property falling approximately one storey (5m) from Market St down to Napier (Fig. 24). The Site is free of significant vegetation and natural heritage features.



Figure 24: Grade change along Queen St N

3. Analysis of Proposal

3.1 Background

In preparing the design for the proposed development, the city's policy and guideline documents were taken into consideration, with a specific emphasis on the following:

- Strathcona Urban Design Guidelines
- City-Wide Corridor Planning Principles & Design Guidelines
- Tall Building Guidelines

3.2 Strathcona Urban Design Guidelines

The Strathcona Urban Design Guidelines (July 2013) implement the design direction of the Strathcona Secondary Plan regarding support for new development. The design principles encourage mixed uses, street-addressing new development, appropriate neighbourhood transitions, an improved pedestrian environment, transit-oriented development, and sustainable design. The following sections of the Guidelines are relevant and referenced as part of the development's design:

- General Built Form Guidelines (4.2)
- General Streetscape Guidelines (4.3)
- Queen Street built Form Guidelines (8.2)



Figure 25: Strathcona Secondary Plan

3.3 City-Wide Corridor Planning Principles & Design Guidelines

The City-Wide Corridor Planning Principles and Design Guidelines (April 2012) provide direction for designated corridors in the city. These guidelines are applicable to the intersection of King St and Queen St and 400 m from the intersection. They are meant to be considered for development applications, together with other applicable city design guidelines.

Section 4.0 outlines the design guidelines for development along corridors. The following sections of policies are relevant and referenced as part of the proposed design:

- Maximum building height (4.3)
- Minimum building height (4.4)
- Landscaping (4.5)
- Parking and loading (4.6)
- Street relationship (4.7)
- Side yards, walls and step-backs (4.8)
- Sidewalks and streetscapes (4.10)
- Land assembly (4.11)
- Shadow impacts (4.12)

3.4 Tall building Guidelines

The Downtown Hamilton Tall Building Guidelines (February 2018) implement the design direction for taller buildings in Downtown Hamilton, defined as those over 12 storeys in height. Although the site is not within the Downtown boundary, the site is captured within the study area for the Tall Building Guidelines and, thus, they are relevant and applicable for the proposed development.

The Tall Building Guidelines has two core components for the design process.

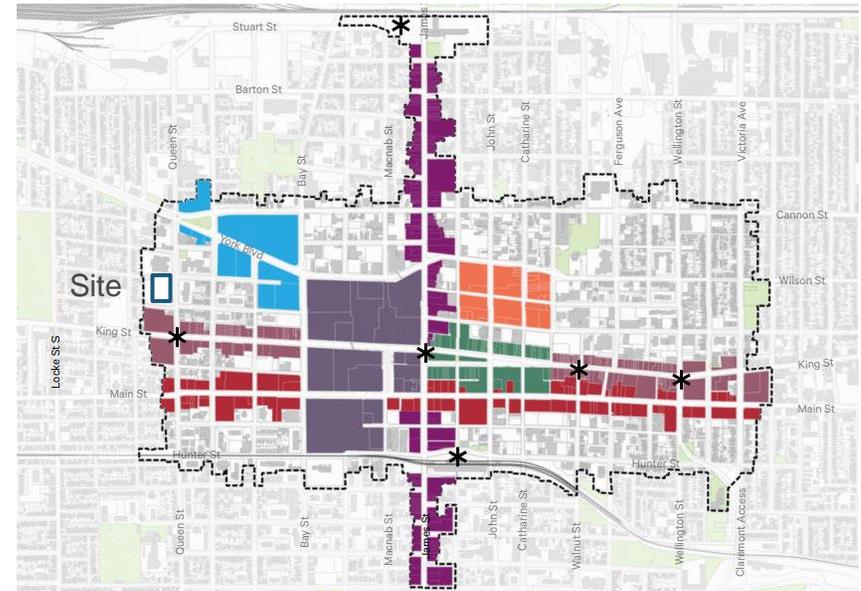


Figure 26: Tall building guideline study area

The component establishes recommended minimum site dimensions that inform evaluation of a site's appropriateness for a tall building. The subject site satisfies these minimum recommendations with a frontage of 78 meters along Queen St N (minimum 35 meters recommended for a tall building) and 96 meters along Napier St and Market St (minimum 45 metres recommended for a tall building).

The second component provides design guidelines related to contextual considerations, building form and articulation, and public realm relationships in the arrangement and design of tall

buildings. These guidelines are meant to offer flexibility and not limit creativity or contextually appropriate designs. The following sections of the Guidelines are relevant and referenced as part of the proposed design:

- Heritage conservation (3.1)
- Neighbourhood transition (3.2)
- Parks & Open Spaces (3.3)
- Vibrant streets (3.4)
- Transit proximity (3.5)
- Views and landmarks (3.6)
- Site organization and building base (4.2)
- Building tower (4.3)
- Tower top (4.4)
- Streetscape and landscape design (5.1)
- Sidewalk zone (5.2)
- Pedestrian weather protection (5.3)

3.5 Analysis by Design Theme

The table below demonstrates how the proposed development is informed by and responds to the applicable design policy. The policies and subsequent responses are broken down into seven overarching design themes, as follows:

1. A compatible integration of surrounding context, scale, and character
2. A design that respects surrounding heritage resources
3. A form that reduces shadow, wind, and visual impacts
4. A pedestrian focused, barrier-free streetscape environment
5. The incorporation of sustainable design measures
6. A multi-modal environment focused on active and public transportation
7. Efficient site utilities and servicing

Design Theme 1 – A compatible integration of surrounding context, scale, form, and character	
Policy / Guideline References	Design Response & Contributions
<ul style="list-style-type: none"> • Strathcona Urban Design Guidelines: 8.2.1 - 8.2.3 • City-Wide Corridor Planning Principles & Design Guidelines: 4.3.1 • Tall Building Guidelines: 3.2; 4.2.2 	<ul style="list-style-type: none"> • The proposed design includes residential uses in the form of low rise townhouses, mid-rise and high-rise apartment units, as well as street-fronting retail commercial units. • The podium is wrapped with active uses, designed to address the street, and continue the residential character and setbacks of the surrounding area. • The proposed podium height compatible with the surrounding low-rise dwellings, while the 15-27 storey towers are comparable in size to the adjacent high-rise residential buildings at 18 and 24 storeys.

	<ul style="list-style-type: none"> • The towers are setback 12.5 m from the westerly property line to provide transition and reduce overlook and shadow impact to the low-rise development. • In addition to the tower setback, a 9 m landscape strip is provided along the westerly property line to further add a soft buffer to the low-rise development. • Three (3) storey podium townhouse units along Market St are compatible with the one (1) to two and (2 1/2) storey adjacent low-rise buildings and provide a transition between the Site and surrounding neighbourhood (Fig. 11).
Design Theme 2 – A design that respect surrounding heritage resources	
Policy / Guideline References	Design Response & Contributions
<ul style="list-style-type: none"> • Strathcona Urban Design Guidelines: 8.2.3 • Tall Building Guidelines: 3.1 	<ul style="list-style-type: none"> • The 2-3 storey podium has a material palette of brick, wood, and glass textures provides a contemporary reflection on the design of the surrounding context, including the historic Scottish Rite. • The neighbourhood character and rhythm is maintained along the street level by providing similar setbacks, compatible massing and pattern along the street facades. • The Heritage Impact Assessment study, prepared by McCallum Sather, dated August 2021, concludes that the proposed development will have minimal impact to the heritage resource in the area.
Design Theme 3 – A form that reduces shadow, wind, and visual impacts	
Policy / Guideline References	Design Response & Contributions
<ul style="list-style-type: none"> • Strathcona Urban Design Guidelines: 8.2.1 • City-Wide Corridor Planning Principles & Design Guidelines: 4.3.1; 4.3.2; 4.9; 4.12 • Tall Building Guidelines: 3.2; 3.3; 3.6; 4.3.2; 4.3.3; 5.3 	<ul style="list-style-type: none"> • The sleek tower floor plate of only 600 sqm, tower placement as well as the tower separation of 20-25 m and point tower proportion, minimizes the shadow and wind impacts on the surrounding properties. • As concluded in the Shadow Study report, prepared by GSP Group, dated November 2021, the proposed development avoids casting any shadow effects on all key downtown civic gathering spaces and most of the proposed development's shadows overlap with the existing shadows cast by larger buildings east of the site.

	<ul style="list-style-type: none"> • The proposed towers meet the recommended building separation distance of 25 m In an east-west direction and have provided a 20m separation in a north-south direction. Even though the separation distance in the north-south direction is slightly less than the recommended distance, it can be justified as the tower proportions are 20% smaller than the recommended tower floor plate of 750 sqm, and they do not cause undue shadow impact. • The visual impact is limited through the articulation of the building facades and variation of the material placement across each podium face. The abundant use of clear glazing on the tower and podium facades, as well as materials that complement the surrounding neighbourhood, will reduce the visual impact further and help the building blend into the existing neighbourhood fabric. • The height of the tallest tower, including the mechanical penthouse, is 189.75m ASL which is below the escarpment height of 190m ASL along the Queen St N view corridor in order to protect the views to/from the escarpment.
Design Theme 4 – A pedestrian focused, barrier-free streetscape environment	
Policy / Guideline References	Design Response & Contributions
<ul style="list-style-type: none"> • Strathcona Urban Design Guidelines: 8.2.1 • City-Wide Corridor Planning Principles & Design Guidelines: 4.7; 4.10 • Tall Building Guidelines: 3.4; 3.5; 4.2.1; 4.2.3 - 4.2.5; 4.2.7; 4.2.9; 5.1 - 5.4 	<ul style="list-style-type: none"> • Barrier-free pedestrian access to the residential towers is provided through a central entrance on Napier St, with commercial access along the Queen St N frontage. The entrances are distinguished by their size and placement along the façade, as well as the use of signage and canopies. • The proposed podium continues the pattern of human-scale development within the neighbourhood by respecting the surrounding low-rise building heights and creates an intimate pedestrian realm through minimal setbacks. • Building facades are activated by the inclusion of townhouse units, small-scale commercial uses and at grade apartment units. The commercial units and main residential entrances include generous amounts of clear glazing to create an open, inviting space and allow for eyes on the street. • All the street facing facades have active uses.

	<ul style="list-style-type: none"> Landscaping with street trees and shrubs is proposed along all of the building street edges to soften the streetscape and provide shade to the pedestrians.
Design Theme 5 – The incorporation of sustainable design measures	
Policy / Guideline References	Design Response & Contributions
<ul style="list-style-type: none"> Tall Building Guidelines: 4.2.8; 4.2.9 Strathcona Urban Design Guidelines: 4.2.7 	<ul style="list-style-type: none"> The proposed development capitalizes on the site’s sustainability advantages owing to its location, in terms of proximity to Downtown Hamilton and existing and future transit routes. Energy and water efficiency matters will be addressed at the time of detailed building design and will need to meet OBC requirements, at the building permit stage. Roof top amenity space is proposed with landscaping, green roof, and trees.
Design Theme 6 – A multi-model environment with a focus on active transportation	
Policy / Guideline References	Design Response & Contributions
<ul style="list-style-type: none"> Strathcona Urban Design Guidelines: 8.2.1 City-Wide Corridor Planning Principles & Design Guidelines: 4.6; 4.7; 4.10 Tall Building Guidelines: 3.4; 3.5; 4.2.3 - 4.2.7; 5.1 - 5.3 	<ul style="list-style-type: none"> Vehicle access is limited to two driveways, one along Napier St, and the second along Market St, minimizing the potential for conflicts with cyclists and pedestrians. Parking, servicing, and loading areas are contained within the building and screened from view. Loading areas are located adjacent to elevators, waste storage and commercial units, and away from residential parking. Convenient access to existing transit services and future LRT corridor along King St is provided through a southern pedestrian building entrance along Market St. Ample bike parking is provided within the parking levels of the podium and are located adjacent to elevator lobby for easy access.
Design Theme 7 – Efficient site utilities, waste, and servicing	
Policy / Guideline References	Design Response & Contributions
<ul style="list-style-type: none"> City-Wide Corridor Planning Principles & Design Guidelines: 4.6 	<ul style="list-style-type: none"> Separate loading spaces are provided for residential and commercial uses with the shared commercial loading area adjacent to the commercial units. All loading spaces are internal to the podium and screened from outside view.

<ul style="list-style-type: none">• Tall Building Guidelines: 4.2.6	<ul style="list-style-type: none">• Waste is stored in internal rooms and collected via the loading spaces.• The tower's mechanical penthouse is enclosed and screened from view using translucent spandrel glass.
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4. Visual Impact Assessment

4.1 Policy and Guideline Basis

Official Plan

With respect to views, Section 3.3.5 of the Urban Hamilton Official Plan generally describes public views and vistas as “significant visual compositions of important public and historic buildings, natural heritage and open space features, landmarks, and skylines which enhance the overall physical character of an area when viewed from the public realm. Vistas are generally panoramic in nature while views usually refer to a strong individual feature often framed by its surroundings. Examples of existing significant vistas include the panorama of the Niagara Escarpment, Hamilton Harbour and the Downtown skyline as viewed from various vantage points throughout the City.” In terms of incorporation of views and vistas, Section 3.3.5.2 of the Urban Hamilton Official Plan identifies that “views and vistas shall be achieved through alignment of rights-of-way, layout of pedestrian circulation and open space systems, and the siting of major features, public uses, and built form”.

Strathcona Secondary Plan

Section 6.3 of the Strathcona Secondary Plan seeks to “Integrate views and vistas of historic landscapes, buildings and natural features, where possible, through design”. Further to the general Official Plan design policies above, Section 6.6.10.1k) identifies that “Existing significant views and vistas contribute to the unique identity, sense of place and character of the Strathcona Neighbourhood” and “shall be maintained and enhanced, where

possible”. These include view corridors to the Escarpment along north-south public streets and views from vantage points within Victoria Park.

The Queen Street South corridor is the westernmost edge of the Downtown Hamilton boundaries. The corridor between York Blvd and Hunter St on Appendix C of the Secondary Plan is identified as a “View Corridor to Niagara Escarpment”. On the east of Queen St S within the Downtown boundaries, the area to the south of King St to Hunter St is identified as “Locations Where There May Be Impacts to Views”; the area north of King St including the Subject Site, is not part of this designation. Section 6.1.10.5 identifies the intent of these defined corridors is to “understand and limit the loss of views to the Niagara Escarpment”. Section 6.1.10.6 identifies that a visual impact assessment “may be required for development located on streets identified as View Corridors to the Niagara Escarpment”.

Tall Building Guidelines

Section 3.4 of the Tall Building Guidelines establishes guidance for taller buildings responds to Hamilton’s “unique conditions and features”:

- a. Any development application shall identify, maintain and enhance viewing opportunities towards the Escarpment;
- b. Tall buildings should be located in a fashion that preserves key views to existing landmarks and termini to and from the Downtown;
- c. Tall buildings shall contribute to an interesting skyline and be sufficiently spaced apart to minimize the loss of sky views;

- d. The silhouette of existing important landmark buildings should be protected, and the view corridor leading to them should remain legible;*
- e. Tower step backs should be increased to preserve the view to an existing important local landmark; Tall Buildings within Downtown Hamilton should respond to the city's unique topography and landscape, including the Escarpment and the Waterfront.*
- f. Views of the Escarpment should be preserved; and,*
- g. An assessment of impact on views to/from the Escarpment will be required as part of development applications.*

Furthermore, Section 3.4 suggests that “tall buildings should provide connectivity to streets and public spaces... to surrounding points of interest, including the following:

- a. Views of Gore Park from King Street, James Street, Hughson Street, and Catharine Street;*
- b. Views of Hamilton Harbour and the Niagara Escarpment from James Street;*
- c. Views of the Niagara Escarpment from Bay Street, Catharine Street, and Wellington Street;*
- d. The continuous linear path of Ferguson Avenue;*
- e. Views on Hughson Street, from Gore Park, terminating at the TH&B Station (West Harbour GO Transit Station).”*

4.2 Scope

For the purposes of this Visual Impact Assessment (VIA), “visual impact” is meant generally as the extent of change in the visual landscape created by a proposed development. The visual landscape for this purpose includes both the natural landscape as

well as the built landscape. The Visual Impact Assessment explores five potential effects of the proposed building based on the above policy and guideline direction:

- (a) Loss of views to the Niagara Escarpment up the Queen St corridor as well as cross-fabric views in surrounding area.*
- (b) Loss of views to the important Scottish Rite landmarks.*
- (c) Impact and contributions to Hamilton skyline and skyviews along King St West and Queen St N corridors*
- (d) Impacts on views from Victoria Park at the centre of the Strathcona Neighbourhood.*

This VIA models 16 viewpoints throughout the broader area to explore the above scope (see Key Map below). These viewpoints include views along King St W from the west and east at longer and short views; views along Queen St from the north and south at longer and short views; and views from the longer area to the north looking towards the Escarpment (near York Blvd and Bayfront Park); views from Victoria Park; and views from Napier St and Market St.

4.3 Modelling and Simulation

The below outlines the progression of the method used for the modelling and photo-simulations used in this VIA.

- 1. A 3D Model of the proposed building was prepared by the project architect, SRM Architects.*
- 2. GSP Group used the 3D Model and Google Earth Professional to create an interactive “viewshed model”, which allowed the proposed building to be placed into the existing built form context using coordinates to accurately position the new building.*

3. Specific view and vista points were selected to illustrate potential visual impacts for assessment purposes.
4. Photographs were taken on October 14, 2021 on the far-side vantage point to the site, mid-point on the sidewalk at a height of approximately 1.8 metres from the ground surface. Camera settings were set to replicate a pedestrian visual perspective.
5. The photo-simulation of each viewpoint (Figures 1 through 16) compares the existing view using the photograph on the far side facing the site and the proposed view showing the 3D Model with the proposed building inserted to show the visual landscape at each viewpoint.

4.4 Assessment

a) Niagara Escarpment Views

Respecting longer views near the waterfront, the Escarpment profile is not visible from Barton St (View 12), or Bayfront Park (View 16) given Downtown topography and the intervening city building fabric.

The Escarpment profile is visible looking along Queen St from Peter St to the site (view 11). The Escarpment is directly visible at the terminus of the Queen St corridor; this view will not be obscured by the development. The proposed building will frame the sides of this view corridor, similar to and together with other approved buildings along the corridor in the vicinity (including the 12-storey building at 354 King St W and the 24-storey building at 15 Queen St S).

b) Scottish Rite Views

Views to the Scottish Rite Club together with the site are limited to the Queen St corridor views. The proposed building does not obstruct any existing views to the Scottish Rite Club given it is not visible from these viewpoints, owing to area topography, the height and setback of foreground buildings and the larger setback of the Scottish Rite Club from Queen St S. Moving south from York Blvd to the site (View 11), the proposed building does not overlap with and does not obstruct any existing views of the Scottish Rite Club.

c) Skyline and Sky Views

“Skyline” views are those longer views of the building’s height viewed together with the broader context. The longest views along the street corridors (Views 2, 5, 8, 12, and 15), the view from Victoria Park (Views 13 and 14) and the longer views from the waterfront (View 16) demonstrate potential visual impacts of the skyline. These viewpoints illustrate that the proposed building positively contributes to the emerging skyline of the western edge of Downtown Hamilton. Its slender towers form does not overpower the skyline in terms of the tower’s bulk. The tower top’s architectural distinction through step-backs and architectural feature elements provide a refined addition to the city skyline. This is particularly evident for longer direct views along King St W from Bay St and Locke St (Views 5 and 8) and looking south along Queen St S from Barton St (View 12).

“Sky views” are defined by the Tall Building Guidelines as the “ability to see the sky, unobstructed by buildings, from the opposite side of a street”. The more immediate views along Queen St N (Views 1, and 11), Napier and Market St (Views 3, 6, 9, and 10)

provide these views. The Tall Building Guidelines principally speak to ensuring separation between towers to maximize sky views, generally which relates to pedestrian comfort along sidewalks. The proposed building provides enough separation to the closest tall buildings in the vicinity and the four towers on the site to maintain appropriate sky views. The proposed slender towers footprint passes more quickly from a pedestrian's perception from all sides given the tower shape and configuration. The towers form provides for sky view openings for sunlight, per the shadow impact study prepared by GSP Group (see Appendix).

d) Victoria Park Views

The top half of the building's tower will be visible from Victoria Park from the selected viewpoints (Views 13 and 14). The visual impact from this vantage point is relatively insignificant. Given the distance between the park and the site and the slender form, the visual impact will be minimal in effect on the park user perspective. The proposed building does not obstruct existing views of the Escarpment from the park.

4.5 Summary

The slender towers mass and architectural treatment for the proposed building:

a) Does not meaningfully obstruct existing views of the Escarpment from longer view points and appropriately frames the Queen Street corridor looking south as part of a corridor with other new approved buildings.

b) Does not obstruct or diminish any views to the neighbourhood landmark of the Scottish Rite Club given the area topography, intervening urban fabric and setback of that building.

c) Does not over-impose on available sky views recognizing the urban context of the site on the doorstep of Downtown.

d) Does not impose on the visual perspective from Victoria Park given distance to the site and the intervening building fabric.

4.6 Figures



Key Map



View 1: Looking North along Queen St N at King St



Existing



Existing



Proposed



Proposed

View 2: Looking North along Queen St S at Main St

View 3: Looking West along Market St at Hess St



View 4: Looking West along King St at Hess St



View 5: Looking West along King St at Bay St

Existing



Existing



Proposed



Proposed



View 6: Looking East along Market St at Ray St

View 7: Looking East along King St at Pearl St



View 8: Looking East along King St at Locke St



View 9: Looking West along Napier St at Hess St



View 10: Looking East along Napier St at Ray St

View 11: Looking South along Queen St at Peter St



View 12: Looking South along Queen St at Barton St

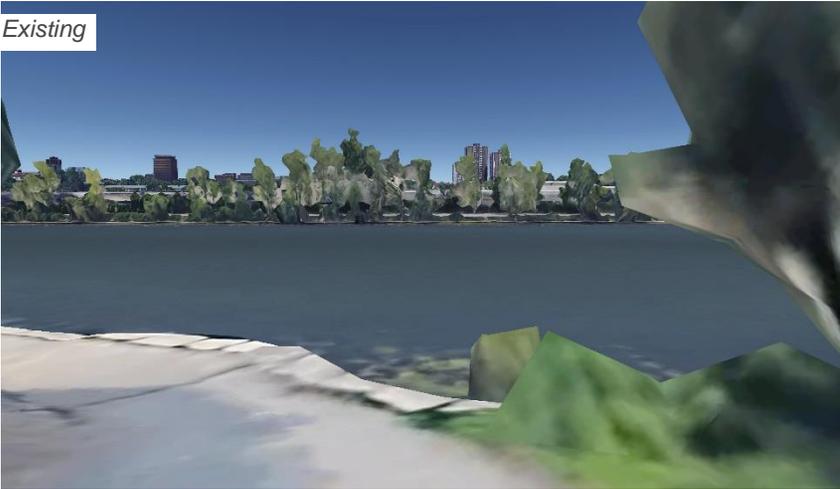
View 13: Looking South-East along Strathcona Ave near Victoria Park



View 14: Looking South-East along Locke St near Victoria Park

View 15: Looking South-East along York St near Harvey Park

Existing



Proposed



View 16: Looking South from Bayfront Park

5. Conclusion

In our opinion, the proposed form, design, and character of the proposed development is quality urban design. The proposed design conforms to the policy direction of the Urban Hamilton Official Plan including the Strathcona Secondary Plan and respects and reflects the intent of relevant design guidelines, particularly the Tall Building Guidelines and Corridor Principles and Design Guidelines. We base this statement on the following conclusions:

- The site is appropriately sized and configured for a tall building per the general parameters of the Tall Building Guidelines.
- The site design is appropriately configured with a tall building form that reflects the scale of surrounding development, the corridor scale of King St W and Queen St N and transitioning with a three (3) storey podium form with townhouses and commercial units that relate to the neighbourhood scale of Market St and Queen St N.
- The building base has a scale and articulation of the corridor scale of Queen St N while reflecting the heritage fabric of abutting and surrounding properties along Market St and Napier St.
- The building base and podium has active uses on all street facades which reinforces an attractive, pedestrian-friendly public realm.
- The building towers provide a slender point form, positioned at the four corners of the podium to meet separation guidelines and providing step-backs to distinguish from the building base.
- The towers are setback 12.5m from the westerly property line to provide appropriate transition, mitigate shadow/overlook, and provide separation distance from any future development on adjacent properties. Additionally, a 9m landscape strip is provided along the western edge to provide a soft buffer to the adjacent low-rise development.
- The building tower top is refined through distinct massing and cladding materials and the mechanical penthouse integrated within the building's architecture.
- The enclosed visual impact assessment demonstrates that the proposed building does not meaningfully impact existing views of the Niagara Escarpment or landmark buildings and makes a positive contribution to the city's skyline.
- The tall building form is supported by the Shadow Study report demonstrating that there are no significant shadow impacts (enclosed within this report).

Appendix

Shadow Study



Shadow Impact Study

125 Napier Street,
Hamilton, ON

November, 2021

Prepared for:
Hamilton Queen and
Market Inc.
366 King Street
Hamilton, ON

Prepared by:
GSP Group Inc.
200 Locke Street
South, Suite 200
Hamilton, ON
L9P 4A9



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Purpose

The following Shadow Impact Study has been prepared by GSP Group Inc. in support of the Official Plan Amendment (“OPA”) and Zoning By-law Amendment (“ZBA”) to facilitate the redevelopment on the lands municipally addressed as 125 Napier Street in Hamilton (referred to as “the Site”).

The Site is located on Queen Street North and is also fronting on Napier Street and Market Street. The Site is located just outside of the western border of Downtown Hamilton. The site has a combined frontage of ±96m along Napier Street, ±78 m along Queen Street N, and ±96 m along Market Street with a total combined area of ±7,663 sq m (±1.89 acre).

The proposed development is comprised of four (4) residential towers with a 3-storey podium. Two towers are 27-storeys tall and the remaining two towers are 15-storeys tall. .

The objective of the City of Hamilton's Terms of Reference: Shadow Impact Study for Hamilton is to:

“maintain quality, comfortable and inviting public spaces and pedestrian environments by demonstrating that a development will not cause undue shade on the subject lands, and on the surrounding context, including building facades, private and public outdoor amenity and open spaces, parkland, school yards and buildings, sidewalks and other components of the public realm.”

The shadow impact study is required for buildings 6 storeys or higher, for the Official Plan Amendments, Zoning By-Law Amendments, Site Plan Control and Minor Variance applications.

As outlined in the planning justification report, the project will require an Official Plan Amendment and a Zoning By-Law Amendment application. The following shadow analysis demonstrates how the proposed development will cast shadow on the surrounding urban context and discuss the mitigation strategies, if required, for any undue shadow impact.

Analysis Method

Following the guidelines from the City of Hamilton's Terms of Reference: Shadow Impact Study for Hamilton, the shadow analysis is conducted for the following:

Dates and time

- Spring Equinox, March 21st at solar noon and hourly intervals starting 1.5 hours after sunrise and ending 1.5 hours before sunset.
- Fall Equinox, September 21 at solar noon and hourly intervals starting 1.5 hours after sunrise and ending 1.5 hours before sunset.

Time Zone

- Eastern Standard Time: Universal Time minus 5 hours
- Daylight Saving Time: Universal Time minus 4 hours

Geographical Coordinates

- Latitude: N 43 degrees 14'30"
- Longitude: W 79 degrees 51'00"

The shadow analysis incorporates three simulated conditions:

1. It illustrates the current condition of the shadow impact, shaded in the colour gray.
2. It establishes an as-of-right condition based on the height as per the previously approved zoning by-law amendment: Maximum height of 15-Storeys with a 3-storey podium. The as-of-right shadows are shaded yellow in the shadow analysis diagrams.
3. It establishes the proposed condition based on the proposed 27-storey and 15-storey towers with a 3-storey podium. The net new shadow (new shadow minus the as-of-right shadow) is shaded in a light blue in the shadow analysis diagrams.



As-of-right Condition



Proposed Condition

Assessment Criteria and Analysis

The City's Terms of Reference for Shadow Impact Study for Downtown Hamilton Section 8.0 provides a description of the Shadow Impact Criteria that is required to be applied in the analysis as follows:

Criteria

1. Shadows from proposed development shall allow for a minimum of 3 hours of sun coverage between 10:00am and 4:00pm as measured from March 21st to September 21st on public sidewalks and public and private outdoor amenity space such as patios, siting areas, and other similar programs.

Quantification & Assessment

1. Queen Street North: With the application of step-backs and slender tower design, the proposed development successfully mitigates any undue shadow impact and will have 3 to 5 hours of sun coverage (pg. 7 & pg. 18) between 10am to 4pm.

Napier Street: The proposed development allows for a minimum 3 hours of sun coverage along most of the Napier Street but fails to meet the criteria immediately North of the proposed development and will have less than 3 hours of sunlight in some areas. However, with any proposed High-Rise development, and given our geographical location on the northern hemisphere, avoiding casting any shadows onto Napier Street sidewalks would be difficult to achieve.

Moreover, the section of Napier Street sidewalk with less than 3 hours of sunlight, is flanked by a non-active frontage (surface parking lot, see image below) and therefore will have a minimal shadow impact.



Ray Street: The proposed development successfully mitigates any undue shadow impact and will have minimum 5 hours of sun coverage (pg. 7 & pg. 18) between 10am to 4pm.

The analysis shows that no private outdoor amenity space will have less than 3 hours of sun during the day except a small portion (5%) of the outdoor amenity area at 75 Queen Street North will have 2 hrs of sunlight.

MITIGATION MEASURES

Criteria

2. Shadows from the proposed development shall allow for a minimum of 50% sun coverage at all times of the day as measured from March 21st to September 21st on public plazas, parks and open spaces, school yards, and playgrounds.

Quantification & Assessment

2. The proposed development allows for at least 50% sun coverage on all public plazas, parks and open spaces, school yards, and playgrounds during all test times.

Criteria

3. Downtown Hamilton contains a number of primary gathering spaces where civic life occurs. Development shall not cast any new net shadow between 10:00 a.m. and 4:00 p.m. as measured from March 21st to September 21st on the Downtown's key civic gathering spaces.

Quantification & Assessment

During all test times the proposed development avoids casting any shadow effects on all key downtown civic gathering spaces listed in the Terms of Reference. In addition, during the test times with the most potential for adverse shadow impacts where the sun is lowest (i.e. March 21st 6:03 PM, September 21st 5:48PM) the majority of the proposed development's shadows overlap with the existing shadows cast by larger buildings east of the site.

Mitigation Measures

Orientation

This proposed location and the orientation will have the least shadow impact on the sidewalks given the geographic location of the site.

Massing

The sleek point tower floor plate of only 600 sq m, as well as placing lower height towers along the western side, adjacent to low rise development, mitigates any undue shadow impact on the properties along Ray Street.

Step-backs and Building Separation

The proposed building steps back above the podium at level 3, reducing the overall massing along the street edge. Additionally the towers have a separation of 20-25 m, which minimizes the shadow impacts withing the property and rooftop amenity area.

The application of these mitigation measures results in minimal shadows impact from the proposed development.

Conclusions

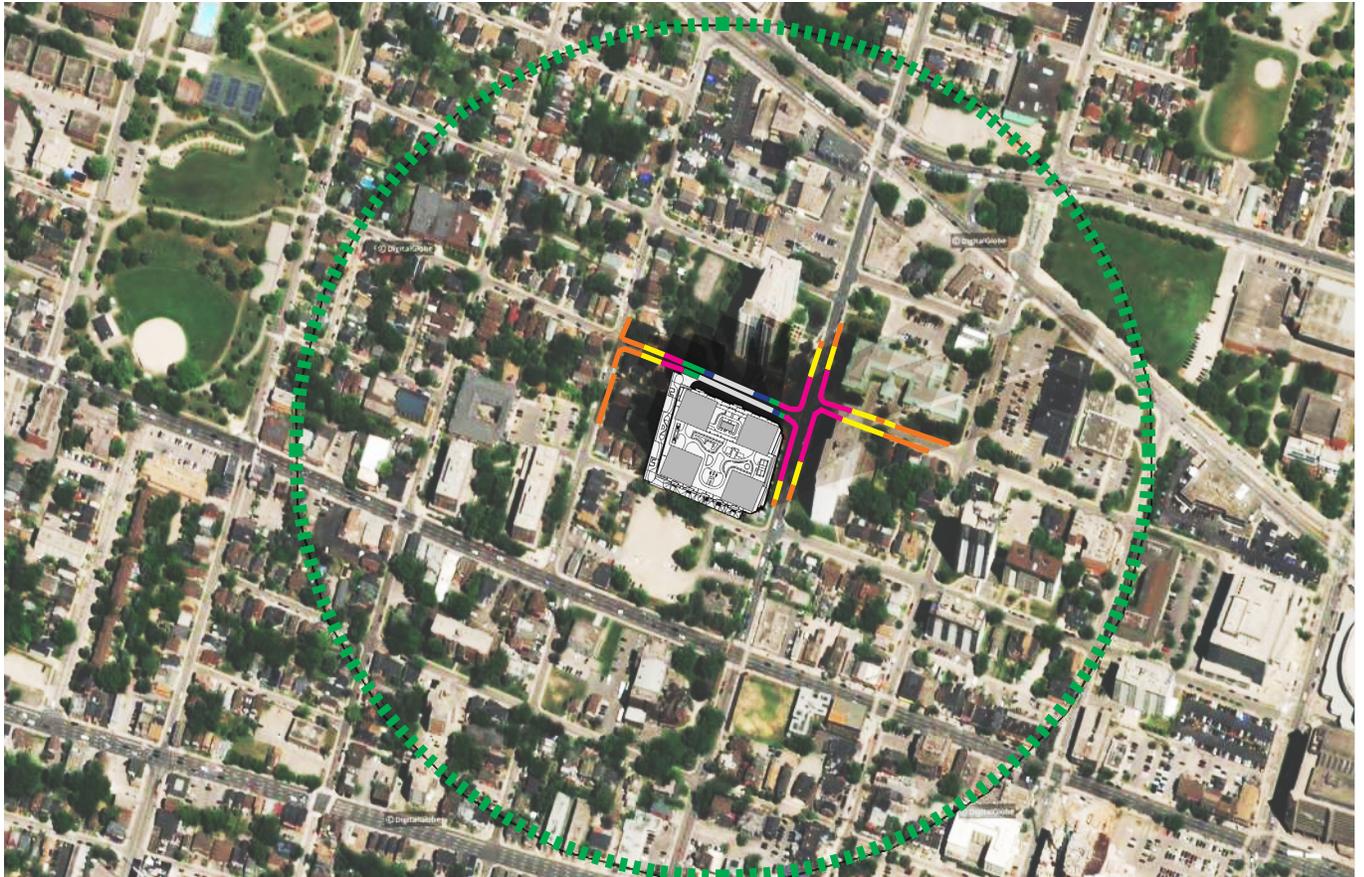
This assessment of the proposed development proves to generally meet the shadow impact criteria outlined in the City of Hamilton's Terms of Reference for the Shadow Impact Study for Downtown Hamilton. With the application of sleek massing, building separation, step-backs, articulation and building orientation, the proposed development has a minimal shadow impact and has implemented the mitigation methods applicable on the site and therefore it is concluded that the proposed development satisfactorily meets the City's shadow impact criteria.

SPRING EQUINOX MARCH 21ST

Shadow Interval (As per city of Hamilton Shadow Study Guidelines)

- Solar Noon.
- Hourly intervals starting 1.5 hours after sunrise and 1.5 hours before sunset.

Sunlight Hours | Between 10am to 4pm

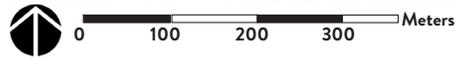


5 Hour
4 Hour

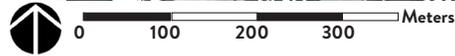
3 Hour
2 Hour

1 Hour
Less than 1 Hour

Existing Condition



Proposed Condition

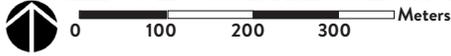


- As-of-right Shadow
- Net New Shadow
- Existing Shadow
- Distance Of Shadow Impact (4X Building Height: 88m x 4 = 352m)
- Property Boundary

Existing Condition

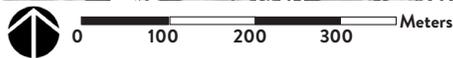


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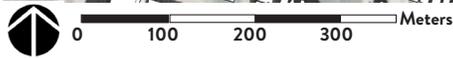
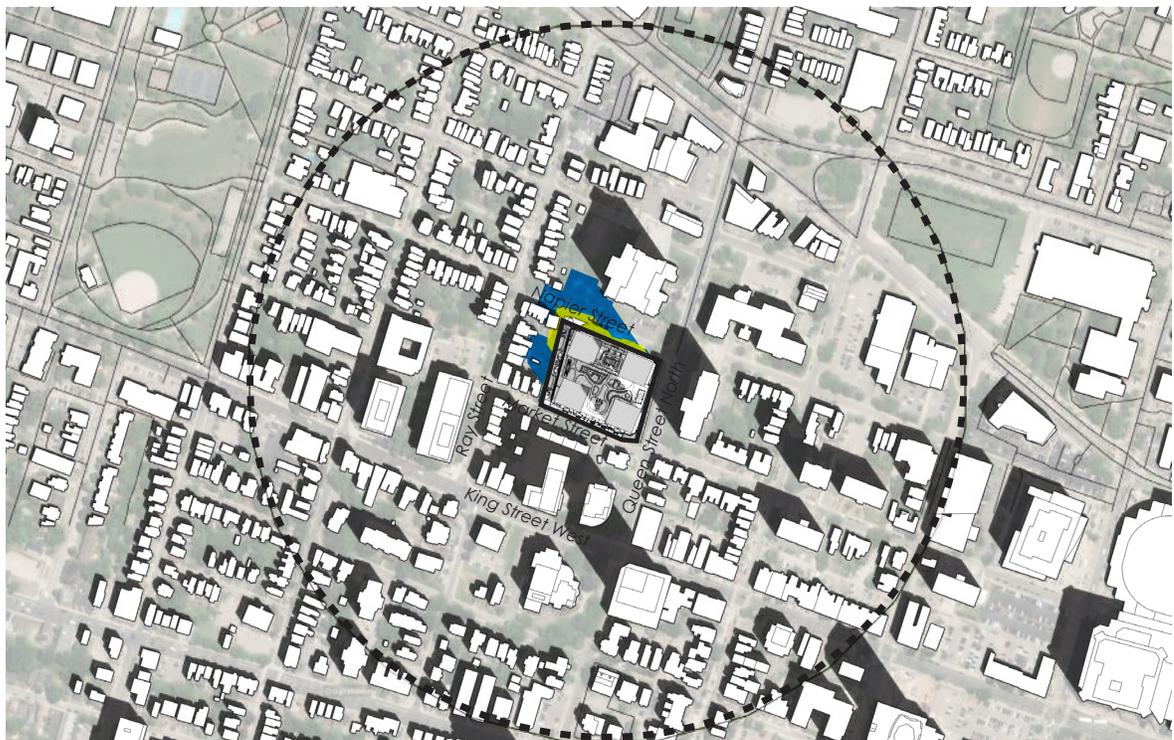


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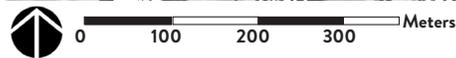


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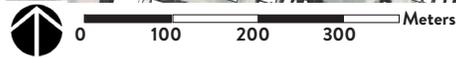
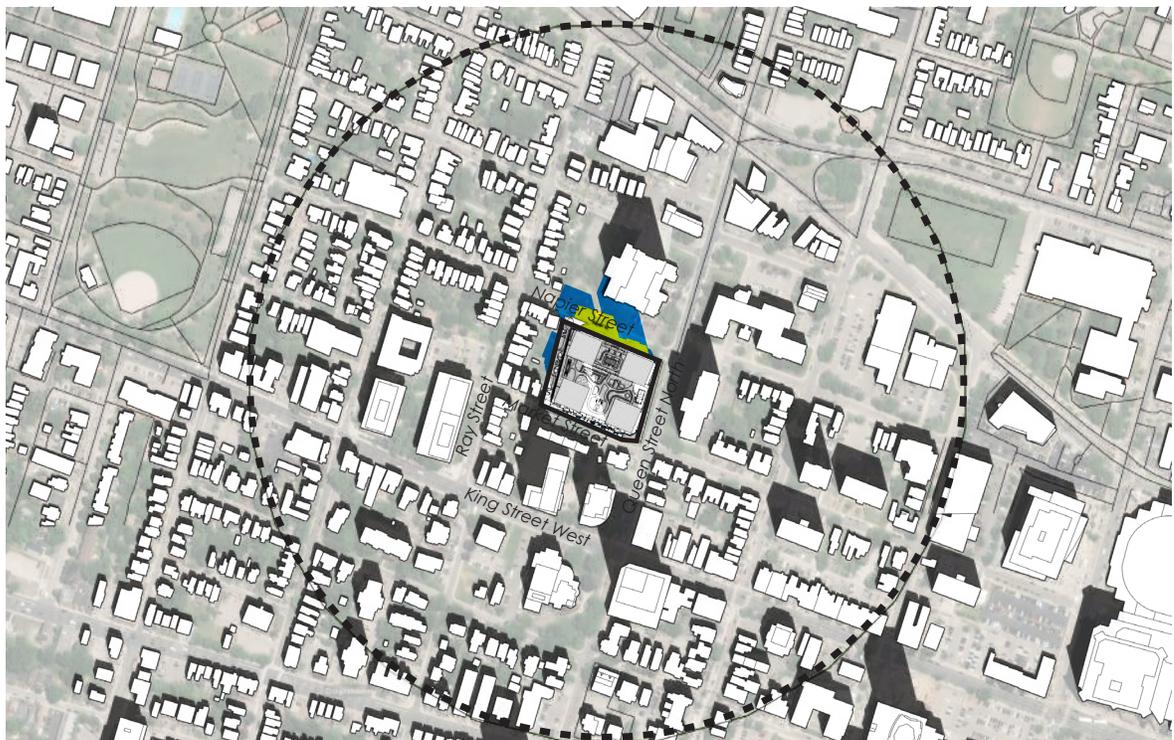


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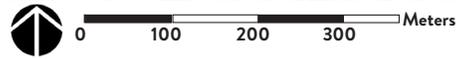


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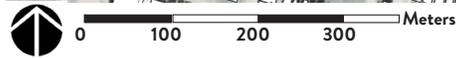
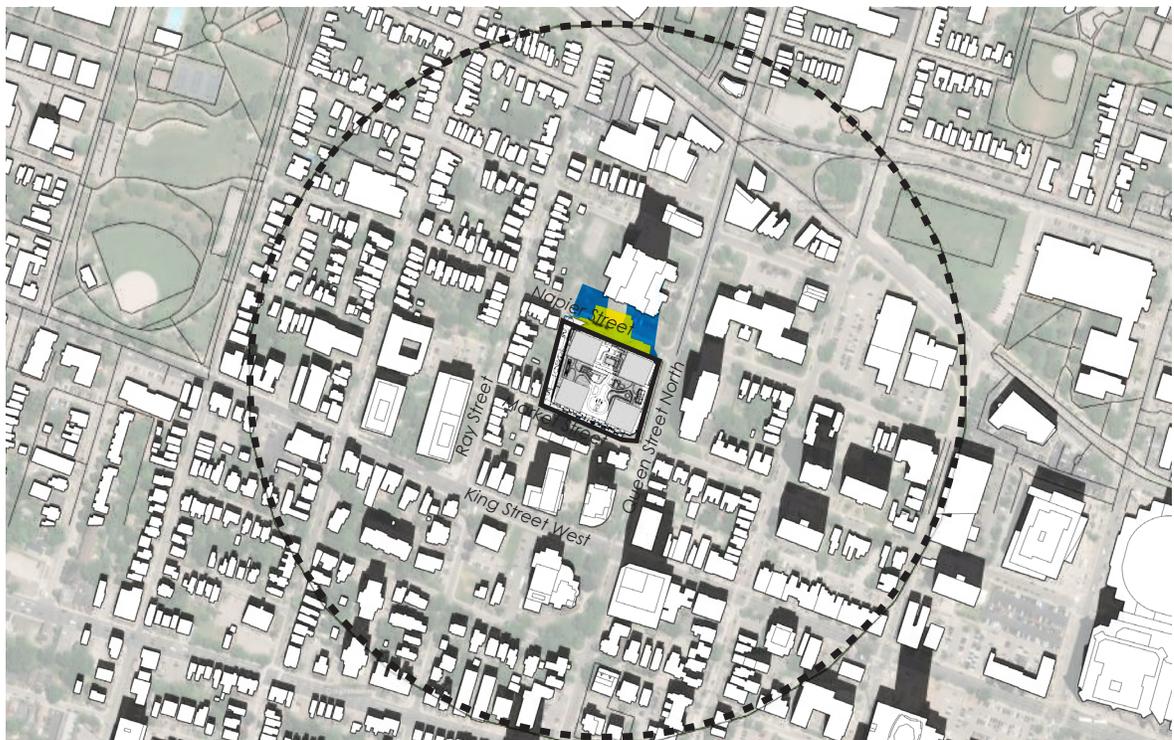


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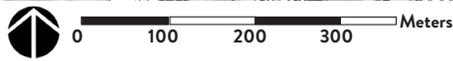


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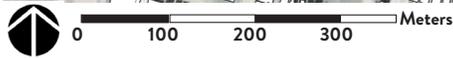
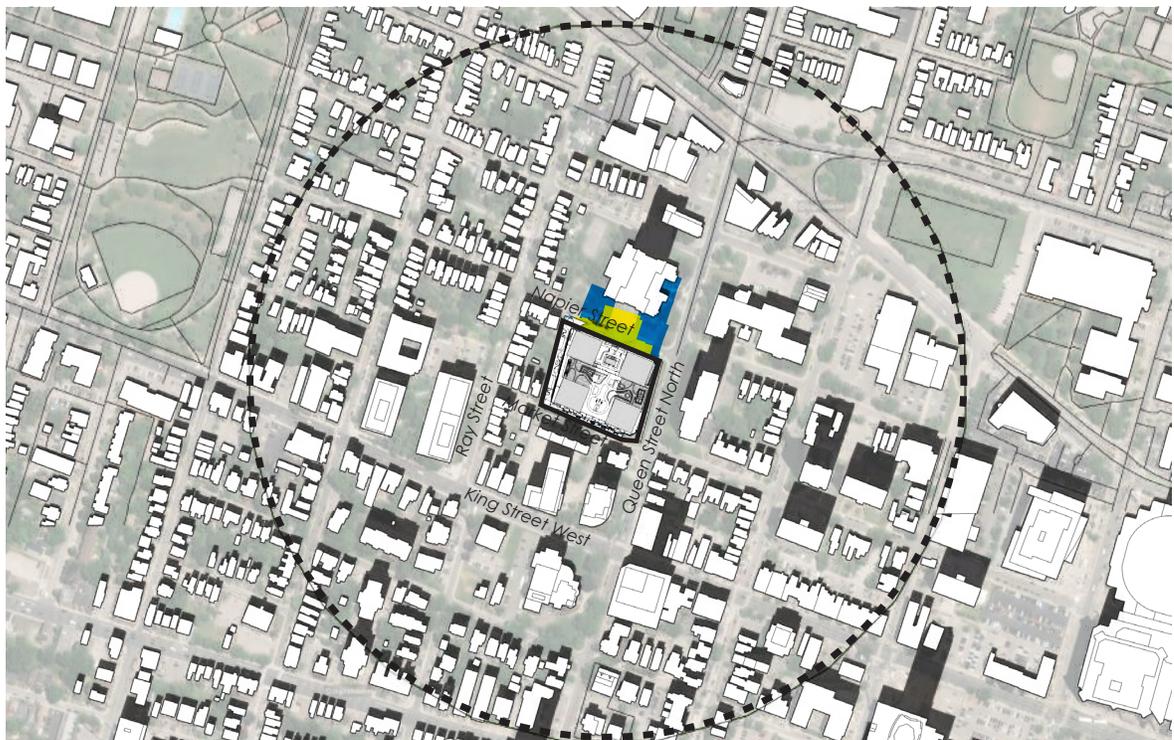


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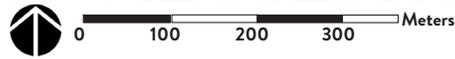


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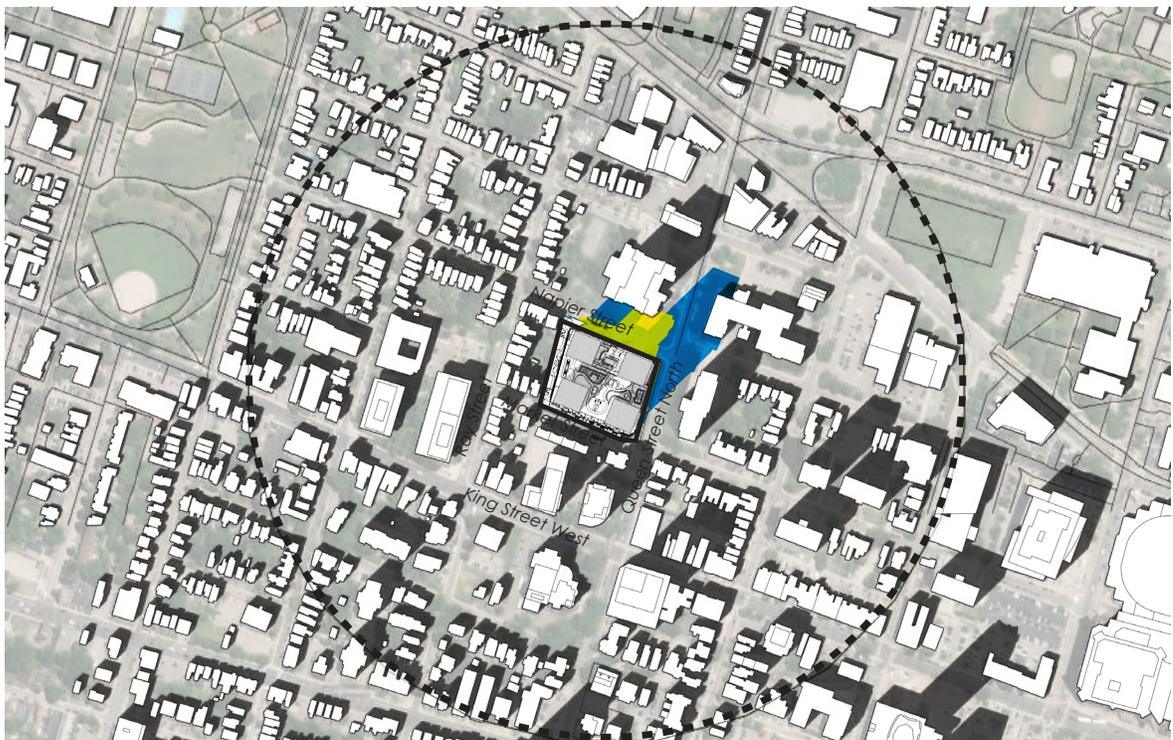


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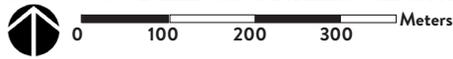


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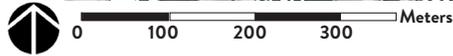
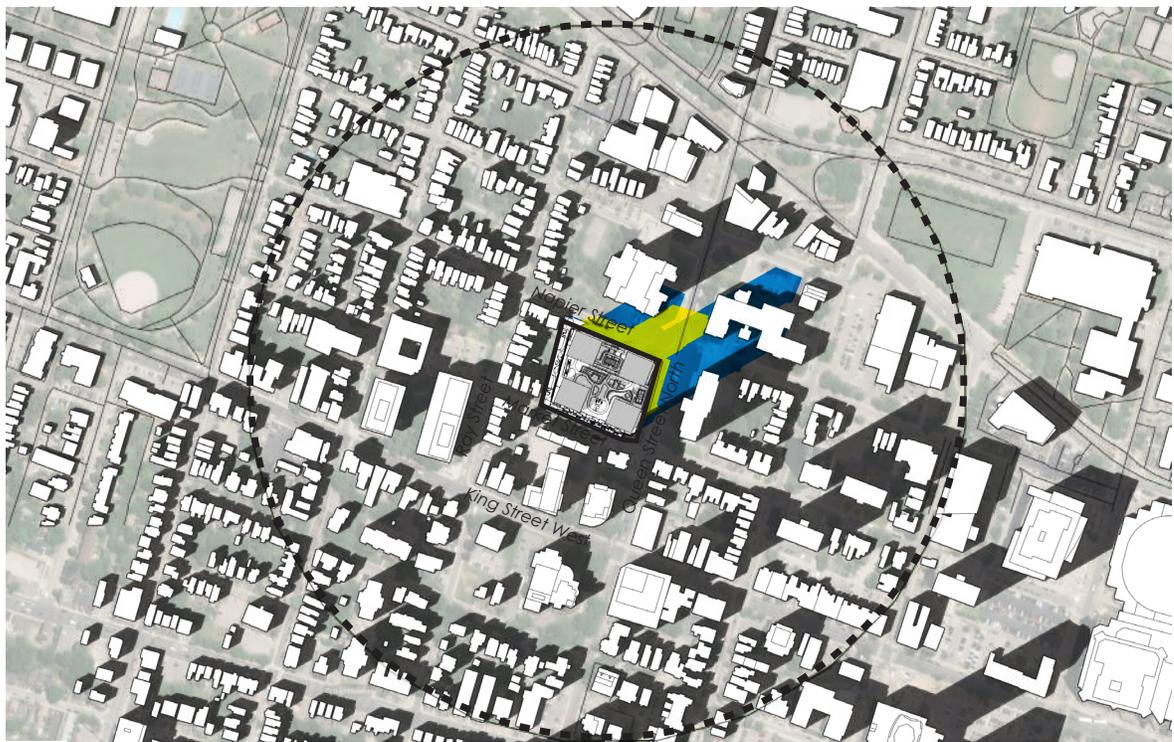


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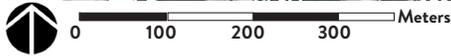


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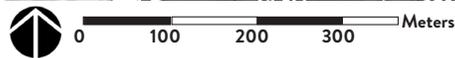


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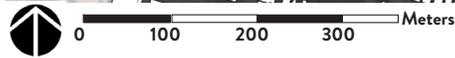
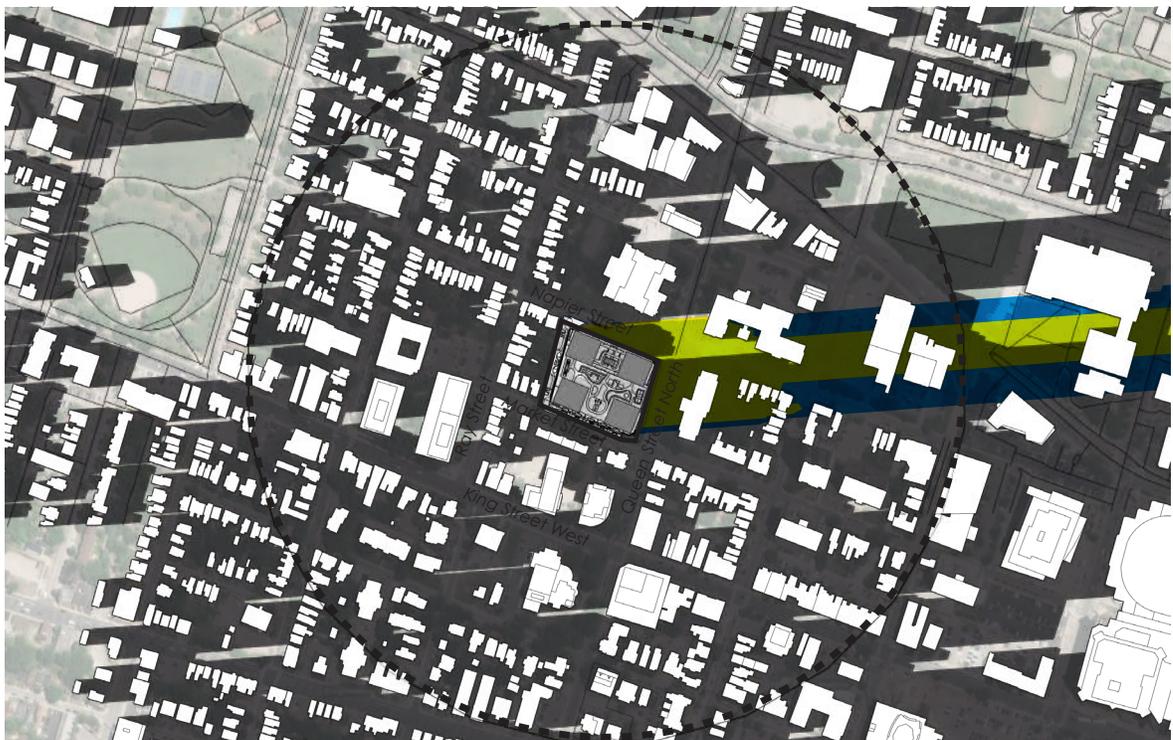


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Existing Condition



Proposed Condition



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Shadow Interval (As per city of Hamilton Shadow Study Guidelines)

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- Hourly intervals starting 1.5 hours after sunrise and 1.5 hours before sunset.

Sunlight Hours | Between 10am to 4pm

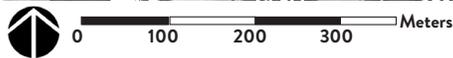


5 Hour
4 Hour

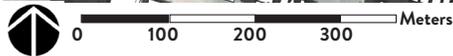
3 Hour
2 Hour

1 Hour
Less than 1 Hour

Existing Condition



Proposed Condition

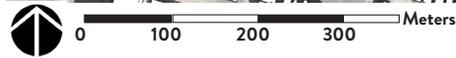


- As-of-right Shadow
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- Property Boundary

Existing Condition

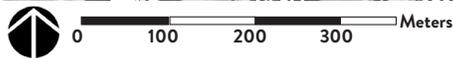


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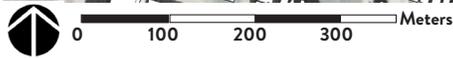
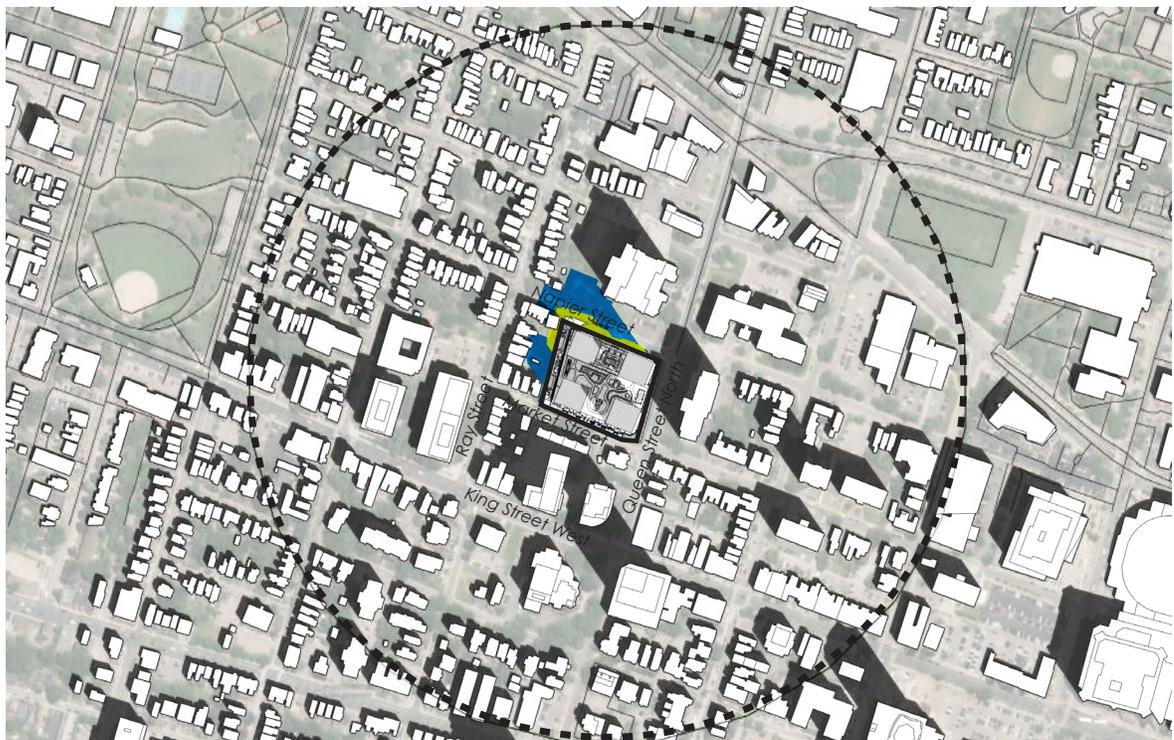


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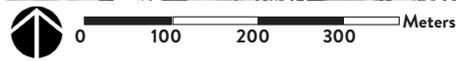


Proposed Condition

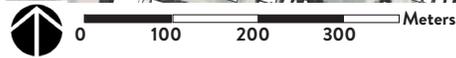
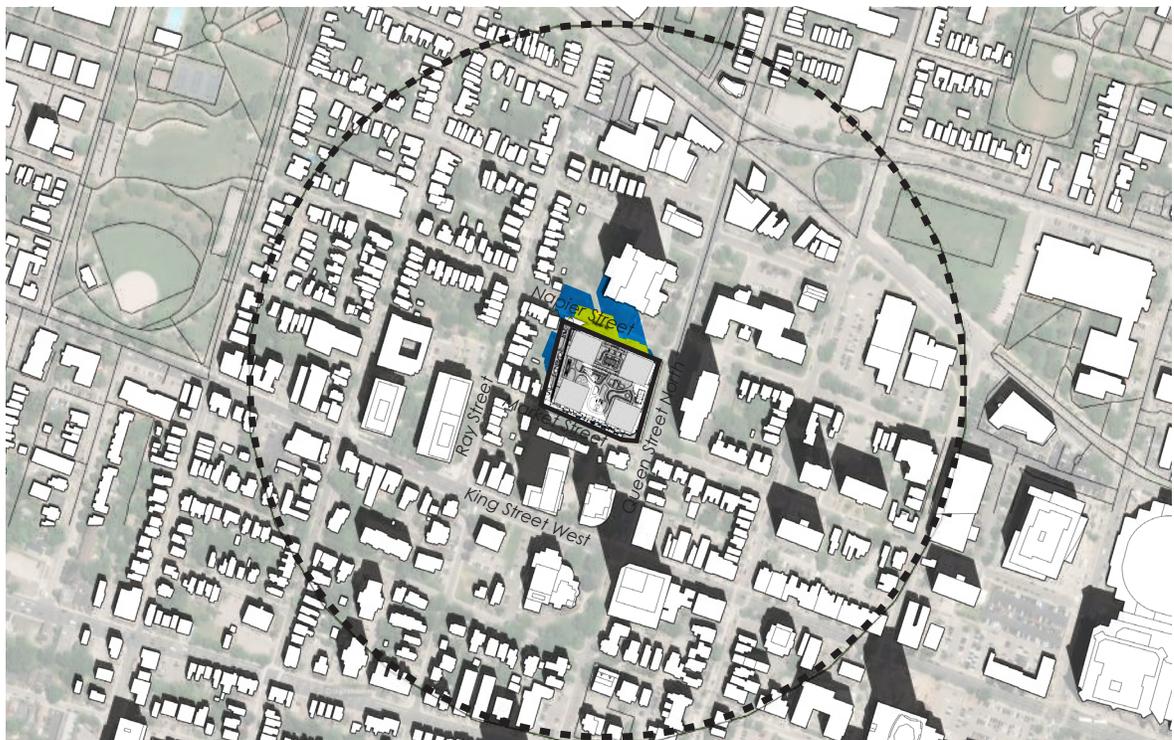


- As-of-right Shadow
- Net New Shadow
- Existing Shadow
- Distance Of Shadow Impact
(4X Building Height: 88m x 4 = 352m)
- Property Boundary

Existing Condition

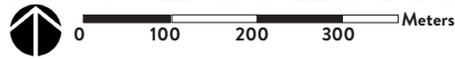


Proposed Condition

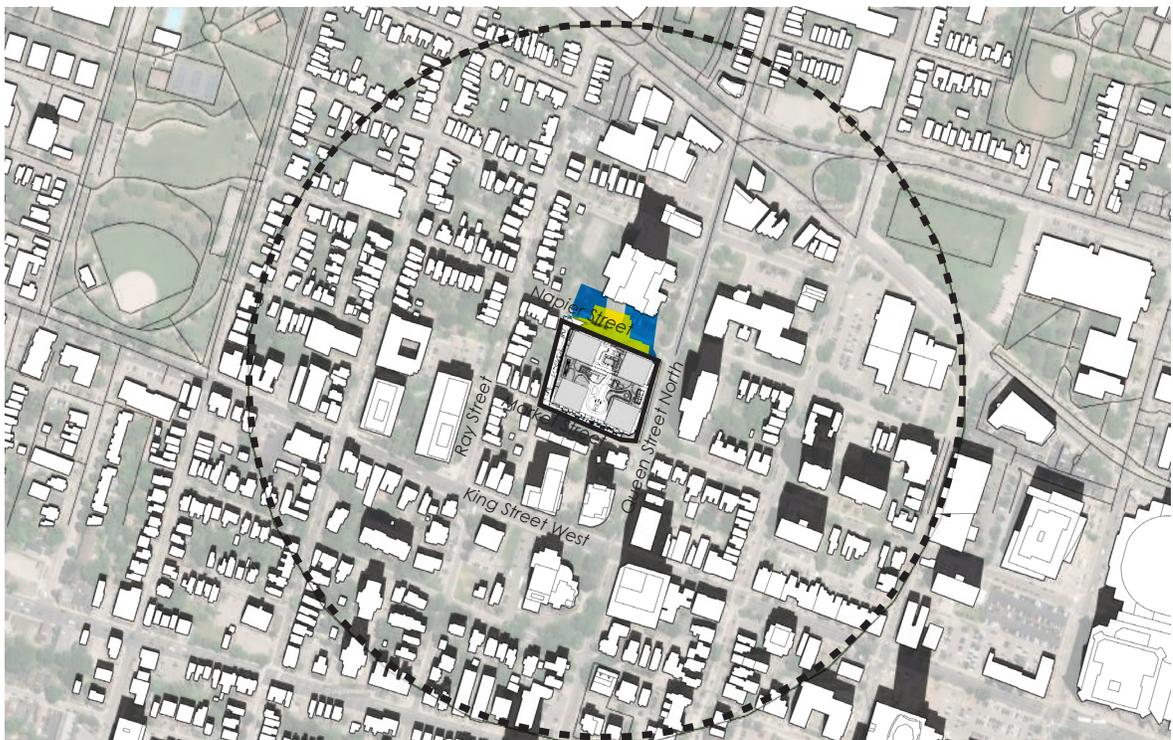


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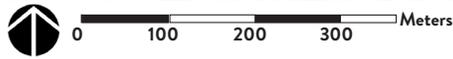
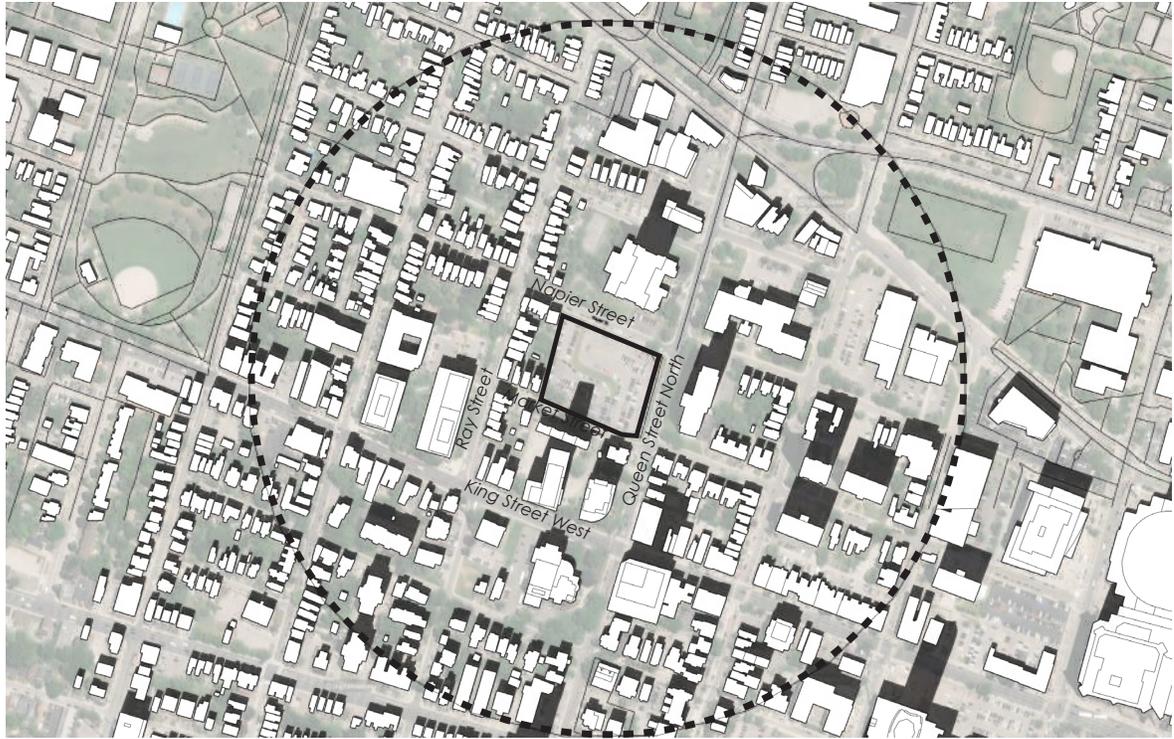


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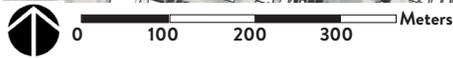
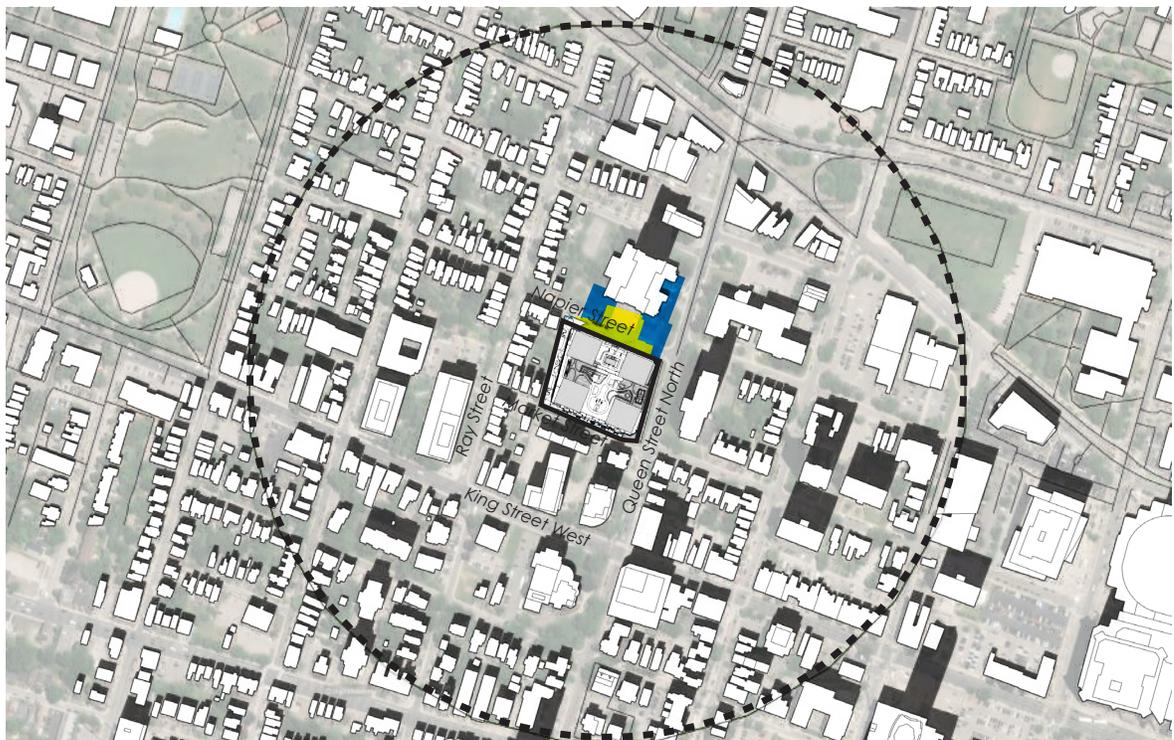


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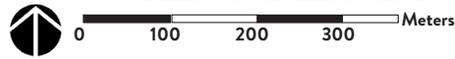


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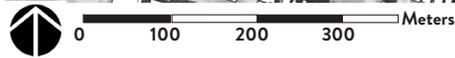
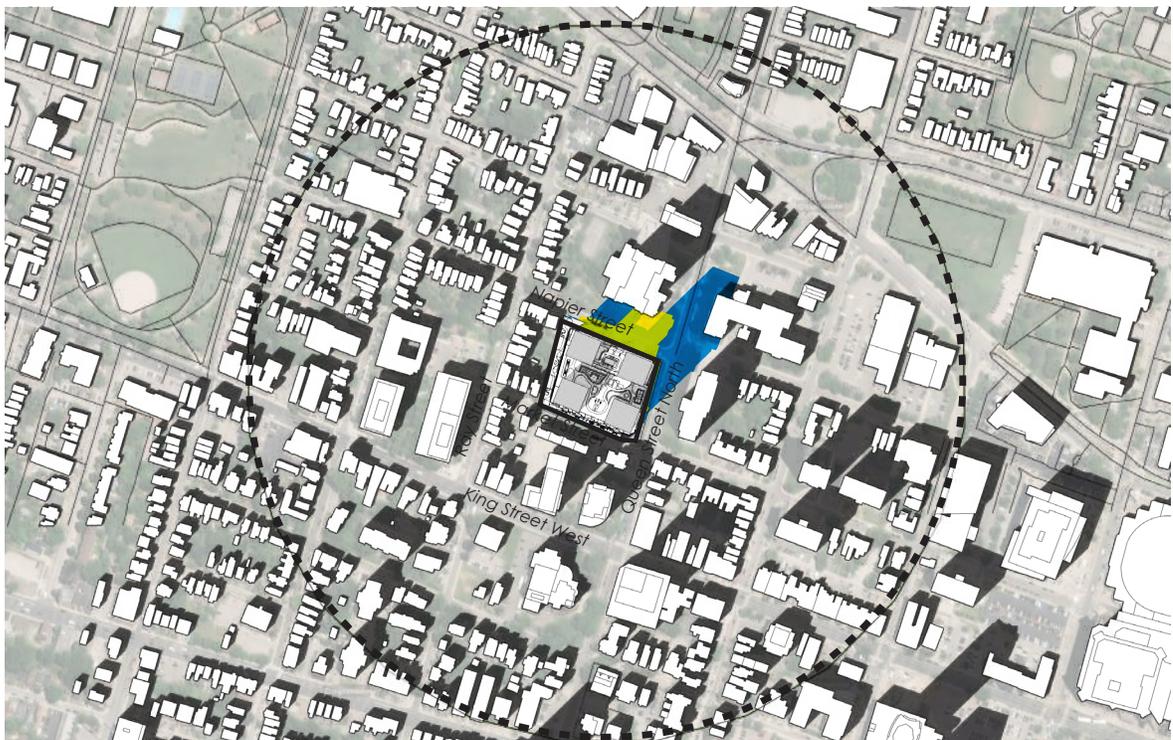


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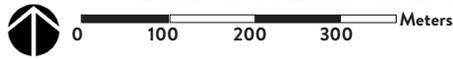


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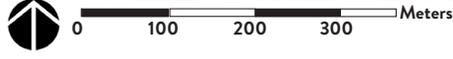
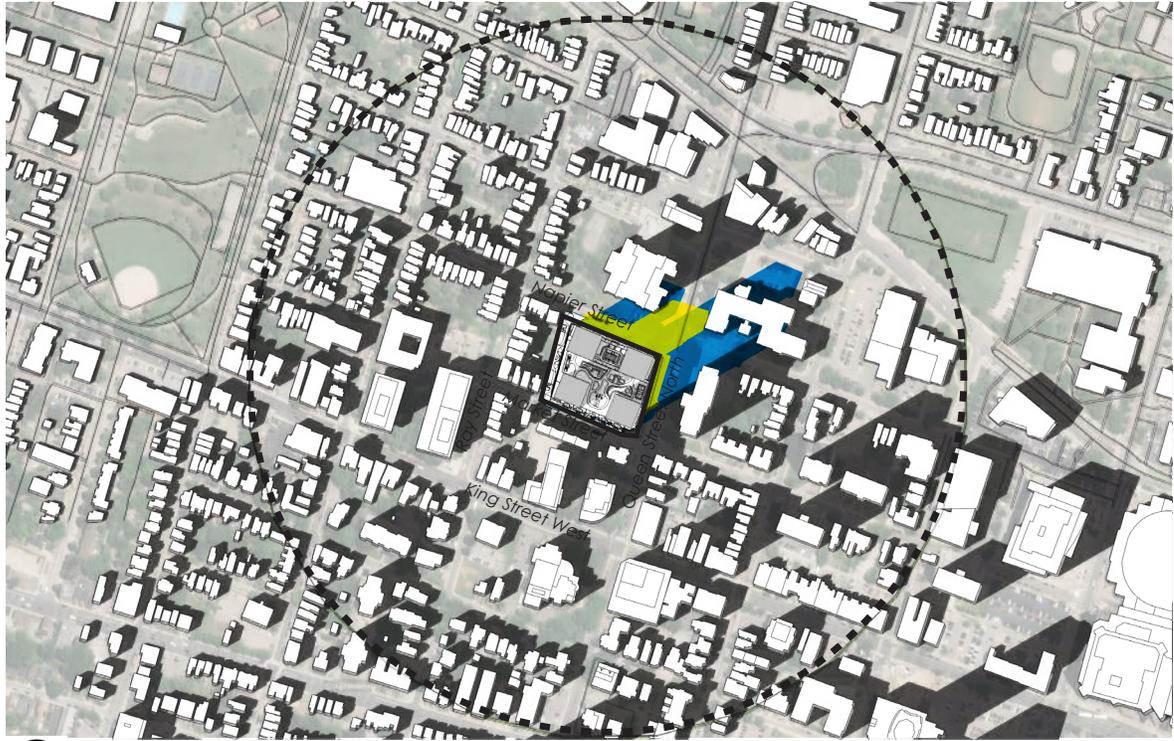


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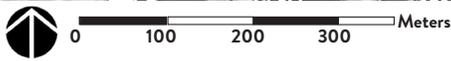


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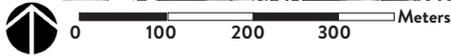


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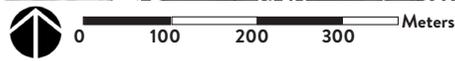


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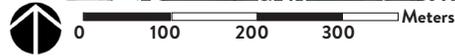
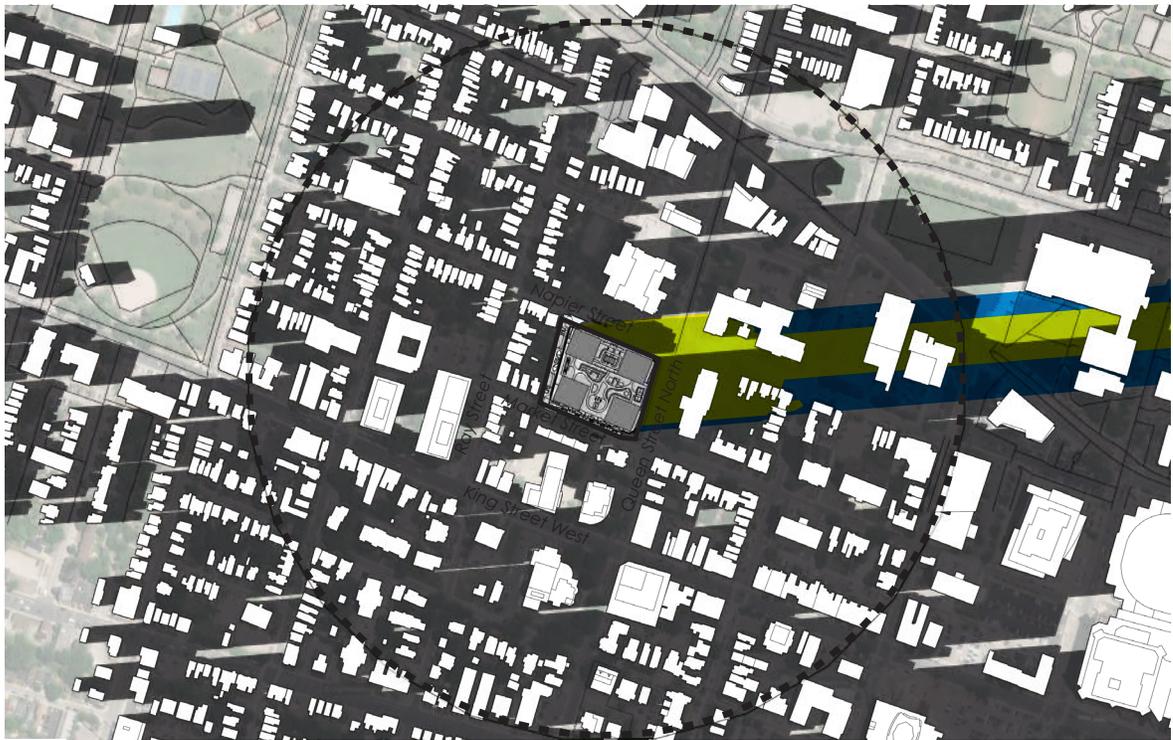


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Proposed Condition



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REFERENCES

- 1) *Section 8.0, Terms of Reference for Shadow Impact Study for Downtown Hamilton.*
- 2) *Sun rise and sun set times for the City of Hamilton, timeanddate.com*
(<https://www.timeanddate.com/sun/canada/hamilton?month=9&year=2019>)
- 3) *Adjacent building location and height, Google earth.*