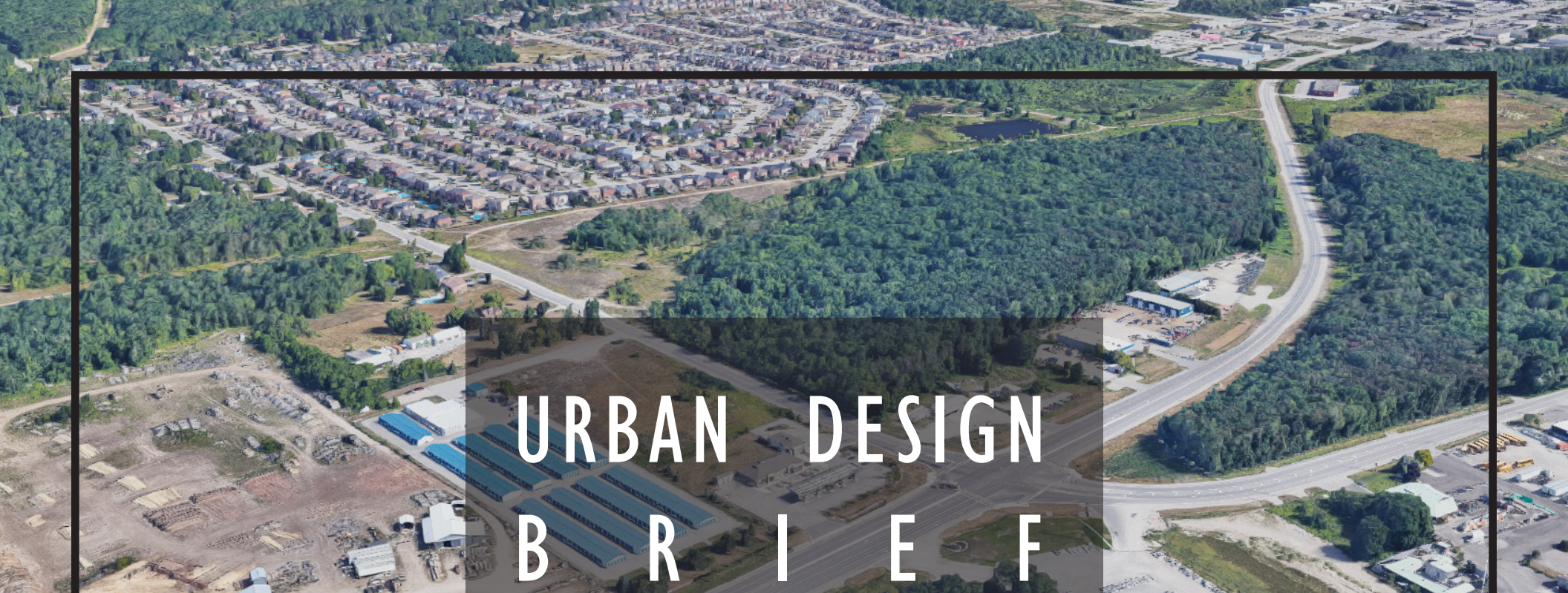




URBAN DESIGN B R I E F

642 DUNLOP STREET WEST
CITY OF BARRIE | COUNTY OF SIMCOE
PREPARED FOR: 2507517 ONTARIO INC.

REV 1 - JULY 2023



INNOVATIVE PLANNING SOLUTIONS
PLANNERS • PROJECT MANAGERS • LAND DEVELOPMENT

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INTRODUCTION

1

Innovative Planning Solutions has been retained by 2507517 Ontario Inc. to complete an Urban Design Brief relative to Site Plan and Minor Variance applications. This Urban Design Brief will address the various guidelines and policies to guide urban design within the City of Barrie. The City's Urban Design Guidelines and policies have been reviewed relative to the proposed development concept to demonstrate consistency with the intent and objectives of the City's direction for Urban Design.

The subject lands are legally described as VESPRE CON 7 PT LOT 25 RP 51R14958 PT PART 3 and municipally known as 642 Dunlop Street West, in the City of Barrie. The subject lands have an area of approximately 0.80 hectares (8,084 square metres), with 69.7 metres of frontage along Dunlop Street West and approximately 72.0 metres of frontage on Miller Drive. See Figure 1.

The subject lands are currently designated 'General Commercial' in the City of Barrie Official Plan. The subject lands are zoned 'General Commercial (C4)' in the City of Barrie Zoning By-Law.

The purpose of this report is to obtain approval for Site Plan and Minor Variance applications to facilitate the future development of a 5-storey mixed-use building with grade related commercial/retail uses along the Dunlop Steet West Secondary Intensification Corridor and within the Dunlop Street-Tiffin Street Secondary Intensification Node.

This report is intended to be read in conjunction with the balance of Site Plan material submitted concurrently in support of this development; most specifically the architectural, landscape, and lighting plans.

This Report addresses various items of urban design, including:

- Land use;
- Urban built form, housing types, and densities;
- Building placement;
- High quality design and materials; and
- Streetscape and landscaping.



Figure 1. Subject Site

LOCATION & CONTEXT

2

2.1 Subject Site

The subject lands are located within the Built-up Area of the City of Barrie, and along the Dunlop Street Secondary Intensification Corridor and within the Dunlop Street-Tiffin Street Secondary Intensification Node. The subject lands are a corner lot, located at the northeast corner of the intersection of Dunlop Street West and Miller Drive. The subject lands have an area of approximately 0.80 hectares (8,084 square metres), with 69.7 metres of frontage along Dunlop Street West and approximately 72.0 metres of frontage on Miller Drive. See Figure 1.

The subject lands currently accommodate three (3) General Commercial uses on-site: an automotive sales establishment, an automotive repair establishment, and a restaurant.

Two existing accesses currently facilitate vehicular access to the site, with one access off Dunlop Street West and a second access off Miller Drive. The site is serviced by existing municipal water, sanitary, and stormwater infrastructure.

The southern portion of the site has been largely cleared and paved to accommodate the existing commercial uses, while trees and vegetation can be found along the northern boundary of the site in association with unevaluated wetlands and a woodland feature. The subject site is within the Lake Simcoe watershed, and thereby subject to the Lake Simcoe Protection Plan (LSPP). The topography of the site is generally flat with little change in elevation.



Figure 2. Aerial View of Subject Site

The area immediately surrounding the site is comprised of a variety of commercial, residential, and industrial uses. Aerial imagery of the immediate area is shown in Figure 6, and described as follows:

North: Abutting the lands to the north is a large, vacant parcel zoned with a residential hold. This parcel contains woodlands and unevaluated wetlands. Further north exists a residential subdivision characterized by predominantly single detached dwellings and the inclusion of open space lands (Pringle Park). To the northwest lie additional lands zoned for residential development at 40 Miller Drive.

South: Abutting the lands to the south is Dunlop Street West. Further south lie general industrial uses along Tiffin Street and environmental protection lands.

East: Abutting the lands to the east are general commercial lands used for outdoor storage by a full service general contractor (Southshore Group). Further east are additional general commercial uses along Dunlop Street West, including an equipment rental agency and construction equipment supplier (Bobcat of Barrie).

West: Abutting the lands to the west is Miller Drive. Opposite Miller Drive, at the northwest corner of Miller Drive and Dunlop Street West, lies a service station including a gas station, car wash, and restaurant (Subway Sandwich Shop). Further west are highway commercial uses located along Dunlop Street West within the Township of Springwater, including a self-storage facility (Access Storage) and a wood supplier (Miller Lumber).

In summary, the location of the subject lands provides convenient access to necessary amenities including commercial uses, transit, parks, recreation, and schools. The surrounding land uses are depicted in Figure 2.



Service Station at the Northwest Corner of Miller Drive and Dunlop Street West



Pringle Park



Commercial Uses East of the Subject Lands



Figure 3. Aerial View of Surrounding Context

DESCRIPTION OF THE PROPOSAL

3

3.1 The Proposal

The proposal is for a 5-storey mixed-use building providing a total of 72 residential units and ground floor commercial space. The proposal will result in a total gross floor area (GFA) of approximately 7,054.03m², including 6,233.07m² of residential GFA and 754.24m² of retail/commercial GFA. The proposal will also provide approximately 911.51m² total amenity space (combined indoor and outdoor).

The development is sited towards the intersection of Dunlop Street West and Miller Drive. The building thereby provides building face along both street frontages. Two vehicular access points are provided to the site: one full movement access off Miller Drive and a second right-in-right-out access off Dunlop Street West. Parking is provided through a combination of at-grade covered parking and surface parking. Access to the covered parking is provided internally to the site. A total of 111 parking spaces are provided, comprising of 90 residential parking spaces and 21 commercial/retail parking spaces.

Amenity space is provided through a combination of balconies, rooftop terraces, and a 5th floor gym and party room. The rooftop terraces have been designed to provide a range of programming opportunities, including areas for lounging, recreation, tanning and dining. Indoor amenity areas (gym and party room) provide an additional 341.6m² of amenity space for the site.

The massing, siting, and design of the proposed building demonstrates consideration for the principles of good urban design. The building has been brought forward and sited towards the intersection of Dunlop Street West and Miller Drive thereby framing this intersection and supporting an activated street edge. Inset balconies contribute to building design and articulation. Consideration for the principles of good urban design are further detailed within the Urban Design Report (UDR).

The proposed density for the site of approximately 89 units per

gross hectare is also in keeping with the vision for the Dunlop Street Secondary Intensification Corridor and Dunlop Street-Tiffin Street Secondary Intensification Node as outlined within the City's Official Plan.

3.2 Architecture Design Approach

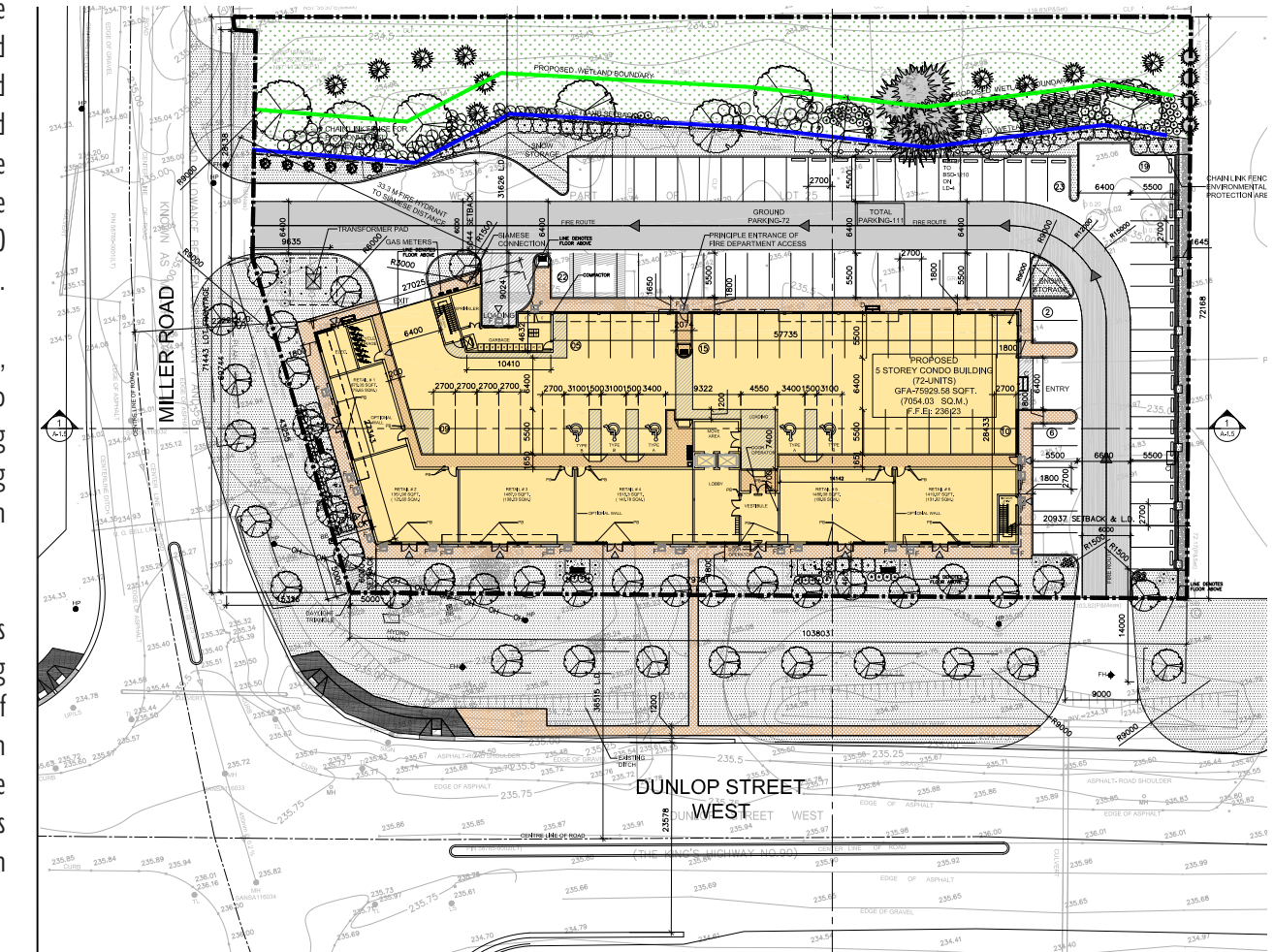


Figure 4. Proposed Site Plan

The architectural approach to the proposed development seeks to introduce high-quality mixed-use, residential development in an appropriate area of the City of Barrie. The proposed development will provide for a total of 72 residential units alongside ground-floor commercial uses.

The interior design of the buildings provides for one bedroom and two bedroom units. Along with the proposed unit types , the proposal also aims to provide amenities that contribute to resident enjoyment and supplement the uses in the surrounding area, including:

- Lobby/Reception
- Centrally Located Mail Room
- Bicycle Storage
- Large Rooftop Amenity Terraces
- Gym
- Party Room
- Commercial/Retail Units.

The massing and siting of the proposed building demonstrates consideration for the principles of good urban design. The building has been brought forward and sited towards the intersection of Dunlop Street West and Miller Drive, to support separation from the existing lower-density commercial uses along Dunlop Street West and separation from the natural heritage features to the north. Bringing the building forward towards the intersection also has the effect of creating an activated street edge at this intersection.

The exterior design focuses on a clean, timeless appearance that will fit seamlessly into Barrie’s evolving neighbourhoods, while still being an original development for surrounding neighbours to appreciate and utilize. A large emphasis has been placed on the opportunity of this development to act as a visual landmark as one enters the City through Dunlop Street West. In this regard, special attention is paid to the visual interest at the corner of Dunlop Street West and Miller Drive, through elements such as bay windows, projections, and greater building articulation.

To prevent a build-up of traffic, two access points have been proposed: one full movement access off Miller Drive and a second right-in-right-out access off Dunlop Street West. Parking is provided through a combination of at-grade covered and surface parking. Surface parking is directed behind the building and towards the rear of the site in consideration of the activated street edge as well as to minimize the visual impact of surface parking areas.

An architectural package has been submitted with this Site Plan Application, detailing the architectural styles and design proposed for the development. The building elevations can be seen in Figure 5.

3.3 Landscape Design Approach

The approach for the landscape design offers consideration for the

Figure 5. Elevations





Figure 6. Rendering - View from Intersection of Dunlop Street West and Miller Drive



Figure 7. Rendering - View from West



Figure 8. Rendering - View from East



following: supporting the activation of at-grade commercial/retail uses by creating an attractive streetscape, supporting appropriate setbacks to the natural heritage features on-site, and creating a place where residents can come together to relax and play. The proposed landscape plan is provided in Figure 10.

To support the activation of at-grade commercial/retail uses and to create an attractive streetscape, plantings of evergreen shrubs and perennials are proposed along the Miller Street Drive building facade. These plantings will exhibit a variety of colour and decorative characteristics to create an attractive streetscape. Street furniture such as benches and trash receptacles are also provided for pedestrians along the commercial frontages to support the a welcoming and activated streetscape.

To support setbacks to the natural heritage features to the north, plantings of both deciduous and evergreen trees, in combination with chain link fencing, is provided. The chain link fence denotes the limits of the wetland setback. These landscape features work to ensure that the natural heritage features to the north remain undisturbed. In addition, a 1.8 metre tightboard fence is provided along the eastern boundary of the site to buffer the surface parking area in support of compatibility with the existing commercial uses to the east.

Private rooftop amenity areas are provided to offer residents a place to relax and play. A total of 911.51 m² of outdoor rooftop amenity space is provided in combination with 341.6 m² dedicated to an indoor gym and party room. The outdoor rooftop amenity area has been designed to provide a range of programming opportunities. The northeast corner of the rooftop is dedicated to an open amenity space for dining and lounging. Dining style seating and lounge style seating are provided for resident use, surrounded by curbed planting beds and thoughtful placement of fiberglass planters. A combination of deciduous shrubs, evergreen shrubs and perennials will be provided within the planting beds and planters. These plantings will

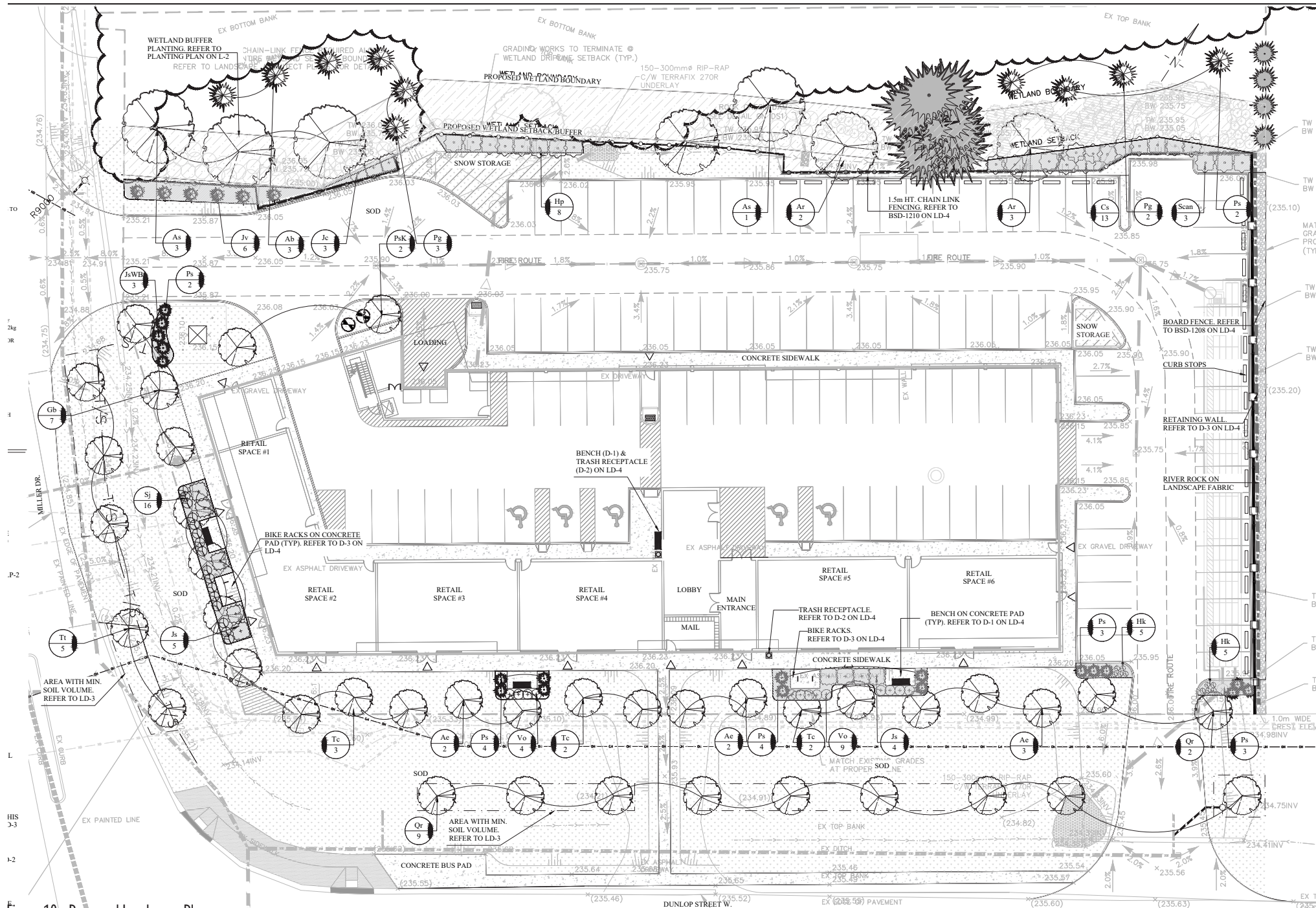


Figure 10. Proposed Landscape Plan

exhibit a variety of colour and decorative characteristics to create an attractive space for resident enjoyment.

The southeast corner of the rooftop is designed to be an open play area, with lounge seating and an artificial turf area. This area also includes thoughtful place of fiberglass planters to create an attractive space for resident enjoyment.

The southwest corner of the rooftop is designed to be an open tanning area. Tanning furniture and planters will be provided in this space.

The proposed landscape and rooftop amenity plan are designed to provide a cohesive aesthetic character for the proposed development that produces a high-quality urban design. Through these plans, the proposed development achieves the following:

- Provides extensive native plant materials, avoiding invasive plan species.
- Incorporates ecologically relative plantings suitable for the site characteristics.
- Utilizes natural construction materials in the form for a wood tightboard privacy fence along the eastern property line.
- Implements landscape plantings which exhibit a variety of colour and decorative characteristics.

- Provides plantings and street furnishings along the building frontages to soften the building elevations and activate the streetscape.

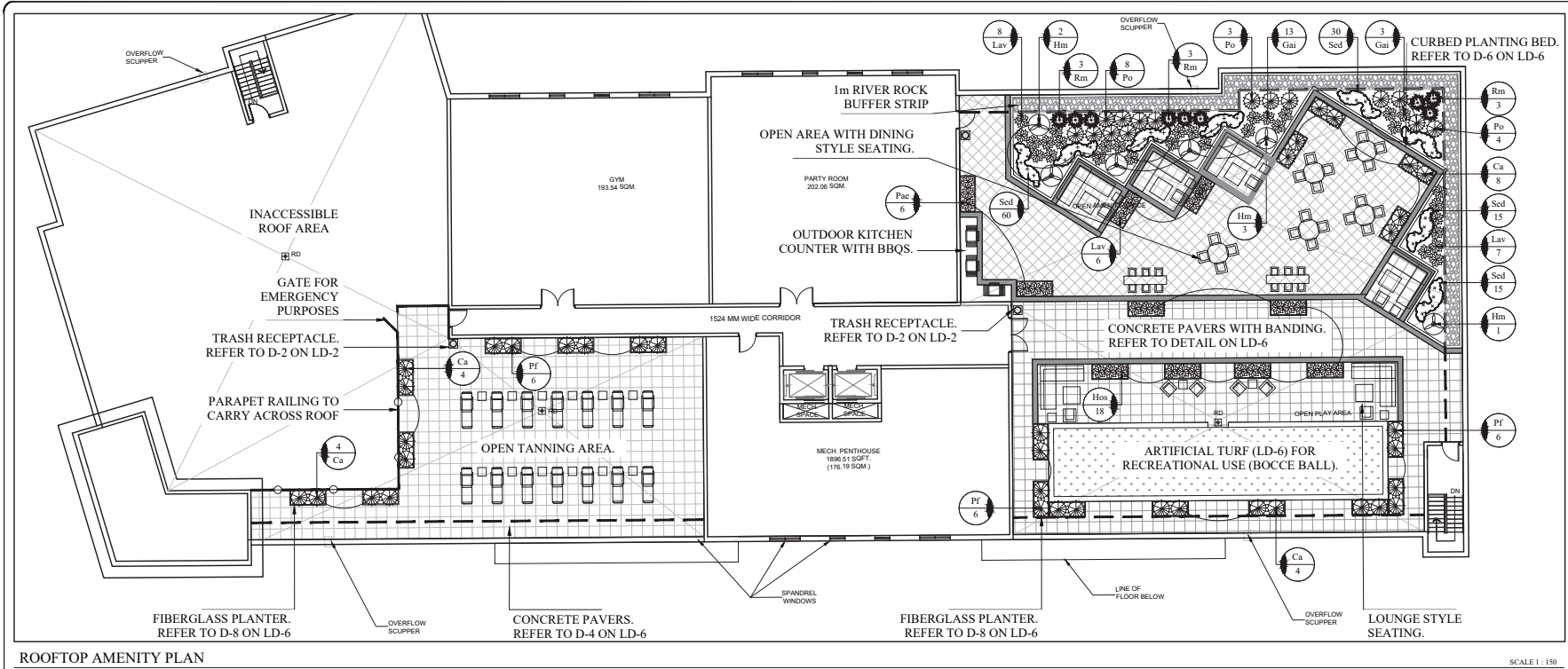


Figure 11. Rooftop Amenity Plan

URBAN DESIGN POLICY

4

4.1 City of Barrie Official Plan

The City of Barrie Official Plan establishes a long range planning blueprint for land uses and resource management within the municipality. It establishes a set of goals, objectives and policies for proposed developments and provides guidance for consideration of land use changes, the provision of public works, actions of local boards, municipal initiatives, and the actions of private enterprise. In implementing the goals and policies of this Plan, the City will strive for “sustainable development,” defined as development that does not jeopardize opportunities for future generations.

The Official Plan envisions new residential development as providing a growing percentage of multiple family development at medium and high densities in order to provide a complete range of housing options for the City’s residents. Intensification is to represent an essential component of the City’s Growth Management Strategy to minimize infrastructure requirements and to utilize existing services including transit and open space.

The Official Plan designates the subject land as:

- ‘General Commercial’ - Schedule A - Land Use
- Dunlop Street West is considered an Arterial Street on Schedule D - Road Plan
- Miller Drive is considered a Minor Collector on Schedule D - Road Plan
- Dunlop Street West is considered a Secondary Intensification Corridor on Schedule I - Intensification Areas
- The Dunlop Street West-Tiffin Street Intersection is considered a Secondary Intensification Node on Schedule I - Intensification Areas

The Official Plan includes policy provisions related to Urban Design, in Section 6.5, and Tall Buildings, Section 6.6. The policies are to be applied, where applicable, to development proposals throughout the City. The relevant policies are outlined below and are reviewed in reference to the proposed development concept.

4.1.1 General Design Guidelines

The City of Barrie has developed Urban Design Guidelines, which are found in Section 6.5 of the Official Plan. The Urban Design Guidelines identify goals which are “to provide, through urban design policies and guidelines, a framework for the development and maintenance of a healthy, safe, convenient, efficient and aesthetically pleasing urban environment”. The policies are intended to improve the appeal of developments throughout the City through provisions and features such as boulevard landscaping, street furniture, lighting, signage, sidewalks and park/plaza development.

The following policies are relevant to the development applications.

6.5.2.2 a) BUILDING AND SITING

- i) Buildings should be designed to complement and contribute to a desirable community character in terms of massing and conceptual design.

Comment: The buildings provide a high density design complementary of the goals and vision of the Official Plan for Intensification Nodes an Corridors. The proposed building has been sited and massed towards the intersection, providing building facades adjacent to the street in support of an activated street edge. Attention is paid to the architectural detailing of the building at this corner to create a visual landmark at the intersection as one enters the City of Barrie



through Dunlop Street West.

- ii. The design of a building’s roof should screen mechanical equipment from public view and contribute to an attractive streetscape.

Comment: Mechanical equipment will be screened where required and an attractive streetscape is maintained.

- iii. Large exposed blank walls should be avoided. All visible sides of a building should be finished and treated similarly to the front. Where exposed walls exist, screening through landscaping should be encouraged.

Comment: Large exposed blank walls have been avoided, with architectural detailing used to offer variety in visual interest, such as the use of materials, windows, and balconies. All sides of the

building have been finished and treated to match the front facade. Landscaping has been incorporated into the design of the building to allow for a cohesive design.

- v. Building entrances should be well-defined and accessible to pedestrians and the handicapped persons with disabilities.

Comment: The commercial unit entrances are well-defined with signage and variations in facade materials. Various residential building entrances are provided for resident convenience, including a resident entrance off Dunlop Street West. All entrances, both residential and commercial, have been designed to provide accessibility for all pedestrians and residents of all disabilities.

(b) PARKING AREAS

- i) Linking parking areas, driveways and access points should be encouraged to reduce the number of turns onto and off the major road. These mutual entrances will be encouraged and clearly identified.

Comment: Parking areas, driveways, and access points are linked to reduce the number of turns onto and off major roads. Access to the at-grade covered parking has been located internally to the site. Two vehicular access points are provided to the site: one full movement access off Miller Drive and a second right-in-right-out access off Dunlop Street West.

- ii) Adequate disability parking spaces will be provided where required.

Comment: The proposed development will provide accessible parking spaces in accordance with City Standards.

- iii) Properties of depths greater than 60 metres (200 feet)

should have smaller parking areas, divided by landscaped islands and strips. The visual impact of these parking lots should be softened through berming and planting.

Comment: The subject lands are deeper than 60 metres and the surface parking areas have been reduced by providing at-grade covered parking for residents, minimizing the visual impact. Surface parking has been broken up into small parking areas along the rear and interior side yards of the site, to soften the visual impact from the street.

- iv) Major parking, loading and delivery areas, as well as garbage enclosures should be confined to the rear of the buildings.

Comment: Parking and loading areas are confined to the rear and interior side yard of the building, out of view from the Dunlop Street-Miller Drive intersection. Garbage holding rooms are provided within the building, with waste to be hauled off-site through private waste collection.

(c) LANDSCAPING

- i) Minimum planting strips in accordance with the Urban Design Manual shall be provided along the street frontage and should contain planting materials and street furniture (lighting, seating and bus shelters) consistent with any themes established by the municipality.

Comment: The landscape strategy has been designed with consideration for the design policies for development within Intensification Nodes and Corridors, which encourage buildings sited to frame abutting streets to support human-scaled development. Plantings and street furniture are provided along Miller Drive and Dunlop Street West.

- iv) Landscaping should seek to utilize native vegetation, and water conservation practices wherever feasible.

Comment: A detailed landscaping plan is provided with this submission in accordance with this guideline.

(d) ENVIRONMENTAL FEATURES

- ii) All contiguous woodlands greater than 0.2 hectares are protected by the City’s Tree Preservation By-law, irrespective of ownership, maturity, composition and density. The City will control development adjacent to woodlands to prevent destruction of trees.

Comment: A Tree Preservation Inventory and Preservation Plan, prepared by JDB Associates Ltd., was prepared in support of this development.

- iv) Wherever possible the protection of treed areas, hedgerows and other natural areas shall be incorporated into the design, and the planting of new trees shall be encouraged.

Comment: In addition to the Tree Inventory and Preservation Plan, a Landscape Plan was prepared by JDB Associates Ltd.. The Landscape Plan demonstrates how the landscape design has been leveraged to provide additional buffering to and protection of the existing natural heritage areas (woodland and wetland) to the north. This includes plantings of both deciduous and evergreen trees, in combination with chain link fencing. The chain link fence denotes the limits of the wetland setback. These landscape features work to ensure that the natural heritage features to the north remain undisturbed.

- v) Development adjacent to an Environmental Protection Area should be designed to incorporate the Area’s natural features and provide for their long-term protection, subject to the results

of an EIS that may be required. Environmentally significant features such as those listed in Section 4.7.2.1(a) and mature vegetation should be incorporated as integral components to proposed development.

Comment: An EIS, prepared by Roots Environmental, has been submitted in support of these applications. The Landscape Plans and EIS will work in conjunction to provide for the long-term protection of the on-site environmental protection area.

(e) SIGNAGE

i) Signs shall complement the architectural design and materials of the buildings and be satisfactorily located on site in accordance with the Sign By-law.

Comment: A Signage and Pavement Marking Plan was prepared by WMI & Associates Ltd. and submitted as part of the application.

(f) UTILITIES

i) Consideration shall be given to the location of utilities within the public rights-of-way as well as on private property within appropriate easements. Utilities shall be clustered or grouped where possible to minimize visual impact. The City encourages utility providers to consider innovative methods of containing utility services on or within streetscape features such as gateways, lamp posts, and transit shelters.

Comment: A Site Servicing Drawing, prepared by WMI & Associates Ltd., and an Exterior Lighting and Photometric Plan, prepared by Hubbert EME Engineering, have been submitted as part of these applications. The aforementioned plans outline the location of utilities within public rights-of-way as well as on private property.

(g) ENERGY EFFICIENT URBAN DESIGN

i) Energy efficiency shall be encouraged through community, site, and building design measures that use energy efficient building materials, energy conserving landscaping, building orientation that uses shade and sunlight to advantage, panels for solar energy, appropriate lighting, “green” roofs, and other methods.

Comment: Specific energy conservation and sustainable design techniques provided in the design include appropriate lighting, rooftop plantings, and the use of modern systems and materials to support energy efficiency and resource sustainability.

iv) Energy efficiency is promoted through the development of a compact urban form that encourages the use of transit, cycling, and walking, a mix of housing and employment uses to shorten commuting trips, and focusing major developments on transit routes.

Comment: The proposed development creates a compact built form that encourages the use of active transportation, with densities that can support future expansions to transit infrastructure. The proposal provides a mix of housing and commercial/retail uses to provide opportunities to shorten and/or reduce number of trips. To further encourage active transportation, the Traffic Impact Study submitted in support of these applications encourages the City to consider accelerating the sidewalk installation on the east side of Miller Drive between Dunlop Street West and the existing end of sidewalk adjacent to the hydro corridor.

4.1.2 Tall Buildings And Height Control

Section 6.6 of the Official Plan provides policies for buildings above 3-storeys. The following policies are relevant to the development applications.

6.6.3 GENERAL POLICIES

(a) Innovative architectural design will be encouraged to reduce the visual and physical impact of height on the adjacent pedestrian realm, including design features such as tower and podium configurations or other design measures.

Comment: The proposed mid-rise built form supports a human-scaled streetscape. At-grade commercial uses are provided along both street frontages to provide an interactive pedestrian realm with the facade of the building.

(d) Where possible, parking areas, site servicing, loading areas, and building utilities should be located towards the rear of buildings with appropriate screening. The use of underground parking is strongly encouraged in place of above-ground structured or surface parking. Where aboveground structured parking is proposed, at least 60 percent of the property frontage, and flankage in the case of corner lots, will consist of residential or commercial uses.

Comment: The proposed development includes a combination of at-grade covered parking and surface parking for residents. Surface parking and loading areas are located internally to the site and screened from view. Majority of the flankage of this corner lot consists of commercial uses.

(e) Tall buildings directly contribute to the look and feel of the City’s architectural styles. Accordingly, tall buildings will be held to a high standard of design excellence by using quality urban design, architectural treatments, and building materials in order to promote a visually interesting skyline.

Comment: The proposed buildings will provide an architecturally significant addition to the City of Barrie, particularly in offering a visual landmark as one enters the west end of the City through

Dunlop Street West. The building has been designed to provide visual interest at the intersection, through the combination of different facade materials, balcony placement, and corner treatments.

6.6.4 POLICIES

(a) BUILDING SHADOWING

i) Tall buildings will be designed to best mitigate the impact of shadows on public parks and open spaces, private amenity areas, and surrounding streets, throughout the day. Development applications located adjacent to the open space waterfront areas surrounding Kempenfelt Bay shall be designed to minimize the impacts of shadowing particularly between March 21 and September 21.

ii) Buildings will make use of setbacks, stepping provisions, and other such design measures in order to reduce shadow impacts. Towers will be positioned on sites to reduce the extension of shadows onto surrounding areas. Appropriate spacing will be provided to allow for adequate sunlight and views of the sky between adjacent building towers.

Comment: A shadow analysis has been prepared by nArchitecture Inc. and submitted with this application. The study indicates that adequate sunlight and skyviews are being provided at full build out. Minimal impact is seen on surrounding uses.

(c) MICROCLIMATIC IMPACTS

i) Tall buildings will be designed to minimize adverse microclimatic impacts in order to foster a comfortable pedestrian realm at the street level. Microclimatic impacts may include the effects of wind channeling, the urban heat island effect, adverse shadowing, and the interruption of sunlight.

ii) Where appropriate, tall buildings will incorporate features that provide weather protection for pedestrians, such as podium bases, canopies, awnings, facade interruptions, arcades, landscaping, or other creative solutions.

Comment: A Pedestrian Level Wind Study was completed by Gradient Wind Engineering Inc. in support of the development application. Please refer to the report for full details regarding impacts.

(d) STREET LEVEL ACTIVITY

i) The policies for 6.6.4 (d) are intended for tall buildings located within the Urban Growth Centre and other intensification areas. However, they may be applied to tall buildings outside of these areas when in accordance with good planning and urban design principles.

ii) New development will foster a pedestrian friendly public realm by featuring a street wall of continuous built form frontage adjacent to any principal streets. This street wall will include active at-grade uses, with building facades incorporating transparent windows, doors, glazing, and other such architectural treatments.

iii) The primary building facades should be positioned and oriented along the property line in order to achieve a uniform street edge. Corner lot buildings should be designed to reinforce multiple streetfacing frontages. Main entrances should be directly accessible from public sidewalks. Exceptions to this rule may be considered where greater setbacks are applied to improve the streetscape by incorporating outdoor patios, extended sidewalks, or other creative publicly accessible uses.

iv) Tall buildings will incorporate building articulations, massing and materials that respect a pedestrian scale and

create interest. Features that separate buildings from the street or inhibit pedestrian activity, such as fencing or long stretches of blank walls, will be actively discouraged.

Comment: The proposal supports street level activity as it provides at-grade commercial along both Dunlop Street West and Miller Drive, reinforcing multiple streetfacing frontages at this intersection. The uses at-grade incorporate transparent windows and doors to allow for an interactive streetscape. The primary building facades and main commercial entrances are oriented along the property line. The building massing and materials respect the pedestrian scale through building articulation, alternating inset commercial frontages, and transparent at-grade commercial.

(e) LOCAL AREA COMPATIBILITY

i) Where taller buildings are located next to lower scale buildings, design elements which make use of height transitions between sites shall be encouraged. Towers should be located on site away from areas directly adjacent to lower scale buildings. Compatibility between sites is not intended to be interpreted as restricting new development to exactly the same height and densities of surrounding areas, particularly in areas of transition such as the intensification corridors.

Comment: As the subject lands are located along a Secondary Intensification Corridor and within a Secondary Intensification Node, it is expected that new heights and densities will be provided through new development, with appropriate height transitions between sites. Given the minimal shadowing impacts and provided separation to adjacent uses, it is anticipated that the proposal provides appropriate transition to surrounding sites.

6.6.6 TALL BUILDING APPLICATION SUBMISSION REQUIREMENTS

(a) The City may require the following to accompany any Zoning By-law Amendment or Site Plan applications for tall buildings: (Mod G (w))

i) A BLOCK PLAN defined as the block on which the proposed development is to be built. The Block Plan shall have regard for: servicing, grading and drainage; land use; building form and massing (including shadow, and noise analysis and may have regard for wind analysis); traffic circulation; parking/loading; ingress/egress; through-block pedestrian connections at grade and above grade; public spaces with facilities; visual enhancement of existing views, and street and internal landscaping (including lighting, planting, furniture and surface treatments).

ii) A CONTEXT PLAN defined as including all adjacent blocks to the site such that the plan can have sufficient regard to traffic circulation, pedestrian connections, open space linkages, view corridors, shadow/wind/noise impacts, and land use compatibility.

iii) A SHADOW IMPACT STUDY demonstrating the effect of building shadowing on adjacent public properties. Particular attention will be given to the effect of shadowing between March 21 and September 21.

Comment: The above noted reports have all been prepared and have been submitted with this application.

4.2 City of Barrie Urban Design Manual

The City of Barrie’s Urban Design Manual (UDM) was revised in 2014 and provides direction for design elements within urban developments. The UDM has been established to implement the existing urban design policies contained within the OP to provide a framework for establishing Barrie’s future urban form, and to ensure that new development is consistent with the City’s vision for urban design. The proposed concept incorporates many of the design directives found within this document. Particular emphasis is put on those directives related to; the physical environment and building siting; pedestrian and vehicular circulation; site servicing; architectural design; and public transit accessibility.

The Urban Design Manual Guidelines Checklist has been included as Appendix 1 of this report.

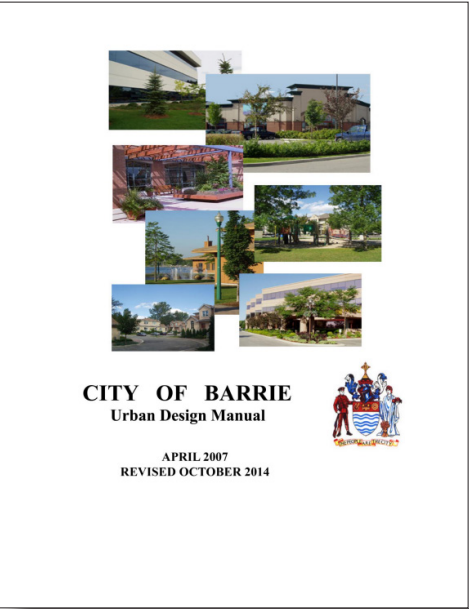
PHYSICAL ENVIRONMENT AND BUILDING SITING

The proposed structure and associated density is considered appropriate for the subject lands as they have been planned for in a manner that is sensitive to the surrounding uses and are located in an identified intensification area within the City.

The proposed building contributes to a human-scaled design which incorporates landscaped features and visual interest from the street. Commercial uses are provided at-grade to encourage pedestrian activity and interaction between internal spaces and the public realm.

The site is located with convenient access to various uses along Dunlop Street West and within downtown Barrie, including commercial, retail, restaurants, open and amenity spaces.

The built form of the proposed development is considered appropriate for the subject lands, given that they are located within



the Secondary Intensification Corridor and Node, where such density is possible and encouraged.

SITE CIRCULATION

Pedestrian access has been incorporated into the design in order to provide safe and convenient access to and from all residential and commercial entrances.

The private condominium road provides two entry and exit points. Access to the at-grade covered parking is provided through the private condominium road. An adequate number of parking has been provided on site, as supported through the Parking Justification Study submitted in support of these applications. An adequate amount of barrier free parking spaces are provided. These parking spaces are located close to accessible barrier free entrances. All required safety features will be provided in the covered parking with stairwells and elevators located in high visible areas.

SITE SERVICES

Site circulation routes for service vehicles are designed to direct transit in a logical and orderly fashion. Vehicular areas have been designed to limit the possibility of cars reversing/maneuvering on public streets. All required vehicle movements will be conducted within the internal private road.

Loading areas have been located internally to the site. Loading spaces located outside are adequately screened from the street. All utilities are located underground or in the interior where feasible.

ARCHITECTURAL DESIGN

he building has been brought forward and sited towards the intersection of Dunlop Street West and Miller Drive. Bringing the building forward towards the intersection creates an activated street edge in relation to the at-grade commercial uses. The at-grade commercial are oriented towards the street with large windows providing active storefronts and breaking up the building mass. The main entrances for the commercial uses are prominent from the street, are provided direct pedestrian access, and are clearly identifiable. Multiple residential entrances are provided, include a residential entrance off Dunlop Street West

The proposed buildings use a high degree of architectural quality. Prominent design elements include corner detailing and articulation, the mix and use of materials, and window and balcony treatments. The change in materials creates visual architectural interest while also maintaining a consistent design.

Balconies and terraces have been designed to provide usable amenity and personal space. At-grade covered parking is provided to reduce surface parking areas. Barrier free accessibility standards have been adhered to. Mechanical equipment will be hidden from municipal rights-of-way.

Further details regarding the architectural plans can be found in Section 3 of this report.

TRANSIT

Transit is available to the site along Sproule Drive to the north (approximately 12 minute walking distance). Through the density provided, the proposal will support opportunities for future transit expansions to the area. Notwithstanding, the Traffic Impact Study submitted in support of these applications does recommend that the City consider adjusting existing transit routes to provide transit service adjacent to the site.

LANDSCAPE DESIGN

The proposed landscape design preserves the existing natural features. As mentioned in Section 3 of this Urban Design Report, the landscape plan has been designed to offer additional buffer and protection between the lands to be developed and the environmentally protected area. A rooftop amenity space is provided for private resident use with opportunities to accommodate a variety of activities. The overall design intent is to create a connected landscaped design that complements the building design, is accessible, and serves the residents, patrons, and visitors of the site.

Further details regarding the landscape plans can be found in section 3 of this report.

4.3 City of Barrie Intensification Area Urban Design Guidelines

The Intensification Area Urban Design Guidelines direct new development within the Intensification Nodes and Corridors, Urban Growth Centre, and Major Transit Station Areas identified in the City of Barrie Official Plan. The Guidelines present a vision and a set of priority directions, to ensure that new development is; compatible with the existing built fabric, creates an attractive and safe pedestrian realm, supports alternative modes of transportation (i.e. walking, cycling and transit), and is environmentally sustainable.

As the subject lands are located within the Dunlop Street West Secondary Intensification Corridor and within a Secondary Intensification Node, the urban design guidelines apply to the subject lands. The guidelines identify the intensification typology as a mixed-use and residential avenue. Key opportunities for mixed-use and residential avenues include redevelopment of underutilized parcels for street-oriented mixed-use development in low to mid-rise buildings. Redevelopment in these scenarios are outlined as opportunities to redefine the existing street and boulevard. This is to be achieved by providing human-scaled mixed-use buildings that line the street, providing “eyes on the street”, as well as accommodating landscaping, seating, signage and at-grade retail uses.

The proposed development is reflective of the mixed-use residential avenue. The proposal offers the redevelopment of underutilized lands for a mid-rise, mixed use building that lines the street in support of a human-scaled streetscape. Landscaping, seating, signage, and at-grade retail uses are also provided and detailed through the reports and drawings submitted in support of these applications.

Section 2.5.1 describes the priority directions that will guide all new development within the mixed-use and residential avenues. These include:

- Establish building height transitions where taller buildings frame primary street intersections and transition to mid and low-rise heights adjacent to stable residential areas.
- Recognize the long-term evolution/change of these mixed-use corridors, through short-term design that supports longer term development opportunities.
- Focus initial development at the street edge and at key Intensification Nodes
- The design of the street right-of-way should balance the requirements for vehicles, transit, and cycling while providing pedestrian amenities on the boulevards.
- Consider long-term options to subdivide large/deep land parcels into smaller blocks. These blocks may initially be drive aisles within surface parking areas
- When surface parking lots are developed for new buildings or public open space, plan for the relocation of parking in structured facilities, including parking decks and below grade.

3.0 Public Realm Urban Design Guidelines

Section 3.2 provides direction on streets and streetscapes. It states that streets within the intensification areas should be pedestrian-supportive, and are encouraged to include landscaping, wide boulevards, and opportunities for active uses at-grade. Opportunities

to support pedestrian comfort such as street furniture for pedestrian use, lighting for pedestrian safety, and signage for wayfinding are encouraged.

The proposed development incorporates at-grade commercial uses to support an activated pedestrian realm. To support pedestrian use and comfort, the proposal provides landscaping (including plantings and street furniture), lighting, and signage. The proposal supports an overall improved public realm design.

4.0 Private Realm Urban Design Guidelines

Section 4.0 provides policy direction for the private realm, including community structure, transit supportive design, parking considerations, building orientation, and site layout. The proposed development is transit supportive, providing densities that can support future expansions to transit infrastructure. Access to the local transit route is provided within approximately 12 minute walking distance from the site. Surface parking is provided within the interior and rear yards, out of view from the intersection. To minimize the visual impact of surface parking, parking is broken up into smaller areas separated by planting and landscaping. The proposed development also implements at-grade covered parking which is sited towards the rear of the building so as not to obstruct or interrupt the primary building facade.

Section 4.3 speaks to General Building Guidelines, including building orientation, site layout, and building height. The proposed development is situated to frame the intersection, providing an active public realm with at-grade commercial, contributing to a positive interactive streetscape. The height proposed is appropriate to support human-scaled development and minimizes adverse impact on adjacent properties. The proposal is a corner building at a key intersection, and appropriately provides architectural details that emphasizes the focal nature and visibility of this building.



5.0 Mixed-Use and Residential Avenue Guidelines

Section 5.1 sets out policies relating to the Mixed-use and Residential Avenue typology. The guidelines state that Dunlop Street and other such corridors should evolve into “major transportation corridors that balance functional requirements of the street with the provisions for an active, pedestrian-supportive streetscape”. Specifically, development should be oriented to the public realm, have a high degree of architectural quality, and make use of design features such as landscaping, special paving, unique light standards and public art. Emphasis is placed on creating streets that are attractive pedestrian supportive destinations.

As mentioned, the proposed development is mindful of the guidelines of the Mixed-use and Residential Avenue for the Dunlop Street Intensification Corridor area and related Intensification Node. It proposes a human-scaled structure with active at-grade frontages,

makes use of landscaping features, reduces the amount of surface parking, and provides transit-supportive densities.

For the reasons stated above, the proposed development satisfies the guidelines set forth in the Intensification Area Urban Design Guidelines.

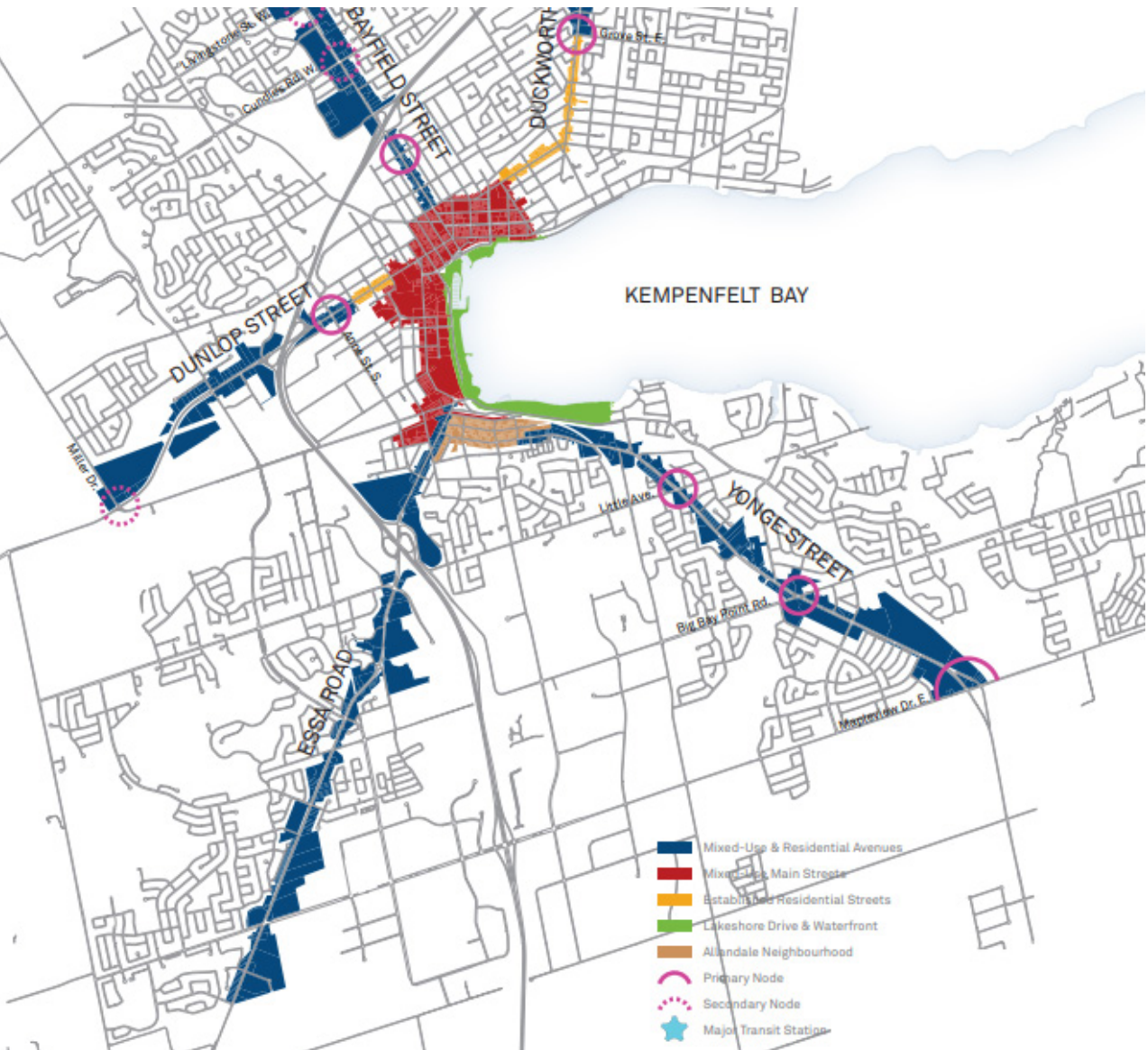


Figure 12. Intensification Typologies - Intensification Area Urban Design Guidelines

BLOCK/CONTEXT PLAN

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The following figures comprise of the Block/Context Plan for the proposed development.

Figures 13-15 offering 3D massing visuals to demonstrate the built form and massing of the proposed development in relation to the built form and massing of the existing and potential future surrounding uses. The 3D visuals also include the layout and design of the existing surrounding road network, as well as the proposed private condominium road and parking areas on-site.

Figures 16-18 offer images and plans to demonstrate traffic circulation, pedestrian connections, parking/loading on-site and on adjacent lands. Figure 18 provides aerial imagery of the natural heritage features north of the site.

The overall Block Plan has been developed to demonstrate the proposal in relation to the surrounding block and context. The intent of this plan is to show how the proposed development fits into the existing lot fabric, land uses, and other potential development sites. The plan also demonstrates why higher densities should be considered appropriate in this location given the context to abutting lands. A Shadow Impact Study and Microclimate Assessment (Pedestrian Level Wind Study) are discussed in Sections 6 & 7 of this Report to further support the appropriateness of the proposed development.



Figure 13. View Looking Northwest - 3D Massing of the Proposed Development and Surrounding Built Form



Figure 14. Birds-eye View - 3D Massing of the Proposed Development and Surrounding Built Form



Figure 15. View Looking Northeast - 3D Massing of the Proposed Development and Surrounding Built Form

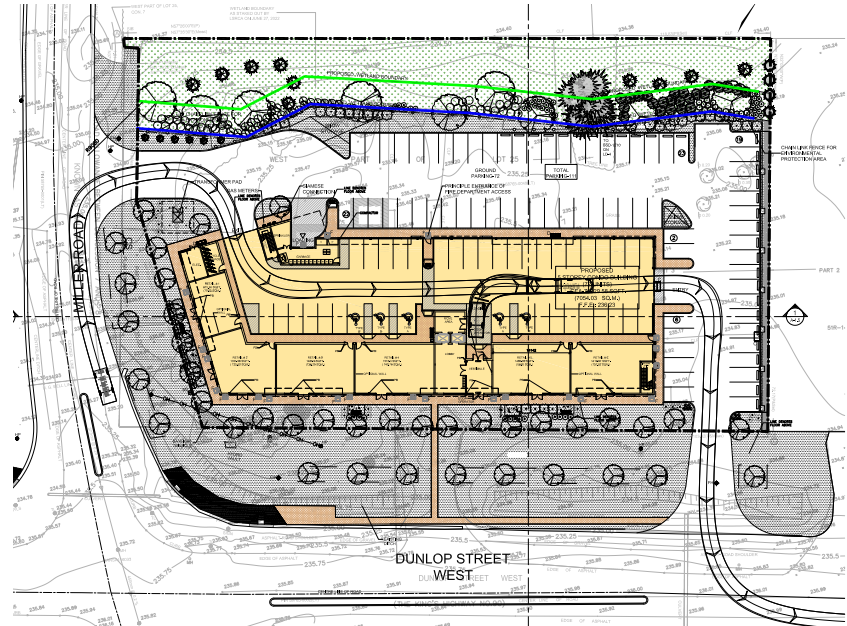


Figure 16. Loading Truck Turning Movement

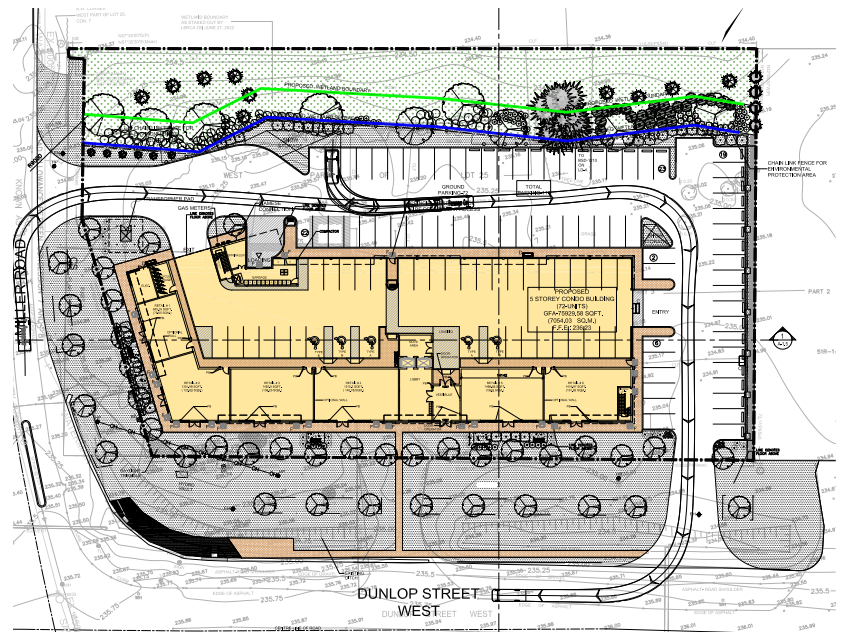


Figure 17. Car Turning Movement



Figure 18. Aerial View of Subject and Surrounding Lands with Superimposed Site Plan

SHADOW STUDY

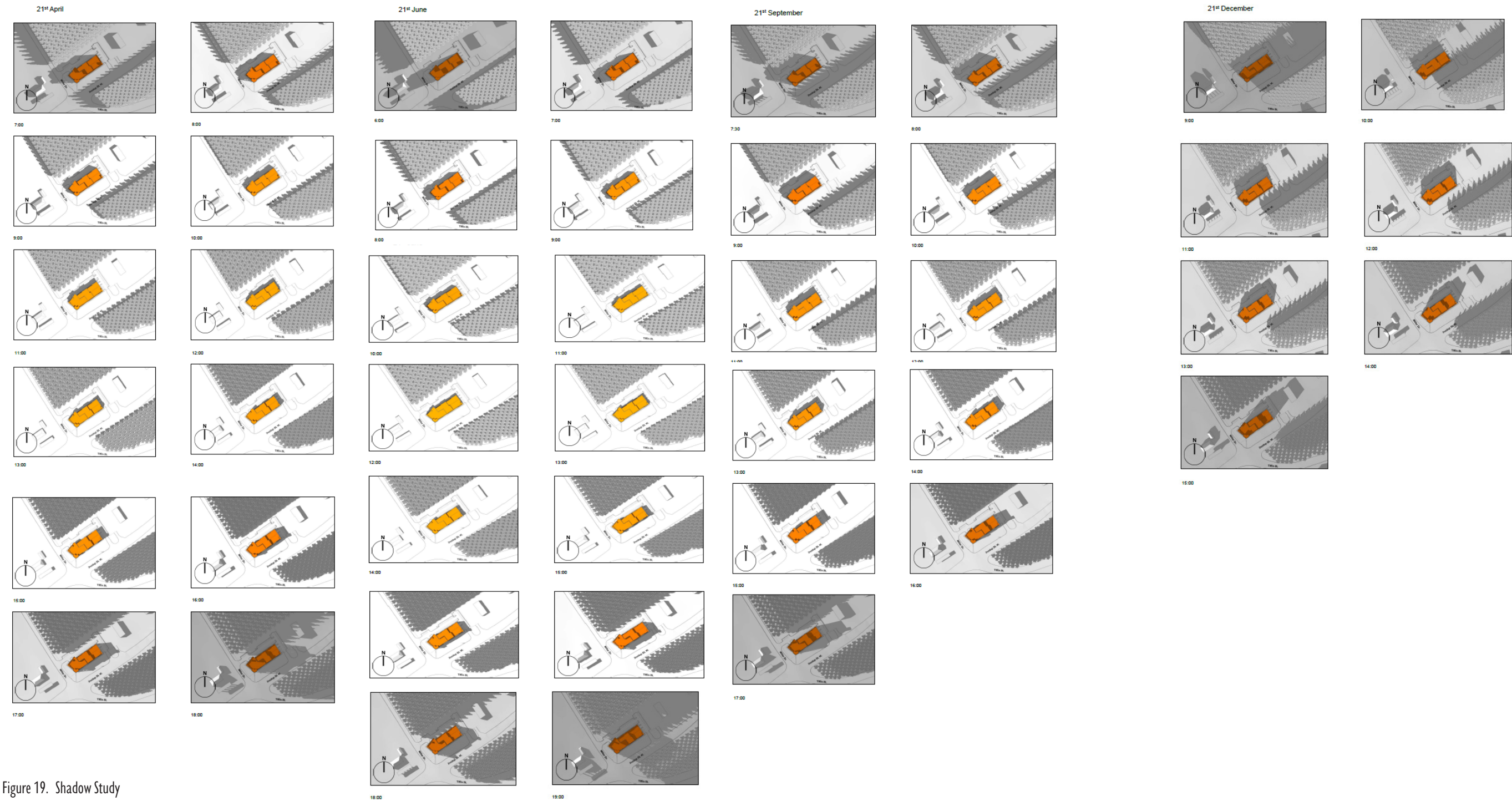
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A Shadow Study was completed by nArchitecture Inc. for the proposed development. This study demonstrates the shadows cast by the proposed development during several times throughout the year. The Study determines whether shadows generated will impact adjacent properties, streets and public spaces, and to what extent.

The Shadow Study concludes that shadow projecting from the proposed building:

- will only impact the commercial plaza west of the Site when it is still early in the morning and outside of regular business hours during Summer.
- will only impact the commercial building east of the Site for 1 hour during Winter.
- will only impact Miller Drive early in the morning for 1 to 2 hours from Spring to Autumn.
- will only impact the corner of the north woodland in the morning for 2 hours during Autumn and Winter.
- will only impact Dunlop Street West for 1 to 2 hours during Spring and Summer.

The Shadow Study is shown in Figure 19.



MICROCLIMATE



A Pedestrian Level Wind Study was completed by Gradient Wind Engineering Inc. for the proposed development. This study investigates pedestrian wind comfort and safety within and surrounding the subject site, and to identify areas where wind conditions may interfere with certain pedestrian activities so that mitigation measures may be considered, where required.

The Pedestrian Level Wind Study concludes the following:

- 1) All grade-level areas within and surrounding the subject site are predicted to receive conditions that are considered acceptable for the intended pedestrian uses throughout the year. Specifically, wind conditions over the surrounding sidewalks, surface parking lots, and building access points, are considered acceptable.
- 2) Calm and acceptable wind conditions are predicted over the east common amenity terrace serving the proposed development at Level 5.
- 3) Regarding the west common amenity terrace at Level 5, conditions are predicted to be mostly suitable for sitting with standing conditions central and to the north of the terrace during the typical use period. Within the areas that are predicted to be suitable for standing, conditions are also predicted to be suitable for sitting for at least 76% of the time during the same period. Depending on the programming of the space, the noted conditions may be considered acceptable. If necessary, sitting conditions may be extended over the full terrace by introducing a perimeter wind screen, typically glazed, and rising 1.8 m above the local walking surface.

4) The foregoing statements and conclusions apply to common weather systems, during which no dangerous wind conditions, as defined in Section 4.4, are expected anywhere over the subject site. During extreme weather events, (e.g., thunderstorms, tornadoes, and downbursts), pedestrian safety is the main concern. However, these events are generally short-lived and infrequent and there is often sufficient warning for pedestrians to take appropriate cover.

Images and figures from the Pedestrian Level Wind Study are shown in Figure 20.

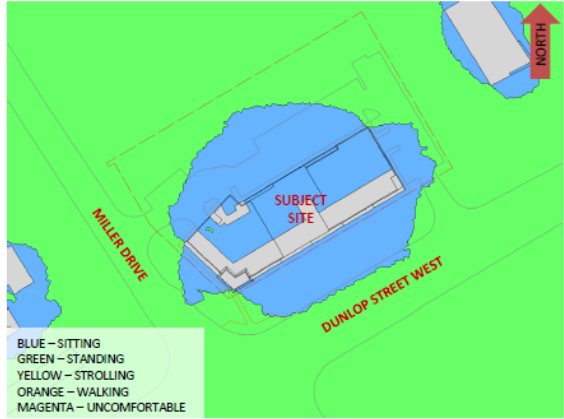


FIGURE 5A: AUTUMN – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING



FIGURE 5B: AUTUMN – WIND COMFORT, GRADE LEVEL– EXISTING MASSING

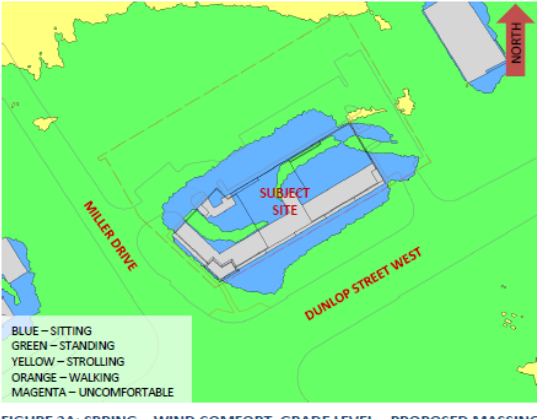


FIGURE 3A: SPRING – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING

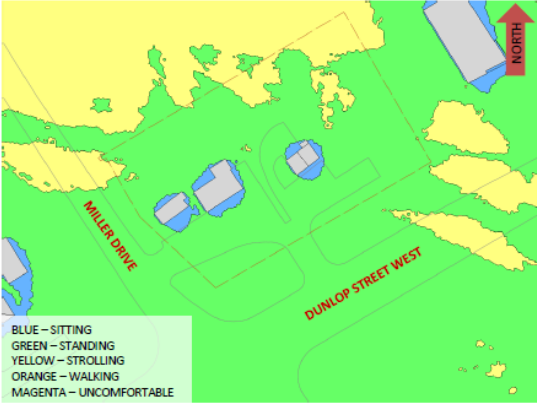


FIGURE 3B: SPRING – WIND COMFORT, GRADE LEVEL– EXISTING MASSING

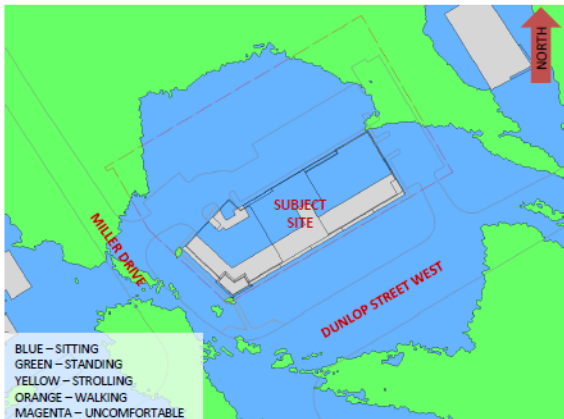


FIGURE 4A: SUMMER – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING



FIGURE 4B: SUMMER – WIND COMFORT, GRADE LEVEL– EXISTING MASSING

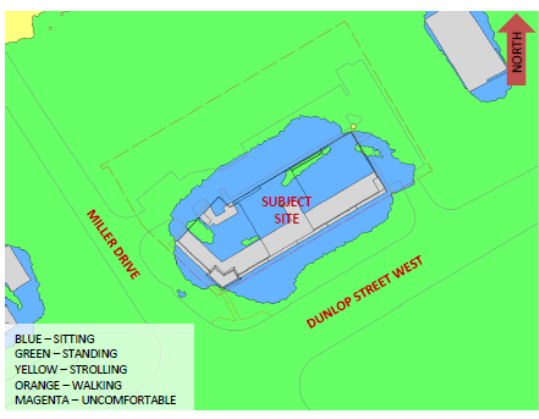


FIGURE 6A: WINTER – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING



FIGURE 6B: WINTER – WIND COMFORT, GRADE LEVEL– EXISTING MASSING



FIGURE 8A: TYPICAL USE PERIOD – WIND COMFORT, LEVEL 5 AMENITY TERRACES

Figure 20. Excerpts from the Pedestrian Level Wind Study

CONCLUSION

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The purpose of this report is to obtain approval for Site Plan and Minor Variance applications to facilitate the future development of a 5-storey mixed-use building with grade related commercial/retail uses along the Dunlop Steet West Secondary Intensification Corridor and within the Dunlop Street-Tiffin Street Secondary Intensification Node.

This Urban Design Report addresses the various guidelines and policies developed to guide urban design within the City of Barrie, relative to the proposed development. The City of Barrie Urban Design Guidelines have been reviewed against the proposed development to demonstrate consistency with the objectives of the City's design directives.

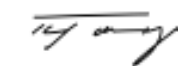
The site is considered appropriate for intensification and is in accordance with the established locational criteria. A strong urban streetscape and high quality site design creates a development that aligns with the vision of the Dunlop Street Secondary Intensification Corridor and Secondary Node.

It is our professional planning opinion that the proposed Site Plan and Minor Variance applications, and development in general, adequately satisfy the City's urban design guidelines and goals.

Respectfully submitted,
Innovative Planning Solutions



Darren Vella, MCIP, RPP
President & Director of Planning Planner



Karla Tamayo, M.Pl.
Intermediate Planner

An aerial photograph of a suburban area. In the upper left, there is a dense residential neighborhood with many houses. To the right of the houses is a large, lush green wooded area. In the lower left, there are several large industrial buildings with blue roofs. A multi-lane road runs horizontally across the middle of the image, intersecting with a road that runs vertically on the right. The text 'IPS INNOVATIVE PLANNING SOLUTIONS' is overlaid on the image, with 'IPS' in a black box and the rest in white text.

IPS

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