Urban Design Guidelines

Browlands Master Development Plan Scenic Drive at Sanatorium Rd., Hamilton, Ontario For Valery Developments





Prepared by MSAi Michael Spaziani Architect Inc.



Table of Contents

Municipal Policy Review

В	ACKGROUND/ EXISTING CONDITIONS	
1.1.	Introduction	3
1.2.	City Context	4
1.3.	Neighbourhood Context	5
1.4.	Streetscape Context	6
1.5.	Site Attributes	8
M	JNICIPAL POLICY REVIEW	
1.6.	Key policies	10
	1.6.1. Official Plan UHOP and Chedmac Secondary Plan	10
SIT	TE DESIGN	
1.7.	The Master Plan	15
	1.7.1. Site Design	15
	1.7.2. Building Design	23
	1.7.3. Landscape Design	35
	1.7.4. Constraints	36
1.8.	Analysis of proposal and recommendations	
	1.8.1. Approach	36
	1.8.2. Context Fit	37
	1.8.3. Building Design	37
	1.8.4. Landscape Design	37
	1.8.5. Shadow Impacts	39
1.10	O Professional Recommendations CONTRIBUTIONS	41
1.9.	Community benefits / Conclusion	41

BACKGROUND/ EXISTING CONDITIONS

1.1 Introduction

- 1.1.1 This Urban Design Brief has been prepared to support a rezoning and Official Plan Amendment Application to the City of Hamilton. The subject site is located at Scenic Drive at Sanatorium Rd. on the edge of the Niagara Escarpment in upper Hamilton.
- 1.1.2 The subject site is 10.7 hectares (26 acres) in size with a frontage of 612m on Scenic Drive. 2.53ha. of the total site area is protected as woodland. Another 1.43ha. is protected as Floodplain/ Drainage channel for Chedoke Creek. The net development area is 6.75 hectares.
- 1.1.3 The site was the subject of an Ontario Municipal Board hearing with a ruling issued on June 22, 2012. The ruling set out a number of conditions for the development including building height, locations, number of units and setback standards. Heights were set at a range from 3 to 6 storeys with a maximum unit count of 530 units.
- 1.1.4 The subject design proposal is for a total of 16 buildings ranging in height from 2 to 8 storeys, in the form of street townhouse, heritage building, and mid-rise apartment forms.
- 1.1.5 10 buildings are 2 storey townhouse forms limited to 4 row units per building. 4 apartment buildings are proposed ranging in height from 5 to 8 storeys. The Long and Bisby heritage building will be conserved in-situ and adapted to current uses such as office and amenities.
- 1.1.6 A total of 630 residential units are proposed. As follows.

	Height	Units
Block 1- WEST	_	
Building D	5 storeys	116
Building E	5 storeys	115
Townhouses T1-T6, T11-T13	2 storeys	40
TOTAL		271 units
Block 2- EAST		
A	8 storeys	168
В	6 storeys	86
C	5 storeys	<u>116</u>
TOTAL		<u> 370</u>
TOTAL SITE	649units	

- 1.1.7 The development adheres to the spirit of the OMB decision with low rise built form on Block 1adjacent to existing single detached lots along Scenic Dr. and mid-rise apartment forms on Block 2 across from existing mid-rise buildings south of Scenic Dr.
- 1.1.8 The current Master Plan reflects detailed studies that have established the boundaries of the Chedoke Creek watershed and the existing woodlot. The plan also recognizes the shallow underburden of shale bedrock, limiting excavation depth and

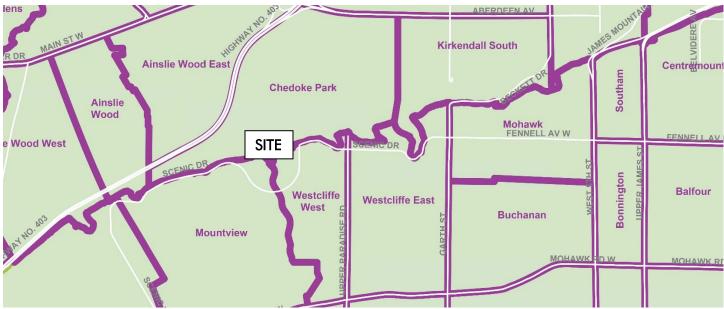
underground parking to a single level.

1.2 City Context

1.2.1 The subject site is located to the southwest of the downtown Hamilton core, on the mountain lands above Chedoke golf course. The site is regionally served by both the Chedoke Expressway/ Hwy 403 and the Lincoln Alexander Expressway. The site is well served by local bus transit along Sanitorium Rd.



Site location to the southwest of the Hamilton downtown core area on the "mountain" at the edge of the Niagara Escarpment



The is located at the boundary of 2 Neighourhoods, Mountview and Westcliffe West, with the Institutional Lands of the Chedmac Secondary Plan intervening

1.3 Neighbourhood Context

- 1.3.1 The Subject Site is situated in the Chedmac Secondary Plan Area. The plan area includes Institutional Designated lands with mid-rise built form. The south and west sector of the plan area is designated Low Density Residential 1A and 1B with existing low rise single detached and townhouse forms.
- 1.3.2 The Community context includes many important education and health care uses including Chedoke Hospital Service buildings, Columbia International College Residences, Chedoke Twin-Pad Arena, Extendicare and Idlewyld Nursing Homes and Holbrook Junior Public School. The most recent development is a 4 storey condominium block, Scenic Trails at 4 storeys.
- 1.3.3 Block 1 of the subject site is adjacent to a stable neighbourhood within the Mountview Neighbourhood. The existing houses along Scenic Dr. are single detached types on large 30 by 84m lots, generally in a single or double story form.

1.3.4 Block 2 abuts 4 residential lots within the Westcliffe Neighbourhood to the east.





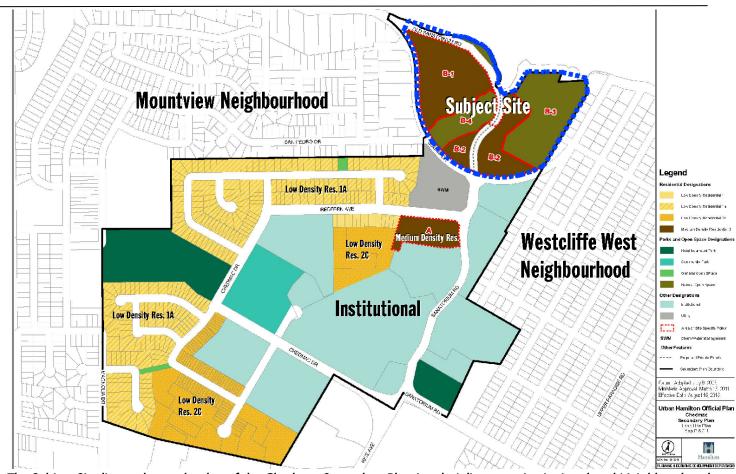
Aerial View to Northwest towards Downtown

Aerial View to Northeast toward Mohawk Rd.

1.3.5 Mohawk Rd. West is the nearest major collector to the south with 10, 12 and 14 storey apartment blocks. The Chedmac Secondary Plan Lands are seen to the right with existing residential and institutional uses leading toward the subject site along Scenic Drive.



Tall apartment slabs along Mohawk Rd. with the abutting Chedmac lands to the right



The Subject Site lies at the north edge of the Chedmac Secondary Plan Lands Adjacent to Institutional and Neighbourhood Designations. Block 2 (B2) is located across from Institutional Lands with existing mid-rise built form. Block 1 (B1) faces Neighbourhood Lands across Scenic Dr.

1.4 Streetscape Context

1.4.1 Scenic Dr. is a narrow two-lane roadway with mature landscaping along its edges.



The east end of Scenic Dr. entering the subject site precinct on the right. Columbia College is seen in the distance at Sanatorium Rd.

1.4.2 The streetscape context along Scenic Drive includes large single detached lots fronting on the street across from the Block 1 lands (B1). A sidewalk exists at the east end of the site up to San Pedro Dr. No sidewalk exists to the west of San Pedro Dr.



2 Lane Scenic Dr. looking West with the sidewalk ending at San Pedro Dr.



Scenic Dr. west of San Pedro Dr. with mature landscape and no sidewalks.

1.4.3 To the east of Sanatorium Rd., at Block 2 (B2), the facing built form is the 4 storey Columbia International College Residence building. The college building is set parallel to Scenic Drive and strongly defines the street edge in an urban manner with a streetwall set at about 6m from the front property line.



Columbia International College on the left with subject site on the right

1.4.4 The intersection of Sanatorium Rd. and Scenic Dr. operates as a gateway into the Institutional land designation within the Chedmac Secondary Plan Area transitioning from the Mountview Neighbourhood to the west and the Westcliffe Neighbourhood to the east.



The intersection of Sanatorium Rd. and Scenic Drive, a gateway node marking the Institutional land designation to the south

1.4.5 The urban design context is mixed with transitions from a quasi-rural 2-lane landscaped condition to a more urban institutional precinct at Sanatorium Rd. where mid-rise built form inserts itself into the Scenic Dr. character. A major storm water pond facility (SWM) intervenes between Sanatorium Rd. and the west section of Scenic Dr. further defining a strong landscape character within the district.



The Chedoke Creek SWM Pond at the intersection of Scenic Dr. and Sanatorium Rd.

1.5 Site Attributes

- 1.5.1 The existing site has an imperceptible slope along Scenic Dr., descending from geodetic level 194.0 in the east to 190.50 in the west. This 3.5m descent occurs over a property frontage on Scenic drive of 612m resulting in an average slope of only 0.6 percent, which is extremely flat. The grades from Scenic Dr. to the northern property edge at the escarpment descend from 192.5m to 191.0m over 200m from south to north near the middle of the site, which is also virtually flat.
- 1.5.2 Views of lower Hamilton and Lake Ontario are available on the site from the north edge of Sanatorium Rd. The views will be preserved after the closing of Sanatorium Rd. through the introduction of a private road, and pedestrian and cycling paths to be created along the Brow edge.
- 1.5.3 The lands along the escarpment edge are heavily landscaped and obscure potential strategic views from the site to the north.

1.5.4 The Long and Bisby building exists on the site today. The building was part of the former Chedoke Hospital Mountain Sanatorium complex on the site. The building will be preserved on site and used for office and community functions.



The Long and Bisby Building to be restored

1.5.5 The site includes 2 significant natural and built heritage features that will be preserved on site. An existing woodlot to the northeast side of the property, to the east of the Long and Bisby building, will be preserved and protected. These lands total 2.53ha. or 6.25 acres. The extension of Chedoke Creek will be supported through the preservation of the floodplain lands associated with the creek and assist in storm water management of the watershed. These lands comprise 1.43ha or 3.5 acres of central green space



The Chedoke Creek flood plain and overland flow channel will be preserved as a central feature of the site with existing trees retained where possible.

Municipal Policy Review

1.6 Key policies

1.6.1 The Urban Hamilton Official Plan (UHOP)

The Subject Site is designated Medium Density Residential 3 within the Chedmac Secondary Plan (CSP) within UHOP. UHOP provides general Urban Design policy guidance under Section 3.3 that is supplemented by more detailed policies in the Secondary Plan.



The Chedmac Secondary Plan (CSP) includes the following Urban Design policies in Section 6.3.7.2.4 applicable to the subject site. The Secondary Plan requires that,

A Master Site Plan including, among other matters, a phasing plan, visual impact assessment and urban design guidelines, in accordance with Policies B.6.3.7.2.4 b) to f)

This Guideline Document fulfils this submission requirement showing how the proposed urban design concept for the site satisfies those policies.

A Visual Impact Assessment (VIA) / Viewshed Analysis is provided under a separate report.

The CSP includes the following policy guidance. The following Urban Design policies reflect the general principles of the OMB Hearing Decision issued on June 22, 2012

Chedmac Secondary Plan 6.3.7.2.4 Urban Design

Other Policies

- k) Significant views to and from the Escarpment Urban Area shall be maintained and enhanced, consistent with the cultural heritage landscape.
- Surface parking shall be prohibited between Scenic Drive and the main wall of any building that faces Scenic Drive.
- m) The majority of parking shall be accommodated either through underground structures or within buildings.
- n) A minimum of 30% of landscaped open space shall be maintained for each of Areas B-1 and B-2. In order to preserve the open, park-like setting, the established groupings of trees shall be preserved, where possible.
- o) Continuous building walls along Scenic Drive shall be prohibited. Buildings shall provide appropriate spacing based on building height to allow light, reduce shadow impacts and provide privacy between buildings. The spacing of the buildings will also promote views into and through the site.
- p) All block townhouse units shall have the principal front door orientated towards Scenic Drive or an internal private condominium road or driveway. For townhouse units fronting both Scenic Drive and an internal public street, private condominium road or driveway, the principal entrance shall be orientated towards the public street.
- q) All apartment buildings shall have a minimum podium height of 2 storeys and a maximum podium height of 4 storeys. Those portions of apartment buildings that abut Scenic Drive shall be setback above 4 storeys.
- r) Green roofs shall be incorporated, where feasible, for all buildings that exceed 4 storeys in

Compliance Strategies

The subject site design responds to these policies as follows.

Significant views from the public realm along Scenic Dr. are maintained where appropriate and specified in the 2007 Urban Design Guidelines

No surface parking is proposed along Scenic Dr.

The majority of parking is accommodated in a single level of underground garage.

A much higher percentage of landscaped open space has been proposed. The proposed landscaped area for both B1 (west) and B2 (East) exceeds 50% ensuring a landscape dominant character

The entire frontage along Scenic Drive measures 612 linear metres. As proposed built form occupies about 60% of the frontage leaving 40% of the frontage open as landscaped open space and view corridors. A more urban condition is created across from Columbia College with building C fronting on Scenic Drive in a similar way and marking the Sanatorium/ Scenic gateway into the Institutional lands.

Townhouses are designed with principal front doors facing Scenic Drive and car access from a private road internal to the site. The townhouses form a crescent shape conforming to the curve of Scenic drive. Each building is limited to a maximum of 4 units of width creating shorter streetwalls that are 34m in length, not dissimilar from the 30m lot width metric on the south side.

Apartment buildings will have a 3-part façade definition with a base, middle and top. The bases will be either 1 or 2 storeys depending on the height. Upper floors will be set back to de-emphasize the perceived height. 8 storey buildings will have a 2 storey base and 1 to 2 storey stepback of the upper floors. 4 and 5 storey buildings will have a single level base and stepback.

Green roofs will be examined through the detailed site plan design process and provided where

height.

s) Development of the Chedoke Browlands (Area B) shall incorporate sustainable site and building features and technologies to minimize energy consumption, conserve water, reduce waste, improve air quality and promote human health and wellbeing. All new development shall incorporate Leadership in Energy and Environmental Design (LEED) certification for new construction and neighbourhood development and Low Impact Development (LID) approaches, where possible.

6.3.7.2.5 Transportation

- ... The following policies shall also apply:
- a) The Chedoke Browlands (Area B) will be developed on the premise of a network of private driveways together with a private condominium road or public street, with a minimum of two driveway accesses to Scenic Drive.
- b) New development shall support the use of public transit by creating a comfortable pedestrian environment with links to the public arterial road system where transit will be provided.
- c) A pedestrian pathway network shall be established throughout the Chedoke Browlands (Area B) to connect to the Brow Trail. A public access easement shall be granted for pedestrian linkages within the north-south portion of the private road (as shown as a dashed line on Map B.6.3-1 Chedmac Secondary Plan - Land Use Plan).
- d) A roundabout may be required at the southerly intersection of Scenic Drive and the private road (as shown as a dashed line on Map B.6.3-1 -Chedmac Secondary Plan - Land Use Plan) and any land required to accommodate the roundabout shall be dedicated to the City.
- e) The Owner shall submit a streetscape plan for existing Sanatorium Road either as a private condominium road or as a public street.
- A bicycle pathway, as identified in the City's Trails Master Plan, shall be provided and maintained through an easement along the north-south alignment of the Sanatorium Road either as a private condominium road or public street (as shown as a dashed line on Map B.6.3-1 – Chedmac Secondary Plan – Land Use Plan).

possible.

Similarly green initiatives will be examined in the detailed design stage. LEED standards will be considered but LEED certification will not be pursued. LID opportunities will be considered in light of the bedrock presence close to grade.

Private roads connect to Scenic Dr. at 2 locations as directed by this policy.

Public transit will continue from Sanatorium Rd. to Scenic Dr. with the closing of Old Sanatorium Rd. through the site. A private road will replace Old Sanatorium Rd. on the subject site to enhance connectivity

A network of pedestrian and cycling passages are proposed that connect the larger community to the Brow Trail. Sidewalks are provided at the edges of private roads and through natural areas adjacent to Chedoke Creek area.

A roundabout has been accommodated on the master plan. As a condition of development lands will be conveyed from the subject site to suit the creation of a roundabout.

The conceptual streetscape plan is included in the master plan for the private road in the general location of the existing Sanatorium Rd.

A bicycle pathway will be accommodated within the private road connecting to the Brow Trail.

g) Any private condominium road shall be engineered and built to carry the load of fire apparatus to the satisfaction of the Fire Chief.

This required by the Ontario Building Code and will be implemented

The Chedmac Secondary Plan also identifies this development site as a "Cultural Heritage Landscape". A Heritage Impact Assessment (HIA) will form part of a complete development application and address the specific policies of the Secondary Plan. In summary the key attributes that have been considered in forming the Master Plan include,

- Provision of and integration of walking and cycling trails to interconnect the greater community with the Brow Trail
- Maintain the continuity of the Brow Trail along the escarpment edge within an enlarged Brow Park
- The retention and conservation strategy for the Long and Bisby building and its attendant landscape as a featured element of the Master Plan
- The preservation and interpretation of curvilinear street patterns
- The retention and conservation of the significant woodlot to the northeast
- The retention and enhancement of Chedoke Creek drainage channel and landscape as key central feature and orientation focus of the site and community.
- Building scale will range from low-rise to mid-rise in proportion to adjacent built form and landscaped open space. All mid-rise built form will conform to a 20 degree angular plane drawn from the public realm adjacent to the site

Urban Design staff were consulted early in the design process to review preliminary plans for the site. Staff responded with a few concerns and comments as follows. Our current design response has substantially addressed all of these concerns.

Urban Design Staff Comments,

"Overall, staff is in agreement with the analysis and recommendations of the approved 2007 UD Guidelines. In respect to the proposed draft concept plan changes, please consider the following high-level recommendations:"

Cultural Heritage

Retain and reconvert the historic heritage building ('Long & Bisby'), potentially integrating a community-oriented use within.

Street network

Retain Sanatorium Drive to connect the western and eastern districts on site and enhance circulation patterns, accessibility, and legibility of the new community layout.

Built form

Concentrate the higher density, mid to high-rise residential buildings in the eastern district as the contextual residential neighborhood will be less impacted at this location by increased massing and

The Long and Bisby building and landscape will be retained and adapted to current uses in-situ.

Sanatorium has been disconnected as a public street but retained as a private driveway for public car use. Important active transportation connections for pedestrians and cyclists will be provided as a further strategy that will maximize landscape enhancements in this area.

A concentration of 5, 6 and 8 storey apartment buildings A, B and C, has been proposed for the eastern Block 2 in recognition of the existing mid-rise college and other buildings within the Institutional

height. Higher built form at this location will also provide a logical continuation of the existing mid-rise colleges and institutional uses along Sanatorium Drive. In addition, it will help frame, physically, the principal access point into the new community. Street step-backs will be required.

Limit building heights to 4-6 storeys in the western district and organize their location in such manner as to not impact proposed lower-rise residential properties.

Apartment buildings would preferably be lined along the northern property line all the way to Scenic Drive to create a functional separation between them and the proposed lower rise ground-oriented residential units. This layout would allow an improved internal road hierarchy where low-rise, ground-oriented units (townhouses) would be accessed by means of secondary roads, setting them apart from the active traffic typical for apartment buildings.

Any proposed buildings along Scenic drive should have a base no greater than 4 storeys (2 storey greater than the existing built context). For buildings taller than this base, 1.5-2m stepbacks will be required above the 4th storey and another between the 6th and 8th storey.

Rear lotting is not supported by City policies. Should townhouse units be provided alongside Scenic Road, a dual frontage condition should be considered to ensure they contribute fully to the public realm of the street on both sides. Consider a dwelling typology which can accommodate a semi-public yard along the public road, with low decorative fencing and private walkway connections to the public sidewalk.

Pedestrian connectivity

Please ensure pedestrian connectivity between the two districts on site and also between them and the established trail at the northern side of the existing woodlot.

Open space

New SWM ponds should be publicly accessible and enhanced as passive community amenities. Provide an urban edge treatment for the ponds by integrating walkways where adjacent to residential areas and ensuring built form is adequately designed to create a pedestrian-oriented interface alongside. If townhouse units are proposed along the western SWM pond, an

lands to the south. Stepbacks are proposed for the upper floor(s) to create better proportioned street walls and minimize visibility from the lower city lands below the Brow escarpment.

We have analysed the relationship between the proposed 6 storey buildings and the townhouses. With the appropriate use of base definition and upper floor stepbacks a successful relationship can be created without scale, shadow, or privacy impacts

Pushing the apartment buildings to the northern boundary will offend the Niagara Escarpment's view protection strategies from external locations within the city. The outward scale perception of the western Block 1 has been developed at a low-rise scale when viewed from the adjacent Brow Trail. Sectional studies have been prepared to show the preferred relationship used for the Master Plan.

Buildings B and C are located adjacent to Scenic Dr. on Block 2. Each has a base wall condition at 2 storeys. Building B is 6 storeys with a 2 storey base and Building C is 5 storeys with a 2 storey base.

The townhouses proposed along Scenic Dr. are proposed as dual-frontage units with entry doors facing Scenic Dr. and car access and other entrance doors off the north face. Semi-public landscape and grading strategies are employed to mediate between the private and public realm along Scenic Dr.

Pedestrian connections are proposed through the Master Plan to interconnect all components of the public realm.

The central SWM pond area around Chedoke Creek will have pedestrian pathways as shown in the Master Plan. All building faces on this area will be upgraded as principal frontages in terms of fenestration and materials.

enhanced rear condition will be required, in respect to facades and ground level treatment.

SITE DESIGN

1.7 The Master Plan

1.7.1 Site Design

The site design seeks to recognize and respond to a mature existing low-rise residential context that is stable and unlikely to change. The context includes the following unique attributes.

- Scenic Dr. is the westward extension of Fennel Ave. West. as it transitions from an urban character to a more rural character marked by a more mature landscape towards the west end of the site.
- Scenic Dr. follows a sinuous path, tracing the edge of the Niagara escarpment brow giving it a unique character.
- Scenic Dr. transitions from a midrise urban character at the intersection of Sanatorium Rd. to a predominantly low-rise character with large detached lots on the south side of the street.
- The site is split into 2 distinct precincts on either side of the Chedoke Creek floodplain that is well landscaped.
- The existing Old Sanatorium Rd. takes traffic through the middle of the eastern site and connects to the Brow edge, public trails, vista points of lower Hamilton and features such as the Cross of Lorraine and a waterfall.
- A significant woodlot to the northeast of the site to be preserved.

The site design responds to these existing context characteristics with 2 distinct responses, one for the western sector, Block 1, and the other for the eastern sector, Block 2.



Site Concept showing 10 perimeter townhouse blocks on Block 1 (west), and mid-rise built form on Block 2 (east)



View to northeast with Block 1 on the left, the Chedoke Creek greenway in the centre, and Block 2 on the right.

Block 1 Site Design

Block 1 has a low-rise outward appearance with 2 storey townhouses aligning with the public realm edges of that sector. A consistent low-rise massing conforms to a 15 degree angular plane viewed from the site perimeter as illustrated below. This strategy preserves the extent of skyview equal to a low-rise built form along Scenic Dr. while blocking views of mid-rise built form within Block 1. The built form along an urban corridor would normally be controlled by a 45 degree angular plane in support of streetwalls equal to the width of the adjacent street. The lesser angle in this case defines a less urban condition respecting the scale and character in this sector of the site.



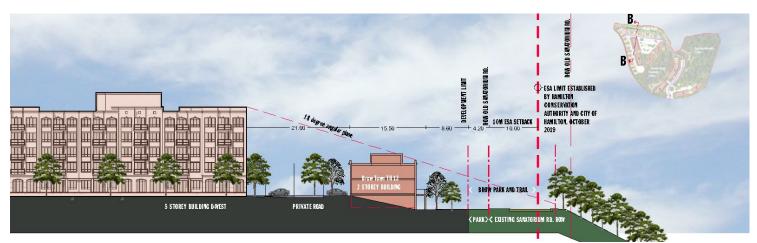
Section A-A showing a 15 degree angular plane relationship to Scenic Dr. and existing residential lots

Along the escarpment edge, at Old Sanitorium Rd. a similar relationship has been applied to control mass and perceived scale from the newly established and expanded Brow Park.

Brow Park and Trail will be a public realm feature that celebrates the attributes of the escarpment edge. Townhouse forms will front and face this public amenity providing casual overlook on this active park setting.



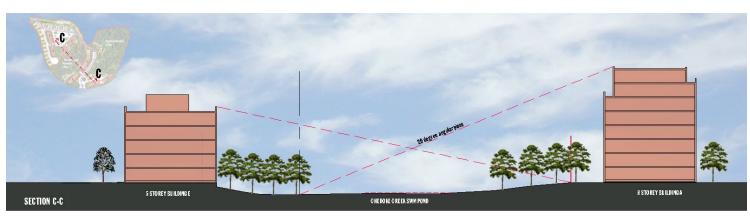
View towards Building D beyond the townhouses on Scenic Dr. Building D is hidden behind townhouse mass.



Section B-B through the escarpment edge at the expanded Brow Park and Trail. Built form is set back 30m from the established ESA bank protection line.



View to east from Scenic Dr. and Old Sanatorium Rd. towards the new Brow Park and Trail along the escarpment edge.



Section C-C through the Chedoke Creek floodplain with Block 1 on the left and Block 2 on the right

The third significant edge condition is the relationship of each block to the central landscaped Chedoke Creek greenway. The Chedoke Creek facility will be preserved as a naturalised landscaped feature that is a focal point and orientation device for the total site. Building mass on either side of the feature responds at different scales with a low-rise relationship defined by a 20 degree angular plane on the west side in Block 1. On the east side in Block a 5 storey mid-rise form fronts onto the feature. It is limited by a 15 degree angular plane drawn from the western pedestrian path leading north towards the Brow Trail. The buildings frame the open space feature at a suitable scale preserving skyview and abundant sunlight, while providing secure overlook on the public trail elements of this feature.



View from San Pedro Dr. towards the Chedoke Creek Greenway, towards the Brow Park. Pedestrian walkways connect to the Brow Park across the greenway

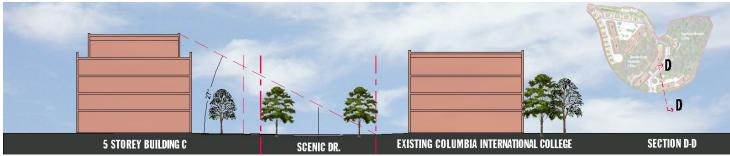
All public edges of Block 1, the western parcel, have a low-rise or low mid-rise scale relationship to the three public realm features surrounding the parcel, Scenic Drive, The Brow Park and Trail, and the central Chedoke Creek preserve.

Block 2 Site Design

The site plan approach for Block 2 responds to different edge conditions that inform the urban design approach on that parcel. The Scenic Dr. edge on this block is characterised by the existing Columbia College mid-rise building that creates an urban character. In response buildings B and C are aligned parallel or at right angle to the Scenic Dr. frontage creating an urban corridor condition. This urban design approach is appropriate as it marks an urban structure that signals the Institutional land use node at Sanatorium Rd. and Scenic Dr. Sanatorium Rd. also functions as an important north-south pedestrian connection leading from Mohawk Rd. in the south to the Brow Park and Trail to the north. Sanatorium Rd. winds through the heart of the Institutional district interconnecting employment,

health and education sites as well as newer residential blocks such as the Scenic Trails condominium.

In response, a roundabout has been introduced to mark this significant intersection creating a visible gateway into the subject site and the escarpment lands, as well as the Institutional sector. Buildings B and C at 5 and 6 storeys respectively, are located to frame the roundabout while creating an urban streetwall along Scenic Dr. This urban condition creates a distinct and memorable gateway character.



Section D-D through Columbia College and Building C showing a compatible mid-rise mass within a 30 degree angular plane drawn from the far side of Scenic Drive



Section E-E across Scenic Dr. through Building B at 6 storeys and the existing storm water management pond to the south

Section E-E shows the height of Building B at 6 storeys which is part of a transition of building heights from west to east along Scenic Dr. Built form descends in height from Building B at 6 storeys to Building C at 5 storeys to the east. This transition in heights responds to the stable existing built form context at heights and intensity that are appropriate without any negative impacts on character.



Site Concept Plan Showing Pedestrian Trails from the Residential Neighbourhood through the Site to the Brow Trail along the escarpment

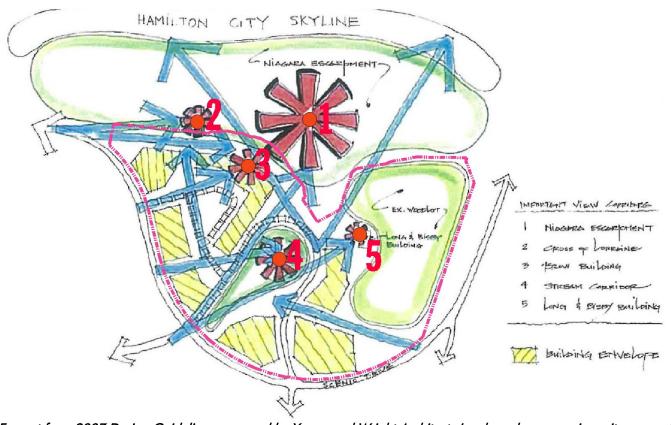
Views and Vistas

The prior Urban Design Guidelines for the site from 2007 indicate some key views into and through the site. Those guidelines identified 5 important views to maintain through site design conceptualization. Those views are,

- 1. The Niagara Escarpment
- 2. The Cross of Lorraine
- 3. The Brow Building
- 4. The Chedoke Creek Corridor and
- 5. The Long and Bisby Building.

As noted earlier, City urban design staff have recognized these guidelines as having merit when applied to the current site concept. Subsequent to the production of the guidelines, the Brow Building no longer exists and therefore is no longer considered a focal point.

The views have been considered originating from Scenic Drive into the site. A Visual Impact Assessment study has also been prepared under separate cover to analyse the view impacts originating from the exterior of the site according to Niagara Escarpment criteria.



Excerpt from 2007 Design Guidelines prepared by Young and Wright Architects Inc. based on a previous site concept.

When applied to the current proposed site design the resultant viewscapes are similar with view cones that capture the noted targets with some differences. For example, the view cone noted as 5 below takes on greater significance than just focusing on the Long and Bisby building. That view is a major central public realm view through Block 2 from the roundabout and captures the woodlot at the brow. The buildings frame that view creating a major vista through the site from Scenic Drive and Sanatorium Rd. to the south. View 4 similarly has a wide open-space view looking across the expanded Chedoke Creek.



Views to key locations 1 through 5. The Brow building at 3 no longer exists

In total, when experienced from Scenic Dr., there are 4 major viewscapes that have significant widths that punctuate the built form proposed along Scenic Dr. These landscaped breaks provide built form interruptions in the proposed streetwalls, lessening the perception of a continuous built form mass. These breaks measure from 50 to 100m in width and can be considered major landscaped breaks in the Scenic streetwall conveying a less urban condition in response to the context to the south and west.



View 2- towards Brow Park and Trail

View 4- across the Chedoke Creek greenway



View 5- toward the Long and Bisby building with Building A and B on the left and Building C on the right

Pedestrian Connectivity

With the closing of Sanatorium Rd., alternative driveway and active transportation paths have been proposed achieving the same degree of connectivity. The figure below shows the location of 3 distinct pathways: pedestrian, cycling and the Brow Trail.

Pedestrian connections originate from within the Mountview Neighbourhood shown on the left side of the plan below. These pathways are designed for pedestrian movement and lead to the Brow Trail at the west end of the site and to the Brow Trail access point at the north end of the Chedoke Creek greenway. Sidewalks have been provided within the private street network to further extend walkways to unit and building entry points. Pedestrian routes from within the Institutional lands are proposed to extend through the roundabout towards the Brow Trail either through the street network or through the Chedoke Creek greenway. A new municipal sidewalk is proposed along the entire north side of Scenic Dr. interconnecting entry points to the site at 6 locations. It is expected that each townhouse will have a private sidewalk connection to this municipal sidewalk.

The Brow Trail is shown along the escarpment edge and remains well connected from east to west and into the subject site.

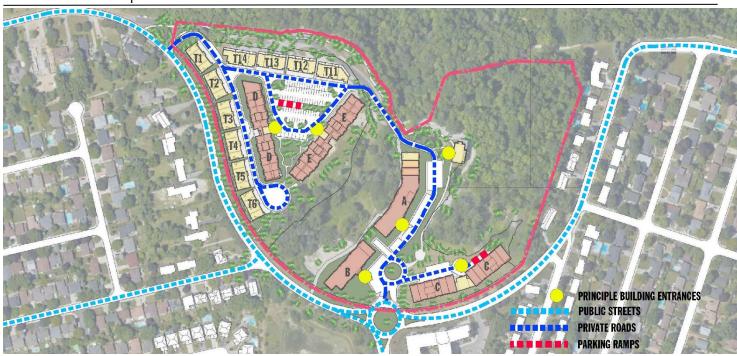
Cycling routes are proposed within the paved private roadways as a shared space.



Site Connections Plan showing comprehensive Neighbourhood connectivity

Vehicular Network

Private roadways connect to Scenic Dr. at 2 locations where intersections exist today at Old Sanatorium Rd., and Sanitorium Rd. A roundabout is planned at the Block 2 entry at Sanatorium Rd. at the Columbia College campus. The road pattern in Block 2 comprises a series of loops to facilitate cars and trucks entering and exiting the site. A limited number of surface parking spaces are provided for visitors with the majority provided underground. Pick-up and drop-off locations are positioned near building entrances.



Road Network with 2 access points of Scenic Dr.

Block 1 is accessed from an entry driveway near the existing Old Sanatorium Rd. The townhouses have driveways accessed from the internal private road system.

Building entry points are illustrated in the illustration above with visible primary entrances facing Scenic Drive. The image below shows a typical treatment along Scenic Dr. along a curved street alignment.



Example of townhouse entrances facing a curved public street, similar to Scenic Dr.

1.7.2 Building Design

The conceptual building designs on the site fall into 2 categories, mid-rise apartment form and low-rise townhouse form. Each building type is subject to a series of design parameters to ensure compatibility

with conditions at all public edges of site and internally between buildings on the site. The apartment form designs included herein are conceptual and meant to illustrate massing and character options that are either contemporary, traditional, or transitional. The design principles outlined for each building type are intended to guide the design development details required through the Site Plan Approval process.



Proposed Plan demonstrating the built form and movement patterns

Mid-Rise Building Guidelines

Three scales of mid-rise building are proposed on site. Building A is planned at 8 storeys. Building B is planned at 6 storeys and Building C is planned at 5 storeys. The section analysis earlier in this document outlines the angular planes and transition rationale used to limit the heights as proposed. The key architectural design principles for these mid-rise buildings are as follows.

- Building mass will be divided into 3 distinct components; Base middle and top in order to reduce the perceived mass of the buildings.
- 8 storey buildings will generally include a 2 storey base, 4 storey middle and 2 storey top.
- 5 and 6 storey buildings will generally have a 2 storey base, 2 or 3 storey middle and 1 storey top.
- Variation in these elements are encouraged to animate the facades, and further break down the perceived mass of the built form.
- The definition of the base should be created through the use of contrasting materials such as masonry, projecting façade elements and/or contrasting colours. Generally more visually massive materials such as brick or stone should be employed near grade.
- The upper floors of buildings should be finished in lighter materials such as window wall or metal panels to accentuate the top of the buildings.
- The upper 1 or 2 floors should be stepped back at least 1.5m, or designed in contrasting materials to diminish the perceived mass of the upper building walls and enhance skyview.
- Uninterrupted building face lengths will be limited to about 70m. Intervening 2 story

- entrance pavilions or other techniques such as material changes, roofline silhouette, or wall geometry, will be used to break the linear appearance of longer buildings
- Buildings along Scenic Dr. should be limited to lengths of about 50m to allow the streetwall to align with the curved frontage along Scenic Dr.
- The majority of parking will be provided in 1 level of underground garage to maximize surface landscaping and enhance construction affordability.
- 50% of the Block 1 and 2 net development area should be landscaped open space (LOS). The demonstration Site Plan below shows about 50% LOS on Blocks 1 and 2. This ensures that a landscape rich character results in this context.
- Building entrances should be clearly defined facing both the internal private roads and Scenic Dr.
- Building faces should be composed of discrete elements that create a rhythmic divide every 6 to 8m to create a finer scale that is perceived by pedestrians walking in close proximity to the building.
- Accessible sidewalks should be employed on at least one side of each private road at a minimum width of 1.5m
- Setbacks of building faces from private road curbs along travelled areas should be a minimum of 6m. Parking spaces should be set no closer than 4m to building faces.
- Landscape zones should be introduced within setbacks to enhance the pedestrian experience along all private roads. Detailed landscape plans will be evaluated through the Site Plan Application process.
- Separation distances between mid-rise buildings should be at least 20m
- The end and rear walls of mid-rise buildings should have windows and materials similar in quality and extent as those on the front faces.
- Building design character should be consistent and harmonious throughout the entire site with a consistent approach to design and materials while ensuring a variety of expressions that also uniquely identify each building.



Building C- Contemporary Massing 5 Storeys

Scenic Dr. Elevation Concept for Block C at 5 storeys with stepped back 5^h floor and 2 storey entry pavilion breaking the length of the building.



Proposed Elevation Building C (Building A Beyond) as a more traditional architectural expression. (KNYMH Architects)



Block 2 Precinct Plan with mid-rise buildings organized along a north-south driveway



View from the roundabout on Scenic Dr. into Block 2 parcel. Building B at 6 storeys is on the left, A at 8 storeys in the centre, and C at 5 storeys on the right



Building B proposed concept elevation with contrasting material on the first and second floor (KNYMH Architects)



Building A proposed at 8 storeys with a 2 storey base. Upper floors are stepped back toward the Brow edge to reduce visual presence. Building plan is cranked to further diminished the perceived mass. (KNYHM Architects)



Transition in heights from Scenic Dr. with Building B at 6 storeys and Building C at 5 storeys on the right with stepped back upper floors.



Example of an 8 storey mid-rise building by Daniels, designed by MSAi, in North York with three-part façade definition with 2 storey base and stepped back top



Example of an 8 storey building by Reichmann/ MSAi Walden Circle Mississauga with 1 and 2 storey stepback at the top and 2 storey base in contrasting stone material. Note compatible relationship to adjacent townhouses.



Example of a mid-rise building by Chartwell/ MSAi in Oakville with distinct stone base and varied roof line

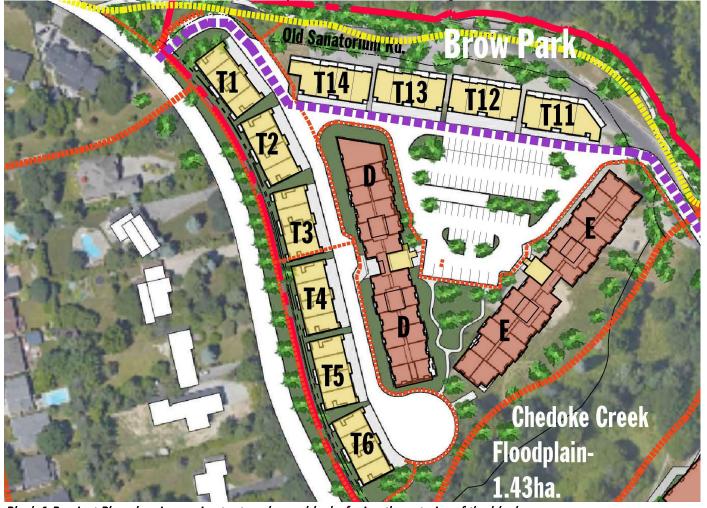
Low-Rise Building Guidelines

Block 1 includes 14 townhouse blocks fronting onto external public realm elements including Brow Park and Trail to the north, Scenic Dr. to the southwest and the Chedoke Creek Greenway to the southeast. The townhouse blocks are limited to 4 units with a building length not exceeding 35m in order to allow the buildings to align with and follow the curved path of Scenic Dr and the Chedoke Greenway.

The townhouse designs are based on an 8.3m wide width to accommodate double garages as an option for each townhouse.



View to northwest along Scenic Dr. with 2-3 storey townhouse blocks following the street curve.



Block 1 Precinct Plan showing perimeter townhouse blocks facing the exterior of the block

The following design guideline principles shall apply to the design of the low-rise townhouse blocks.

- Townhouse heights to be limited to a maximum of 3 storeys with eave heights at 2 storeys where possible to reduce the perceived scale of each block.
- Third floors should include only access stairs to 3rd floor amenity terrace.
- Townhouses facing the public realm on Scenic Dr., Brow Park and the Chedoke Creek greenway should include principle entrances with semi-private definition of the yards with raised planters, steps, and partial walls.
- Garage faces should not project ahead of the main building wall or front porch structure to reduce the visual presence of the car on the streetscape.
- End and rear elevations where visually exposed should have windows and materials matching the quality and extent evident on the front faces.
- Townhouse end units in Buildings T1 and T6, occupy key gateway entrance locations to the site and should be upgraded to express the gateway function through the inclusion of, for example, taller corner elements, substantial glazing, unique design expressions, enhanced landscaping, entrance gates and other character enhancing elements.
- Each of the 6 blocks along Scenic Dr. should include subtle material and detail variations to create visual interest along this street. A harmonious crescent shaped streetwall should be created that reflects the sinuous path of Scenic Dr.
- Setbacks from the Scenic Dr. frontage line should be a minimum of 4m
- Setbacks from the internal private roads should be a minimum of 4.5m to the building or covered porch face and 6m to the garage door face
- Landscaping along Scenic Dr. should retain mature trees within the city-owned boulevard in conjunction with new tree planting within the private front yard setback.
- Townhouse fronts should include bay windows, covered porches, balconies canopies and other enhancements to bring variety and interest to the public realm.
- A midblock pedestrian pathway should be provided midway between T1 and T6 to increase the permeability of the Scenic Dr. frontage and allow direct pedestrian access to Building D.

The following images illustrate some of the principles noted above as examples.



A corner tower feature creates a gateway marker at key site entrance similar to T1 and T6



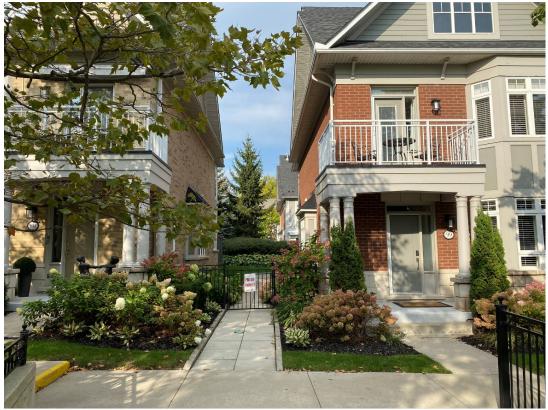
An upgraded flankage elevation with a porch and entrance with windows matching the front



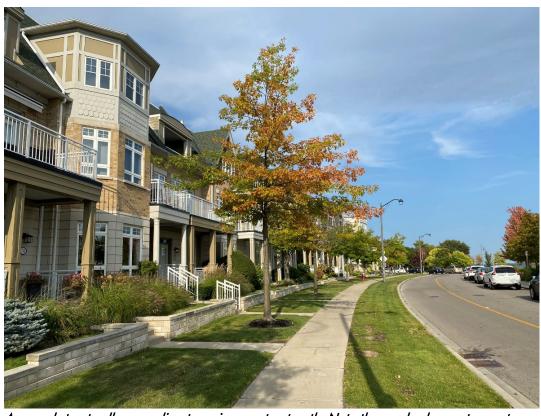
An alternative expression of the same massing in alternative materials and colours with enhanced front yard landscaping



Scenic Dr. massing concept showing a 2 storey wall height with roof terrace access extended into the 3rd floor. Note principal entrance.



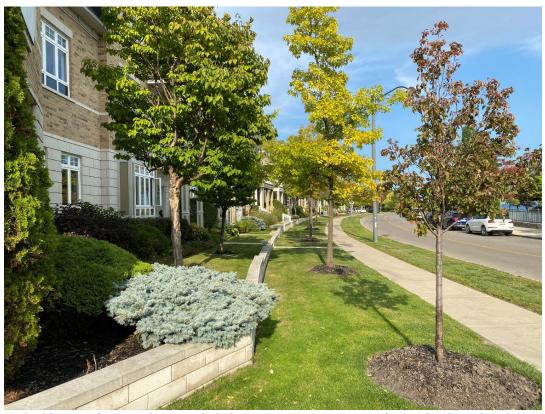
A mid-block pedestrian connection leading from Scenic Dr. into the Block 1 site.



A curved streetwall responding to a sinuous street path. Note the grade change to create a semi-private zone



Roof extensions into the third floor space creates a silhouette roofline adding interest to the building mass



A double row of trees to be provided along Scenic Dr. One is on the city boulevard and the 2^{nd} is on the private side of the lot line

1.7.3 Landscape design

A detailed landscape plan has not been prepared at this time, however, landscape concepts and general intentions have been established in this document. There are five significant landscaped zones that are focal points for the development. These include the Brow Park along the escarpment edge, the Building D and E garden court, The Chedoke Creek greenway, the significant woodlot on the east and the Long and Bisby cultural landscape. All landscapes are interconnected with trails throughout the site.



View to southeast with the landscaped garden court framed by building D and E wings. Brow Park and Trail in the foreground

1.7.4 Constraints

In considering the urban design for this site the primary concern has been the massing transition to the abutting stable residential neighbourhood to the south and east. To affect a good massing transition, angular planes and stepbacks have been strategically employed to minimize any negative scale, privacy, overview, and shadow impacts. The proposed building stepbacks where applied create some waterproofing and structural challenges that will increase the construction cost of these buildings but should be considered to establish an appropriate and compatible built form scale in this context.

Similarly, there is a strong impulse to respond positively to the public realm and open space blocks with appropriate setbacks and landscaping opportunities on all boulevards.

Another significant constraint is the presence of bedrock within 2 to 3 metres below grade. This will limit underground parking to a single floor and limit the number of units possible on the site. This constraint when combined with appropriate height and massing strategies results in a successful urban design outcome that balances the degree of intensification with the site constraints.

These constraints have been carefully managed to achieve the best possible urban built form and public realm in this corridor and neighbourhood context.

1.8 Analysis of proposal and recommendations

1.8.1 Approach

The customized response to this unique irregular site will create a memorable and supportive project that strongly establishes the subject site as an urban orientation place within a rich landscaped environment. The master plan invites public access to and through the site. It is a positive example of sensitive yet intensified infill development.

1.8.2 Context Fit

The siting responds to the various context edges around the site including existing low-rise residential buildings to the south, the College lands mid-rise built form at the junction of Scenic Dr. and Sanatorium Rd., and the publicly accessible Brow Park lands and trail.

1.8.3 Building Design

A mid-rise building typology of streetwall and upper stepbacks has been custom tailored to this context with a 5 and 6 storey streetwalls across from Columbia College. Taller buildings at 8 storeys are proposed at distances further remove from the public edges of the site, concealed behind 2 to 3 storey townhouse forms or stepbacks.

In conjunction with a palette of high-quality materials and traditional or contemporary building design strategies, the project will establish a high quality tone that will energize this section of the mountain as a vibrant and active community. The combination of these 2 building strategies results in building designs that are compatible with the context while preserving significant environmental features.

1.8.4 Landscape Design

Opportunities for excellent landscape design have been created in the site design of this proposed development. Through the Site Plan Approval process detailed plans will be prepared to support the important roles of the various landscape zones on the site. In conjunction with a municipal planting program along Scenic Dr. and the Brow Park lands, a comprehensive streetscape plan including furniture, pavement designs, banner, lighting and other pedestrian amenities will be developed to the city's satisfaction. The detailed design of the Brow Park will celebrate focal points along the escarpment such as the Cross of Lorraine, the Chedoke Creek waterfall and access point to the Brow Trail.

Green roofs and other environmental initiatives will be considered during detailed design as part of a sustainability and landscape amenity strategy for the site.



View of the central Chedoke Creek greenway, a focal landscape and orientation point at the heart of the master plan.



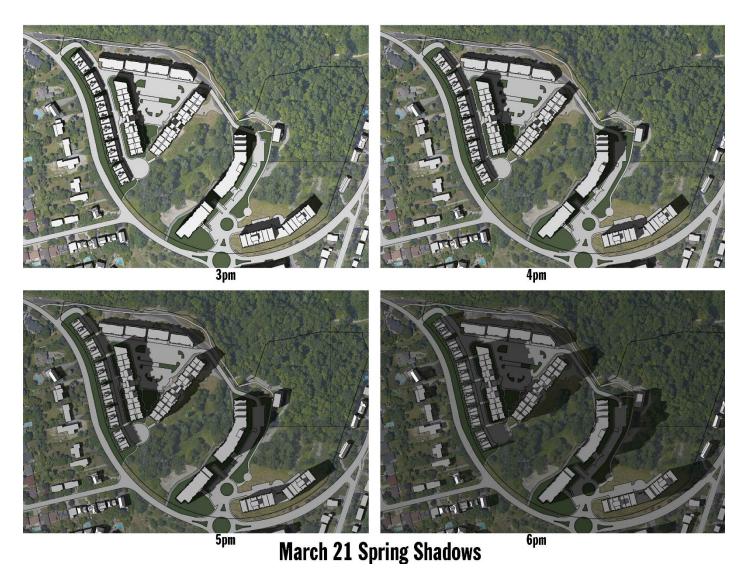
View to the southwest over the preserved significant woodlot and the Long and Bisby cultural landscape, major features within Block 2.

1.8.5 Shadow Impacts

Shadow studies have been prepared for the March 21 equinox. Shadows for the September 21 equinox are similar in extent and duration. The following diagrams show the extent of shadow between 8am and 6pm.



The shadow studies show that there are no shadows falling on any existing low-rise buildings in the adjacent neighbourhoods. There are no shadows cast on the Brow Park by the proposed buildings. There are partial morning shadows on the Chedoke Creek greenway that fully clear the lands by 1 pm.



Late afternoon shadows begin to fall on the Long and Bisby building after 5 pm. For the balance of the day the Long and Bisby landscape is in full sun.

Based on these shadow studies there are no significant negative impacts at extended durations between March 21 through September 21, the prime season of active outdoor use.

1.9 Professional Recommendations

From an urban design perspective, the project as configured complies in all regards with the intent of the Official Plan and Secondary Plan policies. The project has the potential to demonstrate positive intensification strategies at a key highly visible location within the picturesque Browlands precinct. It should be strongly supported through the approval processes to advance the vision set out for Hamilton's future development.

Through the full Site Plan Review process, the details of the project design will be finalized and secured ensuring the full implementation of these urban design controls and recommendations.

CONTRIBUTIONS

1.10 Community benefits / Conclusion

The efficient use of this prominent land parcel to create an increased range of accommodation and commercial use within the Chedmac Secondary Plan Area will allow for a more vibrant and well landscaped scenic environment. The degree of intensification is sensitive to the existing low-rise context and will not create adverse scale, shadow, or character impacts. The project as designed will contribute to the evolution of the mountain in Hamilton as a more complete community, offering more living and park space options within a compact urban form in a walkable trail district and nearby cultural heritage landscape.