

CITY OF BRAMPTON
COMPREHENSIVE ZONING BY-LAW REVIEW

Technical Paper #1
Mixed Use & Intensification Areas

DRAFT | May 2018



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1 Introduction

1.1 Background

The City of Brampton is currently undertaking a review of its Comprehensive Zoning By-law No. 270-2004. A component of the review is the development of a number of Technical Papers to identify directions and address key issues. The Zoning and Analysis Report, prepared August 2017, identified 17 options for Technical Papers for review and consideration by the City.

This paper is Technical Paper #1 and will provide a review and discussion on Mixed Use and Intensification Areas.

1.2 Purpose of this Technical Paper

The purpose of this Technical Paper is to identify the policy framework from the Official Plan that articulates the City's directions for the various Mixed Use and Intensification Areas throughout the City and provide general approaches to zoning for development and buildings within these areas.

1.3 Overview of this Technical Paper

Technical Paper #1 provides a summary of the Official Plan policies that pertain to mixed use and intensification areas, as well as the identification of key zoning approaches, tools, and general development regulations for implementing the policies and vision for these strategic growth areas in a Zoning By-law.

2 Context

This section of the Technical Paper will provide an overview of the current in force Official Plan (September 2015 Office Consolidation) policies that direct and implement growth in and along intensification areas and corridors. Following the Official Plan discussion, a review of the existing zones within the Zoning By-law are analyzed for applicability for mixed use or intensification areas.

An Official Plan Review has been initiated by the City, and through this process the City may reconsider the extent and location of mixed use and intensification areas. However, given the timing, it is expected the new Zoning By-law will be prepared to implement the current Official Plan, and therefore consideration must be given to the current document. The Brampton Official Plan sets forth direction to guide growth in the City and establishes land use designations and associated policies to assist with decision-making. One of the key priorities for the City is sustainable community development and, the recently released - May 2018, City Vision (Living the Mosaic) that embodies several foundational statements and actions that direct Brampton towards this end. The vision includes a new 'Uptown', 'jobs within communities', 'complete living' and 'everything connected'. Planning for and accommodating intensification in strategic locations will ensure a compatible mix of uses that are compact, transit supportive and contribute to making the vision 'real'.

The Growth Plan for the Greater Golden Horseshoe (GGH), 2017 directs municipalities to develop and implement the new intensification targets through policies and strategies in Official Plans and supporting documents. The Zoning By-law will need to be cognizant of the new Provincial growth targets and policy directions.

2.1 City of Brampton Official Plan

In Section 3.2, the Official Plan states:

... "Brampton's City Structure is the fundamental basis for building a compact and transit-supportive city where growth will be concentrated within its Urban Growth Centre, along intensification corridors, around mobility hubs and major transit station areas. Development that maintains the City Structure is the focus of this Plan." And further, "To sustain the principles of the City Structure and ensure that stable residential neighbourhoods are maintained, it is essential that higher densities be directed to key areas which support higher order transit, and are appropriately situated to accommodate more intensity."

The Central Area and Urban Growth Centre are to include a mixture of land uses that achieve the most density and tallest buildings within the City. Section 3.2.3 Central Area and Urban Growth Centre, the Official Plan states: *... "A vibrant mixed use Urban Growth Centre will include planning to achieve a minimum gross density of 200 people and jobs combined per hectare, in a healthy balance that allows residents to live and work in close proximity." "Major intensification will...ensure a compatible mix of land uses within the Central Area and Urban Growth Centre."*

In addition to the Central Area and Urban Growth Centre, Intensification Corridors, Mobility Hubs and Major Transit Areas are elements of the City's key intensification areas. Also, the emerging vision identifies a new 'Uptown' and five 'Town Centres' where intensification of mixed-uses will be focused.

Section 3.2.6 Intensification Corridors states that they are to be...*"planned to accommodate significant growth through higher residential and employment densities supporting higher order transit service. Located mainly along major arterial roads, intensification corridors provide linkages across the City connecting mobility hubs, major transit station areas and the Central Area, including the Urban Growth Centre."*

In section 3.2, the Official Plan City Structure defines the key elements of Major Transit Station Areas and Mobility Hubs as:

- *Major Transit Station Areas, which are areas around existing or planned high order transit, providing a focus for intensification for employment, residential, civic, cultural and recreational uses.*
- *An intense concentration of employment, living and shopping around Mobility Hubs which are focused around the intersection of two or more regional rapid transit lines.*

Section 3.2.6 of the Official Plan also identifies two corridors—Primary Intensification Corridors and Secondary Intensification Corridors—where intensification is also anticipated. Primary Intensification Corridors generally:

- Are those Corridors which are primarily identified as higher order transit corridors linking major destinations within and beyond the City;
- Shall be planned to accommodate intense mixed-use development at higher densities supported by the City's highest level of transit service; and,
- Shall generally be designed to achieve a floor space index of 1.5 over the entire Intensification Corridor, within buildings 2-10 storeys in height.

Secondary Intensification Corridors generally:

- Are corridors that are supported by transit along Primary Intensification Corridors;
- Are planned to accommodate intense mixed-use development; and,
- Shall be designed to achieve a floor space index of 1.0 over the entire Intensification Corridor, within buildings 2-8 storeys in height.

In Section 4.11.3.4, it is the intent of the City that *"higher density, mixed use development shall be subject to a high standard of urban design to support their landmark image and functions as appropriate, promote transit oriented development, create a favourable pedestrian realm, and ensure compatibility of the various uses within and without the development. In addition to the policies for the single uses, special attention shall be given to contextual design and planning through a combination of careful site layout, built form, street and streetscape design as well as on-site amenities."*

Further, in Section 4.11.3.4.7, the *"nature of integrated uses, vertically or horizontally, shall require special attention to compatibility. Compatibility amongst various land uses is required as is the compatibility with the adjacent and surrounding neighbourhood. Considerations shall be made to use, scale, form and character to ensure smooth transition and promote synergy between various land uses."*

2.2 Comprehensive Zoning By-law No. 270-2004

A Zoning By-law shall conform and implement the Official Plan and reflect the current and anticipated needs of the City as it accommodates growth that responds to the

legislative requirements of the PPS and the Growth Plan. The City is moving towards a more compact and sustainable built environment that includes intensification areas and a mix of uses which needs to be reflected in the zoning by-law.

The current Comprehensive Zoning By-law No. 270-2004 includes a variety of Commercial zones that include permissions for a mix of uses. There exists a number of duplications among the intent of the various Commercial zones, as well as numerous site specific exceptions (Special Sections) within all of the Commercial zones to allow for increased permissions or restrictions.

As noted in the Zoning Issues and Analysis Report, dated August 2017, given the large number of site specific amendments, a separate technical paper may be required to consider opportunities to consolidate or reduce the number of exceptions. The following reviews the general permissions of the Commercial zones that permit a variety of mixed uses, and at this time, does not address all of the site specific exceptions.

The Commercial zones include:

Commercial One, Two, and Three – C1, C2, and C3 – The three commercial zones permit a range of commercial, retail, and mixed use developments. The requirements differ slightly between the three zones with an increase in the number of permitted uses, lot width and front yard depth, as well as a variance in building height increasing from 2 storeys in C1, to 6 storeys in C2, to no restriction in C3.

Service Commercial – SC zone includes a number of the same commercial uses found under the C1, C2, C3, DC, DC1, and CMU1 zones. It appears that almost every parcel zoned SC has site specific permissions that range in difference from number and type of permitted uses to building height, for example

along both sides of Queen Street. This zone is typically along the intensification corridors and located in nodes as identified on Figure 1 - Official Plan Schedule 1, such as mobility hubs and major transit station areas.

Office Commercial – OC zone specifically permits office and financial institutional uses, and through site specific exceptions, permits commercial uses similar to the SC zone, as well as uses such as research facilities, hotels, and conference centres. This zone is located along the primary intensification corridors, as identified on Figure 1 - Official Plan Schedule 1, as well as located at a major transit station area. The general requirements specify lot size and maximum building height. Site specific exceptions vary between permitted uses, lot size, setbacks, and building height.

Downtown Commercial - DC allows for a range of commercial uses in the Downtown, including those found in the CMU1 zone, as well as apartment dwellings with ground floor commercial, and a maximum building height of 11 storeys.

Downtown Commercial One – DC1 zone expands on the DC zone permitted uses, also allows ground floor commercial uses in an apartment dwelling, but the minimum and maximum building heights are specific to the boundaries of the Downtown and identified on Figure 2 - Schedule B-3 of the Zoning By-law.

Central Area Mixed Use – CMU permits a mix of commercial and institutional uses and is located north of the Downtown, along Main Street North, along a primary intensification corridor. A maximum Floor Space Index (FSI) of 2.0 is established for this zone and is the only Commercial zone with this requirement.

In addition to the above Commercial zones, the Zoning By-law includes a zone under Residential that provides for a mix of residential and non-residential uses.

Composite Residential Commercial – CRC which allows for a mix of residential and non-residential uses which are essentially a mix of the Service Commercial - SC and Residential Extended One - R2B(1) zones and is subject to the requirements under these zones. The CRC zone is located in the Mount Pleasant Village Mobility Hub and includes live-work units and multiple unit dwellings.

2.3 Development Permit System

The area north of the Downtown is identified as **Main Street North** and a land use control tool, the Development Permit System, has been applied to this area to allow for flexibility in the planning framework to permit specific urban design and streetscape objectives.

The Development Permit System (DPS) combines zoning, site plan, and minor variances into one approval to streamline the planning approval process and facilitate redevelopment. The overall intent of the DPS is to consolidate and simplify the development review process for this area of Brampton within five broad design guidelines for the area:

1. Retain the area's heritage character and image;
2. Support a range of mixed land uses;
3. Green the street and improve the quality of streetscape;
4. Support pedestrian and transit initiatives; and,
5. Establish the northern gateway to downtown Brampton.

The Main Street North Development Permit By-law applies along Main Street north between Church Street and Vodden Street, plus some lands on the east side of Isabella Street and

Thomas Street, and selected lots on Victoria Terrace, William Street, Bird Avenue, Ellen Street, and Alexander Street. The lands are designated as "Character Area" within the Downtown Precinct of the Central Area. There are two "intensification-oriented" districts within this By-law

1. **Central Area Mixed Use Three** – Development Permit System (CMU3-DPS) applies along the majority of the Main Street North Corridor, along with some side streets.
2. **Central Area Mixed Use Two** – Development Permit System (CMU2-DPS) applies to the current commercial plazas extending south from the intersection of Main Street North and Vodden Street.

The By-law provides for a range of traditional, intensification-oriented zoning regulations such as requiring setbacks above certain heights, built-to lines/front wall lengths, and angular planes for yards abutting low rise residential areas. The By-law also includes additional design-oriented regulations and emerging regulations, including first storey façade treatment regulations (i.e. minimum percentage of a wall treated with windows and doors), tower floorplate maximums, and tower separation distances.

2.4 Development Design Guidelines

The City of Brampton is undertaking an update of its Development Design Guidelines (DDG's) which provide design directions to guide future development in the City of Brampton. The DDG's currently provide for a minimum design standard for developers/builders to follow when preparing plans, documents, and technical papers in support of development applications. Its focus has been on greenfield development.

The updated DDG's will consolidate amendments and new chapters that have been added since 2003 and will be expanded to address a much broader range of development forms and contexts, including intensification and infill in established neighbourhoods. At the same time, the updated DDG's will elevate the minimum design standard for all development across the City, through updates to the relevant current design guidelines and addition of new performance standards. To further support the City's objectives and principles for higher densities and intensified uses, a new and integral chapter will be added for Mid-Rise and High-Rise development.

Whereas guidelines provide qualitative design directions, a Zoning by-law provides enforceable quantitative permissions that must be adhered to within the development application process. To ensure cohesion in the development application process, the review of the Zoning By-law and the update of the DDG's must complement one another and be consistent in standards and provisions.

An important part of this will be the review of the existing Development Design Process which currently focuses on Secondary and Block Plan stages of development. Discussions have suggested that a more fulsome tertiary plan process needs to be articulated together with clear expectations / requirements for supportive design documents.

To reflect the recommendations of the approved Mid-Rise Guidelines and early findings of the draft High-Rise guidelines, a number of the standards have been incorporated into this Technical Paper.

2.5 Benchmarking

A preliminary review of Zoning By-laws in other municipalities, such as Vaughan, London, Guelph, and Richmond Hill were undertaken to gain an understanding of how urban design can be integrated into a zoning by-law. The noted cities have incorporated various provisions for urban design elements for multi-unit and high-rise developments, which are highlighted on the following page.

The City should incorporate similar provisions in its Zoning By-law to reinforce best practices in the urban form and design within mixed-use and intensification areas. This has occurred in some areas of the City, such as the Hurontario Corridor, and the Downtown area, where detailed zones have been developed to implement more detailed guiding policy and design objectives.

Table 1 – Review of Mixed Use Zone Requirements in Other Municipalities

PROVISIONS	VAUGHAN Commercial Zones	LONDON Downtown Area Zone	GUELPH Downtown Zoning By-law	RICHMOND HILL Yonge and Bernard Key Development Area Secondary Plan Zoning By-law
Landscaped area		Minimum 0-5% of the lot area		Minimum of 20% of the lot area
Buffer Strips	2.0-6.0 metres		0-3 metres	Minimum of 45% of front yard for townhouses/quadruplexes 3.0 metres
Outdoor patio	Permitted accessory use for eating establishment			Permitted accessory use for eating establishment. More detailed provisions are provided.
Residential setback vs retail/commercial setback		The required setback for the residential portion of buildings shall be 1.2 metres per 3 metres of main building height or a fraction thereof above 15 metres.	3-7.5 metres if abutting on residential, institutional, park, or wetland zones	
Building Form Typology		Buildings may take the form of shopping centres, mixed use buildings or stand alone structures.		
Lot Coverage		95-100%		Varying based on zoning
Stepback			The minimum Stepback shall be 3 metres and shall be required for all portions of the Building above the 4th Storey. Stepbacks shall be measured from the Building face of the 3rd Storey facing a Street. Other provisions are provided for specific streets.	For a high rise or mid rise building, the building main wall shall be step back a minimum of 3.0 metres above the street wall.
Towers' Floorplates			The maximum Floorplate of the 7th and 8th Storeys of the Building shall not exceed 1,200 square metres. The maximum Floorplate of each Storey of the Building above the 8th Storey shall not exceed 1,000 square metres and shall not exceed a length to width ratio of 1.5:1. Other provisions are provided for specific zones.	The maximum gross floor area of each storey in a tower shall be 750 square metres
Building Tower Separation			A minimum 25 metre tower separation is required for any tower portion of a Building greater than 12 Storeys as measured perpendicularly to the exterior wall of the tower portion of the Building. For any tower portion of a Building 12 Storeys or less: A minimum tower Setback of 6 metres is required from the Side Yard and/or Rear Yard Lot Line; A minimum 12 metre tower separation is required. (...) the tower Setback may be reduced to a minimum of 3 metres from the Side Yard and/or Rear Yard Lot Line if there are no windows to a Habitable Room on the facing wall of an existing abutting Building."	(...) a tower shall have a minimum separation distance of 25.0 metres from another tower. Where a main wall of the building has windows and a line projected at a right angle from a main wall intercepts another main wall of a building or the same building with windows on the same lot, the minimum required above grade distance between the main walls shall be 15.0 metres. Where a main wall of the building has windows abuts another main wall of a building or the same building on the same lot which does not have windows and a line projected at a right angle from a main wall intercepts the other main wall of a building or the same building, the required minimum above-grade distance between the main walls is 7.5 metres.
Angular Plane			Building Heights shall not exceed an Angular Plane of 45 degrees in accordance with the following	Imaginary flat surface projecting over a lot in KDA Zone 1 or 2, at an inclined angle measure of 45 degrees from: a) grade in accordance with Schedule C; or, b) 10 metres above grade in accordance with Schedule C.
Active Frontage Regulations			Where a Street Line, or portion thereof, identified as Active Frontage Area exceeds 35 metres, the maximum Front Yard and/or Exterior Side Yard Setback shall be 0 metres for a minimum of 75% of the Street Line. The remaining 25% of the Street Line shall have a maximum Front Yard and/or Exterior Side Yard Setback of 2 metres. Where a Street Line, or portion thereof, identified as Active Frontage Area is less than or equal to 35 metres, the maximum Front Yard and/or Exterior Side Yard Setback shall be 0 metres. Further provisions are provided.	The required minimum height of the first storey of a building abutting any Active At Grade Frontage, measured between the floor of the first storey and the ceiling of the first storey, shall be a minimum of 4.5 metres. Specific provisions pertaining to street wall are provided.
Exterior Finishes Regulations			All visible walls of any Building within a specific area shall be constructed of the transparent glass and coursed masonry and/or such materials which replicate coursed masonry as specified in other sections of the bylaw. Other provisions pertaining to window treatment are provided.	
Floor Space Index		Varying based on zoning	Varying based on zoning	For the purposes of calculating Floor Space Index, the lot area shall be deemed to be the total lot area prior to any conveyance of land to a public authority.
Fences			Varying based on zoning	
Bicycle Parking Spaces		Varying based on use	Varying based on use	Varying based on use
Projections				Provisions pertaining to the permitted projection of specific structures over a maximum height or minimum required yards are provided

Figure 1 – City of Brampton Official Plan Schedule 1

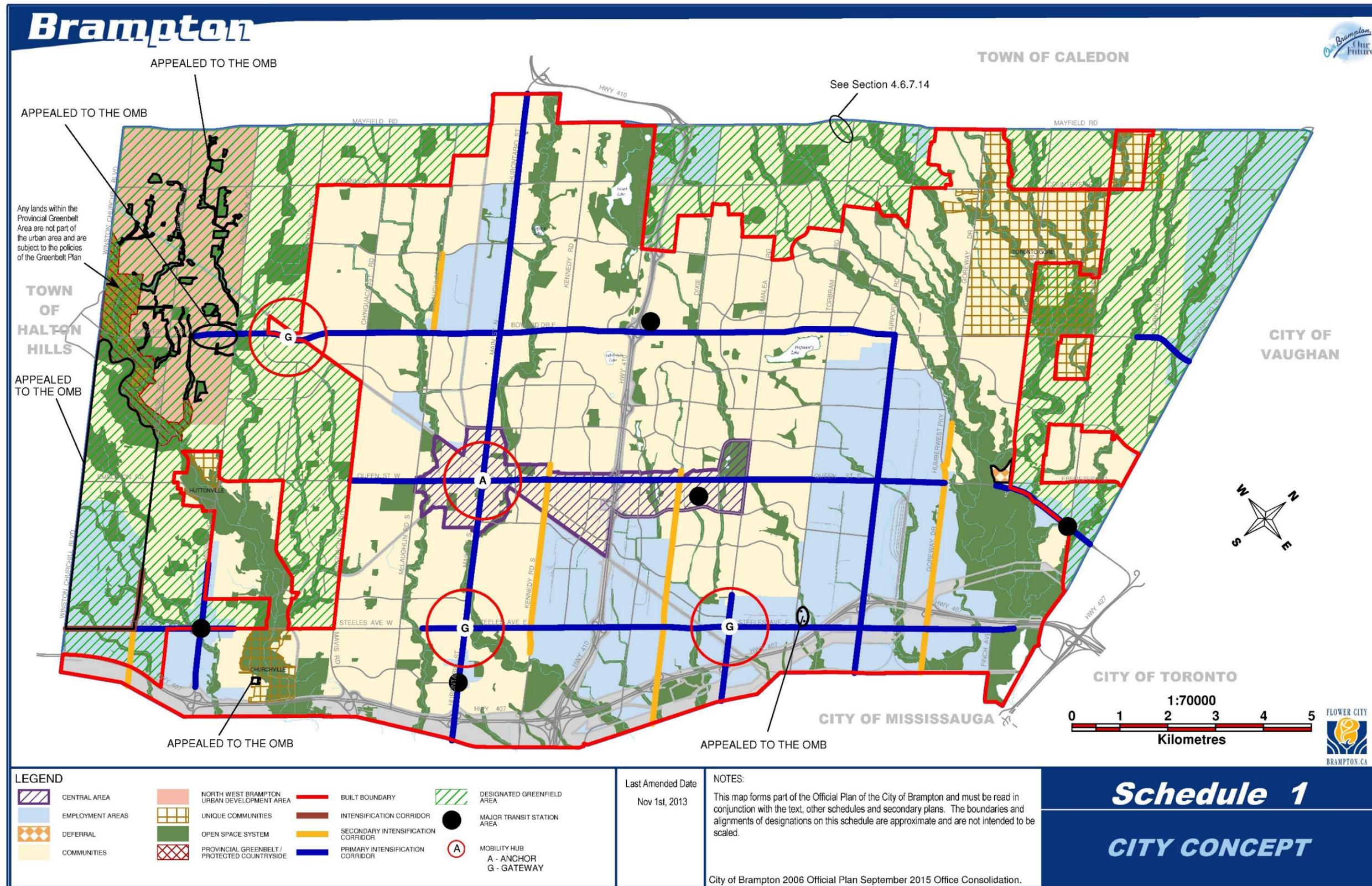
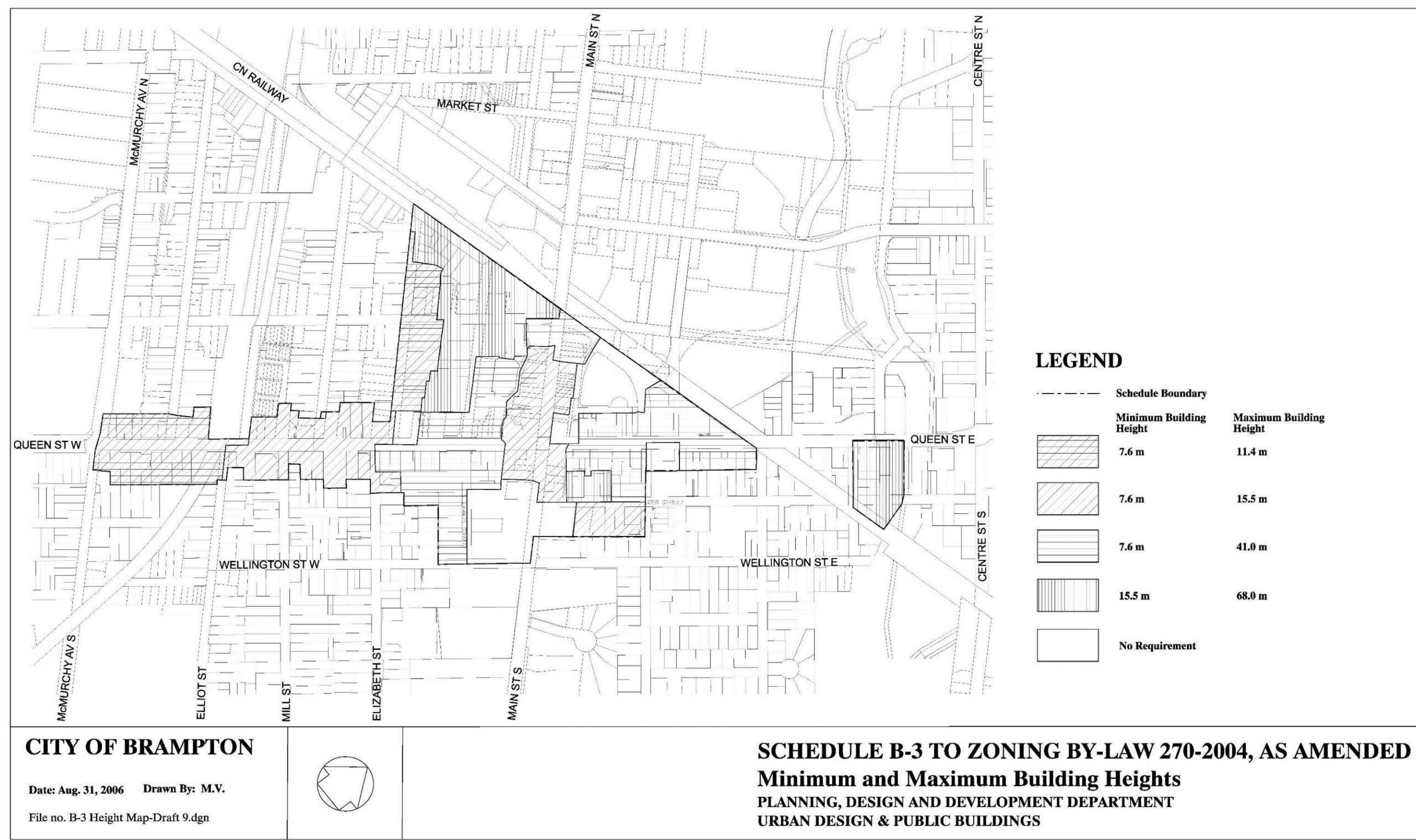


Figure 2 – City of Brampton Zoning By-law Schedule B-3



3 Zoning Approaches and Tools

The Official Plan and Zoning By-law will work together to ensure that the built form and community character that are desired by the City will be achieved. Given that the larger scale (taller and higher density) forms of development that are expected within the Central Area and Urban Growth Centre, Intensification Corridors, Mobility Hubs, and Major Transit Areas are expected to be zoned based on site or area-specific development applications, there are a number of zoning tools that can be explored.

Key issues of building separation, the protection of development potential on adjacent sites, and how development transitions to stable neighbourhoods are all fundamental issues that must be dealt with when exploring development compatibility and a well-functioning mixed-use, higher density district.

The following key topics are to be considered to ensure that what is proposed is built in the way that it was envisioned:

1. How a development or building sits on its site (Setbacks, Build-to-Lines, Build Within Zones, Building Separation Requirements);
2. How a development or building interrelates with adjacent existing or planned buildings (Building Separation Requirements, Setbacks);
3. How a development or building transitions to adjacent stable neighbourhoods (Setbacks, Step-backs, Angular Planes); and,
4. How a development or building addresses adjacent streetscapes (Build-to-Lines, Setbacks, Build-Within Zones, Step-backs, Angular Planes).

3.1 Infill Developments

Infill developments are defined as new buildings within an existing built-up area. They are meant

to make the best use of the available land, while complementing the character and style of both the surrounding street-scape and already established built form. Infill development generally consists of low-rise building forms 2-4 storeys.

The success and appropriateness of an infill development depends on:

- High quality design with attention to detail;
- Respect for and sensitivity to its context including established /desired character in terms of built form and streetscape; and,
- An innovative approach to deal with potential restrictions/challenges.

Combined, these elements ensure infill developments are a 'good fit' to the community, integrate seamlessly to their surroundings and enhance both their value and their environments. Infill development of high quality design could bring meaningful changes to the streetscape and create new possibilities for the surrounding urban form.

Important characteristics of an infill development are determined by the site's context, including scale of lots, unit widths, siting patterns (setbacks, orientation, etc.), appropriate height and massing, garage configuration, architectural features and materials/colour palettes.

There are three types of infill areas within Brampton:

1. Intensification Areas: Outlined in the City of Brampton's Official Plan. These areas are intended for new forms of development that are generally at greater densities than presently exist. Townhouses and multi-plexes may be allowed in these areas along corridors and in new development nodes where policies permit.
2. Infill in Mature Neighbourhoods: The majority of infill development will occur in areas that are located where the cost of land and the demand for housing requires higher

densities. These neighbourhoods have existed for a period of time and are generally low density. New infill development in these areas requires compatible townhouse typologies.

3. Heritage Areas: Infill townhouse and multi-plex development may be allowed if the new development improves heritage structures on the site, respects the character of the existing neighbourhood and where planning policies permit.

Townhouse and multi-plex development in infill areas need to specifically:

- Ensure compatibility with the physical context and enhance the character of the existing neighbourhood;
- Provide design excellence in the private and public realm;
- Enhance pedestrian comfort and safety;
- Regulate access and parking to minimize their im-pact on public streets; and,
- Minimize shadow impacts and blocked views from adjacent properties;

The following general development regulations should form the basis of an implementing Zoning By-law for Infill Developments:

- **Mix of Uses** - The mixture of uses should include a requirement for active uses - retail, service commercial uses are preferred - to be located at grade where appropriate. The Zoning By-law can mandate the actual mixture of land uses, and where they are to be located. The mix of uses can be considered within the zone, on a lot, or within a building;
- **Building Height** – Infill Developments shall generally be between 2 and 4 storeys;
- **Façade** – The Primary Building Façade or Exterior Side Façade of any building facing the street shall feature a porch, prominent

entrance or other architectural gestures that provides a ‘public face’;

- **Architecture Style** - The front wall of the building shall have windows of a traditional scale and proportion, with height generally greater than width. Roof materials and colour should be of a traditional palette. Dormer/roof windows are encouraged to punctuate pitched roofs. Windows within the dormer should occupy the majority of the dormer face;
- **Front Area** – The main door will be clearly visible. Front porches are encouraged as features that increase the prominence of the front entrance. The elevation of the front door shall be no more than 1.2 metres above grade. The green character of front yards shall be maintained and monotony of landscape treatment over large development frontages should be avoided. Front yard hedges should be no more than 1.2 metres high to define the edge of private property to maintain visibility to the street. A pedestrian path should provide a route from the front door to the sidewalk. Most of the front yard should be soft surface, not hard surface/paved.
- **Streetscape** – Maintain a consistent character on the street by ensuring that the height and opacity of any front yard fencing is consistent with fences of the immediate neighbours;
- **Amenities** – Provide outdoor amenity space for Infill Developments’ units either individually or in a shared space;
- **Site Access** – Infill Developments should be serviced with access to the garage/parking from the rear, wherever possible;
- **Massing** – The massing for Infill Developments should be of the following low-rise typologies:

Front-loaded Townhouses - Blocks of attached units oriented to the street and located on conventional lots with integrated garages accessed from the street.

Setback (Bldg / Garage): 3.0-4.5/6.0m
Parking: 1-2/unit
Unit Width: 6.0-6.5 m



Figure 3 Front Loaded Townhouses

Lane-based Townhouses - Blocks of attached units oriented to the street. Access to an attached or detached garage located at the rear of the block, from a lane (or private drive). Ideally suited to infill conditions, and is also effective in reinforcing important locations such as parks, public spaces, community nodes and primary streets.

Setback: 3.0-4.5 m
Parking: 1-2/unit
Unit Width: 4.5-5.8 m

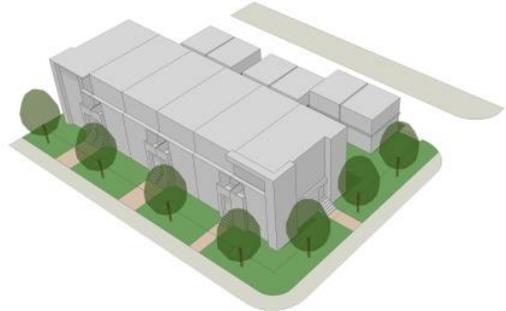


Figure 4 Lane-based Townhouses

Stacked Townhouses - Blocks of attached units which are stacked one above the other and oriented to the street. May also have units that face the rear of the lot, depending on how they are configured. The lower unit is typically accessed from grade or up ½ level and the upper unit is accessed by a separate stairs leading from a common landing.

Back-to-Back Townhouses - Blocks of attached units configured to share a common rear wall, with one block oriented to the street and the other to a rear lane or private driveway.

Setback: 4.5 m
Parking: 1/unit
Unit Width: 5.5-7.0 m

Setback: 4.5-6.0 m
Parking: 1/unit
Unit Width: 6.5-7.0 m



Figure 5 Stacked Townhouses

Figure 6 Back-to-Back Townhouses

Back-to-Back Stacked Townhouses -

Blocks of attached units that combine both Stacked and Back-to-Back configurations and are oriented to both the street and the rear of the block.

Live/Work Townhouses -

Blocks of attached units with parking accesses from a rear lane designed to allow for a mix of residential and non-residential uses. The ground floor is typically designed to accommodate retail, commercial or office uses, while the upper floors are designed as dwelling units. There is no physical separation between the live element, and the work element.

Setback: 3.0-4.5 m
Parking: 1-2/unit
Unit Width: 6.0-7.0 m

Setback: 0 m
Parking: 1-2/residential unit & 1/retail unit
Unit Width: 7.5-8.0 m

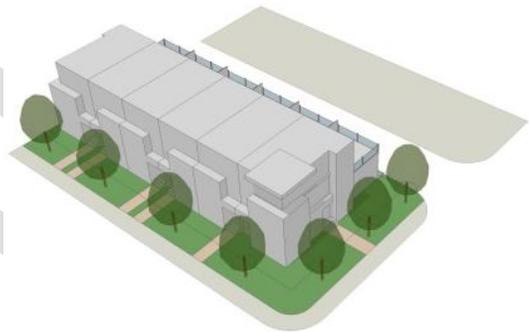
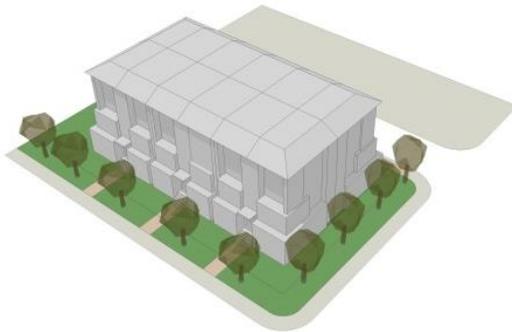


Figure 7 Back-to-Back Stacked Townhouses



Figure 8 Live/Work Townhouses

Liner Townhouses - Blocks of townhouse units that wrap around the base of a building or parking structure to create a 'street or ground-related' façade, and usually, a residential veneer that enhances the pedestrian realm.

Setback: 0-3.0 m
 Parking: 1-2/unit
 Unit Width: as per building structure

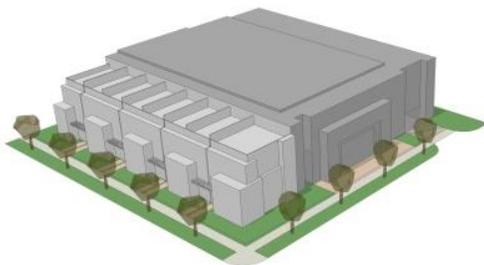


Figure 9 Liner Townhouses

The following general development regulations should form the basis of an implementing Zoning By-law for Mid-Rise Slab Buildings:

- **Mix of Uses** - The mixture of uses should include a requirement for active uses - retail, service commercial uses are preferred - to be located at grade. Residential and/or less active uses like office space, should be located above grade. The Zoning By-law can mandate the actual mixture of land uses, and where they are to be located. The mix of uses can be considered within the zone, on a lot, or within a building;



Figure 10 Mid-Rise Building with Retail Podium

- **Building Height** - Mid-Rise Slab Buildings shall generally be between 5 and 9 storeys, subject to the restrictions that ensure an appropriate transition (setbacks, angular planes) in height abutting a stable residential neighbourhood. The regulation of building height for all Mid-Rise Slab Buildings shall be inclusive of mechanical penthouses and roof ornamentation;

3.2 Mid-Rise Buildings

Mid-rise buildings are generally larger massed buildings that have a wide floor plate. A typical configuration includes a central elevator core with a double-loaded corridor that accesses the units. Because mid-rise Buildings have a monolithic scale and the resultant impact on shadows and views, they should be restricted to low and mid-rise heights and short towers (see next section).



Figure 11 7-Storey Mid-Rise Building

- **Podium Element** - Mid-Rise Slab Buildings shall include a podium element which represents the scale of the appropriate street wall height - generally 3 storeys. The podium shall include grade access retail or other active uses to animate the street frontage;
- **Massing and Setbacks** - The portion of the Mid-Rise Building above the podium shall maintain a floor plate size and massing configuration that permits adequate sky view and minimizes shadow impacts. The slab portion of the building is required to step back a minimum of 2.5 metres from the podium façade that forms the street wall;

Front yard and exterior side yard setbacks shall be a maximum of 3.0 metres. Rear yard setbacks shall be a minimum of 7.5 metres, but shall also be appropriate for the buildings context, and shall provide an appropriate buffer to any abutting stable residential neighbourhood. The podiums of adjacent Mid-Rise Slab building may connect, with no minimum interior side yard. Where there is to be a separation between buildings, the minimum interior side yard setback shall be sufficient to permit appropriate access to the rear yard;

- **Placement and Orientation** - Mid-Rise Slab Buildings shall be sited to align to streets and open spaces to frame these areas. The minimum separation between slabs and other buildings is 12 metres above the podium, where there are windows. The main

front door to the building shall be clearly visible from the street;

- **Lot Coverage** - Buildings shall not cover more than 60 percent of the lot area and landscaped open space shall comprise a minimum of 30 percent of the lot area;



Figure 12 Mid-Rise Building with Stepback to Match Street Wall



Figure 13 Mid-Rise Building Appropriately Located at Streets' Intersection



Figure 14 Mid-Rise Building with Residential Character



Figure 15 Mid-Rise Building with Appropriate Access from Major Streets

- Building Services** - All development shall locate and screen service areas, ramps and garbage storage to minimize the impact on the pedestrian realm and adjacent residences. It is encouraged that these facilities be located internally within new buildings. The Zoning By-law should ensure that the locations for parking, driveways and service entrances and loading areas are to be carefully considered and coordinated with surrounding developments as well as with the locations for pedestrian entrances. The sharing of building services, service entrances and electrical services among buildings, and among development complexes is encouraged, and should be located below grade where possible;
- Site Access** - Good site access is to be provided from major traffic routes in a safe traffic movement manner on flanking streets or laneways, where available. The Zoning By-law should ensure that any entrances that are placed along said major traffic routes must promote convenient pedestrian access as well as maintain the surrounding streetscape;
- Adequate Parking** - Parking should be in structure, preferably below grade. Parking must be hidden from view from the street and adjacent neighbours. Adequate parking for residents, visitors and employees must be provided in order to prevent spill over parking in adjacent stable neighbourhoods. The Zoning By-law should identify the number of required parking spaces, including bicycle parking requirements. Parking may be coordinated with surrounding sites to accommodate shared parking facilities; and,
- Roof Top Gardens** - Where appropriate, roofs and terraces shall be usable for private and communal outdoor patios, decks and gardens. Green roofs are encouraged as a means of retaining stormwater, improving air quality, and to add visual interest. Roof top gardens may also offer opportunities as dog stations. The Zoning By-law should include regulations for the use of roof tops.

3.3 Short Towers (Slab)

Short Towers (Slab) stretch more wall-like than needle-like. Short tower floor plate sizes are typically larger than those of tall towers. A short tower often requires greater land area to build. In urban settings, a short tower can be objectionable, as it blocks views and casts long shadows. In the right situation how-ever, a short tower can be an effective form of high-rise.

The following general development regulations should form the basis of an implementing Zoning By-law for Short Towers:

- **Mix of Uses** - The mixture of uses should include a requirement for active uses - retail, service commercial uses are preferred - to be located at grade. Residential and/or less active uses like office space, should be located above grade. The Zoning By-law can mandate the actual mixture of land uses, and where they are to be located. The mix of uses can be considered within the zone, on a lot, or within a building;
- **Building Height** – Short Towers shall generally be between 9 and 13 storeys, subject to the restrictions that ensure an appropriate transition (setbacks, angular planes) in height abutting a stable residential neighbourhood. The regulation of building height for all Short Towers shall be inclusive of mechanical penthouses and roof ornamentation;
- **Podium Element** - Short Towers shall include a podium element which represents the scale of the appropriate street wall height - generally 3 storeys. The podium shall include grade access retail or other active uses to animate the street frontage;
- **Massing and Setbacks** - The portion of the Short Towers above the podium shall maintain a floor plate size and massing configuration that permits adequate sky view and minimizes shadow impacts. The slab portion of the building is required to step back a minimum of 2.5 metres from the podium façade that forms the street wall;

Front yard and exterior side yard setbacks shall be a maximum of 3.0 metres. Rear yard setbacks shall be a minimum of 7.5 metres, but shall also be appropriate for the buildings context, and shall provide an appropriate buffer to any abutting stable residential neighbourhood. The podiums of adjacent Short Towers may connect, with no minimum interior side yard. Where there is to be a separation between buildings, the minimum

interior side yard setback shall be sufficient to permit appropriate access to the rear yard;

- **Placement and Orientation** - Short Towers shall be sited to frame streets. Where possible and appropriate, the placement of the Short Towers should be away from the corner of two intersecting streets and staggered from adjacent towers. The minimum separation between slabs and other buildings is 12 metres above the podium, where there are windows. The main front door to the building shall be clearly visible from the street;
- **Lot Coverage** - Buildings shall not cover more than 60 percent of the lot area and landscaped open space shall comprise a minimum of 30 percent of the lot area;



Figure 16 Slab with Appropriate Street Wall and Angular Plane



Figure 17 Connected Slabs



Figure 18 Short Tower with Great Architecture, Appropriate Setback and Retail Podium

- **Building Services** - All development shall locate and screen service areas, ramps and garbage storage to minimize the impact on the pedestrian realm and adjacent residences. It is encouraged that these facilities be located internally within new buildings. The Zoning By-law should ensure that the locations for parking, driveways and service entrances and loading areas are to be carefully considered and coordinated with surrounding developments as well as with the locations for pedestrian entrances. The sharing of building services, service entrances and electrical services among buildings, and among development complexes is encouraged, and should be located below grade where possible;
- **Site Access** - Good site access is to be provided from major traffic routes in a safe traffic movement manner on flanking streets or laneways, where available. The Zoning By-law should ensure that any entrances that are placed along said major traffic routes must promote convenient pedestrian access as well as maintain the surrounding streetscape;

- **Adequate Parking** - Parking should be in structure, preferably below grade. Parking must be hidden from view from the street and adjacent neighbours. Adequate parking for residents, visitors and employees must be provided in order to prevent spill over parking in adjacent stable neighbourhoods. The Zoning By-law should identify the number of required parking spaces, including bicycle parking requirements. Parking may be coordinated with surrounding sites to accommodate shared parking facilities; and,
- **Roof Top Gardens** - Where appropriate, roofs and terraces shall be usable for private and communal outdoor patios, decks and gardens. Green roofs are encouraged as a means of retaining stormwater, improving air quality, and to add visual interest. Roof top gardens may also offer opportunities as dog stations. The Zoning By-law should include regulations for the use of roof tops.

3.4 High-Rise Point Towers

High-Rise Point Towers are generally the preferred form for tall buildings that are greater than 14 storeys. High-Rise Point Towers are compact, slim buildings with small floor plates often containing no more than 4 to 8 units organized around a central elevator core. This form of building minimizes shadowing and visual impacts from the perspective of the pedestrian, and with appropriate separation, can maximize views between buildings, and reduce privacy and over-look impacts. In some cases, point towers may be a preferred form to lower, but larger massed, Mid-Rise Slab Buildings and Short Towers.

The following general development regulations shall form the basis of an implementing Zoning By-law for High-Rise Point Towers:

- **Mix of Uses** - The mixture of uses should include a requirement for active uses - retail, service commercial uses are preferred - to be located at grade. Residential and/or less active uses like office space, should be located above grade. The Zoning By-law can

mandate the actual mixture of land uses, and where they are to be located;

- **Location and Heights** - High-Rise Point Towers may only be permitted subject to restrictions that ensure a transition in height to low-rise areas (setbacks, angular planes) and a transition in building intensity through greater separation requirements between towers. The regulation of building height for all High-Rise Point Towers shall be inclusive of mechanical penthouses and roof ornamentation;

The Zoning By-law should ensure that community benefits through Section 37 are provided for any High-Rise Point Towers greater than 25 storeys;

- **Podium** - High-Rise Point Towers should be placed on a podium building, which represents the scale of the appropriate adjacent street wall height - generally 3 storeys. Where appropriate, townhouses can be used for the podium;
- **Massing** - To ensure a slender form, the tower (the portions of the building above the podium structure) shall maintain an average gross floor plate size that is no greater than 750 square metres. To ensure that High-Rise Point Towers remain slender from all vantage points, it is important to encourage as much as possible equal floor plate dimensions (length to width ratio of 1:1). The maximum dimension of any side of any residential tower shall be 30 metres;
- **Tower Widths and Setbacks** - The width of the High-Rise Point Tower that fronts onto a street should be as slim as possible. Where the tower height fronting a street is greater than 25 metres high, the tower should step back from the face of the podium by a minimum of 3 metres, plus an additional 1 metre for every 25 metres above the initial 25 metres of building height;
- **Placement and Orientation** - Where possible and appropriate, the placement of the High-Rise Point Tower should be away

from the corner of two intersecting streets and staggered from adjacent towers. The narrowest width of a Point Tower should be oriented to the primary street frontage;

Minimum Separation - As the configuration of a High-Rise Point Tower generally consists of units on all sides, the minimum separation between towers becomes an imperative consideration. To maximize views between buildings while minimizing shadowing, privacy and over-look impacts, the minimum separation between residential towers shall be 25 metres. Where a proposed tower cannot provide an on-site setback of 12.5 metres from any interior side lot line, or rear lot line, legal agreements with abutting, affected landowners shall be required to ensure compliance with required tower separation distances. In these cases, the City may consider Density Transfers.



Figure 19 Tower Located on Top of Subway Station with Appropriate Stepback



Figure 20 Towers Properly Distanced with Retail/Office Podium

In dense urban sites, less tower separation distances may be considered where shadowing, sky view and privacy impacts are appropriately addressed. Conversely, in locations transitioning to a stable residential neighbourhood, greater tower separation distances should be considered to ensure a transition in intensity, as well as height;

- **Lot Coverage** - Buildings shall not cover more than 70 percent of the lot area, landscaped open space shall comprise a minimum of 15 percent of the lot area;
- **Building Services** - All development shall locate and screen service areas, ramps and garbage storage to minimize the impact on the pedestrian realm and adjacent residences. It is encouraged that these facilities be located internally within new buildings. The Zoning By-law should ensure that the locations for parking, driveways and service entrances and loading areas are to be carefully considered and coordinated with surrounding developments, as well as with the locations for pedestrian entrances. The sharing of building services, service entrances and electrical services among buildings, and among development complexes is encouraged, and should be located below grade where possible;
- **Site Access** - Good site access is to be provided from major traffic routes in a safe traffic movement manner on flanking streets or laneways, where available. The Zoning By-law should ensure that any entrances that are placed along said major traffic routes must promote convenient pedestrian access as well as maintain the surrounding streetscape;



Figure 21 Towers with Appropriate Separation



Figure 22 Tower with Great Architecture



Figure 23 Tower Located at Intersection of Major Traffic Routes

- **Adequate Parking** - Parking should be in structure, preferably below grade. Parking must be hidden from view from the street and adjacent neighbours. Adequate parking for residents, visitors and employees must be provided in order to prevent spill over parking in adjacent stable neighbourhoods. The Zoning By-law should identify the number of required parking spaces, including bicycle parking requirements. Parking may be coordinated with surrounding sites to accommodate shared parking facilities; and,
- **Roof Top Gardens** - Where appropriate, roofs and terraces shall be usable for private and communal outdoor patios, decks and gardens. Green roofs are encouraged as a means of retaining stormwater, improving air quality, adding to add visual interest, and providing resident amenities (with an eye toward design that is sensitive to existing adjacent communities). The Zoning By-law should include regulations for the use of roof tops. A Technical Paper will be prepared on private amenity areas as a component of the zoning by-law review.

3.5 Other Tower Buildings

Other Tower Buildings are high-rise buildings that satisfy all of the other High-Rise Point Tower regulations, but are not a Point Tower due to larger tower floor plates (for example viable office floor plates usually require much larger massing).

The following general development regulations shall form the basis of an implementing Zoning By-law for High-Rise Point Towers:

- Where the tower is greater than 25 metres high, and its floor plate is greater than 750 square metres, the tower should step back a minimum of 6.5 metres from the face of the podium, plus an additional 1.5 metres for every 25 metres above the initial 25 metres of building height;



Figure 24 Office Building with Interesting Architecture and Heritage Podium



Figure 25 Office Building Proposed at 174-184 Queen St E, Brampton



Figure 26 Office Building with Appropriate Floorplates and Located along a Major Transit Route

- The minimum floor heights for office towers should be 4 metres;
- The minimum front yard depth and setback for office towers located along intensification corridors should be lesser than residential towers to bring the building closer to the street;
- The average gross floor plate size for an office building tower shall not exceed 1,800 square metres. The maximum dimension of any side of an office building tower shall be 55 metres; and,
- In general, the distance between large massed towers will depend on the uses and configuration of units. While a 15 metre separation is appropriate in dense areas for office uses, a 25 metre separation is required for a residential tower to ensure adequate privacy and views.

3.6 Development Transition

One of the key elements for consideration is to determine how an appropriate transition from the Mixed-Use and Intensification Areas to the identified stable residential neighbourhoods can be consistently achieved. It is the responsibility of the taller and more massive buildings to establish appropriate transition to the abutting smaller scale development. More specifically, the transition between taller and denser building types and stable residential neighbourhoods shall be established through area specific Zoning By-law requirements that apply all, or some combination of:

- A building setback of at least 7.5 metres shall be established from any affected rear or interior side lot line and shall not include any land area provided by an abutting public rear lane;
- A minimum landscape buffer strip of 3.0 metres shall be included within the setback, abutting any affected rear or side lot line. The 3.0 metre landscape buffer shall provide the opportunity for substantial tree planting and appropriate privacy fencing;



Figure 27 Slab with Appropriate Transition towards Stable Neighbourhood

- An angular plane measured from 10.5 metres above grade at the rear lot setback line, or 7.5 metres from the rear lot line shall be used to establish the maximum height of any new development. The angular planes shall be applied as follows:
 - a 45 degree angular plane where new development abuts a rear yard condition; or,
 - a 60 degree angular plane where new development abuts an interior side yard condition.

3.7 Flexibility

Overall, various forms of intensified development, including taller buildings will differ in response to the local context or building use. Most taller buildings follow a classic form and consist of three integrated parts: a podium, tower or slab and top, each with a particular role to play. There may be special circumstances where acceptable alternatives to the built form types identified in this Technical Paper may be proposed.

In general, the intent of this Technical Paper is to set an appropriate and desirable standard for development for discussion; however, it is important to remember that flexibility is an important consideration for implementation, and exceptions to these policies do not necessarily result in a less desirable or less appropriate built form response.

4 Conclusions and Preliminary Recommendations

The current Zoning By-law includes numerous site specific exceptions (Special Sections) within all of the Commercial zones to allow for increased permissions or restrictions. This is apparent along Queen Street, which is identified as a Primary Intensification Corridor in the Official Plan. Due to the large number of site specific amendments, a separate technical paper may be required to consider opportunities to consolidate or reduce the number of exceptions to ensure consistency along the identified intensification corridors and to implement the key objectives and requirements of the Official Plan.

The existing zones along the Intensification Corridors are predominantly Commercial and do not include permissions for mid- to high-rise or mixed use developments which are key for supporting transit and transit oriented development.

In summary, there are three preliminary options for the consideration of the development of a new Zoning By-law.

1. Pre-zone on the basis of the suggested regulations under Section 3, Zoning Tools and Approaches;
2. Establish zones in a Zoning By-law that can be applied to a development application; and,
3. Leave the regulations in a guideline document for the purpose of analysis of a development application on a site specific basis.



Figure 28 Built Form in Brampton - 3D Model (Existing and Proposed)