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399 GREENHILL DEVELOPMENT
399 Greenhill Avenue, Hamilton, Ontario

May 20, 2022
**SITE PLAN AND DEVELOPMENT VISION**

**Site Plan**

The proposal is a redevelopment of Mount Albion Plaza for purpose built rental housing. The proposal consists of two 12-storey mid-rise residential buildings and two 3-storey stacked townhouse blocks, with an approximate above grade residential GFA of 37,515 square meters. All tenant parking provided below grade.

Approximately 1,000 square meters of reconfigured retail space will be retained at grade level in Building A. The retail uses will have convenient access to surface parking as well as direct pedestrian access from Greenhill Avenue.

**Development Vision**

The proposed vision is to reactivate the underutilized site and transform it into a vibrant development and contribute to the creation of a mixed-use community. The development Vision is supported by the following principles:

- Establish an engaging architectural expression that respects and enhances the existing physical character of the surrounding context.
- Create a welcoming pedestrian realm through enhanced landscape design and strategic programming at grade level.
- Promote community health and well-being by creating high quality streetscapes, open spaces, and large retail forecourt that encourage physical activity and active transportation.
Overview

Mount Albion Plaza is an older, auto oriented community shopping plaza, which in recent years has found it challenging to attract and retain retail tenants. Accordingly, the owner, Medallion Properties, has applied to amend the UHOP and By-law 05-200 to provide for its redevelopment for purpose built rental housing. Two new 12-storey mid-rise residential buildings and two 3-storey stacked townhouse blocks are proposed with all tenant parking provided below grade. Approximately 1,000 square metres of reconfigured retail space will be retained at grade level in Building ‘A’. The retail uses will have convenient access to surface parking as well as direct pedestrian access from Greenhill Avenue.

The two mid-rise buildings are identified as Buildings ‘A’ and ‘B’, on the site plan prepared by IBI Group (Figure 7 - Site Plan). Building ‘A’ is oriented in an east-west direction and will extend along Greenhill Avenue, while Building B will be oriented in a north-south direction and will frame the entrance pick-up/drop off driveway for both buildings, and the central courtyard. The proposed townhouse blocks are oriented in a north-south direction and parallel Mount Albion Road. Entrances to each unit facing Mount Albion Road are provided from that street, while those facing westerly take their access from a common walkway between the townhouses and Building ‘B’.

The two mid-rise buildings have a maximum height of 12 storeys and step down to 9 and 3 storeys. There is a 1 storey on the northwest portion of Building ‘A’ which accommodates a large outdoor amenity space. The proposed building massing respects a 45-degree angular plane from the existing low density residential neighbourhoods to the northwest, east, south and west in order to provide an appropriate transition and limit view (see Figures 8-14 for Elevation Drawings).

Building ‘A’

Building ‘A’ is a 12-storey (42 metres including mechanical penthouse (MPH)) mixed-use commercial / residential building with an overall GFA of 17,645 square metres and an additional 885 square metres of below grade GFA. 1,000 square metres of non-residential (retail) gross floor area is to be located on the ground floor of Building ‘A’. Building ‘A’ will include 246 new purpose-built rental units comprised of 38 bachelor units (15.4%), 102 one-bedroom units (41.5%), and 106 two-bedroom units (43.1%).

Two entrances to Building ‘A’ are proposed, one from Greenhill Avenue at the southeast corner of the building and one from the internal pick-up/drop off driveway. The Greenhill Avenue entrance is directly accessible from the street.

The building is to have a brick 3 storey podium base above which a lighter and more contemporary element is proposed which includes glass, metal and concrete. All residential balconies on the 2nd and 3rd floors will be recessed and will be flush with the building façade, while balconies above the 3rd floor will include both projecting and recessed styles. Lighting and signage for the commercial uses at grade will be incorporated into the store fronts. All building lighting will be oriented to eliminate glare on adjacent properties or public roads.

A large outdoor terrace is to be located on the second level (on the roof of the 1st storey) at the northwest corner of Building ‘A’ that will serve as common outdoor amenity area for the residents of the development. It is planned to include outdoor seating and dining spaces, optional communal garden or games and lounge area, privacy screening, built-in planters, and decorative fencing.

Building ‘B’

Building ‘B’ is a 12-storey (42 metre including MPH) residential building with an overall GFA of 16,820 square metres and 956 square metres of below grade GFA. The building is oriented in a north-south direction with the southern edge of the building addressing Greenhill Avenue. Building ‘B’ will include 255 new purpose-built rental units comprised of 9 bachelor units (3.5%), 118 one-bedroom units (46.3%), and 128 two-bedroom units (50.2%).

Two entrances to the building are proposed: a vehicular access from the internal pick up/drop off driveway on the west side of the building, and a pedestrian access on the east side of the building from the central walkway serving the townhouses which connects to Mount Albion Road.

The building materials including those used for the podium base and the upper floors will be very similar to those for Building ‘A’. In this building residential balconies on the 2nd and 3rd floors will also be recessed and flush with the building façade, while balconies above the 3rd floor will adopt a mix of projecting and recessed styles.
Townhouses
There are 26, 3 storey (11 metre) back-to-back townhouses on the easterly portion of the subject site, oriented to Mount Albion Road. These are located in two blocks of townhouses separated by a mid-block pedestrian connection from Mount Albion Road. The townhouse units which face Mount Albion Road have direct access from the street, and those which are located internal to the site gain their access from a central, shared walkway. A variety of building materials are proposed including masonry and brick. Balconies are proposed on the third floor.

Total Residential Unit Distribution And Amenity Space
527 new residential dwelling units are proposed in Buildings ‘A’ and ‘B’ and the townhouses of which will be 47 bachelor units (8.9%), 220 one-bedroom units (41.7%), 234 two-bedroom units (44.4%) and 26 townhouse units (4.9%). The total residential and non-residential gross area is 40,356 square metres and the resulting density is in the order of 363.2 units per hectare or a floor area ratio ("FAR") of 2.65. 742 square metres of indoor residential amenity space will be provided for the residents of Buildings ‘A’ and ‘B’, which is approximately 1.5 square metres per unit. There is approximately 1,988 square metres of outdoor amenity space averaging approximately 3.7 square metres per unit.

Open Space
The primary focus for outdoor space is the central courtyard and adjacent plaza. These outdoor spaces will feature a large outdoor amenity area with a number of seating options, shaded areas, and paved and grassed surfaces. A dog park for residents has been incorporated to the north of Building ‘B’. The final design and landscaping for the central courtyard and the forecourt along Greenhill Avenue will be determined through the site plan approval process.

Access, Parking And Loading
The existing entrances on Harrisford Road, Greenhill Avenue, and Mount Albion Road will be maintained, as driveway connecting Harrisford Road and Mount Albion Road.

A total of 481 parking spaces will be provided for all uses: 422 for residents and 59 spaces will be reserved for commercial uses and visitors. There will also be 12 barrier-free parking spaces (approximately 2.5% of all parking spaces). All tenant parking will be located in two levels of underground parking and there will be 24 surface parking spaces well screened from the public streets, which will provide convenient visitor and commercial parking. A total of 274 bicycle parking spaces are proposed: 26 spaces for long-term residential bicycle parking, 5 spaces for short-term residential bicycle parking, and 5 spaces short-term commercial bicycle parking. There will be 2 Type ‘G/B’ loading spaces.

The underground parking ramps and loading space locations are located and accessed at the north end of the subject site and each apartment building will have its own ramp. Pedestrian connections to and from the subject site will be provided from Harrisford Street, Greenhill Avenue, and Mount Albion Road. There is also a mid-block connection from Mount Albion Road between the townhouses and a walkway between Building ‘B’ and the townhouses which connects to Greenhill Avenue and the internal driveway. All will be designed to have appropriate landscaping features, lighting, and visibility measures.

Height, Massing, and Density
As noted in Section 5.1 above, it is our opinion that the subject site is an appropriate location for mid-rise intensification. It is contextually appropriate from a built form perspective, given its frontage along an existing collector (i.e., Mount Albion Road), its proximity to the existing 12-storey mid-rise buildings to the north and its separation from low-rise residential uses to the south, west, and east. Any built form impacts resulting are limited and acceptable.

From an urban structure perspective, the proposed 12-storey building heights respect the pattern of building heights in the area and represent a good ‘fit’. At 36.5 metres (42 metres including mechanical penthouse) it is only xx metres higher than the adjacent mid-rise buildings.

From a massing perspective, the proposed buildings have been organized into distinct visual elements that respect the existing built form context along the Mount Albion and Greenhill Avenue frontages. The proposed buildings will have an appropriate pedestrian scale along the adjacent public streets.

Building ‘A’ is oriented to Greenhill Avenue while Building ‘B’ frames the interior courtyard and is buffered from Mount Albion Road by the proposed stacked townhouses. Changes in building articulation, insets, and material and colour throughout the site and along these frontages will provide visual interest along the corridor and clearly delineate the entrances into the site.

From a density perspective, it is our opinion that the proposed overall density (i.e., FAR of 2.65) can be accommodated on the subject site with no impacts on adjacent public streets and private properties. An attractive public realm is to be provided along both Greenhill Avenue and Mount Albion Road, and Buildings ‘A’ and ‘B’ are generally well set back from the apartment buildings to the north. The placement of higher density land uses near existing and planned transit stop/station locations conforms to the UHOP policies.

We note that while the Official Plan includes density limitations for high density residential areas, the specific 200 units per hectare limitation applies to all Neighbourhoods designation areas outside of Central Hamilton and does not take into account unique site or design-related considerations which support further intensification on the subject site. Key considerations include the placement of all the resident parking below grade (a significant cost), the proposed landscaping on the site and the high-end design which includes a variety of building materials, building step-backs and special façade treatments (to be secured through the site plan approval process).

In summary, based on the following planning and urban design considerations the proposed development is supportable:

• the subject site’s location;
• proximity to transit services;
• the surrounding built form and land use context;
• the size and depth of the subject site; and,
• limited potential shadow impacts on surrounding low-rise residential uses.
<table>
<thead>
<tr>
<th>Statistic</th>
<th>Building A</th>
<th>Building B</th>
<th>Townhouses</th>
<th>Project Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Area (Existing)</td>
<td>14,521 m²</td>
<td>14,510 m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Site Area (Less Daylight Triangles)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential GFA</td>
<td>16,645 m²</td>
<td>16,820 m²</td>
<td>4,050 m²</td>
<td>37,515 m²</td>
</tr>
<tr>
<td>Non-Residential GFA</td>
<td>1,000 m²</td>
<td>0 m²</td>
<td>0 m²</td>
<td>1,000 m²</td>
</tr>
<tr>
<td>Below Grade GFA</td>
<td>885 m²</td>
<td>956 m²</td>
<td>0 m²</td>
<td>1,841 m²</td>
</tr>
<tr>
<td>Total GFA</td>
<td>17,645 m³</td>
<td>16,820 m³</td>
<td>4,050 m³</td>
<td>38,515 m³</td>
</tr>
<tr>
<td>Total All Built Area</td>
<td>18,530 m²</td>
<td>17,776 m²</td>
<td>4,050 m³</td>
<td>40,356 m²</td>
</tr>
<tr>
<td>Building Height</td>
<td>12 storeys</td>
<td>12 storeys</td>
<td>3 storeys</td>
<td>12 storeys</td>
</tr>
<tr>
<td></td>
<td>(42 m incl. MPH)</td>
<td>(42 m incl. MPH)</td>
<td>(11 m)</td>
<td>(42 m incl. MPH)</td>
</tr>
<tr>
<td>Floor Area Ratio</td>
<td>2.65 : 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Dwelling Units</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>38 units (15.4%)</td>
<td>9 units (3.5%)</td>
<td>-</td>
<td>47 units (8.9%)</td>
</tr>
<tr>
<td>One Bedroom</td>
<td>102 units (41.5%)</td>
<td>118 units (46.3%)</td>
<td>-</td>
<td>220 units (41.7%)</td>
</tr>
<tr>
<td>Two Bedroom</td>
<td>106 units (43.1%)</td>
<td>126 units (50.2%)</td>
<td>-</td>
<td>234 units (44.4%)</td>
</tr>
<tr>
<td>Townhouse</td>
<td>-</td>
<td>-</td>
<td>26 units</td>
<td>26 units (49%)</td>
</tr>
<tr>
<td>TOTAL Dwelling Units</td>
<td>246 units</td>
<td>255 units</td>
<td>26 units</td>
<td>527 units</td>
</tr>
<tr>
<td>Amenity Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Indoor Amenity Areas</td>
<td>742 m²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Outdoor Amenity Areas</td>
<td>1,988 m²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Amenity Area</td>
<td>2,730 m²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Parking Spaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res.</td>
<td>422 spaces including 2% barrier-free spaces</td>
<td>59 spaces (visitor and retail, including 2% barrier-free spaces)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Vehicle Parking</td>
<td>481 spaces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle Parking Spaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>264 residential</td>
<td>5 residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-Term Spaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>0 residential</td>
<td>5 residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Term Spaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Bicycle Spaces</td>
<td>274 spaces</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
General Urban Design (Section B.3.3)

The preamble provides that the design and placement of buildings, infrastructure, open spaces, landscaping and other community amenities affects how people live and interact with each other. The intent of the urban design policies is to create compact and interconnected, pedestrian-oriented, and transit-supportive communities within which all people can attain a high quality of life.

Urban design goals are set out in Section B.3.3.1. Applicable goals are as follows:

B.3.3.1.1 Enhance the sense of community pride and identification by creating and maintaining unique places.

B.3.3.1.2 Provide and create quality spaces in all public and private development.

B.3.3.1.3 Create pedestrian oriented places that are safe, accessible, connected, and easy to navigate for people of all abilities.

B.3.3.1.4 Create communities that are transit-supportive and promote active transportation.

B.3.3.1.5 Ensure that new development is compatible with and enhances the character of the existing environment and locale.

B.3.3.1.6 Create places that are adaptable and flexible to accommodate future demographic and environmental changes.

B.3.3.1.7 Promote development and spaces that respect natural processes and features and contribute to environmental sustainability.

B.3.3.1.8 Promote intensification that makes appropriate and innovative use of buildings and sites and is compatible in form and function to the character of existing communities and neighbourhoods.

B.3.3.1.9 Encourage innovative community design and technologies.

B.3.3.1.10 Create urban places and spaces that improve air quality and are resistant to the impacts of climate change.

The general policies and principles for urban design that are intended to contribute to the achievement of these goals are set out in Section B.3.3.2. Development is to follow appropriate urban design principles in order to successfully integrate new development and redevelopment in the urban area and with surrounding neighbourhoods. However, not every design direction will apply in all situations.

The physical design of a site must relate to its role in the overall urban structure of the City, while enhancing the function of the applicable urban structure element (Policy B.3.3.2.1).

The following design principles apply to all development and redevelopment and have been laid out in a table format to reflect the physical and urban design “Principles” and the operationalizing components. Non applicable principles and components have been removed.
<table>
<thead>
<tr>
<th>Principle</th>
<th>Operationalizing Components</th>
</tr>
</thead>
</table>
| **B.3.3.2.3 Foster sense of community pride and identity by, in part:** | • Respecting existing character, development patterns, built form, and landscape;  
• Promoting quality design consistent with the locale and surrounding environment;  
• Demonstrating sensitivity toward community identity through an understanding of the character of a place, context and setting in both the public and private realm;  
• Contributing to the character and ambiance of the community through appropriate design of streetscapes and amenity areas;  
• Incorporating public art installations as an integral part of urban design. |
| **B.3.3.2.4 Create quality spaces by, in part:** | • Organizing space in a logical manner through the design, placement, and construction of new buildings, streets, structures, and landscaping;  
• Recognizing that every new building or structure is part of a greater whole that contributes to the overall appearance and visual cohesiveness of the urban fabric;  
• Using materials that are consistent and compatible with the surrounding context in the design of new buildings;  
• Creating streets as public spaces that are accessible to all;  
• Creating a continuous animated street edge in urban environments;  
• Including transitional areas between the public and private spaces where possible through use of features such as landscaping, planters, porches, canopies, and/or stairs;  
• Creating public spaces that are human-scale, comfortable, and publicly visible with ample building openings and glazing;  
• Minimizing excessive street noise and stationary noise source levels through the design, placement, and construction of buildings and landscaping. |
| **B.3.3.2.5 Create safe, accessible, connected, and easy to navigate spaces by, in part:** | • Connecting buildings and spaces through an efficient, intuitive, and safe network sidewalks, and pathways;  
• Providing connections and access to all buildings and places for all users, regardless of age and physical ability;  
• Ensuring building entrances are visible from the street and promoting shelter at entrance ways;  
• Integrating conveniently located public transit and cycling infrastructure with existing and new development;  
• Providing pedestrian-scale lighting;  
• Designing streets and promoting development that provides real and perceived safety for all users of the road network;  
• Creating places and spaces which are publicly visible and safe. |
| **B.3.3.2.6 Ensure compatibility and enhance the character of the existing environment by, in part:** | • Complementing and animating existing surroundings through building design and placement as well as through placement of pedestrian amenities;  
• Complementing the existing massing patterns, rhythm, character, colour, and surrounding context; and,  
• Encouraging a harmonious and compatible approach to infilling by minimizing the impacts of shadowing and maximizing light to adjacent properties and the public realm. |
| **B.3.3.2.7 Create adaptable places by, in part:** | • Designing buildings, sites, and public spaces that can be used for a variety of uses in the future;  
• Encouraging design that accommodates the changing physical needs of people and their lifestyles through all stages of their lives; and,  
• Encouraging innovative design of built forms and public spaces. |
| **B.3.3.2.8 Promote urban design through environmental sustainability by, in part:** | • Achieving compact development and resulting built forms;  
• Integrating, protecting, and enhancing environmental features and landscapes, including existing topography, forest and vegetative cover, green spaces and corridors through building and site design;  
• Encouraging on-site storm water management and infiltration through the use of techniques and technologies, including storm water management ponds, green roofs, and vegetated swales;  
• Encouraging the reduction of resource consumption in building and site development and avoiding the release of contaminants into the environment; and,  
• Encouraging energy efficiency in neighbourhood design and development as set out in Section B.3.7.1. |
| **B.3.3.2.9 Enhance and support community health and well-being by:** | • creating high quality, safe streetscapes, parks, and open spaces that encourage physical activity and active transportation;  
• ensuring an equitable distribution of accessible and stimulating amenity areas, including the development of places for active and passive recreation uses;  
• encouraging development of complete and compact communities or neighbourhoods that contain a variety of land uses, transportation, recreational, and open space uses; and,  
• reducing air, noise, and water pollution through:  
• facilitating and promoting the use of active transportation modes through building and site design;  
• providing adequate green space, landscaped buffering, and storm water management facilities;  
• using appropriate pavement treatments;  
• promoting energy efficient design of sites and buildings; and,  
• promoting innovative construction materials and techniques. |
| **B.3.3.2.10 Design streets not only as a transportation network but also as important public spaces by, in part, providing:** | • adequate and accessible space for pedestrians, bicycles as well as transit, other vehicles, and utilities;  
• continuous sidewalks;  
• landscaping such as street trees and landscaped boulevards;  
• pedestrian amenities such as lighting, seating, way-finding signage, and urban braille;  
• public art; and,  
• amenities and spaces that encourage pedestrian activity and animate the streetscape. |
Cycling & Trail Network Map

Legend
- Subject Site (SS)
- Bus Stops Close to SS
- Parks and Open Space
- Schools
- Rec Centres
- Golf Club
- Places of Worship
- Retail

Subject Site

Area Context & Cycling/Trail Network

399 GREENHILL DEVELOPMENT
399 Greenhill Avenue, Hamilton, Ontario
Area Context & Cycling/Trail Network
May 20, 2022
399 GREENHILL DEVELOPMENT
399 Greenhill Avenue, Hamilton, Ontario
Context Plan
May 20, 2022

SUBJECT SITE
**Built Form Impacts**

In our opinion, the proposed development will have no unacceptable built form impacts on any surrounding buildings or properties. The mid-rise height and massing, together with the proposed townhouses on the easterly portion of the site fronting Mount Albion Road, will appropriately mitigate any potential built form impacts.

**Light, View and Privacy**

Light, View and Privacy ("LVP") impacts are generally addressed through a combination of spatial separation, setbacks, building orientation and mitigating measures between buildings. In this regard, the City through its Official Plan policies, zoning considers LVP impacts to determine if the proposed building relationships are appropriate.

In our opinion, the proposed development will have no unacceptable built form impacts on the surrounding streets or properties. In this regard, the subject site is bound on three sides by public streets, its only shared property boundary is to the north, to the existing 12 story apartment development.

Separation distances between the closest lot lines of the neighbouring low-rise built forms and the main wall of the mid-rise portion of the proposed building are proposed at or exceeding 30 metres (98 feet). There is no shadowing of the residential uses on the south side of Greenhill Avenue, and limited shadowing on the residential uses to the east and west (see 5.6 Shadow Impacts). Residents of these townhouses will continue to enjoy privacy, sunlight, and sky-views.

Proposed minimum building setbacks on-site are as follows (based on zoning definitions for front, side, and rear yards):

- **Front Yard Setback** (Harrisford Street) = 2.0 metres (Building ‘A’)
- **Exterior Side Yard Setback** (Greenhill Avenue) = 1.0 metre (Building ‘B’)
- **Interior Side Yard Setback** = 14.0 metres (Townhouses)
- **Rear Yard Setback** (Mount Albion Road) = 3.0 metres (Townhouses)

There is a large open central courtyard area providing outdoor amenity space and on the subject site itself, Building ‘B’ is separated from the proposed 3-storey townhouses by a distance of 14 metres and Buildings ‘A’ and ‘B’ are separated from each other by a distance of 21 metres.

**Shadow Impacts**

New developments are to be designed in a manner that minimizes their impact on neighbouring buildings, to ensure adequate sunlight, and to minimize the impacts of shadows. The City’s terms of reference for shadow impact studies in Downtown Hamilton sets out the test dates, time zone, and geographical coordinates, and requires that shadow modelling be prepared on March 21st and September 21st. Although the subject site is not located in Downtown Hamilton, these dates have been adopted, and a sun/shadow study was prepared by IBI Group to understand the shadowing at these spring and fall equinoxes, respectively. The following discussion describes the results of the shadow study during the March 21st (spring equinox) and September 21st (fall equinox).

The proposed buildings are located and massed so as to “adequately limit” shadow impacts on properties in adjacent lower-scale Neighbourhoods, particularly during the spring and fall equinoxes, at each hour between 9:18 a.m. and 6:18 p.m.

The sun/shadow study shows that, at the spring and fall equinoxes (March 21st and September 21st, respectively), there will be incremental shadow impacts from 3:18 pm to sunset on only 4 of the single-detached homes at 220 to 232 Mount Albion Road, and on some of the townhouses in the Mount Albion Park community also to the northeast. The remaining shadows during the spring and fall equinoxes are limited to the subject site, the street ROWs, or some front yards for short periods of time, all of which are generally less sensitive than rear yard shading.

Based on the foregoing, it is our opinion that the proposed buildings result in minimal shadow impact on neighbouring lands and ensure adequate sunlight.

Based on the foregoing analysis, it is our opinion that the incremental shadow impacts resulting from the proposal are minimal and “adequately limited” in accordance with the applicable Official Plan policies.

**Urban Design**

The proposed building design and site organization conforms with the urban design and built form policies of the UHPD, in particular Policies B.3.3.2.3 to B.3.3.2.10, inclusive. Specifically, the proposed redevelopment:

- will create a compact and interconnected, pedestrian-oriented, and transit-supportive site;
- respects the existing character, development patterns, built form and landscaping of the neighbourhood;
- will result in new mixed-use buildings that are well designed and include brick, stone, concrete and other complimentary materials throughout the Red Hill and Davis Creek neighbourhoods;
- is sensitive toward community identity by providing a mid-rise building in a form that is oriented towards and along Greenhill Avenue and Mount Albion Road;
- includes appropriate setbacks, stepbacks, and articulation for an interesting and activated streetscape;
- is logically organized through the design, and placement of the new buildings, internal driveways and entrances, structures, and landscaping;
- will result in a building orientation that will provide a continuous and animated street edge along Greenhill Avenue and Mount Albion Road with heights that transition to surrounding low-rise structures to the east, south, and west;
- includes transitional areas between the public street edge and private walkways and amenity areas through the use of pedestrian streets, planters, designed landscaping elements, lighting, and trees;
- will connect the proposed buildings and spaces through an efficient, intuitive, and safe network of sidewalks and pedestrian pathways that were designed using principles of Crime Prevention Through Environmental Design (“CPTED”) and accessibility;
- will, at 3-stories for the townhouses and 12-stories for the mid-rise buildings, create a comfortable and human-scale street edge that includes storefront windows and front doors directed towards the ground floor at locations obvious and accessible to pedestrians;
- does not limit the subject site from being enhanced, adapted, or redeveloped in the future for newer, more modern, or different uses;
- will result in a large outdoor amenity area central to the site and surrounded by building mass to reduce street noise and noise from nearby uses and to provide residents and patrons with a comfortable place to recreate;
- optimize land in the built-up area in a form that is transit supportive, thereby contributing to principles of sustainability through transportation demand management;
- provides adequate and accessible space for pedestrians, bicycles other vehicles, and utilities, with access to existing transit stops;
- includes existing continuous public sidewalks along all of the site’s streets (i.e., Harrisford Street, Greenhill Avenue, and Mount Albion Road) with pedestrian connections at 3 locations to and from the site;
- has been designed to minimize built form impact to the surrounding low-rise properties to the east, south, and west, including appropriate transition in scale, with stepping, which ensures adequate privacy and sunlight; and
- generally falls within a 45-degree angular plane taken from the edge of the low-rise properties to the east, south, and west, thereby, minimizing shadow and wind impacts.

399 GREENHILL DEVELOPMENT

399 Greenhill Avenue, Hamilton, Ontario

Urban Design Response

May 20, 2022
Noise
Valacoustics Canada Ltd has prepared an Environmental Noise Assessment ("ENA") in support of the Applications. The purpose of the ENA was to determine noise sources that may adversely impact the proposed development and the more sensitive residential uses contemplated for the site.

The ENA found that noise sources expected to impact the proposed development are all related to road traffic on Greenhill Avenue, Mount Albion Road and the Red Hill Valley Parkway.

The assessment concluded that in order for the development to achieve acceptable noise source guideline limits, the following mitigation must occur:

- Buildings ‘A’ and ‘B’ require mandatory air conditioning;
- The townhouse blocks require provisions to install air conditioning at a later date;
- Building ‘A’ requires windows up to Sound Transmission Class Rating ("STC") 36 to meet the indoor sound level criteria of the MECP noise guidelines;
- Building ‘B’ requires windows up to STC 33 to meet the indoor sound level criteria of the MECP noise guidelines; and
- Exterior wall and window construction meeting the minimum non-acoustical requirements of the Ontario Building Code ("OBC") will be sufficient for the townhouse blocks.

Overall, the ENA concluded that the residential component of the development can be accommodated at a suitable acoustical environment for all occupants with so long as appropriate design and the applicable MECP noise guideline requirements met. Lastly, it was noted that the assessment should be updated once floor plans, building siting and grading plans are developed.

Wind
Theakston Environmental was retained to prepare a Pedestrian Level Wind Study ("PLWS") in support of the proposed redevelopment and related planning applications. The purpose of the PLWS was to assess pedestrian level wind velocities relative to comfort and safety that may result from the proposed redevelopment.

Pedestrian level wind and gust velocities were measured at 44 locations in and around the subject site. Overall, all of the locations tested were found to be within the safety criteria and most were within the identified comfort criteria limits.

The proposed buildings will penetrate winds that formerly flowed over the site, resulting in a blockage relative to the existing site context that will cause winds to redirect over the proposed buildings, without consequence, and/or, depending upon the angle of incidence, around, or down the buildings towards the pedestrian level, as downwash.
‘Urban Forest’ = nature emerges from the urban setting to breathe life into the community. A high percentage of softscape provides for a healthy environment.
A high percentage of softscape offers cool, calming space for outdoor activity. Amidst the urban surroundings, nature emerges and brings with it physical, mental and environmental benefits for residents and visitors alike.
Adaptive hardscape with seat-wall planters will provide attractive and functional means of adapting to the challenging site grading. Abundant tree planting contribute to the urban canopy in the area and helps manage a positive microclimate on site.
The rooftop amenity is a garden in the sky; a natural space in an unnatural location. A high percentage of greenery and planting makes the space comfortable for a variety of activities.
North Building Elevation
Site Plan

1. For landscape information - refer to drawings prepared by IB Group Landscape.
2. For grading and servicing information - refer to drawings prepared by Hussen Engineering.
3. For vehicular maneuvering diagrams - refer to drawings prepared by Lea Consulting Ltd.
4. For curb radius - refer to site plan.
5. The Type G loading space will be maximum 2.0% slope, constructed of 200mm of reinforced concrete and has an unencumbered vertical clearance of 6 ft.

399 Greenhill Development
399 Greenhill Avenue, Hamilton, Ontario
Site Plan
May 20, 2022
399 Greenhill Avenue, Hamilton, Ontario

PROPOSED BUILDINGS

PROPOSED SHADOW

MARCH 21, 11:18 DST

399 GREENHILL DEVELOPMENT
399 Greenhill Avenue, Hamilton, Ontario
Shadow Study
May 20, 2022
399 Greenhill Avenue, Hamilton, Ontario

399 GREENHILL DEVELOPMENT

May 20, 2022

PROPOSED SHADOW

JUNE 21, 11:18 DST

PROPOSED BUILDINGS

399 GREENHILL DEVELOPMENT
399 Greenhill Avenue, Hamilton, Ontario
Shadow Study
May 20, 2022
1 EXECUTIVE SUMMARY

The Development proposed by Medallion Developments Inc. for 399 Greenhill Avenue in Hamilton, Ontario has been assessed for Environmental standards with regard to Pedestrian Level Wind Velocities relative to comfort and safety. The pedestrian level wind and gust velocities measured for the forty-four (44) locations tested are within the safety criteria and most are within the comfort criteria described within the following report.

The proposed Development is located in the City of Hamilton and occupies the southern portion of the block of lands bound by Albright Road to the northeast, Mount Albion to the southeast, Greenhill Avenue to the southwest, and Harrisford Street to the northwest. The site is currently occupied by a low rise commercial building that will be removed. The Development involves a proposal to construct two 12 storey buildings denoted Buildings A and B, as well as two 3 storey townhouse blocks. Based upon this analysis, wind conditions on and around the proposed Development are predicted to be mainly suitable for strolling, standing, or better, year-round, under normal to high ambient wind conditions, with localised windy conditions within the gap between Buildings A and B.

Suburban lands supporting mainly low to mid-rise residential buildings and low-rise institutional buildings surround the property, with open lands supporting mature vegetation to the northwest through west and south through east of the site beyond. The site is situated approximately 5km southwest of Lake Ontario.

Urban developments provide surface roughness, which induces turbulence that can be wind friendly, while suburban settings similarly, though to a lesser extent, prevent wind from accelerating as the wind’s boundary layer profile thins at the pedestrian level. Conversely, open settings allow wind to travel horizontally along the buildings, around the corners and beyond, creating windswept areas at or near the gap between Buildings A and B.

The Development is punctuated with steps, balconies, notches, canopies and other features that discourage downwash associated with prevailing winds, deflecting a portion of said flows around the building at elevations well above the pedestrian level. This results in a moderate upset to the impending wind climate realised at the site with inclusion of the proposed Development, relative to the existing setting. Where mitigation was required, it was achieved through the incorporation of the following design features:

- stepped façades
- irregular facades
- moderate height
- balconies
- canopies
- landscaping

and others, that were included in the proposed Development’s massing and landscape design. Additional mitigation is recommended for areas within the gap between Buildings A and B, as well as for the western entrance to Building B and Outdoor Amenity Spaces throughout the site, in order to achieve comfortable conditions that are suitable for the intended uses. Comfort conditions expected at the proposed Development site are in many cases improved, or similar to the existing setting, and considered acceptable to the suburban context.
Figure 7c: Pedestrian level wind velocity comfort categories.
Figure 7d: Pedestrian level wind velocity comfort categories.
Figure 9a: Pedestrian level wind velocity safety criteria.
Figure 9b: Pedestrian level wind velocity safety criteria.
This is Schedule "2" to By-law No. 22 -
Passed the ___ day of _______ 2022

Mayor

Clerk

Schedule "2"

Map Forming Part of
By-law No. 22 -
to Amend City of Hamilton By-law No. 05-200

<table>
<thead>
<tr>
<th>Subject Property</th>
<th>Hamilton</th>
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<tbody>
<tr>
<td>399 Greenhill Avenue</td>
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Max. Building Height 6.5m
Max. Building Height 11.0m
Max. Building Height 29.0m
Max. Building Height 36.5m

Scale: N.T.S
Date: March 18, 2022
Prepared By: Bousfields Inc.