YOUR VISION OUR FUTURE

BRAMPTON URBAN DESIGN GUIDELINES

THIS 'DRAFT URBAN DESIGN GUIDELINES' IS CONSIDERED PRELIMINARY FOR DISCUSSION PURPOSES ONLY. THE CONTENTS OF THIS DOCUMENT ARE SUBJECT TO CHANGE AS A RESULT OF FURTHER ANALYSIS AND CONSULTATION.

IMAGES AND DIAGRAMS WILL BE UPDATED/INCLUDED IN SUBSEQUENT DRAFTS

PARTA: INTRODUCTION

A1 BACKGROUND	04
A2 PURPOSE OF THE DOCUMENT	05
A3 VISION / GUIDING PRINCIPLES	10
A4 DOCUMENT STRUCTURE /	
HOW TO READ THE DOCUMENT	12

A1 BACKGROUND

Brampton is a rapidly growing city that has witnessed substantial change over the past several decades. It is at a turning point in its evolution, transitioning from a primarily suburban community dominated by sprawling greenfield and industrial developments to a more compact, urban community with a mix of uses.

BRAMPTON 2040 VISION: LIVING THE MOSAIC

In 2018, the City of Brampton developed the Brampton 2040 Vision, a strategic plan that captures the community's vision for how Brampton should evolve to 2040. It provides seven target vision statements, with fundamental themes that are identified as the DNA of the Vision: sustainability, livability, diversity, and health. The vision builds upon existing planning, policies, strategies, and programs that are already adopted or underway in the City. Seven vision statements are supported by a set of actions for change, that are guided by 5 lenses for success that include public engagement, collaboration, design, technology, and identity.



Brampton Feature Sign

THE BRAMPTON PLAN (OFFICIAL PLAN)

Brampton Plan carries forward and implements the 2040 Vision. Emerging from the 2040 Vision, Brampton Plan's vision statement provides focus and direction for all planning decisions and directions within the Plan.

The Brampton Plan, is a roadmap for city-building and, in concert with other critical studies, sets the framework for the environment, sustainability, open space, transportation, heritage and urban design.

THE URBAN DESIGN GUIDELINES

The City-Wide Urban Design Guidelines, one of the frameworks for city-building, replaces the 2003 Development Design Guidelines (DDG). The DDG were approved by Council in 2003 and originally intended to chart the course for greenfield development and address the challenges posed by the development impetus at that time. Accordingly, their focus was on new development in greenfield areas. Since the time of their endorsement, the City of Brampton, Peel Region and the Province of Ontario have adopted/updated a number of plans, legislation and policies to direct growth with more focus on urban development including intensification.

The purpose of the City-Wide Urban Design Guidelines is to clearly articulate the City's expectations with respect to street and block pattern, the location of community focal points, the interface with natural heritage, the development of parks and open space, and the development of the public realm. The

A2 PURPOSE OF THE DOCUMENT

Guidelines also address a full range of development forms and building types including low-, mid- and high-rise forms as well as mixeduse development.

The Guidelines promote and encourage design excellence in public and private development with a focus on the physical elements that make up the City, what they are individually and how they work together, from the community scale to the site-specific and individual lot scale.

IMPLEMENTATION AND ALIGNMENT

The Urban Design Guidelines help implement the urban design policies of the Brampton Plan and complement the City's new Zoning By-law:

 As the overarching document that expresses Brampton's vision for creating attractive and well-designed communities, Brampton Plan establishes broad policies and principles for urban design. Brampton Plan intends that the Zoning By-law and City-Wide Urban Design Guidelines will be the primary tools that will be used to help implement the urban design

'BRAMPTON WILL BE A CITY 'BY DESIGN'

policies. Brampton Plan sets out a framework of designations and overlays to help realize the vision and City Structure for the city and sets out high-level intentions for design and built form in different areas of Brampton.

- The City-Wide Urban Design Guidelines will play an integral role in realizing the design vision for the different areas that make up Brampton and, in conjunction with the Zoning By-law, lend shape, form and character to the policies and regulations outlined in those respective documents.
- The Zoning By-law helps implement Brampton Plan and the City-Wide Urban Design Guidelines by incorporating certain minimum design expectations, such as minimum building and lot requirements.



Zoning is the legal tool used to regulate land use and development. Not all of the City-Wide Urban Design Guidelines are implemented in zoning, as the Zoning Bylaw focuses mainly on setting minimum expectations to allow for some flexibility in the design process. As such, the Zoning By-law and Urban Design Guidelines are considered complementary implementation tools.

Other tools that the City has to implement its vision and policies include:

SUSTAINABLE NEW COMMUNITIES PROGRAM

Brampton's Sustainable New Communities Program uses a Sustainability Assessment Tool (SAT) that was launched in 2015. It is a pointbased system in which development proposals earn points for achieving specific criteria (metrics) organized under the categories of Built Environment, Mobility, Natural Environment & Open Space, and Infrastructure & Buildings. All applications must achieve a minimum Bronze score, with Gold the highest score threshold. The points are organized under Good (generally 1 point), Great (2 points) and Excellent (3 points). The SAT uses a series of questions under 52 performance indicators to quantify the sustainability attributes of a development application. An application must achieve the minimum required score (Bronze). In 2022, Brampton updated the program and metrics, and included a new category Innovation, which allows for flexibility and the opportunity to create innovative sustainability measures, beyond what is in the SAT. Further, as of January 1, 2023 all applicable applications submitted are required to achieve a minimum 'Good' level for the Building Energy Efficiency, Greenhouse Gas Reduction, and Resilience metric.

SUSTAINABLE COMMUNITY DEVELOPMENT GUIDELINES

The Sustainable Community Development Guidelines (SCDG) provide comprehensive sustainability guidelines for the planning and design of new communities and neighbourhoods at a range of scales: Secondary Plan, Block Plan, and Draft Plan of Subdivision/Site Plan. The SCDG are included as a reference document for the Sustainable New Communities Program.



Rendering of Brampton Riverwalk - Recipient of Brampton Urban Design Award 2023

REGION OF PEEL - HEALTHY DEVELOPMENT ASSESSMENT TOOL

Region of Peel Healthy Development Assessment (HDA) Tool, considers 6 core elements of the built environment: Density; Service proximity; Land use mix; Street connectivity; Streetscape characteristics; and, Efficient parking.

There are two versions of the assessment: Largescale planning (secondary plans, block plans, subdivision plans;) and Small Scale planning (smaller-scale subdivision plans, official plan and zoning by-law amendments, site plans). Each assessment includes a Scorecard with standards for each core element that are appropriate to the type of planning application submitted. A score is tallied based on how many of the standards are met, and serves to inform staff and decisionmakers of a development's overall health promoting potential.

REGION OF PEEL - CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Prepared with the intent to encourage the adoption and application of CPTED principles in Official Plans and Guidelines, and used for the evaluation of applications. CPTED strategies are used to influence certain desired, human behaviours and include. Natural surveillance; Natural access control; and Territorial reinforcement.

BRAMPTON COMPLETE STREETS GUIDE (2022)

The Brampton Complete Streets Guide sets forth that the "City of Brampton promotes a multimodal transportation system, with the objective of designing, building, and maintaining streets (including multi-use paths) that safely and comfortably accommodate all users, including motorists, motorcyclists, bicyclists, pedestrians, individuals with disabilities, transit and school bus riders, delivery and service personnel, freight haulers, and emergency responders." The ambition for complete streets is stated in the Official Plan, Transportation Master Plan, Active Transportation Master Plan, and Vision 2040. It is included in the Official Plan' s Principles for the City Structure.

The City envisions that this Guide applies to all public and private roads in all areas of the City, and will inform planning and development projects and become part of all Environmental Assessments, comprehensive redevelopment initiatives, planning studies, public realm plans, secondary plans, and other revitalization efforts.



Rendering of Brampton Riverwalk - Recipient of Brampton Urban Design Award 2023

The Guide defines 11 Street Types to reflect and respond to the range of existing and planned contexts in Brampton. For each street type, the guide identifies the Application (type of street, such as an Arterial, and where in the City, such as Downtown), Sample Streets, and Design Objectives that include the users - Pedestrian, Cycling, Transit, and Motor Vehicles, along with Sustainable Infrastructure. A demonstration cross section is provided for each showing the elements within the boulevard and the roadway. Lane width dimensions, curb radii, cycle infrastructure design, etc. are provided under separate sections.

BRAMPTON ECO PARK STRATEGY

The Brampton Eco Park Strategy is an action item of the Brampton 2040 Vision: Living the Mosaic. The intent of the Brampton Eco Park is to better conserve and enhance the natural systems within the City which have been significantly declining due to population growth and the resultant land-use changes.

The strategy defines the Brampton Eco Park, as a large and growing municipal park and nature reserve existing across the city and interwoven within the city landscape. It consists of Eco Spaces, including but not limited to the city's natural heritage system, parks, green spaces, green infrastructure streetscapes, utility corridors, and yards that strive for the Eco Park principles. This is an ongoing process that will result in a city filled with connected Eco Spaces,







xxx

Brampton Eco Park is made up of a network of Eco Spaces, which include the green and sustainable spaces within Brampton, such as Brampton's NHS and parks. It will be the highly naturalized spaces; urban, social spaces such as streetscapes and urban plazas; grey and green infrastructure; utility corridors; school grounds; and private lands.

AGE-FRIENDLY COMMUNITIES

The City of Brampton developed an Age Friendly Strategy and Action Plan in 2019. The intent of the strategy is to support an age-friendly community that encourages and enables active aging as a way to enhance or maintain the quality of life for older adults. Brampton is aligning with the WHO's eight dimensions of an age-friendly community which include: outdoor spaces and buildings, transportation, housing, social participation, communication and information, respect and social inclusion, civic participation and employment, and community support and health services.

BRAMPTON GROW GREEN ENVIRONMENTAL MASTER PLAN

Brampton's Grow Green Environmental Master Plan (EMP) aims to conserve, enhance, and balance the City's natural and built environments to create a healthier, resilient, and environmentally sustainable city. The EMP outlines six core goals, including People, Air, Water, Land, Energy, and Waste. Each goal includes a number of corresponding metrics or actions that the City will take to improve Brampton's environmental performance, quality of life, and economic development.



The 2020 document is an update that retains the vision, principles, and core goals and focuses on providing a refreshed and streamlined Action Plan and Metrics that:

- Reflects knowledge garnered from the first five years of implementation;
- Aligns with the Brampton 2040 Vision and the Term of Council Priorities;
- Connects to the City's strategic documents and their long term vision; and,
- Integrates the community's desired direction for the future of Brampton.

ACTIVE TRANSPORTATION MASTER PLAN

The Active Transportation Master Plan (2019) establishes an implementation strategy to build a connected cycling and pedestrian network throughout Brampton and to adjacent municipalities, enabling safer, more convenient travel by non-motorized modes, and encourages cycling as a viable means of transportation for both recreational and utilitarian purposes. The ATMP identifies the vision statement from Brampton 2040 Vision for transportation and connectivity as "a mosaic of safe, integrated transportation choices and new modes, contributing to civic sustainability, and emphasizing walking, cycling and transit." The associated actions for active transportation include prioritizing active mobility through an Active Mobility Charter, and implementing complete streets supporting more integrated transportation choices that prioritize walking and cycling.

The ATMP includes a Design Compendium to inform the design of complete streets and the active transportation network presented in the document.

TRANSPORTATION MASTER PLAN (2015)

The City's Transportation Master Plan (TMP) provides strategic direction for the development of Brampton's transportation network to support the city's growth over the next 25 years. A key focus of the Plan is to implement a truly multimodal transportation system that supports sustainable growth. The City is currently completing an update of this Plan.

THE PARKS AND RECREATION MASTER PLAN (2017)

The Parks and Recreation Master Plan is a guiding document for the delivery of parks, open space, recreation and sport facilities in the City with the underlying objective of promoting an active and engaged community where attention to personal and public health is paramount. The document provides the City with overarching direction on parks and open space systems, and outdoor sports and recreational facilities; indoor sports and recreational infrastructure and buildings; and parks and recreation programming.

The City will be undertaking a five year review and update of the 2017 Council-endorsed Parks and Recreation Master Plan.

A2 VISION / GUIDING PRINCIPLES



The four pillars of sustainability which ground the Brampton Plan are applied across all policies are:

FOUR PILLARS

- 1 Environmental Sustainability
- 2 Social Sustainability
- 3 Economic and Financial Sustainability
- 4 Cultural Sustainability

In addition, Brampton Plan identifies five design lenses, and guiding principles that form the basis for the City-Wide Urban Design Guidelines.







WALKABLE CITY

Accessible, complete, resilient communities

- Increase active transportation options through connected networks of streets, sidewalks, bicycle routes, and trails Create diverse, compact and transit-supportive neighbourhoods
- Promote mixed use neighbourhoods to shorten distances between homes, work places, schools and amenities
- Focus higher order uses and densities close to public transit
- Make and blocks that are walkable and connected
- Make streets beautiful, safe and comfortable to encourage walking

MOSAIC CITY

Place making and innovation culture

- Promote place-making that instills a sense of community and civic pride
- Develop community and social hubs
- Enhance the city's built, cultural and natural heritage assets
- Conserve and promote cultural heritage resources to support the social, economic, and cultural wellbeing of all communities, including First Nations and Métis communities
- Preserve the city's rich heritage through adaptive reuse and restoration
- Strive for design excellence in the planning and design of the city optimize opportunities for infill, intensification and revitalization

AGE-FRIENDLY CITY

Multi-generational and youth focus

- Ensure accessibility for all ability levels and needs
- Include second units, multigenerational and nuclear family housing structures
- Provide options for entire life span/ age-in-place housing, amenities and facilities
- Encourage live-work opportunities

GREEN CITY

Sustainable, climate-ready and greenway experience

- Protect, enhance and integrate the natural heritage system
- Provide an enhanced, connected and quality public realm
- Incorporate best practices in ecology based, sustainable design
- Provide a range of parks and open space typologies
- Promote urban agriculture / local agri-food production
- Enhance the urban forest

5

DESIGN EXCELLENCE

City by-design and inclusive co-design

- Promote net-zero communities
- Incorporate green infrastructure / buildings
- Promote energy conservation and low-carbon emissions
- Improve air quality / reduce greenhouse gas emissions
- Manage water and waste effectively and efficiently
- Manage material resources for the generations to come

A4 DOCUMENT STRUCTURE/ HOW TO READ THE DOCUMENT

This document is structured in 3 main parts, with each organized into topic chapters that contain subtopic sections where guidelines/design standards are outlined and described. These 3 main parts include:

PART A - INTRODUCTION

Provides a high-level planning context to the document, and frames the City-Wide Urban Design Guidelines within the context of the City's new Official Plan (Brampton Plan). It identifies the five lenses that form the basis for the Urban Design Guidelines, and the key guiding principles that are to be used as the foundation for development and city building. The guiding principles are at the core of the planning and design considerations for the built environment which are further articulated in **Part B** – Sustainable Community Design and **Part C** – Site Organization and Built Form.



PART B - SUSTAINABLE COMMUNITY DESIGN

The Sustainable Community Design Guidelines build upon the Complete Communities policies of the Brampton Plan (3.1.2.1) and replace Part 4 -Major Block Plan Components and Part 5 - Block Plan Design Guidelines of the DDG.

They build upon the Sustainable Community Development Guidelines (Part 8 of the DDG). Whereas those guidelines apply to Secondary Plans, Block Plans, Tertiary Plans and Draft Plans of Subdivision, these Sustainable Community Design Guidelines address Precinct Plans and Areas Plans. They do so by way of the same four major building blocks of community structure - Built Environment, Mobility, Natural Heritage, Parks & Open Space, and Green Infrastructure & Built Form.





PART C - SITE ORGANIZATION AND BUILT FORM

Building on the Guiding Principles outlined in **Part A** and Sustainable Community Design Guidelines described in **Part B**, the Site Organization and Built Form guidelines address different building typologies as well as different forms of development - from low- to high-rise forms as well as mixed-use development forms.

These guidelines incorporate an updated version of the 2003 DDG Part 4 -Site Planning and Built Form, which addressed residential, commercial, industrial & employment and institutional & community use development. They also amalgamate DDG Part 7 - Architectural Control Guidelines for Ground Related Residential (ACGGRD) and DDG Part 6 Section 5 - Transitsupportive Townhouse Design Guidelines.

New guidelines are included in this section to address Mid-rise, High-rise and Mixed-use forms of development.

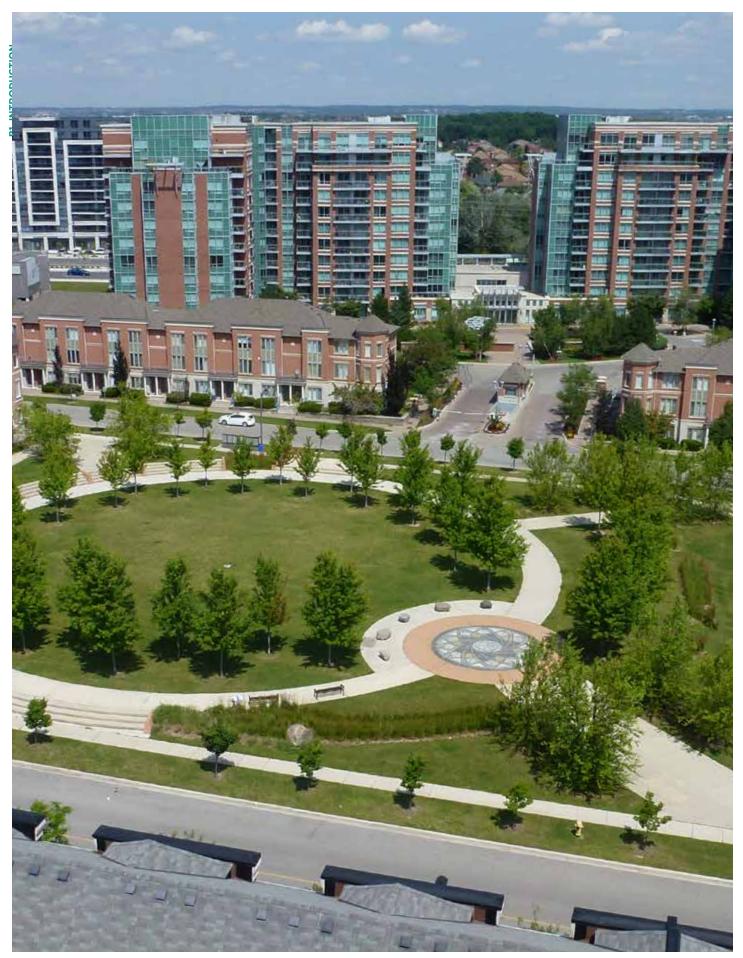
Part C utilizes diagrams, massing models and precedent images to illustrate the desired form and design of development with respect to:

- Site layout, including access, circulation, parking and building placement; landscaping, open space, streetscape treatment; and,
- Building design, including height, massing, transition and building articulation.



PART B: SUSTAINABLE COMMUNITY DESIGN

B1 INTRODUCTION	ТВС
B2 BUILT ENVIRONMENT	твс
B3 MOBILITY	твс
B4 NATURAL ENVIRONMENT AND OPEN SPACE	твс
B5 GREEN INFRASTRUCTURE AND BUILT FORM	твс



The Brampton Plan establishes the City Structure, made up of the City-Wide Growth Management Framework and the Mobility Framework. The City Structure is made up of:

CENTRES

Centres comprise Urban Centres, Town Centres and Neighbourhood Centres. These areas are expected to accommodate the highest concentration of growth and mix of uses. They connect residential and non-residential opportunities and enhance the ability for more residents to live, work and play locally.

BOULEVARDS

Boulevards comprise Primary Urban Boulevards and Secondary Urban Boulevards. They are vibrant and prominent streets in the city and provide for a mix of uses and intensity of built form served by higher order transit, while also providing critical connections to the rest of the city and region.

CORRIDORS

Corridors comprise key Priority Bus linkages within and across Brampton and the broader region and provide for a mix of uses and transitsupportive forms and densities.

MAJOR TRANSIT STATION AREAS

NEIGHBOURHOOD AREAS (COMMUNITY AREAS)

Community Areas include a mix of new and existing residential, commercial and residentialserving institutional areas of Brampton, with the amenities, including parks and open spaces needed for day-to-day living within a 15-minute walk or bicycle ride from their homes.

EMPLOYMENT AREAS

Employment Areas include those areas where large number of residents and employees from the broader region travel to work.

THE NATURAL HERITAGE SYSTEM

The Natural Heritage includes natural spaces and water resources systems such as provincially, regionally and locally significant woodlands, rivers, valleylands, wetlands and ecological linkages, which require protection and enhancement.

Environmental Sustainability is one of the four pillars of sustainability in which the City Structure is grounded, and relates to both the natural and built environments.

The City-Wide Urban Design Guidelines address community design through the sustainability lens. As such, this section is organized to align with the Sustainability Metrics (Metrics) used in the Sustainable New Communities Program Guidebook -

- 1 Built Environment;
- **2** Mobility;
- **3** Natural (Heritage) Environment and Open Space; and,
- 4 (Green) Infrastructure and Built Form.

The Sustainability Metrics (Metrics) are a set of measures to encourage and evaluate the sustainability performance of new development, organized around these categories. Each of the over 120 Sustainability Metrics available to choose from are assigned a point value, and the combination of Metrics achieved in a development proposal results in a Sustainability Score.

BUILT ENVIRONMENT

The built environment should be designed in a manner to ensure that the development contains the components of a community that directly impact physical activity and improve the overall health of its residents. Recognizing the importance of built environment factors in influencing and shaping travel mode choices is essential to creating a complete, walkable, and transit supportive community.

The intensity and diversity of land uses significantly influences decisions on where to live, to drive to work, or the choice to take transit. A mix of housing types and amenities, employment, and live work opportunities, located within walking distance, provides the opportunity for residents to meet their day to day needs without reliance on the private automobile and provides for life-cycle housing allowing residents to remain in their communities.

MOBILITY

The Brampton Plan promotes improved access and mobility through safe, equitable and efficient transportation systems, including access transit and active transportation options.

To ensure that a variety of transportation options are available to residents, a community should be designed such that land uses and transportation planning are integrated and proximity to amenities is increased. Design should encourage physical activity, facilitate active transportation, and support public transit in place of automobile dependence. The most vulnerable population groups including children, elderly, disabled, and low income individuals are the most affected by choices available to them for mobility and access to services and amenities. Designing a safe, convenient, and accessible environment for walking and cycling encourages these alternative modes of transportation.





Active Transportation Infrastructure

NATURAL ENVIRONMENT AND OPEN SPACE SYSTEM

The Brampton Plan promotes the protection, enhancement and restoration of the City's natural heritage within an integrated and connected open space network and the conservation of the City's cultural heritage buildings and landscapes.

The natural environment, urban forest, and the open space system are essential components of a healthy, sustainable community. Firstly, the preservation and enhancement of the natural heritage system ensures the health of the environment and supports the recreational and cultural opportunities in the City. Secondly, ensuring residents have convenient access to a connected and diverse range of open spaces, parks, and recreation facilities offers opportunities for improved public health.

GREEN INFRASTRUCTURE AND BUILT FORM.

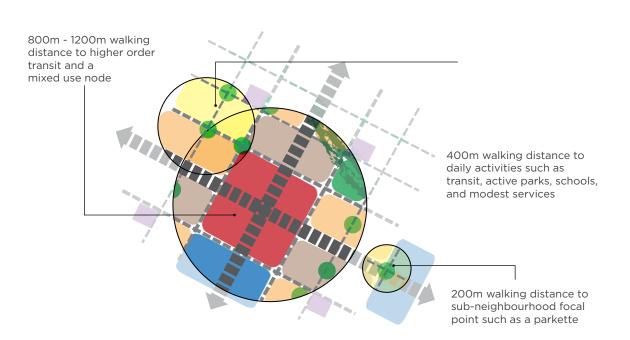
The Brampton Plan promotes sustainability in all its facets. Green infrastructure and built form are important to ensuring that energy conservation is maximized and the strain on non-renewable resources is minimized. New buildings and communities should be designed with a focus on reducing water, waste, and energy use. Since human activity is the principal cause of elevated levels of greenhouse gases and demands on energy, water, and waste systems, the guidelines focus on means of remediating this impact on both the built and natural environments.

The Sustainable Community Development Guidelines, the Sustainability Assessment Tool and these City-Wide Urban Design Guidelines provide guidance towards these goals.

While sustainability programs use different performance measures to satisfy their goals, the end goals of reduced greenhouse gases, carbon fuel reliance, and energy conservation should be common. Other associated benefits relating to urban design that help to implement the above can include improved public health, social/ cultural initiatives, and fiscal management.

The four main building blocks are described on the following pages and apply to all aspects of precinct and area plans.









Example of a sustainable community development.

BUILT ENVIRONMENT

The Brampton Plan recognizes the importance of built environment factors in influencing and shaping travel mode choices, impacting physical activity and improving the overall health of its residents. Furthermore, **the intensity and diversity of land uses significantly influences decisions on where to live, to drive to work, or the choice to take transit.**

The built environment should be planned and designed in a manner to ensure that development contains components essential to creating a compact, walkable, and transit supportive community. This includes a mix and diversity of land uses, a mix and diversity of housing types and amenities, employment opportunities, and live work opportunities, all located within a 15-minute walk.



Compact, higher density residential development.



Mount Pleasant Village multi-storey school

2.1 COMPACT DEVELOPMENT

Compact development and intensification create greater densities that take advantage of existing infrastructure, and the concentration of people and jobs that create the necessary critical mass to support transit and vibrant mixed-use centres.

- Ensure development densities that support existing and planned transit services. Projects at Major Transit Station Areas, Urban Centres, and Primary Urban Corridors should strive for densities that support 160 to 200 units per net hectare.
- 2 Promote greater land use efficiency by placing new housing close to transit facilities and within mixed-use centres to support transit and pedestrian mobility choices, reducing car use, and significantly reducing air pollution.
- 3 Density plays a key role in determining housing form. Strategically allocate density to contribute to a compact urban form, increase transportation efficiency and walkability within the community, and conserve natural resources.
- 4 Minimize the land area required for school sites, within an urban setting, in order to promote compact development and conserve land. School Boards are encouraged to build multi-storey elementary schools located close to the street and co-located with either a public library or community facility to discourage land consumptive practices.
- 5 Contribute to the creation of compact neighbourhoods by building multi-storey Public/ Institutional buildings in order to maximize the site and services, and minimize floor area. Create an urban street condition through a building façade proportion that contributes to a sense of enclosure at the street. Multi-level buildings can accommodate accessory and, if applicable, complementary uses.



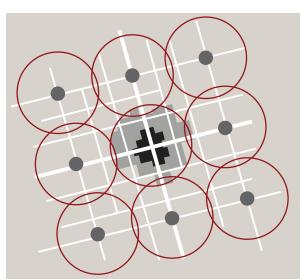


FIGURE XX - Illustration of a cluster of residential blocks that create a 15-minute neighbourhood (depending on topography and natural features) with a neighbourhood centre.

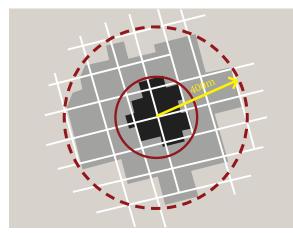


FIGURE XX - Neighbourhood centre within a typical 800m, 15-minute walk, measured from centre to edge

2.2 COMMUNITY FORM

The Brampton Plan envisions that most Neighbourhoods will be developed or transition into 15-minute neighbourhoods through the design and retrofit of new and existing communities (Built-Up Areas and Designated Greenfield Areas) and appropriate infill in Neighbourhoods, with the intent to support community health, well-being and quality of life.

A. 15-MINUTE NEIGHBOURHOODS

The intent of the planning and design of these neighbourhoods is to provide for the day-to-day needs of residents within a 15-minute walk from home.

- Neighbourhoods are to include a broad range of residential uses together with neighbourhood-supportive commercial and community services and facilities, such as libraries, recreation centres, schools and daycares, that serve and support the residents of these neighbourhoods.
- 2 Medium and low-rise apartment dwellings; various forms of multiple family dwellings, such as townhouses and attached housing clusters; and a variety of lot types in semidetached and single detached dwellings should all be considered within the relevant land use areas to achieve this diversity.
- **3** Neighbourhoods are to be located within a 15-minute walk of a Neighbourhood Centre in which higher density residential forms, supportive commercial and community services and facilities are encouraged to be concentrated.



Concentration of higher density forms of housing



Two-storey mixed use building with retail in the ground floor



Neighbourhood centre with community amenities

- 4 Land use components should complement one another through their distribution in the plan, while ensuring diversity of neighbourhood functions and appropriate transitions.
- **5** Public/community uses should be located to form landmarks within the community and/or within Neighbourhood Centres.
- 6 Existing natural and environmental lands should be woven into the fabric of the community as key features providing richness in the Open Space System and views for neighbourhoods.
- 7 The configuration of the Street Network and Multi-Use Trail System should assist in creating linkages to the Parks and Open Space System to ensure continuous and varied pedestrian routes throughout the community.
- 8 Provide a permeable network of collector and local roads to ensure strong links, accessibility, and route choices between neighbourhoods and neighbourhood centres.
- **9** Ensure new development is appropriately phased to provide connections to adjacent development, existing neighbourhoods, and future phases.

B. NEIGHBOURHOOD CENTRES

Neighbourhood Centres act as distinct centres and provide for a range of neighbourhood supportive uses such as local scale retail, service and office uses, cultural and recreation facilities, within a 15-minute walk of most residents.

- Locate and cluster higher residential densities, mixed uses, retail and employment opportunities, and access to higher order transit to form Neighbourhood Centres.
- **2** Include a community facility such as a school, a park or urban square in the Neighbourhood Centre.
- 3 Provide well distributed neighbourhood centres to ensure daily activities and amenities within 400 metres (5 minute walk) of residences to support walking, cycling, and local transit within the community.



Pedestrian Access to Transit Routes



Neighbourhood Centre

C. BLOCKS

Intent: To create a fine-grained pattern of development that is highly permeable and encourages active, healthy living.

- Plan/design blocks to be between 80m and 120m (150m to 180m) in length; to ensure permeability and discourage excessive driver speed block should not exceed 200m (250m) in length. Longer block lengths may be acceptable when coinciding with a local parkette located mid block to offer relief from massing (see Figure xx).
- 2 Mid-block pedestrian connections with or without vehicle access should be provided where block lengths exceed 200m in length and/or depth.
- **3** Organize blocks to set up views and vistas to natural heritage features, parks and open space.
- 4 Design block patterns so that lots have a consistent orientation, either front-to-front or back-to-back configuration along streets/ lanes or around open spaces. Avoid front-toback configurations.
- 5 In order to minimize the visual impact of long blocks, turn lots located on the end of blocks 90-degrees to face the other road, where appropriate. However, consider a variety of lot facing conditions, in addition to flankage lots, along long stretches of collector and arterial roads.
- 6 Minimize the use of cul-de-sacs, except where necessary due to grading and topography, or at view terminus sites.

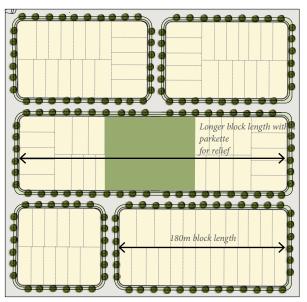


FIGURE xx - Longer block lengths acceptable with the inclusion of a parkette for relief.

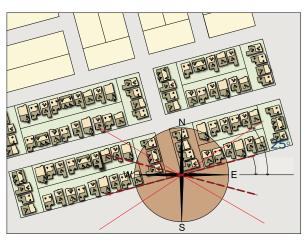


FIGURE xx - To maximize passive solar orientation the street and block alignment should be designed within 15-degrees of geographic east-west .



Mid-block connections



D. LOTTING

- 1 Provide a mix of lot sizes on each block.
- 2 Provide a minimum lot depth of 35m.
- **3** Locate larger lots at:
 - a. Community edges and gateways
 - b. Along neighbourhood collectors
 - c. Facing parks and open spaces
 - d. At the ends of blocks
- 4 Locate smaller lots interior to a block and ensure:
 - a. A maximum of 50% of a development will be small lot sizes.
 - b. No more than 3 of the same small lot sizes are located together on an individual block, or
 - c. No more than 5 small lots in a row, on an individual block.
- **5** Discourage lots smaller with frontages less than 12.2m fronting onto parks or opens spaces except where:
 - a. They have a single car garage.
 - b. They have rear lane-accessed garages.
- 6 Discourage rear lotting adjacent to parks / open spaces.

E. REAR LANES

- 7 Use rear lanes in key areas of the community to create a more pedestrian-friendly public realm. The incorporation of rear lanes is generally encouraged in Centres, Boulevards, Corridors and MTSA areas.
- 8 Encourage the use of rear lanes in mixeduse developments that contain grade related non-residential uses to allow for servicing and loading at the rear of the mixed-use building and avoid potential conflict between pedestrians and vehicles.
- 9 Encourage lane-based housing forms/lots that front parks and schools. In conjunction with the use of rear lanes:
 - a. Smaller lots of 9.2m frontages may be considered.
 - b. A maximum of three 9.2m lots may be sited in a row.
- 10 Focus rear lane-based forms in contiguous areas of a development / plan to allow for efficient maintenance.
- 11 Plan for rear lanes that are between 130 to 160 metres in length, with minimal 90 degree turns, and/or based on emergency services standards.



Street and Blocks

Mid-block pedestrian connections to facilitate block permeability

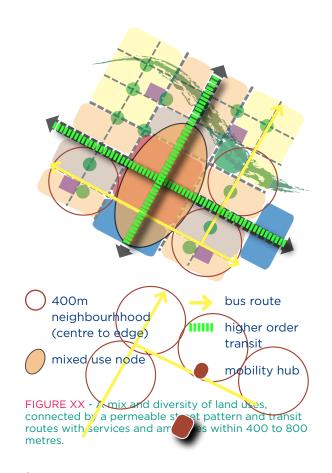
_ Laneway

2.3 MIX AND DIVERSITY OF LAND USES

Mixed use communities contribute to a jobs/ housing balance as lengthy commutes are one of the largest stressors associated with urban living. A mix of uses contributes to creating healthy and vibrant communities by strengthening the livework-play relationship through a proper balance of residential, employment, commercial, retail, and public amenity land uses.

Intent: To encourage a combination of residences, business, institutions, community and cultural facilities, and industry to create a more dynamic environment by ensuring that most people are within a 5 to 15 minute walk of schools, local shops, services, and transit.

1 Centres, Boulevards and Corridors shall be planned to provide a diverse mix of land uses and to ensure variety and balance in new communities.





Centre / Boulevard

Higherdensityalongprimary street to frame access to neighbourhood

Lower densities to transition from natural heritage edge

- 2 Provide a number of higher order diverse uses, such as major transit, arterial roads, an open space, commercial, employment, and institutional facilities to ensure a mix of land uses are within 800 metres (10 minute walk) of residents.
- 3 Centrally place institutional uses as integral components of communities, as a civic focus and/or focal point adjacent to a park or community facility.
- Ensure an appropriate transition of use, intensity, and scale from Centres, Boulevards and Corridors to the surrounding Neighbourhoods area.
- 5 Cluster office, retail, and service commercial uses at collector roads and other key locations along arterial roads. These uses, when adjacent to residential areas, should have direct pedestrian / cyclist connections that prevent vulnerable road users from circuitous paths to these destinations along collector and arterial roads.
- 6 Encourage mixed-use buildings to create an urban streetscape with retail at street level and residential above.
- 7 Where appropriate, strategically intensify, underutilized areas such as strip malls, large format retail sites, and underdeveloped sites in and around existing neighbourhoods to serve as mixed use neighbourhood centres with increased residential densities.



Built form massing transition



Built form framing public realm

2.4 MIX AND DIVERSITY OF HOUSING

A mix of housing types including lot size variation increases residential density while consolidating a diverse and vibrant community. Housing diversity also supports integration of suitable and affordable housing for aging communities and residents of differing economic conditions.

Intent: To provide a diverse range of housing types while enabling ease of access to neighbourhood centres for most residents.

- Provide for a range of housing types, including a range of unit sizes with a range of number of bedrooms, to create choices for all sectors of society, regardless of their age or income bracket, preferred lifestyle, physical ability, or tenure. This mix and diversity makes it possible for households to move / remain within one community as housing needs and lifestyle preferences change.
- 2 Provide a gradation of residential densities, with the highest densities placed at identified intensification areas, mobility hubs or mixed use nodes, and transition to lower density at an approximate radius of 1200 metres (15 minute walk) from centre to edge.
- Ensure at least three of the following housing types exist within a neighbourhood, defined by an approximate 400 metre radius (15-minute walk):
 - a. Single- and semi-detached units
 - b. Townhouse units
 - c. Apartment units
 - d. Mixed use residential units
 - e. Live-work units



Low-rise mixed use / rental housing, Vancouver

- **4** Provide mix of unit types and housing forms to provide options for:
 - a. Aging society, empty nesters and seniors
 - b. Non-traditional households
 - c. Lifecycle housing
- **5** Provide universally accessible housing options to enable the widest spectrum of people, regardless of age or ability, to live within the community.
- 6 Place retirement and long-term care facilities closer to the neighbourhood centre or mixed use nodes, and incorporate multi-storey components to achieve sufficient yield on small sites.
- 7 Provide built form transition to higher density forms lower density forms.
- 8 Provide for live-work units as suitable forms of development to facilitate home-based employment, which ensures proximity between housing and jobs, while enhancing a mix of uses.
- **9** Provide a range of lot sizes and building forms within a residential block to ensure a diversity of housing types and to avoid a homogeneous streetscape.
- 10 Ensure buildings provide a variety of architectural styles, elements, and material detailing to create a distinctive and complementary character, as well as to provide visual interest.
- 11 Ensure the application of the Brampton Accessibility Technical Standards to promote universal design principles that will enhance accessibility in residential areas.



Diverse housing forms



Low-rise rental apartment, Vancouver



Residential units within a mid-rise mixed-use development



Live-work units offer home-based employment opportunities



11

2.5 WALKABILITY

A modified grid pattern of streets and a connected system of neighbourhoods and open spaces, creates walkable neighbourhoods that support the 400 metre (5 minute walk) walking community. A high degree of connectivity supports the accessibility and convenience of transit, schools, retail, and community services, ultimately reducing car dependence.

Intent: To encourage walking and reduce vehicle dependence by providing a mix of uses and density with a high degree of connectivity in a community or neighbourhood

 Promote internal connectivity and multiple connections to the community at large, taking into account the existing and proposed urban structure of adjacent and adjoining areas.

- 2 Provide for an interconnected network of sidewalks, bicycle routes, transit, and multiuse trails ensuring proper integration with surrounding neighbourhoods and a variety of destinations, allowing for continuous movement throughout the community.
- **3** Design the street layout to ensure efficient walking routes to schools, centres, transit, and other key destinations.
- 4 Implement traffic calming measures such as on-street parking, reduced lane widths, public laneways, raised intersections, and/ or traffic circles to reduce vehicular traffic speeds and to ensure safe walking and cycling environments.
- Frovide neighbourhood permeability by designing blocks to be between 80 to 120 metres in length (no more than 200 metres) to promote active transportation and



Mid-block Pedestrian Connections



Pedestrian oriented Mixed-use area



Centrally located park provides opportunities for social interaction.



Accessible, connected, and walkable trail system.

dispersed traffic movements. Ensure street block length is generally shorter closer to neighbourhood centres.

- 6 Locate schools such that pedestrians and cyclists can easily reach building entrances without crossing bus zones, vehicle routes, parking entrances, and student drop-off areas.
- 7 Centrally locate mailboxes adjacent to activity areas to foster human interaction and sense of community.
- 8 Design public pedestrian walkways to include Crime Prevention Through Environmental Design (CPTED) principles in order to provide a safe and comfortable environment for pedestrians.
- 9 Promote safety in the design of communities through creating a walkable, permeable street system with sidewalks on both sides of the road and short residential blocks to avoid long unbroken walls of buildings that do not allow for movement through the community. Long blocks create a thoroughfare for traffic with no interruptions to slow traffic.
- **10** Encourage opportunities for vibrant, diverse and pedestrian-oriented urban environments that provide for public safety, changing experiences, social engagement, and meaningful destinations.

2.6 CULTURAL HERITAGE

The cultural heritage of Brampton is an important component of the City's history and needs to be protected as Brampton evolves. The policies of the Official Plan, set out the preservation and enhancement of the buildings and landscapes that make up the cultural heritage of Brampton.

Intent: To respect, protect and enhance the City's cultural heritage resources through the comprehensive development of new buildings and landscapes adjacent to them.

- Ensure the Precinct Plan / Area Plan refers to the City's Cultural Heritage Register and enhances the City's image as 'the Flower City'.
- 2 Incorporate cultural heritage landscapes, such as hedgerows and rural road swales, into the community and neighbourhood design, to the extent practical, through a range of approaches. Where not precluded by grading or other servicing constraints, site alteration including road widenings, road re-alignments and slope or bank stabilization, should not adversely affect cultural heritage landscape features.
- Locate open spaces where there is an opportunity to preserve cultural landscapes.
- 4 Ensure that significant views and vistas to Cultural Heritage (built or natural) are protected and enhanced and made available to the public.
- 5 Protect significant views and vistas through the location and strategic configuration of open space opportunities, and orientation and placement of new development.
- 6 Where applicable, provide for the relocation or adaptive reuse of heritage structures or cultural landscapes such as hedgerows and rural road swales.
- 7 Maintain existing hedgerows and rural road cross sections, where feasible, and incorporate into the design of the Precinct Plan / Area Plan as dedicated open space blocks.







Examples of heritage integration and design reference



Public art that reflects the cultural heritage of the area.

- 8 New development on lots adjacent to built heritage resources will provide a transition in lot sizes, setbacks, massing, and grading that complements the built heritage resource.
- 9 New buildings located adjacent to built cultural heritage resources will generally be complimentary to existing historical building types, colours, and material palettes having regard for modern building designs, techniques, and materials.
- 10 Consider incorporating existing heritage buildings in situ through retention, restoration, and adaptive reuse to provide a tangible example of the cultural heritage of the area.
- **11** Promote arts and culture by encouraging public art installation throughout a community in highly visible locations. Public art enhances the character of a community and contributes to the culture and history of a location.
- 12 Consider public art at mixed use nodes and as focal points in open spaces to reflect the cultural heritage of the location. Public art can include memorials, sculpture, water features, murals or individual installations at visually prominent sites.
- 13 Incorporate specific design elements to compliment and enrich the City's Flower City heritage, such as plantings at gateway features, floral landmarks and park landscaping as part of a planting strategy, and/or neighbourhood character theme.



Existing hedgerow preserved as part of the local street right-of-way.



Protection and integration of mature heritage trees with open space amenities



Protected and enhanced heritage architecture integrated with open space development



Transit oriented development - Mount Pleasant Village.



3.1 STREET NETWORK AND BLOCK DESIGN

Street network and block design in Brampton shall adhere to the Brampton Plan, the Active Transportation Master Plan (ATMP) and the Brampton Complete Streets Guide (BCSG).

The Complete Streets Guide outlines the vision and guiding principles for a comprehensive, integrated transportation network with streets that provide safe, equitable and convenient travel for people of all ages and abilities.

These include:

- Create Safe and Accessible Streets
- Improve Sustainability and Resiliency
- Promote Healthy and Active Living
- Improve Transportation Choice and Balance
 Priorities
- Develop Connected Networks
- Respect Existing and Planned Contexts
- Create Vibrant and Beautiful Places
- Enhance Economic Vitality

These guidelines build upon the Complete Streets Guide by providing further design direction for street network and block design for all forms of development.

Intent: To create a fine-grained pattern of development that is highly permeable and encourages active, healthy living.

A. STREET PATTERN / NETWORK

- 1 Facilitate ease of movement and orientation through the community through the design of a coherent and comprehensive street network.
- **2** Create a clear hierarchy of street types and functions.
- **3** Create street patterns that incorporate natural heritage features.
 - a. Provide single-loaded streets along edges of natural heritage features and incorporate traffic calming in these locations.
 - b. Align streets to provide views/vistas to natural heritage features.
- **4** Connect new street network to existing and planned roads in adjacent developments.
- **5** Maximize connectivity for all travel modes by ensuring the street network incorporates multiple options for moving between destinations.

- 6 Design street patterns to reinforce focal points, neighbourhood centres, mixed use nodes and public spaces by providing street frontage and direct connection to them.
- Provide frequent local road connections along collectors to enhance connectivity and permeability.
- 8 On local roads, avoid long, uninterrupted sections over 400 metres in length, to discourage excessive driver speed.
- 9 Design local roads at a pedestrian and cycling scale, supported by appropriate urban design and streetscape principles, to provide the opportunity for pedestrians and cyclists to reach nearby destinations in a safe and supportive environment.



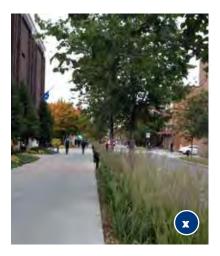
B. TRAFFIC CALMING

- 1 To calm traffic and create pedestrian-friendly, safe streets consider the following when designing local street areas of high activity, such as mixed use nodes and neighbourhood centres:
- 2 Create pedestrian-friendly and safe streets consider the following traffic calming measures when designing local street areas of high activity, such as those in mixed use nodes and neighbourhood centres:
 - a. Spacious sidewalks on both sides (minimum width as per AODA standards)
 - b. Pedestrian crosswalks
 - c. Coordinated street furnishings

- d. Street trees and landscaping
- e. Medians
- f. Curb bulb-outs
- g. Woonerfs
- h. Narrow streets to reduce driver speeds
- i. Raised crossings / intersections
- j. Speed bumps
- k. Signage
- **3** Integrate a multi-use trail system creating linkages that ensure continuous and varied pedestrian routes throughout the community.



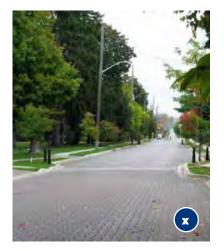
Street view terminal at community focal point



Spacious sidewalks



Single-loaded street adjacent to park



Traffic calming measure - pedestrian crossing with enhanced paving

3.2 TRANSIT SUPPORTIVE

A complete community needs to ensure that a compact, mixed use development with a variety of residential forms, makes transit feasible, efficient, and accessible to all sectors of the public. Transit supportive systems require densities and development patterns that connect people of all ages to homes, jobs and other places linked to their lifestyles. Transit supportive developments support the efficient use of transit facilitates, help to reduce greenhouse gases and improve public health.

Intent: To promote transit-oriented development as a priority tool to achieve sustainable and complete communities.

- 1 Promote higher densities and compact development to support existing and planned transit services, reducing the need for automobile use and greenhouse gas emissions.
- 2 Ensure communities promote transit supportive land uses at existing and future Transit Hubs/Nodes such as higher density residential and employment development forms.
- For most residents within a Neighbourhood, ensure a walking distance of 200m to 400m (3 to 5 minute walk) to a local transit stops and 1200m (15 minute walk) to higher order transit.
- 4 Consider means to reduce the overall footprint of commuter parking areas at Transit Hubs/Nodes through structured parking to promote compact development and conserve land.
- 5 Ensure the coordination of the transit network with the multi-use paths to enhance accessibility to transit.
- 6 Bus stops should have direct pedestrian/ cycling connections with adjacent sidewalks and multi-use paths, in addition to buildings such as schools and commercial plazas.



Transit Corridor



Bicycle Infrastructure

- 7 Provide a range of transit facility amenities including but not limited to:
 - a. Transit shelter or other structures for weather protection; where four-sided transit shelters are not possible, provide overhead open-air canopies to protect transit users from sun, rain, and snow.
 - b. Shade trees
 - c. Seating
 - d. Garbage and recycling receptacles
 - e. Lighting
 - f. Route information, wayfinding and automated fare machines
- 8 Transit facility amenities shall be designed in accordance with Transit Authority standards.
- **9** Support bike use through the provision of bike racks, bike storage, and lockers at transit stops and stations.
- **10** At the Site Plan scale, if a transit stop is located within 100 metres of a building, orient the functional entrance to provide convenient access.
- **11** Locate transit stops close to Secondary Schools.



Transit Infrastructure

3.3 ACTIVE TRANSPORTATION

A balanced and inclusive transportation network facilitates all modes of movement including walking and cycling by way of appropriate walking and cycling infrastructure.

Intent: To encourage active transportation as alternative modes of transportation, while supporting physical activity through the provision of a linked system of walking and cycling trails that ensure residents have increased access and mobility options to local destinations for work and play.

- Support community health and improve air quality by providing infrastructure that promotes walking, cycling, and use of transit as the primary means of transportation, thereby reducing dependency on the private automobile for daily activities.
- 2 Design communities with a typical walking distance of 400 metres (5 minutes) to daily activities, or 1200 metres (15 minutes) to higher order transit or community centre.

- 3 Implement a network of active transportation facilities - inter-connected pedestrian and cycling routes and trails, walkways, sidewalks, bicycle lanes - that link the community with surrounding neighbourhoods, are integrated with existing and future public transit infrastructure and connected to regional and local trail systems.
- **4** Provide adequate and accessible road, transit, pedestrian, and bicycle links throughout the new community/development.
- 5 Design the street and block pattern to emphasize connections and walkability both internally and with surrounding neighbourhoods, through a grid or modified grid pattern discouraging cul-de-sacs, P-loops and crescents, except where necessary due to grading and topography.
- 6 Add pedestrian connections to sidewalks, walkways in adjacent commercial plazas and trails/MUPs at existing cul-de-sacs, where none exist.



Enhanced Trail Surfacing



On-Road Bike Infrastructure



Trail Distance Markers



Comprehensive Wayfinding System

- 7 Provide for a continuous, linked, legible, and clearly marked system of multi-use pathways throughout the community as part of the open space network.
- 8 Provide facilities in retail, commercial and employment developments to support active transportation, including secure short and long term bicycle parking, shower facilities and change rooms.
- **9** Provide paths to connect commercial plazas to residential areas.

A. CYCLING

- Accommodate a cycling network that is safe, convenient and legible, including bike lanes, off-road cycling paths, multi-use paths that are interconnected. Ensure the active transit system complies with the standards of the Active Transportation Master Plan (ATMP) and Brampton Complete Streets Guidelines (BCSG).
- 2 Encourage cycling by providing:
 - a. Dedicated, separated and signed cycling lanes on collector roads
 - b. Clearly marked and signed cycling routes on shared streets
 - c. Reduced vehicle speeds on local streets
 - d. Appropriate street widths to accommodate dedicated and/or shared cycling lanes/routes
 - e. Bicycle parking facilities
- **3** Consider providing planters or planted strips to separate cycling lanes from traffic.
- 4 Ensure pedestrian and cycling routes connect to Transit Hubs/Nodes.
- 5 Provide safe routes to schools that promote walking and cycling by providing a network of connected local streets with traffic calming measures (listed under 3.1.B)
- **6** Locate bicycle parking close to the building entrances.
- 7 Provide accessible and secure bicycle parking in mixed-use developments, as well as in retail, commercial, and employment area developments; requirements for bicycle parking are outlined in the Zoning By-law.



Shared-Bike Systems



Pedestrian Connectivity



Signed Bike Trail Systems

B. TRAILS AND MULTI-USE PATHS (MUP)

- 1 Design trails and MUPs to accommodate a range of users and abilities and be barrier-free, where appropriate, including street/intersection crossings and curb cuts.
- 2 Provide wayfinding signage and/or trail markers throughout the trail network and clearly sign trails regarding permitted uses and speed.
- **3** Avoid siting of trails and MUPs close to significant and sensitive natural areas and features. Where they are permitted to be located, multi-use paths shall be designed to minimize and mitigate impacts on natural heritage features.
- 4 Enhance safety by providing pedestrian lighting at trail entrances and connections, while minimizing disturbance to adjacent natural habitats.
- 5 Incorporate interpretive signage at various locations along trails and MUPs, located in proximity to significant natural features or open space elements.
- 6 Provide benches and waste / recycling receptacles at trail heads and at regular intervals along the trail/MUP.

3.4

STREETSCAPE DESIGN

Intent: To create vibrant and beautiful streets as part of a broader cohesive, quality public realm that facilitates movement and encourages active transportation.

Development at all scales and within the various areas of the City Structure (Centres, Boulevards, Corridors, Neighbourhoods, Employment Areas) shall provide for an enhanced, safe, and comfortable pedestrian environment. The pedestrian street zone shall be designed with a combination of streetscape elements:

- Sidewalks
- Street furniture / furnishings
- Signage
- Pedestrian crossings
- On-street parking
- Planting and Shade

Complete Streetscape



A. SIDEWALKS

Sidewalks should be continuous throughout the community, and designed as an integral part of the pedestrian system to promote active transportation.

- Design sidewalks to applicable municipal accessibility standards to accommodate the needs of persons with disabilities, visual impairments, and the elderly.
- 2 Where sidewalks are required, sidewalks will be encouraged on both sides of all streets. In instances such as the following (Brampton Plan 3.4.2.8), a sidewalk may only be required on one side of the street:
 - a. Portions of streets flanking the Natural Heritage System;
 - Existing window streets where sidewalk extensions join a sidewalk on an arterial or collector street;
 - c. Portions of streets that have a designated multi-use pathway within the boulevard on one side; and,
 - d. Street reconstruction or retrofit projects where existing conditions such as mature trees, right-of-way widths, or Civic Infrastructure would present a barrier to sidewalks on both sides of the street.
- **3** Ensure sidewalks are clear of obstructions and there is sufficient space in the boulevard to provide for street furnishings, public utilities, tree plantings, and transit shelters.
- 4 In existing mixed use areas consider flexible spaces, opportunities to reclaim underutilized roadway, or repurpose parking spaces to create additional public space for benches, planters, landscaping, bike parking, and café tables and chairs, where feasible.
- 5 In new mixed use areas, sidewalks shall be widened to accommodate and support pedestrian activity, spill out and enhanced streetscaping elements.
- 6 Use alternative pavement markings or materials to highlight pedestrian areas and minimize conflict between vehicular and pedestrian users.



Sidewalks and Streetscaping



Continuous Sidewalks with Pedestrian Crossings



Street Lighting, and Art Exhibition Infrastructure



Landscaping and street furniture visually enhance the streetscape

B. STREET FURNITURE

- Concentrate street furniture in areas with the highest pedestrian traffic, such as mixeduse areas, neighbourhood centres, key intersections, and open spaces.
- 2 Incorporate comprehensive and coordinated streetscape furnishings that reinforce the function of the street as a public place. Such elements include lighting, benches, bicycle parking, newspaper boxes, waste and recycling receptacles.
- **3** Provide street furnishings that accommodate a wide range of users with diverse abilities and needs.
- 4 Use unique street furniture to identify significant areas or neighbourhoods within the community. Developers, in consultation with the City, should develop a unified standard and design vocabulary for street furniture which shall be apply to public streets in all and abutting mixed-use areas and community nodes.
- Design street furniture/furnishings as a coordinated family of elements that fit and complement the overall streetscape design.
- 6 Select street furniture/furnishings that are high quality, durable, vandal resistant, and easy to maintain/replace. Consider streetscape elements manufactured from recycled material.

C. SIGNAGE

- Develop a comprehensive wayfinding strategy, including directional signage and mapping at key locations, such as mixed use nodes, neighbourhood centres, trails and key intersections.
- 2 Provide wayfinding signage that has a high level of clarity, visibility, and visual interest; is made of high quality materials; and aids pedestrians and drivers in navigating the area, especially at night.
- **3** Provide signage with a unified design vocabulary.



Interpretive / Educational Signage



Pedestrian Crossing / Bump Out Traffic Calming Measure

D. PEDESTRIAN CROSSINGS

- 1 Provide a formal pedestrian crossing at every four-way intersection in high pedestrian areas to promote safety and a pedestrian-friendly environment.
- 2 Provide signalized pedestrian crosswalks at locations where important civic destinations and/or significant walking traffic is anticipated, such as near retail shops, community amenities, schools and recreation centres, provided traffic warrants and minimum spacing requirements are met.
- **3** Design pedestrian crossings to minimize conflict, and enhance safety and visibility, including:
 - a. A marked travel path of a minimum width of 3.0 metres connected from sidewalk to sidewalk
 - b. Distinctive pavement markings using painted lines, enhanced paving materials, raised paving, textured pavement.
 - c. Signage.
- 4 Provide curb ramps/cuts at crossings for accessibility and to facilitate wheel-chair and stroller usage. Curb ramps are to incorporate tactile surfaces or materials, contrasting sound properties to help pedestrians with visual impairments (as per AODA standards).
- 5 Design pedestrian crossings with bump outs, bollards, refuge medians to further enhance safety, particularly where curb-to-curb distances are greater.



Pedestrian Crossing at School



On-street Parking within a lay-by

E. ON-STREET PARKING

On-street parking serves a number of important functions. In addition to supporting mixed-use and commercial areas, on-street parking also provides traffic calming to streets and acts as a safety buffer separating the pedestrian realm from vehicles.

- Provide on-street parking on both sides of the street in mixed use areas, neighbourhood centres and along urban main streets.
- 2 Design on-street parking to enhance traffic calming and the streetscape environment, including:
 - a. Bump outs.
 - b. Enhanced paving (coloured, textured, etc.)
 - c. Rolled curbs.
 - d. Enhanced planting.
- **3** Ensure a minimum of 1.0m from the on-street parking areas to allow for door swing, in addition to the sidewalk travel path.

F. LANDSCAPING

The City of Brampton Landscape Development Guidelines (2019) provides detailed direction with respect to Architectural Components, Planting, Street Furnishings and Special Elements in these areas:

- a. Street boulevards owned by the City of Brampton
- b. Buffers owned by the Region of Peel
- c. Privately open space regulated by the City's site plan control process

In addition to the Landscape Development Guidelines, the City-Wide Urban Design Guidelines provides further guidance on private landscaping for Low-rise, Mid-rise, High-rise, Mixed-use and Non-residential developments in Part C. The overarching directions for landscaping, as it relates to the Streetscape are to:

- Coordinate the public and private landscape elements that make up the street environment, including coordination of fencing, walls, planting, paving and site furnishings in order to present a cohesive and beautiful public realm.
- 2 Encourage enhanced landscaping within the public boulevards and in the front yards of adjacent residential, commercial, institutional and employment developments.
- **3** Develop connected tree canopies, enhance the urban tree canopy and provide shade over sidewalks.



Enhanced landscaping



Wide Pedestrian Sidewalks and Enhanced Landscaping within Boulevard



Connected Tree Canopy, Seattle WA

BA NATURAL ENVIRONMENT AND OPEN SPACE

Natural Heritage, Parks and Open Space are fundamental elements of a complete and healthy community.

A parks and open space network that is connected to the natural heritage system, and to the communities, encourages residents to walk and cycle, in addition to providing places for gathering, socializing and active and passive recreation.

In addition to Brampton Plan policies 3.2.5.16 - 3.2.5.17 - Natural Assets, policies 3.5.1 - Parks and Open Space and the City's Parks Plan (2041), the following shall apply:



Figure x: Natural heritage system - Credit River Valley



Figure x: Mature trees are preserved In-situ

4.1 NATURAL HERITAGE SYSTEM

The Natural Heritage System (NHS) is a key structural element of the City's structure (see Brampton Plan Schedule 1 and Schedule 6A).

Brampton's NHS is part of the regional and provincial natural heritage system. It will be a continuous natural open space system and corridor with connections to Lake Ontario, Niagara Escarpment, and Oak Ridges Moraine. The City shall ensure that the NHS is preserved and enhanced for future generations. These areas including valleylands, wetlands and woodlands shall be preserved, enhanced and integrated within the communities/neighbourhoods. Parks and open spaces complement and may provide connections and linkages to support the NHS.

Where Natural Heritage System features are present, they should form one of the ordering elements of the community structure.

Intent: To protect, restore, enhance the natural heritage system and mitigate any existing or potential negative impacts due to urbanization and development.

- Integrate the NHS as a key structural element of all neighbourhoods by providing for a range of development interfaces that create opportunities for public vistas and connections to the NHS (e.g. terminal views at the end of prominent streets).
- 2 Connect and integrate components of the NHS with the parks and open space system and the local and regional trail systems, including: valleylands, woodlands, wetlands, etc.
- 3 Minimize development that may encroach upon/impact the NHS including: light pollution, debris, and unauthorized access.

- **4** Where appropriate, provide connections to the NHS through the open space system or trail network.
- **5** Where appropriate, provide opportunities for passive recreation adjacent to the NHS.
- **6** Where appropriate, provide frequent access points and significant street frontage adjacent to the NHS to promote views and accessibility.
- 7 Follow detailed guidelines included in City's Woodland Management Plan Guidelines.

4.2 STORMWATER MANAGEMENT FACILITIES / NATURALIZED CHANNELS

Rainfall, snow melt, and stormwater runoff are natural resources that must be managed to protect and maintain surface and groundwater quantity and quality, and the ecological health and diversity of natural areas and fish and wildlife habitat.

Stormwater Management Facilities and Naturalized Channels are integral components of the Open Space System; promote sustainability by providing habitat, enhancing ecosystem structure and resilience (different eco-regions, native plant species, etc).

Stormwater Management Facilities should be designed as major landscape features with reference to the design criteria set out in the City of Brampton Green Gateways Design Guidelines for Stormwater Management Ponds.

Intent: To provide passive recreational and interpretive / educational opportunities while augmenting the extent of the community's green areas and their associated microclimatic benefits.



Figure x: Valleyland multi-use trail



Naturalized Channels



Residential Edge

- Implement a comprehensive rainwater and groundwater recharge strategy as part of the stormwater management treatment train;
- 2 Implement a Low Impact Design strategy to emphasize the use of bioswales, innovative stormwater practices, constructed wetlands, and alternative filtration systems, such as treatment trains and water conservation measure.
- **3** Consider on-site treatment of stormwater through the use of green infrastructure such as bioswales, at source infiltration, and permeable pavement.
- **4** Locate stormwater management ponds adjacent and integrated to the open space system.
- 5 Enhance views and access to ponds by designing a portion of the pond to be bounded by either streets and/or open space.
- 6 Design ponds to blend with the natural landscape. Where feasible, conceal inlet and outlet structures using a combination of planting, grading, and natural stone.
- Discourage fencing of ponds, except where necessary along rear or flankage residential property lines.
- 8 Provide significant public visibility and access to SWM facilities, through new street/block patterns (minimum 2 street frontages).
- **9** Provide opportunities for passive recreation with particular attention to safety and access issues.
- **10** Co-ordinate the landscape components, such as look-outs, seating areas, fountains and gazebos, to complement the overall character of the community.
- Provide a planting strategy (including canopy trees) that enhances the City's urban forest and promotes the objectives of the Urban Forest Management Plan and Brampton Plan policies 3.2.5.10 to 3.2.5.15.
- **12** Ensure engineered channels are naturalized and support subwatershed / stormwater management functions.



Figure x: Urban stormwater management and biofiltration system



Figure x: Suburban naturalized stormwater management pond with trail connections



Figure x: Stormwater as an amenity and site feature

4.3 RECREATIONAL TRAILS

Recreational trails and multi-use paths are identified in Brampton Plan Schedule 3A - Active Transportation Network. Their design shall be guided by the standards defined in the City's Active Transportation Master Plan. In addition, the following shall also apply:

- 1 Incorporate trails along valleylands and open spaces.
- **2** Connect trails to the sidewalk, to residential areas and to other open space trails.
- 3 Design trail entrances to incorporate pedestrian/cyclist amenities such as lighting, seating, waste/recycling bins and bicycle parking.

- 4 Ensure secondary pedestrian trails located in environmentally sensitive areas consist of low impact materials such as natural earth, woodchips, mown strips, or limestone screenings.
- **5** Avoid locating trails in low-lying areas.
- 6 Ensure trials are minimum 3.0m wide and secondary trails are minimum 2.4m wide.
- 7 Incorporate signage and interpretive / educational features along trails.



Figure x: Recreational trail in valleyland with access to residential areas



Figure x: Recreation trail paved with woodchips



Figure x: Recreational trail with mowed / maintenance strip

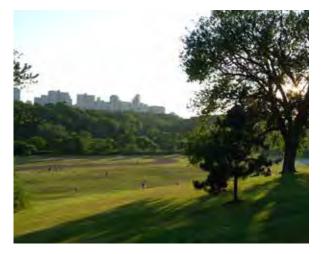
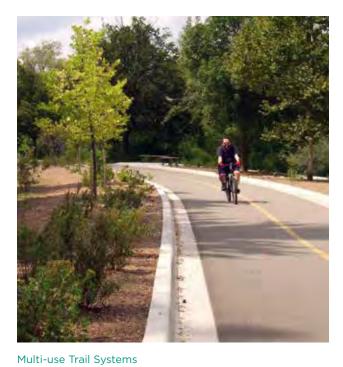


Figure x: Recreation trail integrated within open play areas





Multi-use trails to connect parkland, natural heritage areas and neighbourhoods



Figure x: Multi-Use Trail System



Figure x: Trail in valleyland with tree canopy

Figure x: Trail entrance with bicycle parking

4.4 PARKS AND OPEN SPACE

The Brampton Plan recognizes the development of parks and open space as a key city-wide priority as part of the Health and Wellness City-Wide Building Block. The new Official Plan supports "rethinking" of the existing parks hierarchy including consideration of Urban Parks, Linear Connectors and Privately Owned Public Space (POPS).

Parks and open spaces are valuable community assets that provide opportunities for social interaction, recreation, programmed activities, as well as areas for quiet contemplation and relaxation. Parks and open spaces also provide many ecological functions such as enhancing biodiversity and helping to both mitigate and adapt to the impacts of climate change. Ensuring access to good, quality parks and open spaces that are well designed, offer a range of opportunities for individual or community activities, and are broadly accessible to all ages, incomes and abilities of residents are key foundations for a healthy city. The Parks and Open Space system consists of:

- City Parks
- Community Parks
- Neighbourhood Parks
- Urban Parks
- Linear Connectors

In addition to the Brampton Plan policies contained in **3.5.1** Parks and Open Space, the Parks and Recreation Master plan (PRMP) and the Parks Plan (2041), the following shall apply:

A. CITY PARKS

Intent: City Parks are intended to provide green space and recreation opportunities at the city scale, and in some cases support regional park needs.

City Parks are destinations that serve the entire city. Their size will depend on the shape and constraints of surrounding properties, specific programs for the park, or reflect historical land assembly practices.



Figure x: Active recreational opportunities (Chinguacousy Park)



Figure x: Skate park (Chinguacousy Park)

B. COMMUNITY PARKS

Intent: Community Parks are intended to provide a range of opportunities for outdoor active and passive recreation.

Community Parks vary in size from 10 to 12 hectares and serve between 15,000 to 20,000 residents within a 3-kilometre radius. This may include large playgrounds, shade structures, multi-purpose courts, splash pads, multiple sports fields and associated flood lighting, seating areas, walkways, lighting, open play areas, landscaping, floral displays and buffer areas.

C. NEIGHBOURHOOD PARKS

Intent: Neighbourhood Parks are intended to provide opportunities and experiences for outdoor active and passive recreation within a suburban residential context.

Neighbourhood Parks vary in size from 0.8 - 1.2 hectares and serve between 4,000 to 5,000 residents within a 5-minute walk (800m maximum distance). This may include playgrounds, shade structures, multi-purpose courts, splash pads, multiple sports fields and associated flood lighting, seating areas, walkways, lighting, open play areas, landscaping, floral displays and buffer areas.



Figure x: Cassie Campbell Community Centre

D. URBAN PARKS

Urban Parks are specialized parks that are located within the city's urbanized Centres, Boulevards, and Corridors and higher density neighbourhoods.

In certain instances, Urban Parks may be located in private spaces that provide for public access. The Urban Park Hierarchy consists of the following:

- Urban Squares
- Public Commons
- Promenades
- Connecting Links
- Pocket Parks
- Sliver Parks

URBAN SQUARES

Intent: To serve community users who are generally within a 5-minute walking distance (approximately 400 metres), and support neighbourhood-oriented social opportunities, as well as City-wide entertainment and cultural events depending on their size and location.

Urban Squares are a moderately scaled urban park typology, approximately 0.1 to 0.8 hectares in size. Urban Squares are commonly associated with commercial and residential land uses.

Urban Square spaces may include public art, small outdoor game areas, seating areas and places to eat, as well as street- related activities such as vendor and exhibit space.

For guidelines on Urban Parks design refer to the Parks Plan 2041-- Appendix I Parkland Design Guidelines.

PUBLIC COMMONS

Intent: To serve community uses who are generally within a 10-minute walking distance (approximately 800 metres), and provide social and recreational focal points in urban neighbourhoods.

Public Commons are the largest urban park typology, approximately 0.75 to 2.0 hectares in size. Public Common spaces are the social and recreational focal points of a neighbourhood. They typically meet the needs of the local community, and in some instances, accommodate City-wide facilities. Public Common spaces support a balance of active and passive uses. Public Common spaces should be coordinated with school sites, where possible.

Public Common spaces should accommodate special features that add visual interest and contribute to placemaking, including locations for public art.

For guidelines on Urban Parks design refer to the Parks Plan 2041-- Appendix I Parkland Design Guidelines.

PROMENADES

Intent: To enhance the pedestrian experience along with highly activated at-grade retail spaces.

Promenades are substantial linear spaces that are located between adjacent building facades and the adjacent road right-of-way. Promenades are between 5 and 25 metres in width, with an average width along its length of 15 metres.

For guidelines on Urban Parks design refer to the Parks Plan 2041-- Appendix I Parkland Design Guidelines.



Figure x: Community Gardens



Figure x: Recreation Centre / Playground as focal point of park



Figure x: Large Green Spaces with Seating Areas

CONNECTING LINKS

Intent: To enable pedestrians to travel through the community quickly and easily.

Connecting Links are outdoor or indoor walkways that may be lined with small stores, restaurants and cafés. Connecting Links are minimum of 4 metres in width, and may be substantially wider. When enclosed, their floor to ceiling height should be a minimum of 7 metres.

Connecting Links should contribute to the logical wayfinding system and help to establish a wellconnected parkland network within a highly urban environment.

For guidelines on Urban Parks design refer to the Parks Plan 2041-- Appendix I Parkland Design Guidelines.

POCKET PARKS

Intent: To serve a local community that is generally within a 2.5 to 5-minute walk of residents, visitors and businesses.

Pocket Parks are small, public spaces that accommodate socializing in dense urban areas and designed to a very high standard to support more intensified use. Pocket Parks are destinations unto themselves that are animated with outdoor seating, restaurant and retail frontages.

For guidelines on Urban Parks design refer to the <u>Parks Plan 2041-- Appendix I Parkland</u> <u>Design Guidelines.</u>

SLIVER PARKS

Intent: To add to the width of the public sidewalk system, and create plazas or forecourts between the face of the adjacent building and the street. Sliver Parks are small-scale, linear components of the parkland network

Sliver Parks are appropriate adjacent to active building frontages, with transparent and accessible at-grade uses that animate the space, improve safety and encourage use.

For guidelines on Urban Parks design refer to the Parks Plan 2041-- Appendix I Parkland Design Guidelines.

E. LINEAR CONNECTOR

Linear Connectors reflect lands that are oriented to off-road recreational trails and other connecting links between parkland or major community destinations and form part of the broader Active Transportation Network.

Intent: To advance active transportation as a key component of the overall mobility system.



Figure 2: Pocket park with primarily hard surfaced, with limited soft surface elements. Paley Park, New York, USA



Figure x: Commercial Mid-block Connection



Figure x: Covered POPS space, New York City



Figure x: Park with multi-seasonal amenities



Figure x: Park with public art

F. PRIVATELY OWNED PUBLIC SPACE (POPS)

Privately Owned Public Space (POPS) form an essential part of the urban fabric and have an important function in enhancing pedestrian connectivity in urban areas of the city and opportunities for recreation and social engagement.

Intent: To enhance the quality and function of the public realm in urban areas by providing public access to Privately Owned Public Space.

- 1 Privately Owned Public Space (POPS) are open spaces located within private property which are made publicly accessible via legal agreements between the property owner and the municipality.
- 2 POPS provide high-quality pedestrianoriented open spaces that link adjacent land uses, streetscapes and other public realm components.
- Although POPS enable pedestrian connectivity, they may also be destinations unto themselves with outdoor seating, restaurant and retail frontages, and public art.
- **4** POPS should be designed, constructed and maintained to City standards.

Generally, POPS share three definable characteristics; they are:

- a. Open or landscaped space with access from public property;
- b. Privately owned and maintained; and
- c. Legally required to be open and accessible to the public for general use.

In evaluating the suitability of POPS to be considered as parkland, the following should be taken into account:

5 Location & Scale (i.e. the location of public streets, acceptable area of the POPS to ensure that the space is large enough to be programmable, orientation, elevation, and length to width).

- 6 Uses & Programing (i.e. the relationship of the POPS with the surrounding land uses and forms and the types of active and passive programing that can be included in POPS).
- 7 Edges & Access (i.e. entrance, fences, hours of operation, how will it connect to other public areas, trails, parks, and green network).
- 8 Landscape & Amenities (i.e. hard vs softscape, tree canopy, and design elements).

G. STRATA PARKS

Strata parkland is a public park developed above private infrastructure, typically parking garages. It is publicly owned and typically publicly operated, whereas the underlying infrastructure is maintained within private ownership.

4.8 URBAN FOREST

Urban trees support natural area functions and can create a generous canopy at maturity to provide pedestrian shade, shelter, streetscape amenity, and traffic management, promoting safety and creating a pleasant environment.

Intent: To increase the urban tree canopy and supporting natural systems functions while enhancing streetscapes to provide shade, shelter and aesthetically appealing streets and open space amenities.

In addition to the Brampton Plan policies 3.2.5.8 to 3.2.5.14, and the Urban Forest Management Plan, the following shall apply:

- 1 Provide a diverse and resilient species selection that anticipates climate change conditions and operational constraints.
- 2 Encourage a diversity of tree species along each road, native to the City and Region, noninvasive, drought and salt tolerant, and low maintenance.
- 3 Plant species of street trees that provide a large canopy and shade over sidewalks to reduce heat island effect and enhance comfort and safety. Street trees should provide shade over at least 40% of the length of the sidewalk or road to reduce heat island effect and enhance pedestrian comfort and safety.



Figure x: Park as focus for neighbourhood / development

- 4 Provide appropriate planting conditions (soil volumes / soil mix) to address summer and winter conditions, and to support the growth of healthy, mature trees with connected canopies on local roads.
- 5 Consider incorporating a double row of trees in key areas, such as adjacent to parks and where a wider boulevard exists.
- 6 Design parking lots to incorporate planting of trees to increase tree cover and shading, and to reduce heat island impact.
- 7 Encourage the implementation of alternative planting strategies (e.g. Silva-cells, sufficient soil medium, continuous planting trenches, etc.) to increase tree soil quantity and quality along high-pedestrian areas and sustain longterm growth and healthier tree life.
- 8 Ensure at least 1 street tree is planted for each residential dwelling unit (excluding multiple dwellings that are subject to site plan approval), or spaced at 8.0 to 12.0 metres, and at least 2 street trees for each flankage lot where practical based on factors such as utility requirements, driveway, street furniture locations and the type of species.

GREEN INFRASTRUCTURE AND BUILT FORM

5.1 ENERGY CONSERVATION

Energy conservation refers to minimizing energy consumption by generating or using less energy. It can also play a significant role of lessening climate change by replacing non-renewable resources with renewable energy.

Intent: To reduce traditional energy use and provide alternative energy sources.

- Consider reducing demand for energy from the grid and encourage renewable energy production. Renewable energy sources that could be employed may include the use of solar thermal and photo voltaic equipment, geo-exchange technologies, and/or wind power.
- 2 Encourage passive solar orientation to enhance energy efficiencies by creating optimum conditions for the use of passive and active solar strategies. The integration of passive building systems is enhanced by buildings oriented to maximize the potential for sunlight and natural ventilation.

- 3 Where feasible, implement street and block alignment within 15 degrees of geographic east-west to maximize passive solar orientation of buildings front and rear windows.
- 4 Where feasible, provide alternative community energy systems such as district energy, geo-exchange, sewer heat recovery, and/or inter-seasonal thermal energy.
- 5 Consider constructing all low and medium density residential buildings to be Solar Ready (i.e. built with all the necessary piping and equipment that would be needed to install a rooftop solar power system).
- 6 Reduce heat absorption through the use of cool roofs that are designed to reflect more sunlight and absorb less heat than a standard roof. Cool roofs can be made of a highly reflective type of paint, a sheet covering, or highly reflective tiles or shingles. Consider cool roofing material with a minimum initial solar reflectance of 0.65 and minimum thermal emittance of 0.90.



Roof mounted photovoltaic system



A building that utilizes alternative energy sources



Low density residential built solar ready.



Electrical Vehicles (EV) Charging Stations in Parking Areas



Solar parking lot canopies.

- 7 For a low sloped roof, typical of commercial and institutional buildings, the cool roof Solar Reflectance Index (SRI) value should be 64 and for steep sloped roofs, typical of residential, the SRI value should be 15.
- 8 Green roofs are encouraged for high-rise residential, office buildings, as well as, public institutional buildings to minimize surface runoff, reduce urban heat island effects, provide noise insulation, and improve local air quality.
- 9 Mitigate urban heat island effects through the installation of light-coloured paving materials including white concrete, grey concrete, open pavers, and any material with a solar reflectance index of at least 28. Consider light-coloured material for development with hardscape or paved surfaces in the Village Cores, Centres, and Corridors, including parking areas, pedestrian walkways, and urban squares.



Integration of Solar Panels in Facade Treatment Design

5.2 WATER USE AND MANAGEMENT

The City's potable water is drawn from Lake Ontario which is sustained by Brampton's rivers and creeks that flow through Mississauga and is supplied as part of the Region's Lake-Based System.

Intent: To maintain and restore the water quality and quantity of streams and groundwater system and ensure a sustainable and safe supply of water for residents.

- In order to promote water conservation, all new developments are encouraged to:
 - a. Achieve 10% greater water efficiency than the Ontario Building Code and to encourage through appropriate incentive programs, 20% greater water efficiency than the Ontario Building Code;
 - b. Restrict the use of potable water for outdoor watering;
 - c. Consider the use of water efficient and drought resistant plant materials in parks, along streetscapes, and in public and private landscaping;
 - d. Avoid use of turf grass areas, and when required, install drought resistant sod;
 - e. Increase topsoil depths and provide soil scarification;
 - f. Utilize native plant species; and
 - g. Reduce the impact caused by new development on the natural hydrological cycle by installing permeable or porous driveway and parking lot surfaces.
- 2 Encourage the implementation of Low Impact Development Standards that emphasize the use of bio-swales, innovative stormwater practices, constructed wetlands, at-source infiltration, greywater re-use system and alternative filtration systems such as treatment trains and water conservation measures;
- 3 Implement a rainwater harvesting program to provide the passive irrigation of public and private green space, including absorbent landscaping, cisterns, rain barrels, underground storage tanks, infiltration trenches, etc.



Pervious surfaces that allow water to soak into the ground.



Bioswale as part of the public right-of-way



Water Treatment Features



Rainwater can be stored in cisterns



Bioswales slow water run-off, clean and filter water, and can be integrated into street right-of-way and parking lot designs.

- **4** Consider strategies for stormwater retention and run-off such as:
 - a. Retain stormwater on-site through rainwater harvesting, on-site infiltration, and evapotranspiration.
 - b. Direct flow to landscaped areas and minimize the use of hard surfaces in order to reduce the volume of run-off into the storm drainage system.
 - c. Store snow piles away from drainage courses, storm drain inlets, and planted areas.
 - d. Use infiltration trenches, dry swales and naturalized bioswales adjacent to parking areas to improve on-site infiltration.
- 5 Consider the inclusion of third pipe greywater systems and rain water harvesting for watering lawns, gardening, to reduce demand on potable water use.
- 6 Introduce green infrastructure, such as bioswales, within the public right-of-way to enhance ground water infiltration and improve water quality as part of a comprehensive water management plan.
- 7 Consider the use of porous or permeable pavement instead of standard asphalt and concrete for surfacing sidewalks, driveways, parking areas, and many types of road surfaces, as a stormwater run-off management strategy. Consider the use of grass pavers that take auto weight, but allow grass to grow.
- 8 Consider the installation of subsurface basins below parking lots to enable stormwater to be stored and absorbed slowly into surrounding soils.
- 9 Where feasible, implement curb cuts along sidewalks and driveways to allow water to flow onto planted zones or infiltration basins.
- **10** Implement xeriscape using native, droughttolerant plants, a cost-effective landscape method to conserve water and other resources on a residential and communitywide level.

5.3 MATERIAL RESOURCES AND SOLID WASTE

Sustainable communities shall incorporate strategies to reduce natural resources consumption, salvage of materials on-site and minimize waste by focusing on reduction, reuse and recycling programs and recovering resources from residential waste.

Intent: To encourage private on-site reduction and diversion of solid waste from landfills, stewardship of material resources, and increase measures for recycling and reuse in development plans.

In addition to the Brampton Plan policies 3.2.6.59 to 3.2.6.63, the following shall apply:

- Consider implementing measures towards clean energy from waste facilities, with cogeneration of heat and electric power, which may form part of a zero garbage target. Ensure careful monitoring of emissions in accordance with provincial requirements and international best practice standards.
- 2 Consider the use of recycled/reclaimed materials for new infrastructure including roadways, parking lots, sidewalks, unit pavings, curbs, water retention tanks and vaults, stormwater management facilities, sanitary sewers, and/or water pipes.
- 3 Reduce waste volumes through the provision of recycling/reuse stations, drop-off points for potentially hazardous waste, and centralized composting stations;
- 4 Provide on-site recycling facilities for handling, storing, and separation of recyclables for large buildings, such as multiunit residential buildings, employment and office buildings, and institutional or public buildings.
- 5 Recycle and/or salvage at least 50% of nonhazardous construction and demolition debris and locate a designated area on site during construction for recyclable materials.

5.4 URBAN AGRICULTURE

Urban Agriculture, such as community gardens and traditional farm areas at community peripheries, provides the opportunity for an alternative use of green space and can act as a transition between land uses.

Intent: To provide an alternative use of green spaces as transitions in land uses while facilitating access to locally grown food.

In addition to the Brampton Plan policies 3.3.2.5 to 3.3.2.10, the following shall apply:

- 1 Promote initiatives such as sustainable food production practices as a component of a new development. Development plans and building design shall incorporate opportunities for local food production through:
 - a. Community gardens;
 - b. Edible landscapes;
 - c. Small-scale food processing, such as community kitchens, food co-ops and community food centres;
 - d. Food-related home occupations / industries;
 - e. Small- and medium-scaled food retailers; and,
 - f. Local market space (i.e. farmers' markets).



Figure x: Urban food garden, Toronto

- 2 Incorporate urban agriculture as part of a neighbourhood's character and open space system, while also providing a transitional uses between natural and built environments. Measures to protect natural features must be considered.
- 3 Consider more intense forms of urban agriculture within existing industrial/ employment areas which can impact food security, employment issues and the larger social, economic, and ecological sustainability of growing food locally.
- 4 Dedicate permanent open space for community gardens and/or allotment gardens in open space areas.
- 5 Identify opportunities to create edible landscapes through conservation of existing orchard trees, or by providing orchard trees as part of proposed landscaping strategy.



Figure x: Urban agriculture at community facilities



Figure x: Community garden in public park



Educational and Interpretive Infrastructure



Interpretive Signage

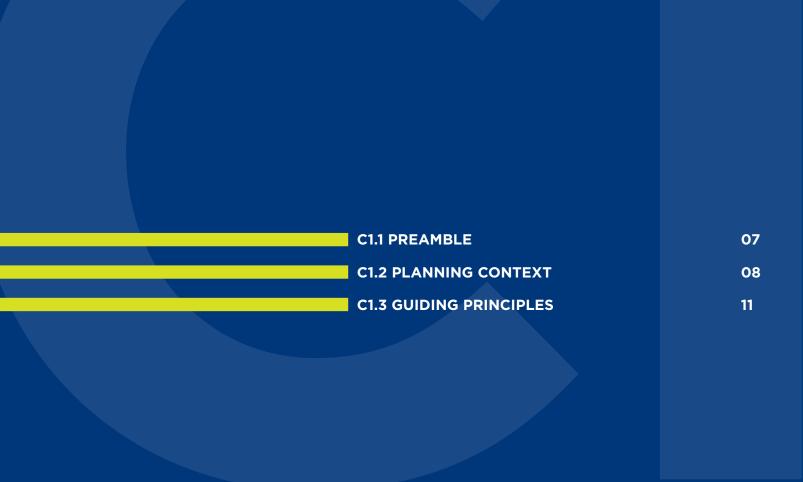
CITY-WIDE URBAN DESIGN GUIDELINES / PART C

PART C: SITE ORGANIZATION + BUILT FORM

C1 INTRODUCTION	твс
C2 DESIGN GUIDELINES COMMON TO ALL BUILT FORM	твс
C3 LOW-RISE DEVELOPMENTS (1 TO 4 STOREYS)	твс
C4 MID-RISE DEVELOPMENTS (5 TO 12 STOREYS)	твс
C5 HIGH-RISE DEVELOPMENTS (+13 STOREYS)	твс
C6 NON-RESIDENTIAL DEVELOPMENTS	твс
C7 MIXED-USE DEVELOPMENTS	твс



INTRODUCTION





C1.1 PREAMBLE



In the past, growth in Brampton has been focused primarily in its suburban communities, and characterized by single-use, low-rise building forms supported by surface parking solutions and suburban park models.

Today, urban intensification is an important part of Brampton's growth management strategy and supports the Province's objectives for smart growth, sustainable development, and complete communities. As Brampton continues to grow, intensification and higher density forms, along with infill housing will become more common forms of development.

With new and emerging forms of development on the horizon, the importance of creating suitable buildings that reflect the needs of the community and that 'fit' within their context, are crucial for the City's evolution.

More intense forms of building development will become more prominent in residential areas, mixed-use areas, and along/within close proximity to the City's higher order transit corridors/stations and stops, as well as employment areas - highlighting the need to and shape such growth.

C1.2 PLANNING CONTEXT

1.2.1 2040 VISION: LIVING THE MOSAIC

In 2018, the City of Brampton endorsed the Brampton 2040 Vision, an aspirational document shaped with the input of more than 13,000 residents, to transform Brampton into a futureready city of dynamic, complete, and urban communities.

As part of the 'Brampton 2040 Vision: Living the Mosaic', the City has identified key locations where intensification is promoted and desired. These locations include Brampton's Central Core, which encompasses Brampton's Downtown, Uptown, Bramalea community and Queen Street Corridor. The historic Downtown and the new centrally located Uptown will become Brampton's hub for promoting economic development and creating complete, transit-supportive communities. Together, this will form a new and improved, enlarged Brampton core. It is anticipated that these areas will rapidly grow with an increase of jobs, attractions, and services. Rapid Transit will link the neighbourhoods together as well as connect to the regional transit system, reducing the need for private car usage. Healthier modes of transportation such as walking and biking will be encouraged through supportive urban design.



Not a plan - for illustrative purposes only. All areas will be subject to full planning/co-design programs with citizens.

© CIVITAS Studio

The "Centre Core" as per 'Living The Mosaic: Brampton 2040 Vision' identifies the areas where intensification is envisioned and High-Rise development is expected

A refreshed Bramalea and Queen's Boulevard are part of a group of complete neighbourhoods surrounding the core area. Bramalea will stay true to its mid-century image but with an updated feel unique to its character, while Queen's Boulevard will offer a urban lifestyle for its residents, workers and visitors.

Altogether, the redefined Central Core will offer the ideal conditions for Mid-Rise and High-Rise development to happen in a sustainable and cohesive way, while enriching the livability of the City core and achieving its growth ambitions for the future.

1.2.2 BRAMPTON PLAN (OFFICIAL PLAN)

The Brampton Plan carries forward and implements the 2040 Vision. Emanating from the 2040 Vision, Brampton Plan's vision statement will provide focus and direction for all planning decisions and directions.

The table below identifies where Mid-Rise and High-Rise buildings are permitted and expected to achieve design excellence in conformity with the Urban Design policies of the Brampton Plan.

Designation (Schedule 2)	Building Typology	Additional Permissions
Mixed-Use	Low-Rise Plus	Additional Planning Studies may identify appropriate locations for Low-Rise Plus, Mid- Rise, and High-Rise buildings
Neighbourhoods	Low-Rise	Low-Rise Plus within 400-800 metres of a Support Corridor shown on Schedule 3B
Overlay (Schedule 1A)	Building Typology	Additional Permissions
Urban Centres	Low-Rise Plus, Mid-Rise, High-Rise	Determination of the appropriate height of High-Rise buildings will be determined, subject to the required planning studies, through a Secondary-Level Plan and in accordance with the applicable policies in this Plan/
Town Centres	Low-Rise Plus, Mid-Rise	High-Rise buildings may be permitted subject to additional planning studies and other applicable policies in this Plan
Neighbourhood Centres (1)	Low-Rise Plus	Mid-Rise buildings may be permitted subject to additional planning studies and other applicable policies in this Plan
Primary Urban Boulevards	Low-Rise Plus, Mid-Rise	High-Rise buildings may be permitted subject to additional planning studies and other applicable policies in this Plan, and where located within a Major Transit Station Area
Secondary Urban Boulevards	Low-Rise Plus, Mid-Rise	High-Rise buildings may be permitted subject to additional planning studies and other applicable policies in this Plan, and where located within a Major Transit Station Area
Corridors	Up to Mid-Rise	
Support Corridor	Up to Low-Rise Plus	

⁽¹⁾ Neighbourhood Centres are not identified on Schedule 1A; however, they will be identified through subsequent Secondary-Level Plans.

The Brampton Plan recognizes many clusters of apartment buildings in the city's neighbourhoods that were designed as "towers in the park". This form of development and approach to land use is non longer appropriate in today's context.

In these established apartment neighbourhoods, improving walkability to transit, shops, and services, improving amenities, accommodating sensitive infill, and promoting environmental sustainability are all key considerations.

These guidelines provide a framework that is based upon the Brampton 2040 Vision, Brampton Plan, and guiding principles. This framework will guide the 'look and function' of both lower and higher density forms of development with respect to site organization, building design, landscaping and the public realm.

As such, the guidelines reflect aspirations for good urban form, compact development, pedestrian friendly environment, sustainability, and a connected public realm. Well-designed buildings and sites have a fundamental responsibility in defining the scale and character of streets, providing opportunities for animating the public realm and contributing to placemaking. These aspirations will continue to underpin all forms of development in Brampton. Brampton Plan intends that the Zoning Bylaw and City-Wide Urban Design Guidelines will be complementary implementation tools to help implement the urban design policies. Where the Zoning By-law incorporating certain minimum design expectations, such as minimum building and lot requirements, the Urban Design Guidelines provide more specific directions and recommendations on design matters to allow for some flexibility in the planning and design process.

C1.3 GUIDING PRINCIPLES

- 1 Create vibrant and street focused built form that frame and spatially define the public realm.
- 2 Create pedestrian scaled and animated streetwalls that enhance a meaningful and inviting relationship between the public realm and building interior.
- **3** Provide higher density built form options that increase and support foot traffic and ridership.

- 4 Ensure development that is compatible with its surroundings and contribute to placemaking.
- 5 Ensure adequate sun penetration into the public realm and avoid adverse/extreme wind impacts.
- 6 Support appropriate transitions from high-rise and mid-rise to low-rise developments and contexts.
- 7 Support mixed-use, mixed-tenure communities.









DESIGN GUIDELINES COMMON TO ALL BUILT FORM

C2.1 PRIVATE OPEN SPACE	03
C2.2 AMENITY AREAS	05
C2.3 LIGHTING	08
C2.4 ACCESSIBILITY	09
C2.5 SAFETY	10
C2.6 PUBLIC ART	11
C2.7 BUILT HERITAGE CONTEXT	12



C2.1 PRIVATE OPEN SPACE

2.1.1 GENERAL GUIDELINES

- 1 Maximize opportunities for open/green spaces, especially at grade.
- 2 Provide meaningful private open spaces that complement the proposed development while enhancing the community.
- **3** Minimize hard surfaces and ensure they have a function on site.
- 4 Encourage community permeability by providing pedestrian connections across the site and link them to the adjacent pedestrian system of sidewalks and trails, transition stations and stops.
- 5 Clearly demarcate and enhance pedestrian walkways through the use of special paving, planting and pedestrian-scale lighting.
- 6 Ensure all pedestrian connections and entrances are universally accessible. If ramps are needed, incorporate them into the building/elevation design.



- 7 Ensure appropriate planting conditions (i.e., soil depth, volume and growing mediums), for successful soft landscaping.
- 8 Locate and design shared private outdoor amenity spaces to balance sun and shade needs to create a comfortable micro climate environment.
- **9** Reduce impacts on air quality and noise from site servicing, mechanical equipment, etc.
- 10 Incorporate universally accessible, environmentally sustainable and high quality materials, four season landscaping, seating, pedestrian-scale lighting, shade structures, weather protection, screening, trees, bike facilities and programming opportunities, as appropriate.



C2 DESIGN GUIDELINES COMMON TO ALL BUILT FORM







2.1.2 FRONT SETBACK

- Incorporate ground level units with functioning front entrances and usable amenity spaces at the front.
- 2 Address the street edge with enhanced landscaped front setbacks that comply with zoning requirements and reflect and support the immediate adjacent use.
- **3** For frontages with residential uses at grade, establish a landscaped threshold between the private and public realm. Design should:
 - a. Avoid the appearance of a rear yard (i.e. privacy fence, storage areas, etc.).
 - b. Present a coordinated and attractive street address by combining steps, low walls, planting and decorative fencing to define the space and providing privacy while also ensuring visual connection to the street is maintained.
 - c. For private amenity areas, provide sufficient usable space to accommodate a small table and chairs.





C2.2 AMENITY AREAS

It is recognized that communal amenity areas for multi-unit developments have an important role in meeting the recreational and social needs of residents. The Zoning By-law defines the types of amenity space that is required for Townhouse, Mid-Rise and High-Rise developments and establishes minimum space requirements based on a per unit calculation. It is noted that the zoning standards provide some flexibility in these requirements that address the relationship of these spaces to landscaping requirements and distinguish standards for different contexts. For example, with respect to the latter, consideration is given to reduced standards in higher density areas with a concentration of public amenities, reduced standards in areas that are in close proximity to parks and the permission of rooftops, terraces and green roofs to be counted towards the required space.

Amenity space shall be provided as per Zoning By-law requirements.



2.2.1 AT-GRADE OUTDOOR AMENITY

These urban design guidelines address the atgrade outdoor type of communal amenity areas, and provide direction for:

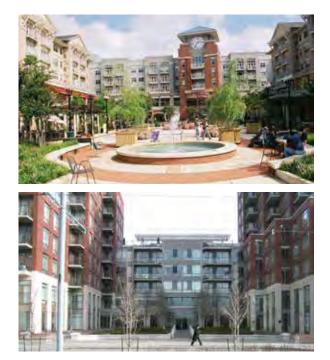
- Their location on the site
- Their configuration
- Their component elements
- 1 Provide required amenity areas as one contiguous space on a site.
- **2** Locate amenity areas in easily accessible and prominent locations on a site.
- **3** Provide visibility from amenity areas to the public realm.
- 4 Ensure amenity areas are generally rectangular in shape.
- **5** Recommended components for amenity areas based upon their size, include:
 - a. 150m² or less: Tot Lot and Seating Area.
 - b. 151 to 400m²: Tot Lot, Children's Play Area and Seating Area.
 - c. Greater than 400m²: Tot Lot, Children's Play Area, Lawn Area and Seating Areas.
- 6 Design amenity spaces for a range of users, with particular consideration for residents occupying the building(s).
- 7 Provide secure direct access to amenity areas from the sidewalk, mid-block connections and other on-site walkways.

- 8 Amenity areas abutting / adjacent to private amenity areas should be separated and screened by fencing and planting; a minimum 2m wide landscaped buffer between these areas should be provided.
- **9** Maximize contiguous open areas to accommodate a wide variety of activities.
- **10** Minimize the extent of hard surfaces, ensure that they have a function and utilize permeable pavements.
- 11 Provide private or semi-private outdoor amenity spaces, such as gardens and terraces, at rooftops or where a substantial stepback provides for enough space for them to be appropriately accommodated.
- 12 Design terraces to include soft and hard landscaping, appropriate lighting and shaded seating areas.
- **13** Maximize every opportunity for on-site greening, including:
 - a. Tree plantings on front and side setbacks along public streets.
 - b. Fully planted buffers/green spaces where complementary landscaping might be used to create seamless transitions between blocks.
 - c. Plantings at rooftops, stepbacks and terraces to add visual appeal to the building from the street.



2.2.2 COURTYARDS

- Incorporate forecourts to break long elevations and/or combine with main entrances of large mid/high-hise developments.
- 2 Provide courtyards at grade to take advantage of the required building separation distance.
- **3** Design courtyards as an amenity space, with soft and hard landscaping. Provide for seating areas and pedestrian circulation throughout and beyond the development.
- 4 Locate private patios and gardens to access direct sunlight and minimize overlook from neighbours to the greatest extent possible.
- 5 Locate interior amenity facilities adjacent to shared outdoor amenity areas and provide windows and doors for direct physical and visual access between these spaces.
- 6 Provide access to secure outdoor play spaces and equipment for all unit types in residential or mixed-use developments.
- 7 Ensure that the base of any building mass or tower that faces onto open spaces is treated to protect migratory birds and mitigate pedestrian-level wind, when rooftops are used for outdoor amenity.



ប

2.2.3 BALCONIES, TERRACES AND GREEN ROOFS

- Incorporate common amenities on the rooftop of the Base where substantial step backs provide for enough space for them to be accommodated.
- 2 Design all rooftop terraces as outdoor amenity areas and/or a green roof, which include soft and hard landscaping, as well as appropriate lighting and shaded seating areas.
- **3** Consider green rooftops for building bases and tops where planting could thrive and enhance the building appeal from the street, to reduce urban heat island effects, to improve air quality and to contribute to noise insulation. (Figure 2)
- 4 Provide private balconies for residential uses on upper levels, integrated into the building design. Micro-climate conditions should be considered in locating balconies. Refer to Windows and Balconies on section 3.4.2 for more details.
- 5 Consider front porches for ground floor units where appropriate to the building architectural style and design.
- 6 Provide units with windows and balconies along elevations overlooking play areas, where possible.



Figure 1: Rooftop amenity space 222 Hennepin, Minneapolis



Figure 2: Extensive green roof - minimum maintenance and low installation costs



c2.3 LIGHTING

Building lighting can enhance the overall quality and character of the development. It should be fully integrated within site and building designs, make a positive contribution to the sense of safety and security of pedestrians, and provide supplementary lighting to street lighting.

- 1 Promote Dark Sky/Nighttime Friendly and bird friendly lighting practices to minimize light pollution and the intrusion of unwanted lighting on natural areas.
- 2 Illuminate storefronts, decorative building facades and architectural features by providing lighting on the face or interior of buildings.
- 3 Ensure lighting is sensitive to nearby residential uses and that there is no light trespass on adjacent properties. Avoid visible, glaring light sources by using down-and/or up-lights with full cut-off shields.
- 4 Ensure all walkways and entrances are well lit.





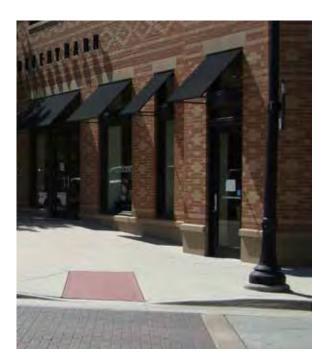


c2.4 ACCESSIBILITY

Buildings and spaces open to the public must be accessible and usable by people regardless of age, ability or situation. Everyone should have access to goods, services, facilities, employment social activities and opportunities to move freely around the Central Area.

- Ensure new development meets the accessibility requirements of the Accessibility for Ontarians with Disabilities Act (AODA), the Planning Act, the Integrated Accessibility Standards Regulation, any applicable Zoning By-law(s) and the Ontario Building Code (OBC).
- 2 Ensure pedestrian routes including those leading to building entrances are safe and easy to use by all people, including those using mobility devices and service animals. Routes should be direct, level, obstacle free, easily identifiable and physically separated from vehicular routes.





- 3 Provide accessible options for site furnishings, including seating and waste/recycling bins. Accessible seating will include armrests for assistance, backrests, and clear areas in front and to one side for people using mobility devices.
- 4 Locate accessible parking spaces close to building entrances, and provide clear and direct pedestrian routes into the building.
- 5 Avoid ramps, wherever possible, by carefully considering site-grading alternatives. Where ramps are required due to challenging site grades, ensure ramps do not protrude into the public right-of-way and that they are integrated into the design of the building/landscape.



Building siting, orientation, and the design of spaces open to the public, should enhance feelings of personal safety and security.

- 1 Ensure Crime Prevention Through Environmental Design (CPTED) principles are applied to exterior spaces open to the public.
- 2 Ensure structures, landscaping and plant materials maintain an open field of vision between 1.0m and 2.5 metre above ground level, and do not provide for hiding places. If elements such as fencing are within this range, ensure it is visually permeable.
- 3 Ensure the design of new development, through the placement of ground-level uses, entrances, windows and balconies contributes to "eyes on the street" and allows for casual surveillance of streets, parks, open spaces, and children's play areas.
- **4** Avoid blank, windowless walls that do not permit people to observe the street from inside buildings.

- **5** Provide lighting at all common entrances, in parking areas, along all internal walkways, and in laneways.
- 6 If necessary for security purposes, security measures such as fencing or gates should be ornamental and complement the architectural expression.
- 7 In parking areas, ensure clear views and sightlines are maintained, that there are multiple points of pedestrian and/or vehicular entry, that there are well-defined pedestrian routes, and that adjacent buildings have windows to provide overlook.
- 8 Avoid exterior stairs along walkways wherever possible to minimize trips and falls, especially stairs with 1 to 2 steps. Grade sites and use retaining walls where required to facilitate universal design for walkway networks with a maximum 5% running slope.





c2.6 PUBLIC ART

Public art on private sites distinguishes the development itself, while enhancing the adjacent public realm, adding visual richness and providing landmarks within the community. It is also an important tool to celebrate local heritage and ground new development in the history and character of its context.

- Ensure public art is incorporated into significant private development projects, as part of its community benefit discussion (re: Community Benefit Charges).
- 2 For private development projects, consider independent or public art integrated into the building design or its associated landscape.
- **3** Ensure public art is clearly visible and easily physically accessible to the public.
- 4 Provide public art that exhibits high quality construction, installation and materials, as appropriate for its intent.





- 5 Involve City staff in the selection of public art and its possible location to ensure consistency with the City's vision and goals for Public Art.
- 6 Ensure public art enhances the public realm through artistic excellence and originality, and is appropriate to the site or location's physical and cultural context.
- 7 Public art should not obstruct pedestrian, cyclist or vehicular circulation, entrances, windows, or sight lines to important natural and built features.
- 8 Public art should not impact, or be diminished by, existing or planned utility locations.
- **9** Appropriate maintenance procedures should be secured with the installation of public art.



C2.7 BUILT HERITAGE CONTEXT

Where development is proposed adjacent to or as part of a site that includes built heritage structures, it is important that any new building maintains and enhances the defining characteristics of these heritage buildings. The following guidelines should be considered when renovating heritage buildings or designing new buildings adjacent to them.

- Retain original, historic, building materials whenever possible during restorative renovations. Historic material should never be covered with modern materials, and unpainted brick should not be painted.
- **2** Uncover and refurbish historic materials that have been covered over due to a previous renovation, to as near original condition as possible.
- 3 Facadism is not a preferred heritage conservation process. However, where only the facade of a heritage building is retained, design the new building so the existing facade appears to be integrated with the new construction in a manner that suggests the building has been retained, rather than having being tacked on to a new facade.



- 4 Design new construction to be visibly differentiated from the old, achieving compatibility primarily through harmonious scale, massing, facade articulation and materiality.
 - a. Design new buildings to be compatible with adjacent heritage buildings. Consider:
 - b. Placing additions to heritage buildings on the rear or side, recessed from the main front wall of the heritage building.
 - c. Placing new buildings adjacent to heritage buildings to have generally equal front setback.
 - d. Designing additions or new buildings to reflect the rhythm of horizontal and vertical architectural elements and/or grid of the heritage building.
- **5** Avoid recreating historical styles.
- 6 Ensure no addition or new construction will negatively impact the heritage building if removed in the future.
- 7 Use materials and colours that are complementary with the heritage context.
- 8 In renovated, preserved or adaptively reused heritage buildings with retail at grade, create recessed entry spaces for retail entrances and strive to convert stepped entrances to barrier free entrances.
- 9 Ensure signs on heritage buildings is compatible in terms of character, colour and material and do not obscure heritage details.

LOW-RISE DEVELOPMENTS (1 TO 4 STOREYS)

C3. 1 INTRODUCTION	03
C3.2 GENERAL DESIGN GUIDELINES	11
C3.3 DESIGN GUIDELINES FOR SPECIFIC	
BUILDING FORMS	32
C3.4 PRIORITY LOTS	42
C3.5 NEIGHBOURHOOD INFILL DEVELOPMENT	
AND CUSTOM HOMES	48



C3.1 INTRODUCTION

This section of the guidelines addresses the design of all Low-Rise residential building forms (low-rise and low-rise plus buildings up to 4-storeys in height, as defined by the Official Plan / Zoning By-law).

The guidelines for the 'Low-Rise Buildings' section are organized in four parts:

- 'General Design Guidelines' that apply to ALL forms of low-rise and low-rise plus buildings;
- 2 'Design Guidelines for Specific Building Forms' that, in addition to the general guidelines, apply to each type of low-rise built form.
- **3** Guidelines for "Priority Lots'; and,
- 4 'Neighbourhood Infill Developments Custom Homes' that, in addition to the general and specific design guidelines and those for priority lots, apply for the design of new buildings in existing neighbourhoods.

The general guidelines apply to the design of 'Missing Middle Housing' forms of developments, in whichever built form they may take.

The design of prefabricated and manufactured housing, as well as 3D- printed housing and tiny houses shall be similarly informed by these guidelines.

Note: As with other Built Form sections of this document, this section may be amended from time to time to reflect changes in best practices and changes in the building industry/market.

What is Missing Middle Housing?

Missing Middle Housing types are those that fall between the densities of singledetached homes and mid- to high-rise apartments. This includes duplexes, triplexes and fourplexes, townhouses, live/ work buildings and courtyard apartments that achieve medium density yields.

Definition from Brampton Plan - 2023







3.1.1 PRINCIPLES/OBJECTIVES

These principles/objectives provide direction to the development of low-rise building forms. The Guidelines are intended to work alongside the Zoning By-law to achieve the following:

- Promote a variety of housing styles and types.
- Contribute to the creation of mature neighbourhoods that are livable and adaptable.
- Foster residential infill that contributes to ongoing neighbourhood renewal and revitalization.
- Encourage residential infill that contributes to the social, economic, and environmental sustainability of mature neighbourhoods and to the overall sustainability of the City.
- Ensure that streets are not dominated by garages and parking.
- Reinforce and support the policy objectives of the Ministry of Transportation's Transit-Supportive Guidelines which: "places significant emphasis on creating a pattern of development within existing communities and new development that is capable of supporting increased transit ridership in existing systems and helping to facilitate the establishment of new transit systems."

Recognizing the need to balance the everchanging nature of the housing market with the broader objectives of community building, it is anticipated that these guidelines will expand in the future to include variations of the listed typologies and/or completely new typologies.

The City encourages design innovation and will continue to work with architects, designers and builders to ensure that new ideas/approaches meet the objective of creating high-quality designs that fit within their surrounding context and contribute to creating an attractive and pedestrian-oriented public realm.

3.1.2 BUILT FORM TYPES

Low-Rise built form types include:

- a. Single-detached Dwellings (OP: Single Family Small and Medium Lots, Cottage Court)
- b. Semi-detached Dwellings (OP: Semi-detached)
- c. Townhouse Dwellings (OP: Street Related Townhouse, Urban Townhouse, Multiplex Small and Large)
- d. Multiplex Dwellings (OP: Duplex Stacked, Triplex/ Fourplex, Multiplex Small) A form of Missing Middle Housing
- e. Additional Residential Units (on an existing lot)
- f. Low-Rise Apartment Buildings (OP: Multiplex Small and Large, Courtyard Building

Table 10 – Low Rise and Low Rise Plus Residential Densities

Density Category	Low Rise up to 3 Storeys	Low Rise Plus up to 4 Storeys
Low Density (0-40 dwelling units/net hectare)	Single Detached (medium lot), 10-14 Single Detached (small lot), 14-24 Semi-Detached, 19-39 Duplex, 19-40 Triplex/Fourplex, 38-40 Street Related Townhouse, 36-40	Urban Townhouse, 27-40
Medium Density (40-75 dwelling units/net hectare)	Triplex/Fourplex, 40-72 Street Related Townhouse, 40-70 Small Apartments, 72-75	Urban Townhouse, 40-75
High Density (75+ dwelling units/net hectare)	Small Apartments, 75-90	Urban Townhouse, 75-83 Small and Mid-Size Apartments, 102-179

Brampton Plan (2023)

FOR PERMITTED USES, BUILDINGS OR STRUCTURES IN RESIDENTIAL ZONES, REFER TO ZONING BY-LAW 4.1.A



A. SINGLE DETACHED DWELLINGS

(OP: Single Family Small and Medium Lots, Cottage Court)

- 1 to 3 storeys in height.
- Parking access from the street or a laneway.
- Main entrance is oriented towards the street.
- Single or double car garages.
- A variety of garage conditions.
- Contemporary and traditional architectural designs.

B. SEMI-DETACHED DWELLINGS

(OP: Semi-detached)

- 1 to 3 storeys in height.
- 2 dwelling units share a common wall which extends from the ground level to the roof line.
- A single unified roof form.
- Parking access from a street or a laneway.
- Single car garage per unit on front integral garages, or 2 car garages per unit accessed from a rear lane.
- Continuous and consistent architectural details and materials for both dwellings.
- Contemporary and traditional architectural designs.



Front-loaded single-detached dwelling, traditional design



Front-loaded single-detached dwelling, contemporary design



Traditional front-loaded semi-detached



Semi-detached with paired entries

C. TOWNHOUSE DWELLINGS

(OP: Street Related Townhouse, Urban Townhouse, Multiplex Small and Large) A form of Missing Middle Housing

- 2 to 4 storeys in height.
- 3+ dwelling units share a common wall which extends from the ground level to the roof line and/or a plaque between levels (i.e. stacked condition).
- Usually blocks of 3 to 8 units in a row (single ground level frontage), with a total of 3 to 32 units per block depending on the type of townhouse (see 'Townhouse Types').
- Units are generally 4.5m to 8m wide, depending on number of units per module and parking configuration.
- Main entrance oriented towards the street.
- Parking access from the street or a laneway.
- Various parking configurations from single or double car garages (detached or attached) to surface and underground parking.
- Continuous and consistent architectural details and materials along the townhouse block.
- Contemporary and traditional architectural designs.

TOWNHOUSE TYPES

Street Townhouse Dwellings

(OP: Street Related Townhouse)

Attached units oriented to the street and located on conventional lots with street accessed integrated garages. Also known as Street Townhouse

Rear Lane Townhouse Dwellings

(OP: Urban Townhouse)

Attached units oriented to the street with attached (Deck Townhouse) or detached garages located at the rear and accessed from a lane/private drive. Effective in reinforcing important locations such as parks, public spaces, community nodes and primary streets.



Traditional Front-loaded townhouses



Lane-based townhouses with ground level entries at rear



Live / work townhouse blocks



Stacked townhouses with emphasized entries



End unit at a back-to-back townhouse block

Live-Work Townhouse Dwellings

(OP: Urban Townhouse)

Attached units oriented to the street with attached garages located at the rear and accessed from a lane/private drive. They are similar to deck townhouses (see lane-based townhouses) but designed to allow for a mix of residential and non-residential uses. Typically, retail, commercial or office uses are located at the ground level, with residential dwellings above. Separate entrances are provided for each use.

Stacked Townhouse Dwellings

(OP: Urban Townhouse, Multiplex Small)

Attached units which are stacked one above the other and have lane accessed integrated garages. They are usually oriented to the street, although they might face a common open space or the rear of the site, depending on how the blocks are configured. The lower unit is typically accessed from grade or up ½level, while the upper unit(s) is accessed by a separate stairs leading from a common landing.

Back-to-Back Townhouse Dwellings

(OP: Urban Townhouse, Multiplex Small) 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, or a common open space. Parking is provided as street/lane accessed integrated garages, or surface parking areas.

Back-to-Back Stacked Townhouse Dwellings

(OP: Urban Townhouse, Multiplex Small)

Attached units that combine both Stacked and Back-to-Back configurations and are oriented to both the street and the rear of the block. Parking is provided in structures, above or below grade.

Podium/Liner Townhouse Dwellings

(OP: Multiplex Large)

Townhouse units located at the base of mid or high-rise buildings, or to wrap around the base of a non-residential building (e.g., parking structure) to create a 'street or ground-related' façade - usually a residential veneer that enhances the pedestrian realm. Parking is provided in structures, above or below grade.



Back to back stacked townhouses with below grade parking and shared amenity/walkway spaces



Townhouse podium units that vary depending on street and building relationship/context



Multiplex building



Detached additional residential dwelling



Apartment building with parking accessed by a laneway

D. MULTIPLEX DWELLINGS

(OP: Duplex Stacked, Triplex/Fourplex, Multiplex Small) A form of Missing Middle Housing

- Attached units clustered to resemble one large house of maximum 4 storeys.
- Units are accessed from either a shared entrance and hallways, or through separate entrances.
- Parking is provided as detached/attached garages and/or surface parking areas, accessed from the street or a laneway.

E. ADDITIONAL RESIDENTIAL UNITS (ON AN EXISTING LOT)

A form of Missing Middle Housing

- 1 to 2 storeys
- Units are either attached to an existing dwelling, or detached and located to the rear or side of the property (Garden Suites)
- Units are accessed from a lane or a walkway connecting to the adjacent street
- Parking on site is optional

F. LOW-RISE APARTMENT BUILDINGS

(OP: Multiplex Small and Large, Courtyard Building)A form of Missing Middle Housing

- Building of maximum 4 storeys.
- Units are organized side by side along a hallway.
- Units are accessed from a shared entrance and hallways.
- Parking is provided underground and/or as surface parking areas at the rear, accessed from the street or a laneway.

C3.2 GENERAL DESIGN GUIDELINES

3.2.1 SITE ORGANIZATION

A. ORIENTATION, PLACEMENT AND SETBACKS

- 1 Orient buildings to face the public realm, in particular any adjacent streets, pedestrian connections and open space.
- **2** Design and place buildings to preserve and protect natural features and mature trees on site.
- **3** Ensure habitable interior spaces are located on the building face(s) fronting the public realm.
- 4 Place buildings to have a consistent orientation, either front-to-front or back-toback configuration along streets/lanes or around open spaces.
- 5 Avoid front-to-back configurations, where possible. If necessary, ensure 'rear' elevations are designed as main elevations (double frontage building) including architectural details and materials, in combination with recessed garages/parking access and enhanced landscaping.
- 6 Protect views to existing natural/built heritage and landmark buildings.
- 7 Ensure setbacks (front and side yards) are generally consistent and reflect the spacing rhythm along the street; also refer to future planned land use.







- 8 Create pedestrian-oriented and scaled streetscapes by providing front setbacks that:
 - a. Locate buildings close to the street edge; a minimum of 3m to entry features or porches is recommended.
 - b. Allow for a variety of front yard setbacks, where lot depths permit, to mitigate long, straight street blocks however, limit variation to no more than 2m.
- **9** Allow for increased front yard setbacks to provide adequate/enough space for tree planting, especially where there is not appropriate conditions for tree planting within the right-of-way.
- 10 Consideration should be given for reduced front yard setbacks where large lots predominate along a street, or where existing setbacks exceed 6.0m. Such reduction should not exceed 30% of the existing adjacent setbacks on either side of the new unit.



- 11 Locate and orient buildings to :
 - a. Ensure privacy and minimize overlook on adjacent properties.
 - b. Maximize opportunities for private amenities and landscape areas.
 - c. Maximize sun penetration and heat absorption.
 - d. Minimize shadow impacts on adjacent properties.
 - e. Minimize the need of sound attenuation walls.
- 12 Provide a minimum building face-to-face distance of 15 metres between (facing open space, common mews or common lanes/ roads).
- 13 At corner locations, provide greater exterior side yard setbacks to allow for added wall articulation and projecting elements such as porches. Encourage exterior side setbacks of at least 3m.



- 14 Increase side yard setbacks along pedestrian linkages and public open spaces.
- **15** Address rear yard privacy and sunlight issues when extending a home towards the rear property line.
- **16** Allow for mid-block connections linked to the surrounding existing/planned pedestrian system.
- 17 For new blocks (subdivisions):
 - a. Provide a mix of lot sizes along each block.
 - b. Locate smaller lots to the interior of the block and bigger lots towards corners.
 - c. Encourage generally consistent setbacks along the block.
 - d. Where lot depths permit, consider a variety of front yard setbacks to mitigate the length of long-straight blocks.
 - e. Provide groupings of at least 2 units of the same height (storeys) to avoid drastic changes in height/massing along the street block.
- 18 Allow entry features/porches, balconies, decks, bay windows and box-out elements to encroach into front, rear and exterior side setbacks as per Zoning By-law.





B. ACCESS, PARKING AND SERVICING

- 1 Encourage lane-based /underground parking.
- 2 Ensure no parking pad or surface encroaches into public space.
- **3** For narrow lots, avoid front integrated garages and encourage garages/parking located to the rear of the lot, accessed through a narrow side yard driveway with 2nd/3rd levels built over the driveway.
- Setback front integrated garages a minimum
 1.5m from the main wall, preferably, or a significant projecting entry feature.
- 5 Setback detached garages at least 1m from main building's front wall (or side wall for corner units).
- 6 Where accessed from a laneway, allow detached garages for abutting lots to be attached along one side.





- 7 Encourage additional units above detached garages, where appropriate.
- 8 Provide a minimum of 5.8 metres setback from the property line to garage doors for front loaded parking configurations (attached or detached).
- **9** Minimize driveway width and length as much as possible.
 - a. Limit single driveways to maximum 3m width at the property line and curb.
 - b. For single front-integrated garages, encourage driveways between 2.7m and 3.0m wide, that do not exceed the garage door width.
 - c. For double-car garages, ensure driveways of maximum 6.5m width.
 - d. For lots at least 5.5m wide, limit driveways to maximum 50% of the width of the front yard.
 - e. For lots narrower than 5.5m wide, limit driveways to maximum 60% of the width of the front yard.





- 10 On corner lots avoid locating garages and main entry features on the same building face / lot side.
- **11** Locate driveways away from parks and open spaces, intersections on corner lots, and 'T' intersections.
- 12 Ensure entry steps do not interfere with the driveway.
- **13** Pair adjacent single driveways whenever possible to provide greater opportunities for landscaped areas and on-street parking.
- **14** Provide a minimum of 6m separation between driveways, when not paired, to enhance planting opportunities.
- **15** Provide access to surface or underground parking preferably from side streets or laneways.
- **16** Locate surface parking areas to the rear, preferably, or side of the lot, away and screened from public view.
 - a. Provide access from a lane or side street, wherever possible.
 - b. Ensure no surface parking is located between a building and the street edge.
 - c. Screen parking areas through a combination of hard (e.g., walls and fencing) and soft landscaping elements. Consider privacy of adjacent properties and minimize headlight glare.



- d. Avoid large areas of uninterrupted surface parking. Mitigate their impact through the provision and design of walkways and landscaping. Ensure walkways are connected to building entrances, provide pedestrian crossings, and clearly delineate different areas through distinctive paving materials.
- **17** Design underground parking ramps and service entrances as part of the building elevation.
- **18** Maximize the efficiency of a site by combining access and servicing areas.
- **19** Locate walkways to parking areas, secondary entrances and servicing areas beside habitable spaces or common areas for informal surveillance.
- **20** Incorporate 'low impact development' (LID) strategies. Refer to section '5.2 Water Use and Management'.

C. LANDSCAPING AND AMENITY AREAS

- 1 Maintain existing grading/slopes wherever possible.
- **2** Preserve and protect existing healthy mature tree.
- **3** Incorporate any heritage landscape element as part of the front yard or common amenity landscape treatment.
- **4** Incorporate existing trees, or other significant planting into landscape strips, whenever and wherever appropriate.
- 5 Offset the visual impact of paved driveways and walkways on the streetscape by encouraging additional plantings, including but not limited to canopy trees and large shrubs in the front yard.





- 6 Enhance biodiversity through planting of native, non-invasive, trees and shrubs.
 - a. Ensure at least 50% of new plantings are native species.
 - b. Encourage low maintenance landscape materials that retain and absorb stormwater.
 - c. Favour naturalized, low maintenance, resilient plantings/gardens.
 - d. Consider perennial ground covers or ornamental grasses
 - e. Consider evergreen plantings for all season screening.
 - f. Encourage minimal water consumption through the use of mulches, compost and alternatives to grass, as well as the implementation of rainwater collection strategies.
 - g. For larger sites, provide a variety of tree species to avoid deforestation in the event of a species-specific affliction.
- 7 Maximize soil volumes and conditions for optimum tree growth.
- 8 Incorporate Crime Prevention Through Environmental Design Principles (CPTED).







- **9** Delineate the transition between the private and public realm by using a combination of hard and soft landscape elements.
- **10** Maximize soft landscape areas in front yards while balancing the amenity needs of the occupants of the site (e.g., parking, decorative hard landscaping, etc.). Encourage soft landscape areas of minimum:
 - a. 80% for lane-based developments; or
 - b. 40% for front-loaded developments on lots less than 5.5m wide.
 - c. 50% for front-loaded developments on lots greater than 5.5m wide.
 - d. Encourage grouping and locating soft landscape areas strategically to maximize the areas of continuous green space.
- **11** Of the remaining front yard area that is not landscaped, ensure a minimum of 50% of that area, if paved, consists of permeable materials such as permeable pavers, gravel, turf stone.
- **12** Limit hard surfaces in front yard landscaping to only walkways and driveways.
- **13** Promote the use of natural stone finishes for paving and landscape walls.
- 14 Encourage permeable paving for walkways, driveways and parking areas to reduce run-off to storm sewers and soften the streetscape appearance.

- **15** Provide a walkway connecting the front door preferably to the sidewalk, or when not possible, to the driveway. Distinguish the walkway from the driveway through a material change and/or planted/sodded edge.
- **16** Incorporate appropriate, complementary pedestrian scaled lighting along walkways and public frontages. Favour energy efficient lighting such as LED and solar options.
- **17** Front yard hedges should be a maximum of 0.9m high to ensure "eyes to the street" and avoid blocked views from the house to the sidewalk.
- 18 Allow low fencing in front yards.
 - a. Ensure fence is not taller than 0.9m and its design and materials complement those of the main building.
 - b. Provide unobstructed views from the building's ground floor to the public realm
 'eyes on the street'.
 - c. Favour see-through materials/ configurations
- **19** Provide privacy fencing along the side and rear edges.
 - a. Ensure privacy fencing is minimum 1.8m high, and maximum 3.0m high.
 - b. Ensure it doesn't extend beyond the main front wall of the building.
 - c. At end and corner units, provide a gate on the portion of the fence that returns from the lot line to the side wall, and ensure fence return is maximum 35% of the flankage wall towards the rear.
 - d. Use durable, low-maintenance materials. Favour materials such as wood, composite and vinyl.
- **20** For new subdivisions, ensure fencing is consistent throughout the development.
- **21** Provide wrought iron fencing along rear and side elevations flanking open space, parks/ parkettes, vista blocks, SWM facilities, etc.
- 22 Provide landscape strips of generally 3.0m to 6.0m metres width to allow for planting. Allow for wider strips on cases where greater landscaping and/or screening/buffering is needed or desirable.





- **23** For developments adjacent to public areas with high level of activity/use, provide enhanced landscaped strips. Consider a combination of fencing, walls, planting and earth berms.
- **24** Use berms in landscape strips as an effective way to minimize views/noise from adjacent uses, but avoid them adjacent to roadways.
- **25** Provide safe movement through the site and surface parking areas by:
 - a. Differentiating walkways from driveways through level change, barrier or bollard, and/or change of material.
 - b. Providing logical, barrier free and convenient pedestrian connections to/ from building accesses, amenity spaces and adjacent pedestrian network (i.e., sidewalks, walkways trails).
- **26** Where walkways are located between two buildings, promote safe pedestrian environments by providing pedestrian-scaled lighting and facade fenestration.
- **27** Use landscaping to mitigate the impact of blank walls.



- **28** Design private amenity areas to be functional and respond to residents needs.
 - a. Amenities should be large enough to accommodate a small table and chairs.
 - b. Consideration should be given to providing roof-top amenities where balconies and at grade spaces are limited. Roof-top amenities may only overlook/front onto public streets/spaces, and be limited to 25% of the total roof area.
- **29** Provide common outdoor amenity for larger scale townhouse developments and Low-rise Apartment developments. For the minimum area requirements, based on number of dwelling units on a Lot, refer to ZBL 4.2.B.
- **30** For common amenity areas of larger developments including several residential units:
 - a. Locate common amenity spaces centrally or as a connection/extension to a larger or major open space feature, pathways or trail system in the surrounding area.
 - b. Frame common amenity with animated elevations
 - c. Design common amenity to be universally accessible
 - d. Locate children's play zones in safe, convenient and highly visible areas.
 - e. Group common outdoor areas, such as children's play, sheltered seating, mailboxes/kiosks and similar features, and frame them with active building elevations.



- f. Encourage the provision of bicycle parking.
- g. Provide a designated snow storage area away from public view and main circulation route.
- **31** For the design of community mailboxes the following should be considered:
 - a. Locate mailbox pedestals and mail kiosks centrally along a street or common amenity area.
 - b. Design mailbox pedestals and mail kiosks as integral components of the streetscape or amenity area.
 - c. Provide seating and waste receptacles at centralized mailbox trellis areas.
 - d. Provide gazebos as part of community mailbox facilities.
 - e. When located at a corner end lot, provide landscaping and/or privacy fencings as a buffer.
 - f. Consider an enhanced base or pedestal for the mailboxes.

D. GARBAGE STORAGE

- 1 Allocate appropriate space for the storage of private refuse and recycling bins.
 - a. Within garages; where possible, expand the interior capacity of garages (1.5 to 2 metres in depth) to allow space for storage.
 - b. Through screened alcoves.
 - c. In the backyard where not visible from the street.
 - d. In the side yard behind an enclosed fence.
 - e. Integrate them the building design for multi-unit developments.
 - f. Ensure easy access to storage space.
- 2 Locate external garbage facilities away from public views. Enclose them through structures of consistent design, colour and materials with the main building, and/or screen them through landscaping.
- 3 Where centralized garbage pick up cannot be avoided, provide pads for pick-up day placement only, and locate away from unit/ building entrances and out of view of public spaces.

3.2.2 BUILT FORM

A. HEIGHT AND MASSING

- Encourage buildings of minimum 2 storeys in height to provide for appropriate streetscape enclosure, and to create smooth height transitions from adjacent existing or potential lower/higher building forms.-
- 2 Avoid drastic changes in height. Provide appropriate transition in height and massing between adjacent/surrounding buildings of different typology, height and massing, by:
 - a. Providing variation in heights within the building ('step down').
 - b. Setting back upper floors (those above the height of adjacent buildings) along the elevations exposed to public view.
 - c. Articulating the roofline to include slopes towards lower buildings.
 - d. Incorporating the upper level within the roof structure.
 - e. Ensuring that the massing of flat roof building is generally consistent to the overall massing of adjacent dwellings.
- **3** Where low-rise apartment buildings are located beside 1 to 2 storey existing buildings, and within 7.5m from the abutting property line, ensure that the height of portion of the building closest to the 1 to 2 storey building is no more than 2 storeys greater than the existing building.



19

B. ARCHITECTURAL DESIGN AND BUILDING ARTICULATION

- Ensure all faces of a building reflect a consistent and cohesive design/architectural style.
 - a. Design front elevations to create/enhance a consistent, articulated and animated street wall along the streetscape.
 - b. Design all elevations exposed to the public realm/view to reflect the architectural level of the front elevation; this includes wall and roof articulation, proportions, fenestration, architectural details and materials.
- 2 Encourage designs with clean lines and simple geometry that complement the character of surrounding built form.



- **3** Encourage both traditional and contemporary architectural styles.
 - a. Ensure all elevation details are consistent with the intended architectural style for the building.
 - b. Avoid mixing architectural styles.
 - c. Elements of historic detailing should not be mixed with those of other architectural styles.
 - d. When traditional styles are considered, ensure they are properly executed and reflect fundamental attributes.
 - e. Avoid historic architectural replication and architectural styles with excessive decorative details that are not properly executed.
- **4** Organize elements of the elevation in a logical grid (horizontally and vertically) to achieve sense of order and unity.
- **5** Create highly-articulated elevations through:
 - a. Wall projections and recesses. Ensure changes on plane are a minimum of 250mm (10^{``}).
 - b. Projecting elements such as box out, bay windows, porches, canopies, towers and turrets.
 - c. Enhanced fenestration.
 - d. Second-storey balconies (recessed or projecting).
 - e. Strong and articulated rooflines including gables and varied slopes.
 - f. Wrap-around elements (porches, box outs, windows, etc) on corner units.
 - g. Well-executed high-quality architectural detailing.



- 6 Consider architectural details including:
 - a. Brick soldier course banding or lintels, quoined corners, piers and corbelling.
 - b. Precast sills, lintels, keystones and imposts.
 - c. Stone accent features such as plinths or projections.
 - d. Stucco and PVC siding accents.
 - e. Window and door casings, louvers, frieze boards, cornice and other moldings.
- 7 Avoid blank walls facing the public realm.
- 8 It is generally acceptable to consider contemporary architectural styles, yet it is important to ensure they reflect the proportions and fenestration of surrounding built form. Design buildings of contemporary style to:
 - a. Include simple lines with strong geometrical shapes.
 - b. Have flat or shallow pitched roof with generous overhangs for the building as well as the entry feature.
 - c. Include large windows, full glazed walls/ gable ends, wrap around corner windows, panoramic windows, skylights, etc.
 - d. Incorporate asymmetrical window placement where appropriate.
 - e. Include, if appropriate, minimalistic decorative elements free of ornamentation.
- **9** Locate entries to face, animate and overlook adjacent streets, public spaces such as parks or private amenities such as mews.

- **10** Encourage substantial, high quality glazing at ground level, while ensuring appropriate privacy for ground-level residential units.
- **11** Ensure appropriate privacy conditions when designing all above-grade amenity areas (e.g., balconies, decks, terraces, etc).
- **12** Locate firewalls unobtrusively and integrated into the design.
- 13 Locate rainwater leaders and downspouts.
 - a. Discretely on side elevations.
 - b. Enclosed into the design, where possible.
 - c. Recessed within the wall face and paired in between the adjacent unit, where applicable.
- **14** Project masonry details a minimum of 12mm from the wall face.
- **15** Provide continuous frieze board that is at a minimum 150mm (6") at the top of supporting columns and underside of roof soffit, and where siding abuts any masonry wall.





C. ROOFS

- Encourage a variety of roof forms and designs within a street block. Consider cottage or hipped roofs, front/side/cross gabled roofs, mansards, as well as flat roofs and other roof types where appropriate and permitted.
- 2 Design roofs to be proportionate to the overall building massing and of consistent style.
- **3** Ensure breaks on the roofline correspond to the articulation of the wall below.
- 4 Design articulated roofs and roof lines by incorporating features such as projections, gables, usable dormers, variation of roof ridges, and brows. Use accent materials to highlight these elements.
- **5** Fake dormers are strongly discouraged.
- 6 Design the roof of traditional style buildings to:
 - a. Have steeper slopes.
 - b. Include back-to-front slopes of at least 5.9:12 on the main roof.
 - c. Have side slopes of minimum 7.9:12.
- 7 Design the roof of contemporary style buildings to:
 - a. Be flat or have lower pitches/slopes.
 - b. Have deeper, generous overhangs of between 600 and 900mm.
 - c. Include profiled caps, cornice edges or elevated parapets for flat roofs.
 - d. Have strong cornice lines.

- 8 Provide minimum roof pitches of 6:12, and incorporate steeper pitches for gables within main roofs.
- **9** Provide a consistent soffit overhang that adds shadow lines and projections to the elevation design. A minimum of 300mm is recommended.
- **10** Locate stacks, gas flutes and vents on the rear slope of the roof where possible.
- **11** Locate gas flues as close to the roof ridge as possible.







D. ENTRY FEATURES, DOORS AND WINDOWS

- 1 Design entry features (main entrances) to:
 - a. Face the adjacent public realm, including streets and open spaces.
 - b. Be the focus of the elevation, visible and clearly discernible from the public realm (street, walkway, park, etc).
 - c. Be consistent with and complement the design of the building proportions, architectural style and materials.
 - d. Include weather protection elements.
 - e. Be deep enough to provide for usable space. A minimum of 1.5m is recommended
 - f. Be close to the finished grade and/or a maximum 1.2m (6 risers) above the finished grade of the sidewalk.
 - g. Be located no closer than 1.0m to the property line.
 - h. Where proposed, ensure columns are proportionally scaled to the building and overall entrance, and consistent with the building style/design.



- 2 Enhance entry features through:
 - a. Covered porches, porticos, or canopies.
 - b. Roofs that are proportionate to and complementary to that of the overall building, including gables and slope details.
 - c. Architectural details such as architraves and cornice details.
 - d. Highlighted doors in distinct and complementary materials/colours.
 - e. Double entry doors with vision panels.
 - f. Transom/side lights (especially when a single entry door is proposed) to allow for natural light at entrances.
 - g. Complementary light fixtures.
- Coordinate all elements of the entry feature, including steps, columns, railings and lighting, to ensure a cohesive appearance.
- 4 For contemporary designs with flat canopies at entry features, ensure generous overhangs and consider massing elements such as a cantilevered or recessed upper storey.



- 5 Recessed entries should be no deeper than1.5m in order to comply with CPTED principles by avoiding hiding places.
- 6 Design entry steps as an integral part of the entry feature and elevation design (i.e. avoid pre-formed, add-on steps).
- 7 Discourage the use of precast steps at main entrances. Where more than 3 steps are required to access the porch, they should either be:
 - a. Poured-in-place concrete with masonry veneer on the exposed sides.
 - b. Precast stairs with an integrated ledge to accommodate masonry veneering on the side (maximum unit size is 6 risers).
 - c. Where more than 6 risers are necessary in a single run, poured-in-place concrete is required.
- 8 Where the first floor of the building is within
 3.0m of the front yard property line or
 sidewalk, raise the entry feature between 0.9 1.2m above the finished grade of the sidewalk.





- **9** Where front entries require more than 6 exterior risers or are 1.2 metres above/below grade:
 - a. Locate the additional steps internally to the building.
 - b. Interrupt the number of continuous steps by provide a landing(s) in between.Landing to be a minimum of 1.2m in depth.
- **10** Encourage a variety of front door styles in keeping with the architectural expression of the building.
- **11** Integrate accessibility ramps into the elevation and building design, where applicable.
- **12** Provide high quality, maintenance-free railings; consider:
 - a. Heavy gauge wrought iron or similar.
 - b. Painted wood.
 - c. High quality prefinished aluminum or vinyl railings are acceptable where they are complementary to the design of the building.
 - d. Glass when appropriate for contemporary designs.
- **13** Provide appropriate and enough natural light penetration, ventilation and privacy through the strategic sizing and organization of windows on the building's elevations.
- 14 Maximize window openings on elevations facing public spaces, when appropriate, while also ensuring appropriate privacy and safety.
- **15** Ensure windows complement the proportions and style of the building, and are organized/ placed in a logical manner (vertical and horizontal composition grid).



- **16** For exposed elevations, ensure ground and upper level windows are aligned vertically and horizontally for a cohesive and upgraded elevation design.
- **17** Keep window treatment consistent for all windows exposed to public view regarding style, panelling, proportions, framing, details, etc.
- **18** Provide windows that are thermally sealed, double glazed and either casement, single hung or double hung type.
- **19** Encourage transom and clerestory windows where floor heights permit and when appropriate to the elevation design.
- 20 Darkly tinted glass is not permitted.
- **21** Sliding doors are not permitted on front and exposed elevations.





E. GARAGES

- Design detached garages to include consistent materials and architectural style/ details to those of the main building.
- **2** Design front integrated garages to minimize their impact on the elevation and streetscape and ensure:
 - a. Their width is a maximum of 50% of the building/unit. Allow for up to 60% on lots smaller than 5.5m wide.
 - b. They are either recessed from or flush to the main face of the building, preferably; alternatively, allow garages to be recessed from projecting porches.
 - c. The second level wall above the garage is recessed a maximum of 2.5m from the garage face.





- **3** Design garages exposed to public view to:
 - a. Promote a variety of garage doors styles and ensure they are consistent with the architectural style of the building (including their roof).
 - b. Incorporate doors with glazing panels.
 - c. Include exterior light fixture associated to the garage.
 - d. Where two-car garages are permitted, use two single bay garage doors (2.5m wide) separated by a masonry pier, or use a double-wide (maximum 4.9m wide) single bay door.
- **4** For contemporary designs, consider high quality, contemporary style garage doors such as, but not limited to:
 - a. Flush, smooth surface finished.
 - b. Full vision door with aluminum frame. They may include a variety of transparencies for glass panels such as clear, frosted, obscured, etc.
 - c. Large window panels set into garage door.
- **5** Design 3-car garages to:
 - a. Provide a variety of setbacks and garage configurations; offset one or more of the garage bays to provide massing/wall articulation.
 - b. Provide tapered driveway treatment with maximum width of 6.5m at the curb.

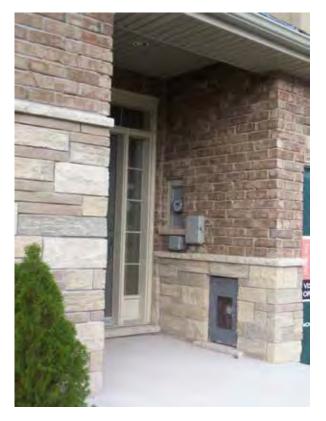


- 6 Mitigate the impact of dropped garage conditions (Where the slab of the garage drops more than 600mm (2'-0") below what is indicated on the working drawings) by:
 - a. Increasing the garage door height.
 - b. Lowering/dropping the garage roof.
 - c. Providing additional architectural detailing above the garage such as masonry detailing, brick banding, soldier coursing or a louvre, cambered or arched lintels/ headers. Keep details consistent with the elevation design and architectural style.
 - d. Incorporating a clerestory window above the garage door.
 - e. Incorporating cambered or arched lintels over garage door.
 - f. Providing centered light fixtures over garage doors.
 - g. Locating street numbers/ addresses plaques above the garage door.
- 7 Design entries to below grade garages as part of the elevation design:
 - a. Locate on a side elevation, where possible.
 - b. Recessed and integrated into design of building.
 - c. Screened by landscape features.



F. UTILITY / SERVICE METERS AND AC UNITS

- Locate utility and service meters away from the front elevation and yard, and screened from public view.
 - a. On interior side yards.
 - b. For lots with access to a laneway, locate utility and service meters at the laneway, if possible.
- 2 For utility and service meters on the front elevation, discretely located them:
 - a. Integrated into the design of the building (wall).
 - b. Screened through landscaping or decorative screens.
 - c. Behind a change of plane towards the rear.
 - d. Recessed and/or enclosed in entry feature (e.g., porch) or landing when located on front elevations.
 - e. Below entry slabs/steps.
 - f. If appropriate, grouped in one location where their presence has been addressed through a wall recess, enclosure and/or, where appropriate, a small roof overhang.
- 3 Locate air conditioning units, dryer vents, exhaust fans, furnaces and hot water tanks at the rear, preferably, or on interior side yards.
- 4 Where appropriate (e.g., low-rise apartment buildings, back-to-back townhouse blocks, etc.), integrate mechanical units into the roof design, through increased slopes or enclosure, to screen them from public view.
- **5** Screen air conditioners and barbecues located on front amenities, such as balconies, through architectural structures/details and materials coordinated with the elevation design.
- 6 Locate communication dishes on rear elevations, or on the rooftop of flat roof buildings, setback from building edge.
- 7 Indicate the location of all utility meters and air conditioning units on working drawings.







G. MATERIALS, ADDRESS PLAQUES AND LIGHTING

- 1 Select materials to reflect and complement the architectural style of the building.
- 2 Create colour/material palettes to include contrasting but complementary colours. For new subdivisions, provide varied but distinct palettes that contribute to harmonious streetscapes.
- **3** For new subdivisions, provide separate colour/material packages for traditional and contemporary designed buildings.
- **4** Use high quality, durable and low-maintenance materials. Consider:
 - a. Brick masonry.
 - b. Stone; natural type preferably.
 - c. Cementitious siding.
 - d. High quality vinyl such as 'board and batten'.
 - e. Industrial materials (metal, concrete), marble, wood, masonry with smooth finishes, as well as large calibre, smooth finish cementitious siding for contemporary designs.







- 5 Favour:
 - a. Natural finishes.
 - b. Locally sourced and sustainable materials, and consider recycled ones, where appropriate.
- 6 Use materials and fastening systems that are authentic to their purpose and neatly detailed. Do not use materials that imitate other materials.
- 7 False fronting is not permitted.
- 8 Keep main materials to a maximum of two, with a third material to be used only for accents.
- **9** Limit the use of stucco (or similar) and PVC siding to accents such as projecting elements and windows.

- **10** Use consistent cladding materials on all elevations of the main and ancillary buildings of the development.
 - a. All elevations exposed to public view should incorporate the same materials of the front/main elevation.
 - b. On exposed elevations, changes in material should be purposeful and coincide with substantial massing elements (e.g., changes in plane) or organizing lines of the building. Changes in material shall not occur at building corners.
 - c. On interior elevations, return materials from the front facade and terminate them at 1200mm (47") from the front of the unit or to a logical stopping point such as an change in plane, opening or downspout.
 - d. Coordinate and align the termination of materials and architectural details.
- **11** Use materials and colours to highlight the building's components (base, middle and top) and enhance it's articulation.
 - a. Favour roof colours darker than the main cladding materials.
 - b. Incorporate distinct cladding materials at the base of buildings of 3 or 4 storeys.
- 12 Ensure concrete foundations are:
 - a. Maximum 250mm (10") high on exposed elevations.
 - b. Maximum 300mm (12") high on interior elevations.
 - c. Check-stepped where sloping occurs.
- **13** Consider adopting the following materials whenever suitable: sustainable, recyclable, durable, locally available materials.
- **14** Ensure siding to be framed with 150mm (6") trim boards.
- **15** Ensure window frame colours are compatible with exterior colour package.
- **16** Glass for windows or doors should not be mirrored or darkly tinted.
- **17** Favour sustainable, recyclable, durable, locally available roofing materials.
- **18** Provide metal flashing that matches the wall cladding or roof (regarding colour/tone).















- **19** Design address plaques to:
 - a. Be placed prominently on the front facade, or above garages in well lit locations.
 - b. Be minimum 100mm (4") tall.
 - c. Have simple design and legible font face.
 - d. Include dark numbering, placed on a light coloured background for maximum contrast.
 - e. To complement the character of the unit and reflect the image of the community.
 - f. Acceptable designs include: Etched masonry plaques set into the wall cladding; pre-finished ceramic or plastic plaques set into a bezel; pre-finished metal plaques; individual metal numbers.
 - g. Where possible, encourage a coordinated approach to the style of municipal address plaques as a means of fostering community identity.

20 Incorporate lighting into the elevation design:

- a. At entrances, above garages (1 per garage door) and along soffits.
- b. Ensure light fixtures complement the elevation design in terms of style, scale, materials and colour.
- c. Favour energy efficient lighting such as LED and solar options.
- **21** Coordinate the building and landscape colour/ material palettes for a cohesive design.

H. SKYLIGHTS + SOLAR PANELS

- 1 Encourage skylights and solar panels, where appropriate, and design them as integrated parts of the building.
- 2 Locate skylights and solar panels:
 - a. Within roof lines
 - b. Away from public views whenever possible.
 - c. Aligned with the horizontal rhythm of the windows and doors on the associated elevation where exposed to public view.
- **3** Favour flush mount skylights.
- **4** Ensure the array of solar panels is sited to reinforce the horizontal and vertical patterns of the roof.
- **5** Locate frames and plumbing lines away from public views and ensure that their colours are similar to that of the roof material.
- **6** When exposed to public view, mitigate the aesthetic issues of traditional solar panels by:
 - a. Avoiding aluminum frames and white backing sheets.
 - b. Ensuring that solar panels seem less obvious by choosing colors that are similar to the roof colors.
 - c. When feasible, set PV panels flush with the roof, replacing sections of roof fabric.



C3.3 DESIGN GUIDELINES FOR SPECIFIC BUILDING FORMS





3.3.1 SINGLE DETACHED DWELLINGS

- 1 For new subdivisions:
 - a. Provide at least 3 distinct elevations per model, including different roof designs for alternate elevations of the same model.
 - b. Ensure identical building elevations are separated by a minimum of 2 lots.
 - c. Ensure identical building elevations comprise no more than 30% of a street block.
 - d. Ensure identical colour packages are separated by a minimum of 3 lots.

3.3.2 SEMI-DETACHED DWELLINGS

- 1 Encourage rear accessed configurations (lane based).
- **2** Design semi-detached unit elevations comprehensively to look as one elevation. This may include:
 - a. Designing both side to look exactly the same (symmetrical type).
 - b. Designing both units to have consistent architectural style (re: entrances, doors, windows, roof, materials) but different yet complementary articulation and placement of the design elements.
- For narrow units, consider pairing entry features for a greater impact on the elevation. For front loaded units, ensure entry features project from the garage wall.

- 4 For new subdivisions:
 - a. Provide at least 3 distinct elevations per model, including different roof designs for alternate elevations of the same model.
 - b. Ensure identical semi-detached building elevations (includes both units) are separated by a minimum of 2 lots.
 - c. Ensure identical building elevations comprise no more than 30% of a street block.
 - d. Ensure identical colour packages are used on both attached units but separated by a minimum of 2 lots (different buildings).

3.3.3 TOWNHOUSE DWELLINGS

A. SITE ORGANIZATION

- 1 Consider townhouse forms as appropriate building transition between mid-rise and low-rise buildings.
- 2 Encourage lane-based and underground parking townhouse configurations whenever possible and especially for infill developments.
- **3** Ensure a minimum unit width of:
 - a. 6m for front loaded townhouse units.
 - b. 5m for lane based or underground parking townhouse units.
- 4 Encourage wider units for townhouse blocks with front-loaded garages to better balance the proportion of habitable spaces vs. garages. 6.5m frontage is recommended.
- Limit townhouse block length to 8 units (width) or 52m, whichever is less.
 - a. Encourage shorter blocks of 4 to 6 units.
 - b. Ensure greater blocks are highly articulated vertically through changes in height and plane breaks (projections and recesses).
- 6 For interior end units adjacent to pedestrian connections or lanes , ensure interior setbacks of at least 1.2m from the side lot line to allow for some light wall articulation, fenestration and natural light into the unit.







- Provide wider lots for the end units of townhouse blocks to properly accommodate flankage elevations upgrades as well as enhanced landscaped side yards.
- 8 For townhouse blocks facing other lowrise built form up to 4 storeys separated by a mews or similar open space, ensure a minimum separation distance of 15m.
- **9** Limit the width of driveways and garage doors to maximum 60% of the width of front yards and townhouse unit respectively.
- **10** Provide private outdoor amenity spaces for each townhouse unit whether in rear yards or on decks/terraces, and balconies at front.
- **11** Where entrances to adjacent units are paired, considered a singular walkway leading to a shared landing to both entrance stairs.







B. BUILT FORM

- 1 Maintain architectural treatment, roof style and materials consistent throughout the townhouse block (all elevations).
- 2 Design townhouse block as a building instead of individual units. While mirroring of an elevation design is an option, consider different but complementary elevation designs that help differentiating units on a block, while creating a unique architectural style/expression.
- **3** Break the horizontal nature of townhouse blocks and emphasize and differentiate individual units within it through:
 - a. Varying setbacks.
 - b. Wall plane variations projections/ recesses.
 - c. Articulated roof and rooflines (e.g. variations in roof slopes and pitches, incorporation of gables and dormers, etc.).
 - d. Highlighted entrances.
 - e. Different but complementary entrance/ window treatment and placement.
 - f. Varied but complementary materials/ colours.

- 4 Encourage second storey balconies to help create vertical breaks along the block elevation.
- Ensure all entry features are identical, or similar/complementary and organized to reflect a recognizable specific pattern. Consider pairing unit entrances, where possible, for greater impact on the overall block elevation
- 6 For front integrated garages:
 - a. Provide consistent garage treatment, including the door style, for all units within a block.
 - b. Consider staggering garages to enhance the block's elevation articulation.
 - c. Provide varying garage styles, including roofing, between blocks to further differentiate between elevation designs.
- 7 Keep cladding materials consistent throughout the block. However, when appropriate to the block/unit's design and the built character along the streetscape, allow for different but complementary materials that accentuate the individual units on the same block.
- 8 Ensure that utility meters do not dominate the front facade of the townhouse block or individual unit.
- **9** For deck and live-work townhouse units, locate air conditioning units on the deck, or its underside where the only outdoor space is a deck at the rear.
- **10** For further direction on the design of podium and liner townhouses, refer to the design guidelines for base/podiums of mid- or high-rise buildings.



3.3.4 MULTIPLEX DWELLINGS

A. SITE ORGANIZATION

- Design multiplexes to resemble the siting, massing and elevation design of existing buildings in the surrounding context.
- 2 Provide generous soft landscaped areas along public frontages and ensure a minimum of 50% landscaped area in the front/flankage yard.
- **3** Provide pedestrian access to units on a multiplex through either:
 - a. A shared entrance with an internal foyer that leads to separate units.
 - b. Separate entrances located to the front, rear and/or side, connected to the sidewalk or driveway through a walkway, and designed as integral part of the building.
 - c. A combination of the above.
 - d. Ensure the configuration and rhythm of entrances along public frontages reflect those along the street.
- **4** For small/narrow buildings, keep the number of entry features/entrances to a minimum, preferably one, at the front elevation; and:
 - a. Favour incorporating common entrances with internal access to two or more units (interior foyer/hall).
 - b. Provide additional entrances at the rear or side elevations. Allow additional entrances for front, ground related units when appropriate (re: streetscape pattern, larger buildings).
 - c. Consider wall projections, porches and other building articulation elements to screen additional entrances otherwise exposed to the front.
- 5 Provide amenity space for each unit in the form of yards, porches, balconies or terraces/ decks, where appropriate.

B. BUILT FORM

- Design highly articulated and animated elevations that are consistent and enhance the character of the streetwall along the streetscape.
 - a. Generally maintain the height of existing and planned buildings in the surrounding area.
 - b. Encourage wall articulation that resembles the width of units along the streetscape.
 - c. Break the building massing vertically and horizontally, through changes in planes, rooflines, enhanced fenestration and architectural details.
- 2 Limit exterior stairs; if necessary:
 - a. Integrate them at the rear, preferably, or interior side of the building.
 - b. Design them as integral part of the building massing and elevation. They should be constructed of the same, similar or complementary materials of those used on the building.
 - c. Ensure weather protection is provided at entrances.
 - d. Link them to the adjacent sidewalk or private walkway through a clearly define path.
- **3** For multiplexes of larger scale (e.g. similar to stacked back-to-back townhouse blocks or low-rise apartment buildings):
 - a. Provide massing breaks (wall recess/ projection) every 6-8 metres along exposed elevations, and ensure they are at least 1.5m wide and 0.5m deep.
 - b. Design the main entry feature to be clearly visible and discernible from the street by incorporating elements such porches/ awnings/canopies and wall recesses (indentations) proportionate to the building, as well as high level of glazing.
 - c. Incorporate additional entrances for ground related units.
 - d. Strongly encourage underground parking.

3.3.5 ADDITIONAL RESIDENTIAL UNITS (ARU - ON A SINGLE EXISTING LOT)

Additional Residential Units are permitted in certain residential zones, and only on the same lot as a principal detached dwelling, linked dwelling, semi-detached dwelling or townhouse dwelling. Attached units are generally added through extensions or renovations; detached units - Garden Suites or Laneway Houses - are units located in a separate building from the principal dwelling; they might be freestanding or attached to a detached private garage.

For general provisions related to ARU's, refer to Zoning By-law 2.3.A. For specific provisions related to Garden Suites, refer to Zoning By-law 2.3.F.

3.3.5.1 GENERAL GUIDELINES

A. SITE ORGANIZATION

- 1 Provide pedestrian access to ARU's:
 - a. For attached units, a separate entrance located to the rear or side of the main unit, or through a shared entrance with an internal foyer that leads to separate unit accesses.
 - b. For detached units, a separate entrance from the rear lane or front street; include a dedicated walkway (minimum 1.2m wide) leading to the entrance when accessed is proposed from the front street.
- **2** For extensions or new buildings at the rear of an existing property, address privacy matters and sunlight issues by:
 - a. Providing side yard setbacks as per Zoning By-law.
 - b. Minimizing extensions beyond the adjacent dwellings' rear walls.
 - c. Limiting the number of windows to a minimum on side elevations when the rear wall of the dwelling extension/new dwelling extends beyond the adjacent dwellings' walls.
 - d. Avoiding balconies on rear elevations or those facing rear yard amenities (private).
 - e. Avoiding rooftop patios.
 - f. Providing adequate fencing to effectively separate and screen adjacent rear amenities, minimizing their exposure to/ from adjacent properties.



- 3 Minimize the footprint of detached ARU's (to a maximum of 35m²)to ensure enough/ sufficient land (at grade) is left for the amenity space of at least one of the units.
- **4** Encourage providing private amenity space for each unit.
 - a. For attached units, a shared or separate space from the primary unit may be provided.
 - b. For laneway, garden or above garage units, a separate space from the main unit should be provided and screened from other adjacent amenities (re: location, landscaping, fencing).
- 5 Provide/maintain parking for the main unit, with access from a lane or street. Refer to Zoning By-law for parking provisions.
 - a. Ensure enough/sufficient land (at grade) is left for the amenity space.
 - b. Provide one additional parking space for lots including two ARUs. No additional parking is required for lots including only one second unit or garden suite.
 - c. Consider tandem parking, where appropriate.

- 6 Should a residential driveway widening be required to provide for additional parking spaces, walkways or hardscape amenity areas, design driveway widening:
 - a. To enhance the character of the property and streetscape.
 - b. To be composed of cosmetic materials including but not limited to decorative stone and interlocking.
 - c. So the driveway and walkway/hardscaped amenity area are visually delineated via cosmetic hardscaping or decorative elements.
 - d. To incorporate increased soft landscaping such as plantings to balance increased hardscaping.
 - e. So permeable paving systems and green driveways are encouraged.
 - f. To ensure front yard alterations do not generate negative stormwater impacts for nearby properties.

B. BUILT FORM

- Design ARU's (attached or detached) to complement and reflect the siting, grade elevation, architectural style, fenestration, roof/wall articulation, and materials/colours of the main unit.
- **2** Limit height of extensions to that of the main building.
- 3 Ensure the height of detached ARUs is:
 - a. Maximum 4.5m, except for Hamlet, Estate or Agricultural zones, where a maximum of 7.5m height is allowed.
 - b. Maximum 7.5m or the height of the principal dwelling, whichever is less, for detached garages with garden suites above them.



3.3.5.2 GARDEN UNITS (DETACHED ARU)

A. SITE ORGANIZATION

- Refer to Zoning By-law 2.3.F for information on setbacks and building separation distances.
- 2 Encourage locating detached ARU at the rear yard, preferably, or side yard. Consider units above rear detached garages.
- 3 When the detached ARU is located beside the main building, ensure its front setback reflects that of the main building or it is slightly recessed from the main wall of the main building.
- 4 On corner lots, ensure the new unit doesn't project from the main building by placing the ARU unit to reflect the side setback of the main building or be recessed from it (exterior face). Encourage greater exterior setbacks to incorporate entrances and other projecting elements such as porches.
- **5** Where appropriate, encourage units with rooms at grade which provide opportunities for aging in place.
- 6 Encourage generous separation distances (as much as possible and minimum of 3m) between the main and ancillary buildings/ additional units on site, to maximize natural light into the units, foster adequate privacy, and provide opportunities for functional amenity spaces at grade.
- 7 Design, place and service detached ARU to preserve existing trees on the subject site. Consideration should be given to trees and landscaping located on neighbouring properties as critical root systems could be impacted by the new development.
- 8 Design the outdoor amenity area framed by the principal unit and the detached ARU to include a balanced softscape and hardscape treatment that helps mitigate heat island effects while maximizing rainwater infiltration through water runoff reduction.









B. BUILT FORM

- Design articulated elevations that animate the lane/public realm, as well as the private frontage shared with the main unit. Where residences front onto an existing lane, attention should be given to design that effectively creates a 'front door' while providing appropriate setbacks and landscaping to animate the lane and ensure safety and visibility.
- 2 Ensure the architectural style/details and materials of ARUs reflect or are compatible with those of the principal building.
- **3** Comprehensively design units above garages as one building.
- **4** For units above detached garages, locate stairs on the side elevation and, if possible, integrate them into the building massing (inside).
- 5 Consider roof designs that complement that of the main building; this could include single inclined plane roofs; peaked, gabled or hip roofs; or, flat roofs.
- 6 Ensure the height of any porch, patio and/ or deck does not exceed 0.6m above ground level.



- 7 Strategically place windows/openings to maximize sunlight penetration into the ARU while maintaining privacy with adjacent properties.
 - a. Where windows are desired, encourage a minimum of 4m setback from interior site property lines or between the main and ARU buildings. If less than 4m setbacks are provided, consider appropriate screening measures.
 - b. Incorporate most and/or larger windows on the rear elevation facing the lane, the side elevation facing the street (e.g. corner lot) or the deeper side yard.
 - c. Place balconies to face streets only (corner lots).
 - d. Locate windows off-set from abutting elevations with windows.
 - e. Encourage clerestory or opaque glass windows on side elevations facing adjacent properties or those facing the primary unit.
 - f. Incorporate skylights as an alternative source of natural light.
 - g. Provide complementary screening through fences, and hard/soft landscape elements.
- 8 For buildings along lanes, provide animated frontages in combination with attractive landscaping and fencing, when required.
- **9** Select building materials to complement the building design in terms of their functional and aesthetic qualities, as well as energy and maintenance efficiency.
- **10** Despite the higher upfront cost, mid-level finishes are strongly recommended given their longer durability and typically, lower maintenance costs. This includes selecting doors and windows with higher thermal performance as a good long-term cost management strategy.

DRAFT NOVE

3.3.6 LOW-RISE APARTMENT BUILDINGS

(OP: Multiplex Small and Large, Courtyard Building)

A. SITE ORGANIZATION

- 1 Locate new building to minimize shadow or privacy impacts on adjacent buildings.
- 2 Locate servicing/loading areas to the rear/ side of the lot, away and screened from public view.
- **3** Clearly differentiate parking accesses, parking areas and servicing areas.
- 4 Ensure the main entrance is located as close as possible to and visible and accessible from the public realm.
- **5** Where possible, incorporate at-grade units with direct access to the adjacent sidewalk.
- 6 Design front yards to:
 - a. Clearly delineate private from public areas through a combination of soft and hard landscape elements.
 - b. Ensure eyes-on-the-street while also providing for adequate privacy for atgrade units.
- 7 Integrate utility metres, garbage facilities/ storage and other servicing areas into the buildings design, and away and screened from public view.
- 8 For low-rise apartment buildings facing other low-rise built form up to 4 storeys separated by a mews or similar open space, ensure a minimum separation distance of 15m.





B. BUILT FORM

- Ensure well defined base, middle and top components of the building; this can be achieved through:
 - a. Plane and material changes.
 - b. Architectural details such as horizontal bands and prominent cornices.
 - c. Window treatment unique to these components (regarding window proportions and design).
 - d. Top structures related to amenities or mechanical room enclosures.
- 2 Design the main entry feature to be clearly visible and discernible from the street through articulated massing, elements such as awnings and canopies, as well as high level of glazing. Ensure visibility to interior lobbies to promote safe and convenient circulation to/ from the building.
- **3** Screen mechanical units or equipment rooms through placement and architectural features.
- 4 For flat roof buildings, locate air conditioning units on the roof, setback from the roof edge and screened from public view.



C3.4 PRIORITY LOTS

IN ADDITION TO THE GUIDELINES LISTED IN SECTIONS C3.2 AND C3.3, THE FOLLOWING WILL APPLY TO THE DESIGN OF PRIORITY LOTS.

3.4.1 GENERAL DESIGN GUIDELINES

Design all elevations exposed to public view to include:

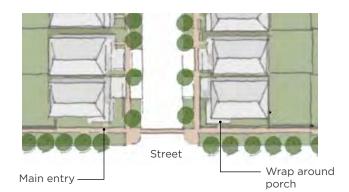
- 1 Articulated walls through changes of plane.
- **2** Substantial fenestration (window openings, doors and balconies).
- **3** Window placement organized in a horizontal and vertical grid both in alignment and size.

- 4 Consistent and continuous main cladding material(s) and architectural treatment/ details.
- **5** Upgraded window treatment and surrounds.
- 6 Articulated roof lines.
- Where appropriate to the building design, consider incorporating gables, dormers, bay windows, as well as decorative panels/louvres.

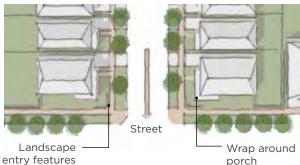


3.4.2 **CORNER AND GATEWAY LOTS**

- 1 Ensure buildings are minimum 2 storeys in height.
- 2 Provide specific designs/models for corner and gateway buildings.
- **3** Place building and design elevations to address both street frontages.
- 4 Encourage locating the main entrance on the flankage elevation.
- 5 Locate usable interior spaces at the corner and along the exterior elevation.
- 6 Emphasize the corner/gateway condition by incorporating wrap around or secondary porches; box out windows; prominent massing and taller , towers or turrets, as well as gables and bay windows. Keep all details consistent with the architectural expression of the building.
- 7 If functional chimneys are included in the design, consider full height exterior chimneys on the exterior side.
- 8 Locate driveways away from intersection.
- 9 Coordinate privacy fencing design for all corner lots.
- **10** Provide upgraded fencing on gateway lots.
- **11** Coordinate private landscaping including fencing of gateway lots with any feature proposed on the public realm.



Corner lot condition



entry features

Gateway lot condition



Corner lot condition

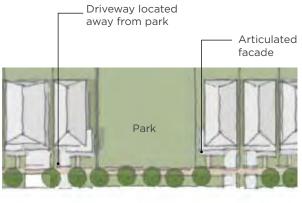


Gateway condition

3.4.3

LOTS FACING/FLANKING/BACKING ONTO PUBLIC SPACES (PARKS AND PARKETTES / OPEN SPACE / VISTA BLOCKS / PEDESTRIAN LINKAGES / SWM FACILITIES)

- 1 Encourage full, secondary or wrap around porches for buildings facing/flanking parks.
- 2 Provide articulated rooflines for buildings backing/flaking public spaces; consider incorporating details such as gables and dormers.
- **3** Locate driveways away from public spaces.
- 4 Consider 2nd storey balconies on lots facing/ flanking/backing onto public spaces.



Street



Lots facing/flanking a park



Wrap around porch next to open space.



Full porches facing open space.



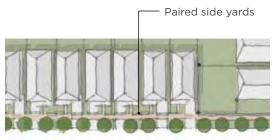
Second storey balconies backing onto open space.

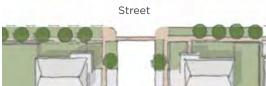
3.4.4 LOTS AT "T" INTERSECTIONS AND ELBOW STREETS

- 1 Pair the front yards of adjacent lots at view terminus of "T" Intersection.
- 2 Locate driveways away from 'T' intersections.
- **3** Driveways should be located to the outside of a pair of view terminus units, where feasible, to increase landscaping opportunities and reduce the prominence of the garage.
- 4 Encourage larger front yard setbacks for lots at view terminus of elbow streets.

3.4.5 LOTS AT WINDOW STREETS

- 1 Provide full porches for the majority of buildings facing window street.
- 2 Encourage upper level balconies on elevations facing window streets.
- **3** Discourage or minimize units with front projecting garages within community window streetscapes.
- **4** Provide substantial front yard landscaping.
- 5 Upgraded privacy fencing including stone piers for lots located at the end (bend) of window roads, where they face onto arterial roads.









Window Street Condition



Demonstration plan for T Intersection



Demonstration plan for elbow street

3.4.6 LOTS ADJACENT TO HERITAGE BUILDINGS

- Place new buildings to reflect the front setback of heritage buildings; alternatively, provide a slightly greater setback.
- If possible, locate new garages to the rear; otherwise, setback garages beyond the main wall of the adjacent heritage building.
- **3** Design new buildings to:
 - a. Have similar massing to that of the heritage building, including the roof articulation where appropriate.
 - b. Be generally as high as the heritage building; provide additional height away from it.
 - c. Reflect the massing of the heritage building through enhanced wall articulation (projections and recesses); this is especially important for new buildings larger than the heritage building.

- 4 Incorporate design aspects of the heritage building related to fenestration proportions and organization on the elevation, as well as materials and colours.
- 5 Encourage designs that provide a clear distinction between 'new' and 'old'; consider:
 - a. Traditional styles that reflect the character of adjacent heritage buildings through current materials and practices ; or,
 - b. More contemporary styles that set heritage buildings apart through a defined contrast.
- **6** Generally reflect the design and proportions of the landscape treatment of adjacent heritage properties.
- Refer to guidelines for 'Neighbourhood Infill Developments and Custom Homes' where appropriate.



3.4.7 **END UNITS** (TOWNHOUSE BLOCKS)

- 1 Treat and design end units exposed to public spaces as corner units including highly articulated elevations, prominent massing elements, porches and bay windows, as well as articulated roof designs.
- 2 Project the rear wall, or a portion of it, from the block's rear wall to provide for a logic and appropriate termination of side and rear upgrades (i.e., materials and architectural details).
- **3** Provide adequate setbacks to allow for enhanced side elevation design.
- 4 Locate usable interior spaces along the exterior wall of end units.
- **5** Design floor plan to provide the main or a secondary entrance on the side (flankage) elevation of the unit, with access to the sidewalk if it exists.
- 6 Consider wrap around or full secondary porches on the side (flankage) elevation whenever possible.
- 7 Where blocks are placed perpendicular to the street, design end units to include additional projections (to the rear) or bump outs to reduce the length of the fence.







C3.5 NEIGHBOURHOOD INFILL DEVELOPMENT AND CUSTOM HOMES

3.5.1 INTRODUCTION

Infill Development / Custom Homes are defined as new buildings within an existing residential neighbourhood. They are meant to make the best use of the available land, while complementing the character and style of both the adjacent streetscape and surrounding established built form.

As such, successful the development of infill buildings / custom homes must be undertaken in a manner that responds to the characteristics of existing built form in an area. The intent of the guidelines contained in this section is to ensure that the design of infill developments / custom homes is compatible and represents a 'good fit' within the physical context and character of the surrounding area, integrates seamlessly within their context, and enhances both their value and their environments.

The design of infill developments / custom homes must respond to the prevailing scale and character of built form in the surrounding area. Their siting (setbacks) and built form (architectural expression, height, elevation articulation and materials) should clearly relate to and complement those of nearby existing homes. Furthermore, The success and appropriateness of an infill developments / custom homes depends on:

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

When appropriately designed, infill developments / custom homes of high quality design can improve the streetscape and create new possibilities for the surrounding urban form.

These guidelines will apply to:

- Infill in Mature Neighbourhoods: These neighbourhoods have existed for a period of time and are generally low density. New infill development in these areas requires compatible typologies.
- 2 Infill in Transition Neighbourhoods: These areas are located between new development areas and existing neighbourhoods.
- 3 Infill in Heritage Areas: Development may be allowed if the new development improves heritage structures on site, respects the character of adjacent existing neighbourhood/heritage structures, and where planning policies permit.
- 4 Custom homes in mature neighbourhoods and new greenfield development areas.

3.5.2 DESIGN PRINCIPLES

The following design principles shall guide the development of infill buildings / custom homes:

- Enhance the unique built character of the neighbourhood.
- Ensure design excellence in the private realm.
- Encourage new, creative and compatible design that contribute to the diversity of a neighbourhood.
- Regulate access and parking to minimize the impact on public streets.
- Minimize shadow impacts and blocked views from/to adjacent properties.

THE DESIGN GUIDELINES CONTAINED IN THIS SECTION SHOULD BE READ IN CONJUNCTION WITH THE GUIDELINES CONTAINED IN SECTIONS 3.2, 3.3 AND 3.4 OF THIS DOCUMENT.

3.5.3 SITE ORGANIZATION

A. ORIENTATION, PLACEMENT AND SETBACKS

- **5** Ensure severed lots reinforce the rhythm and scale of lots of the surrounding area.
- 6 Ensure setbacks (front, side and rear) are generally consistent with the pattern of setbacks along the street, and also refer to future planned land use.
- 7 Place new buildings to reflect the placement and setbacks of the buildings on either side in relation to the street edge. If there are differing setbacks on the adjacent lots on either side, the setback of the infill building should act as a transition between the differing setbacks (e.g., average distance of those on either side of the development).
- 8 Ensure side yard setbacks reflect those of adjacent units, or are the average distance of those on either side of the development.
 - a. Provide at least 1.2m.
 - b. Consider greater exterior side yards to allow for side upgrades included porches.
- 9 Place and orient infill developments / custom homes to minimize shadows on adjacent properties and to preserve their privacy.
- **10** Protect views to existing heritage and landmark buildings.



B. ACCESS, PARKING AND SERVICING

- Ensure parking of infill developments

 custom homes is consistent with the
 established pattern along the streetscape.
 Maintain consistent:
 - a. Driveway widths at the street curb.
 - b. Garage type and location (i.e. frontintegrated vs detached; at the front or the rear of the lot).
 - c. Garage setbacks from the street and building's main wall.
- 2 Where lots result from severing larger ones, front yard parking is prohibited and driveway width limited to that of the garage door.





C. FRONT LANDSCAPING AND AMENITY AREAS

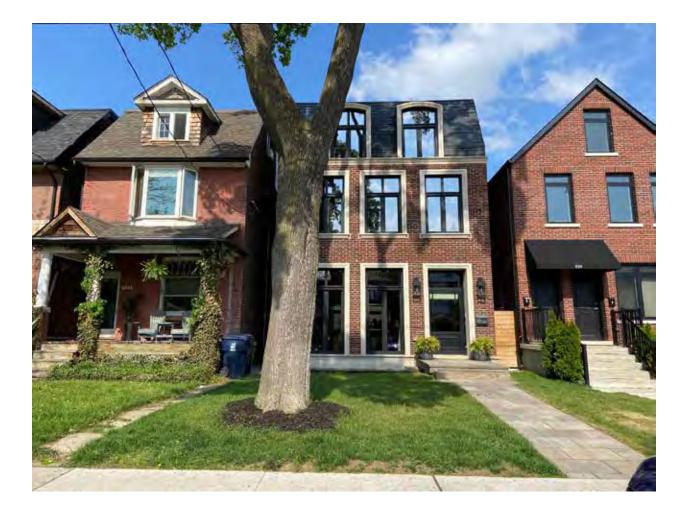
- Design front yard landscaping to reflect and enhance the general character of the existing streetscape.
- 2 Respect and incorporate any heritage landscape feature into the front yard landscape design/treatment.
- Coordinate fencing and other built landscape elements with those on adjacent properties. Where low decorative front yard fencing is existing and a predominant character along the street, the same/similar fencing may be provided, if desirable.
- 4 Where predominant in the neighbourhood and/or along the streetscape, provide a walkway from the front door to the sidewalk.
- 5 For infill developments / custom homes interfacing with established low density built form, encourage:
 - a. New planting or the retention of tree lines and plantings along shared property lines to provide natural screening and separation.
 - b. If amenity spaces are proposed on the new building's roof top, provide a half wall along amenity side facing the established built form, to limit overlook and maintain privacy.
- 6 For infill townhouses, provide outdoor amenity spaces at rear yards and/or on decks/terraces.

3.5.4 BUILT FORM

A. HEIGHT AND MASSING

- 1 Ensure the height, massing and proportions of the infill developments / custom homes generally reflect those of adjacent buildings and those along the streetscape. This includes:
 - a. The proportions of the building's main components (base, middle and top).
 - b. Overall building height including the roof.
 - c. The height of the ground floor. Ensure a minimum of 3.5m is provided.

- 2 While infill developments / custom homes might be higher and/or wider than the existing adjacent ones, their design should include transitional height/massing elements (roof lines, wall articulation), and architectural details. This may include:
 - a. Locating additional height/massing away from the streetscape/public realm (to the side and/or rear).
 - a. Providing differing heights within the building front and side elevations.
 - b. Incorporating articulated roof lines including slopes towards lower buildings
 - c. Incorporating projecting dormers, bay windows, variation in wall planes to deemphasize the height and width of the new building, while reflecting the elevation articulation of surrounding ones.
 - d. Contemporary designs of consistent massing with the surrounding homes; this includes flat roof buildings adjacent to peaked roofs ones.



- Consider limiting the height of infill developments / custom homes in mature neighbourhoods to be no greater/lesser than 1.5 storey (or 4.5m) than the height of existing, adjacent buildings.
- **4** Use the height of infill developments / custom homes to provide a transition between existing adjacent buildings of different height.
- **5** For Townhouse blocks:
 - a. Encourage shorter block lengths, particularly in mature neighbourhoods.
 - b. Create an appropriate width transition by dividing the main elevation in sections of widths that reflect those of adjacent units. Clearly emphasize sections through projections/recesses.
- 6 Provide entry features that are generally consistent with those of adjacent buildings in terms of their overall height and relationship to the street.

B. ARCHITECTURAL DESIGN AND BUILDING ARTICULATION

- Promote design diversity along the streetscape while ensuring a sense of consistency through building scale, massing and fenestration proportions/organization.
- 2 Design the infill building's elevations to generally reflect the horizontal and vertical articulation and proportions of those of adjacent buildings. This includes:
 - a. Wall articulation continuous walls and plane changes - of proportions (width and height) that reflect those of adjacent buildings
 - b. Size/proportions and organization/ placement of windows and doors
 - c. Roof articulation
 - d. Architectural features such as front porches, wall projections, bay windows and balconies.
- **3** Incorporate architectural styles/expressions that are compatible with the existing buildings and enhance the neighbourhood's built character.
- 4 Locate and size garage doors to be consistent with the established pattern along the streetscape.
- **5** Position windows on interior side elevations away from those of adjacent dwelling.
- 6 Where an infill development abuts or is attached to an existing heritage structure, design building additions so that they are either:
 - a. Secondary and complimentary to the heritage structure; or
 - b. Visually separated and distinct from the heritage structure.



C. FRONT ENTRANCES AND WINDOWS

- Where there is a dominant pattern of existing front porches, the new building or addition should include a front porch consistent with the architectural style of the infill development.
- 2 Design main entrances to generally reflect and complement the location and size of entrances along the street, while ensuring it is appropriately scaled to the infill development.
- 3 Design windows to take cues from the surrounding context in terms of size, proportions and placement (horizontal and vertical grid).

D. BUILDING MATERIALS

- Select the materials for infill developments to enhance and complement the neighbourhood's built character.
- 2 Provide colour and material packages that take cues from and are compatible with the built surrounding context, and result in a visually harmonious appearance along streetscape.
- **3** Incorporate traditional materials used on the surrounding area on infill buildings of contemporary design.
- 4 Avoid colour palettes/combinations that are in sharp contrast to the predominant existing colour palettes found in the existing neighbourhood.

E. ROOFS

- Design rooflines to complement and to take cues from existing buildings on the streetscape.
- 2 Carry the datum of adjacent buildings into the roof line of infill development; this may include:
 - a. Continuing the datum line
 - b. Matching the top of a flat roof to the adjacent building's datum or the underside of adjacent building's roof soffit.







MID-RISE DEVELOPMENTS (5 TO 12 STOREYS)

C4.1 INTRODUCTION

C4.2 DESIGN GUIDELINES

03

04



C4.1 INTRODUCTION

This section addresses the design of Mid-Rise buildings, 5 to 12 storeys in height, as defined by the Official Plan / Zoning By-law and including all forms of Mid-Rise building development, including residential, mixed-use, commercial uses and employment.

The guidelines provide a framework for the development of Mid-Rise buildings as individual buildings on a lot and/or part of a larger development (several buildings on a site). The guidelines recognize fundamental principles of expert good urban design, while allowing for creativity and innovation that responds to the site and use-specific contexts. As such, these guidelines address site planning and built-form conditions that are common to all Mid-Rise building forms and organized to include guidelines with respect to site planning, built form design and landscape design.

Note: As with other Built Form sections of this document, this section may be amended from time to time to reflect changes in best practices and changes in the building industry / market.

C4.2 DESIGN GUIDELINES

4.2.1 SITE ORGANIZATION

A. ORIENTATION, PLACEMENT AND SETBACKS

- 1 Place and orient building to maximize view corridors and vistas, privacy for residents, as well as opportunities for open/green spaces on site.
- 2 Create strong, well-proportioned and continuous building frontage (streetwall) and enhance the streetscape/public realm through buildings bases (podiums) that:
 - a. Are oriented to and frame the adjacent public realm including streets and open spaces (both streets in the case of corner lots).
 - b. Are placed close to the front property line and/or to reflect the placement of existing adjacent building to form a generally consistent streetwall.
 - c. Encourage Om side setbacks when abutting other mid-rise buildings with no windows on the side elevation, specially along commercial corridors, to create continuous streetwalls.
 - d. Are minimum 3 storeys in height.

- **3** Locate and place buildings to be setback:
 - a. Om-3m for retail uses, to allow for outdoor spaces such as patios where appropriate.
 - b. 3m-4.5m for residential uses, to allow for privacy and appropriate transition between the public and private realms.
- 4 Where existing boulevards/sidewalks are narrow, consider additional setbacks to allow for minimum (AODA) sidewalk widths and a row of street trees within a combined private/ public realm.-
- 5 Where open spaces (private or public) are provided, arrange buildings to face and frame the space, with primary elevations and entrances oriented toward the space.
- 6 Allow for greater front setbacks for entrances, displays and outdoor places such as cafes and patios, to a maximum of 25% of the overall building frontage. Consider moderate setbacks along retail frontages for outdoor seating or product displays.





- 7 In order to ensure appropriate transitions in height/massing, as well as sunlight penetration and privacy to adjacent lower density residential areas, parks and open space/natural areas, design new development to:
 - a. Incorporate a minimum 7.5m rear yard or side yard setback, measured from the abutting property line.
 - b. For deeper lots (greater than 36m deep), follow a 45° angular plane measured from the abutting property line.
 - c. For shallower lots (less than 36m deep), follow a 45° angular plane taken from a height of 10.5m above a 7.5m rear setback, to allow for feasible developments of these sites.
 - d. For buildings abutting open space/ parks, provide a 7.5m setback from the shared property line. Above the base building (to a maximum of 10.5m above grade), incorporate stepbacks that follow a 45° angular plane taken from the base building top to achieve appropriate transitioning.
 - e. Incorporate new local streets, service lanes, open spaces and/or landscaped buffers along the abutting property line and required setbacks, where appropriate and possible.
- 8 Ensure Mid-rise buildings are no more than 80m in length. Site specific exceptions should be considered on a case-by-case basis.

- **9** Provide appropriate building separation distances to ensure adequate privacy and protect/frame views. Provide at least:
 - a. 20m separation distance between residential elevations of buildings with fronting windows (or 10m to side/rear property lines or lane/trail/easement centre line).
 - b. 15m separation distance (or 7.5m to side/ rear property lines or lane/trail/easement centre line) between residential elevations of buildings with secondary windows facing each other (i.e., shorter side of buildings and/or elevations with minimal windows and no balconies).
 - c. For side elevations, 7.5m separation distance between an elevation with windows and a blank wall.
- 10 For mid-rise buildings taller than 6 storeys, design the upper levels above the base/ podium (maximum 6 storeys) to:
 - a. Incorporate smaller floor plates.
 - b. Favour 2 or more separate structures over a podium (small floor plate structures) over one large slab for larger/longer sites.





- **11** At gateway or corner sites, consider either:
 - a. Minimal setbacks to provide an enhanced sense of enclosure to the public realm.
 Extend the same setback along both elevations.
 - b. Greater setbacks to allow for 'plaza' type, civic spaces uniquely designed to complement the building and provide for focal points in the community, where appropriate.
 - c. In both cases, consider incorporating main entrances at the corner.
- 12 For corner lots, ensure both frontages are treated as main or front elevations with enhanced designs.
 - a. Avoid blank elevations oriented toward the daylight triangle.
 - b. Avoid 'chamfered' building corners.
 - c. Coordinate the building design with landscaping that creates/contributes to a pedestrian-oriented street environment.





- **13** Articulate the elevation of mid-rise developments on corner lots abutting low-rise residential built form, to reflect transitional setbacks so that:
 - a. The portion of the building closest to the low-rise building generally reflects the front setback of it and is at least 4.5m.
 - b. The portion of the wall closest to the corner (intersection) is allowed to project and sit closer to the property line (street edge), within the required minimum setbacks.
- 14 Locate taller buildings along primary streets and intersections (corners), and greatest height at the corner of the overall development.
- **15** Design buildings at gateways as landmark buildings, with focus on prominent and distinct built form/massing that is proportionate to the scale of the adjacent public realm.
- 16 Contribute creating an active public realm, ensure uses (whether residential units, commercial units or live-work units) located within the ground floor of buildings have individual direct access to the public sidewalk. These should be accessible wherever possible and where grading permits. Where direct physical access is not possible, design of the units should have a presence on the street through windows, balconies, landscaped areas, etc.



- **17** For larger sites (i.e., with capacity for several buildings), reinforce and extend a fine-grained public realm network and the surrounding block configuration structure, if existent and desirable.
 - a. Where appropriate, divide larger sites through streets/lanes and/or pedestrian routes that provide for high level of permeability (public circulation).
 - b. Promote walkability by limiting block length to a maximum of 180m.
 - c. Provide high quality mid-block pedestrian connections, streets, or lanes for blocks over 150m in length. Mid-block connections should be sufficiently wide (minimum 6m) to accommodate all types of users (cyclists and pedestrian), well lit and lined with active uses for natural surveillance from adjacent buildings.
 - d. Connect any new open space (public or private) to the existing adjacent pedestrian network (sidewalks and trails), as well as any open spaces/parks.
 - e. Execute both public and private streets and pathways to a high degree of quality, in terms of materials, and overall design, exceeding municipal standards.
 - f. The City of Brampton Complete Streets Guide should be referred to for guidance on the design of public/private local roads and lanes.





B. ACCESS, PARKING AND SERVICING

- 1 Provide access to parking and service areas from lanes and/or secondary/side streets, where possible, and away from corners.
- 2 Minimize the visual and functional impact of multiple vehicular accesses on the public realm, including multiple curb cuts within a small area and frequent interruptions of the building street wall by:
 - a. Consolidating accesses wherever possible, including across several lots/properties.
 - b. Reducing the access width at the street line.
 - c. Where consolidating/grouping of multiple vehicular accesses are not possible, traffic calming measures should be employed. These may include a combination of enhanced pedestrian and driveway pavement at the throat of the access driveway/roadway, additional signage, enhanced landscaping elements, etc.











- **3** Encourage shared access between different sites/developments. Where not possible, locate driveways either:
 - a. One beside the other and designed as one; or,
 - b. As far as possible.
 - c. In both cases, ensure pedestrian pathways crossing them are clearly delineated.
- 4 Avoid mid-block vehicular access; if not possible, design them to be shared and integrated into the building massing (refer to City of Brampton Complete Streets Guide for 'Lanes').
- Ensure continuous pedestrian connectivity through clearly delineated/differentiated linkages through driveways and shared lanes.
- 6 Locate passenger pick-up/drop-off areas internal to the site, and/or at the rear or side of buildings.
- 7 Minimize the presence and impact of parking and servicing areas on the public realm by:
 - a. Providing parking underground.
 - b. If underground parking is not feasible, consider, above-grade structures lined/ wrap by occupied-active spaces, or wellscreened surface parking at the rear or side of the building.
 - c. Incorporating servicing areas (including waste storage and recycling areas) interior to the building, preferably, or locating them to the rear or side of the site/ building away and screened from public view.
 - d. Screening at-grade parking and servicing areas through a combination of architectural and landscape elements. Ensure screening structures complement the design of the building and incorporate similar, complementary materials.

- 8 Parking areas located in front setbacks should be prohibited.
- **9** Integrate vehicular entrances into the elevation design and de-emphasize them through recessed walls and doors that complement the overall design.
- **10** Cover ramps to underground parking to prevent long-term weather damage.
- 11 Design surface parking to:
 - a. Minimize their environmental impact by reducing parking lot/garage size.
 - b. Consider shared parking facilities with adjacent buildings and provide preferential parking for fuel efficient vehicles.
 - c. Disperse surface parking throughout the site and/or split it into parking courts.
 - d. Incorporate clearly delineated and landscaped pedestrian walkways and crossings which are buffered from parked and moving vehicles.
 - e. Incorporate landscaped medians.
 - f. Incorporate minimum 3m width buffers around the edges.
 - g. Include tree planting within islands and buffers.
 - h. Use bioswales and permeable paving materials.
 - i. Reduce heat island effect through light materials and canopy coverage.
 - j. Meet LEED sustainability standards.
- **12** Provide preferential parking for bicycles, car sharing and alternative energy vehicles.
- **13** Provide ample, secure bicycle parking and supporting facilities.
- 14 Locate storage rooms/units interior to the building, preferably, and on elevations away from public frontages. Ensure walls related to them do not encroach into front or exterior yards, or project from the main wall of the building.



C. LANDSCAPING AND COMMON AMENITY AREAS

- 1 Ensure a comprehensive landscape approach that supports the immediate adjacent uses and includes:
 - a. An overall planting strategy.
 - b. Hardscape areas related to entrances.
 - c. Shaded and sitings areas, where appropriate.
 - d. Consistent, high quality landscape elements such as planters, pavings, fences and walls.
 - e. Coordinated, high quality street furnishings, such as lighting, benches, bollards, bike racks and garbage receptacles.
- 2 Coordinate the landscaping between private and public areas. Ensure it:
 - a. Enhances the character of the development and the community.
 - b. Complements the building uses at grade.
 - c. Reinforces the structure, nature and use of the site with a focus on creating safe, comfortable and animated pedestrian environments (streets, edges, corners, gateways, transitions, public spaces, building entrances, etc.)
 - d. Incorporates high-quality landscaped areas and element associated with main entrances and/or walkways.
 - e. Coordinates hard and soft landscape elements, special paving materials, site furniture and pedestrian lighting.
- 3 Locate common amenities and open spaces away from areas of high vehicular activity and from servicing, garbage storage and loading areas.
- 4 Where possible and appropriate, encourage the creation of common spaces such as POPS and mid-block connections, to promote connectivity/permeability, and to reinforce a sense of place. Consider midblock connections between buildings and/or through covered building arcades/lobbies.

- 5 Design open spaces, pathways and mid-block connections with safety in mind, including active frontages, adequate lighting and visible security features.
- 6 Enhance the urban forest with the use of a diverse range of canopy trees; ensure they are hardy, tolerant and high-branching.
- 7 Provide fully planted landscape strips (minimum 3m wide) to screen parking, service, loading areas from adjacent uses and public view.





REFER TO SECTION C2 FOR ADDITIONAL GUIDELINES REGARDING PRIVATE OPEN SPACE, AMENITY AREAS, LIGHTING, ACCESSIBILITY, SAFETY, PUBLIC ART, AND BUILT HERITAGE CONTEXT

DRAFT NOVE

4.2.2 BUILT FORM

A. HEIGHT AND MASSING

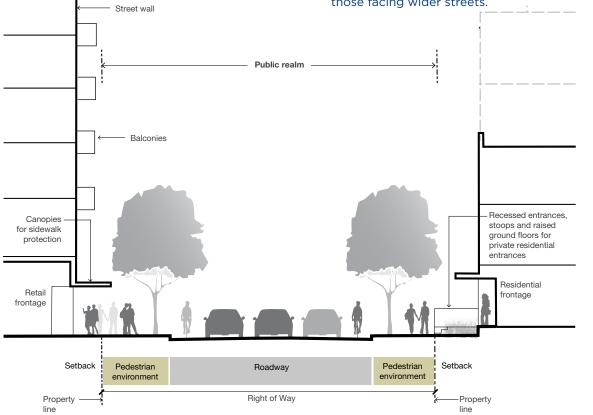
- Achieve pedestrian oriented environments by providing building heights that are proportionate to the width of the street. Ensure:
 - a. Maximum building height reflects the adjacent ROW to a maximum of 12 storeys or 36m, whichever is less.
 - b. Maximum base (podium height) is no greater than 80% of the width of the adjacent ROW.
 - c. For mid-rise buildings greater than 6 storeys, provide a building stepback of a minimum of 2m, above the 6th storey. For mid-rise buildings less than 6 storeys, provide a building stepback

Step-back



of a minimum of 1.5m, above the 3rd storey. Consideration shall be given to maintaining the established streetwall and/or establishing a new street wall that is proportionate to the right-of-way and reinforces a pedestrian-scaled street environment

- d. A physical and/or visual break between the 2nd and 3rd floors is incorporated (i.e., material change when on the same plane; cantilever podium; stepback of minimum 1.5m above the 2nd or 3rd level).
- 2 Encourage a maximum height of 4 storeys for podiums facing rights of way of 26 metres or less; and maximum height of 6 storeys for those facing wider streets.



- **3** For corner developments fronting onto a major and a local street, consider transitional podium heights. Ensure:
 - a. Podium height is within the maximum height related to the adjacent ROW.
 - b. Height transition/change is incorporated at logical places such as changes in planes related to setback variations.
 - c. Allow for higher podiums along the major street frontage to wrap around the corner and extend along the local street for a distance of between 20% to 30% of the length of the building elevation.
- 4 On a site specific basis, depending on the context, the City may consider floor plate controls on floors above 6 storeys on rights of way 26m or less, and floors above 9 storeys on rights of way over 26m.





- 5 Provide appropriate transitions in height and massing toward lower adjacent built form by:
 - a. Limiting streetwall (podium) height to 2 floors above the overall height of the adjacent low-rise development.
 - b. Incorporating stepbacks at various levels above the podium/base and towards existing lower built form.
 - c. Terracing building down towards the adjacent low-rise development.
- 6 For developments/blocks with more than one building, encourage a range of heights (variation) is provided and establish a height hierarchy/strategy related to site conditions and context (existing and planned).
- 7 Ensure floor to ceiling heights of:
 - a. Ground floors are a minimum of 4.0m in height for residential uses and 4.5m for non-residential uses.
 - b. Upper floors are a minimum of 3.0m in height for residential uses and 4.0m for non-residential uses.
- 8 Design mid-rise infill developments to:
 - a. Incorporate a base (podium) that generally reflects that of other adjacent mid-rise buildings and/or the overall height of adjacent low rise structures.
 - b. Locate the tallest component of the building (or buildings) away from any adjacent pre-existing low density areas to avoid visual crowding and adverse shadow impacts.
- **9** For mid-rise buildings adjacent to or within heritage contexts, maintain a consistent cornice line and ground floor height.
- 10 Provide visual interest and emphasize corners, street intersections and view terminus through prominent massing, additional height, and enhanced architectural design/treatment, including projecting/recessed components, wrap around elements, substantial fenestration and unique roof/top designs.
- **11** Consider buildings of equal or similar scale and architectural style at gateways to emphasize the sense of entry and enhance place-making.

B. ARCHITECTURAL DESIGN AND BUILDING ARTICULATION

- Design buildings cohesively in terms of architectural style, proportions, rhythm and materials, while clearly differentiating between the base, middle and top components of the building through massing articulation, strategic use of materials and varied but complementary fenestration.
- 2 Design floor plans to accommodate the building's program and to break its mass, creating/contributing to interesting and articulated building elevations.
- **3** Design the building elevations to:
 - a. Be articulated, both vertically and horizontally, through changes in planes and materials, stepbacks, ample fenestration (windows and balconies), base bands, as well as other types of architectural details.
 - b. Reflect the internal uses (i.e., residential, office/employment, or mixed-use) and clearly distinguish between different uses on the same elevation through distinct but complementary architectural treatments (windows/entrances proportions/sizes and treatment, materials, colours).
 - c. Display all the same architectural style, proportions and materials; however, the level of detail might differ in relation to each elevation's exposure to the public realm.
 - d. Include break in wall planes at least every 55m (long elevations).
 - e. Include active uses, fenestration and an articulated walls where mid-block connection are proposed (publicly accessible walkways).



- 4 Promote high quality and safe pedestrian environments through articulated and animated podium elevations along streets and public places. Provide:
 - a. Active uses along elevations facing the public realm such as commercial/retail units, residential and live/work units, amenity spaces, lobbies, porches, etc.
 - b. Articulated elevation walls, including projections, and recessions that create a rhythm of minor breaks and reflect the different uses and interior program components (i.e., entrances, rhythm of residential/retail units, private amenities - balconies). Favour changes in plane at least every 10m.
 - c. Highest level of architectural details and materials.
 - d. High proportion of glazing at the ground level (visual permeability). For frontages including entrances, lobbies, common amenities or commercial uses, provide at least 75% clear glazing; darkly tinted glass is not permitted.
- **5** To avoid massing that overwhelms the pedestrian zone, encourage that buildings with width frontages greater than 80m are designed to:
 - a. Incorporate major multi-storey vertical massing breaks, ideally ground to top, of minimum 6m width by 2m deep, and generally every 55m.
 - b. Provide highly articulated elevations that include changes in planes.
 - c. Incorporate double-height mid-building/ block connections, where appropriate.









- 6 For mid-rise buildings taller than 6 storeys, ensure the upper levels above the base/ podium (maximum 6 storeys) incorporate significant, multi-storey massing breaks.
- 7 For corner buildings, design both elevation to display the same level of wall articulation, architectural detail, level of fenestration and quality of materials.
- 8 Design gateway buildings to be of the highest architectural quality.
 - a. Provide special attention to the design of the base (podium/streetwall) and top components.
 - b. Include active uses at grade.
 - c. Incorporate enhanced fenestration to animate the elevation and reinforce the community character at these locations.
 - d. Provide and design landscape planting and features to accentuate gateways locations.
- **9** For side elevations exposed to public view, continue frontage features such as windows, wall articulation and materials to avoid excessive blank walls on side streets, lanes and/or walkways.
- **10** Design mid-rise developments within existing built contexts, or those adjacent to or within heritage contexts, to:
 - a. Take cues from neighbouring buildings in terms of scale, wall articulation (rhythm of projections/recessions), and fenestration proportions and placement.
 - b. Incorporate compatible building materials.

- **11** Blank wall are prohibited on elevations exposed to public view.
- 12 Where blank wall are unavoidable, mitigate them through art and/or special wall treatments such as screens, green walls, metallic/wooden textures, etc.
- **13** Integrate building signage into the architectural design to enhance the appearance of the ground floor and contribute to the overall character of the streetscape. Design it in conjunction with weather protection elements where these are proposed.

C. ROOFS

- 1 Create a consistent and visually appealing roofline, while maintaining an adequate view of the sky from ground level.
- 2 Design the top component of the building to be clearly discernible, of consistent architectural style to that of the building and proportionate/complementary to the overall building scale.
- Integrate mechanical penthouse and rooftop elements/spaces into the overall building design, avoiding the appearance of an afterthought or add-on element.
- **4** Ensure the full bulk of mechanical penthouses is within any required angular plane.
- **5** Favour reflective, low intensity colours to reduce heat island effect, and reduce HVAC loads.
- 6 In the case of mansard or peaked roofs, use exceptionally high quality and visually appealing roofing materials. Choose a colour that contrasts and complements that of the building elevation.
- 7 Promote green rooftops as a way to enhance the building appeal from the street, reduce urban heat island effects and improve air quality and noise insulation. Only consider them where planting could thrive.













D. ENTRANCES, WINDOWS AND BALCONIES/ TERRACES

- Strategically locate and orient main pedestrian entrance(s) to address the public realm.
- 2 Ensure entrances are directly accessible and connected to the adjacent pedestrian network of sidewalks and trails through clearly delineated walkways and/or entry areas.
- **3** Design main pedestrian entrances to be highly visible, prominent and focal elements on the elevation by:
 - a. Being properly scaled in relation to the overall main elevation and building massing.
 - b. Incorporating articulated massing including cantilever configurations or projecting elements .
 - c. Incorporating weather protection elements such as canopies.
 - d. Providing high level of glazing along lobby areas.
- 4 Consider locating and designing main entrances in conjunction with covered midblock connections.
- 5 Make entrances universally accessible.
 - a. Encourage entrances are at the same level of the adjacent sidewalk.
 - b. Where ramps are unavoidable, integrate them seamlessly into the design of the building.
- 6 If secondary entrances are required (e.g., where parking or common amenities are located on the rear or interior frontages, or along mid-block/building connections and courtyards), incorporate into the elevation design and highlight them through architectural details such as glass doors and canopies. Consider through lobbies/halls connected to the main entrance.

- 7 Use and design entrances to ground related units (residential or commercial) to emphasize individual units and further animate and articulate the streetwall. Highlight them through architectural elements such as porches, canopies, awnings, as well as steps or stoops, and enhanced landscaped spaces designed to complement the unit's use.
- 8 Add visual variety and interest to the building elevation, and enhance inside-to-outside connections by incorporating windows, bay windows, balconies, outdoor terraces, canopies and awnings.
 - a. Ensure all elevations exposed to public view include windows, and, in the case of residential uses, also incorporate balconies. Consider different but proportionate sizes, and varied but complementary treatments to animate the elevations, reflect internal uses, and further differentiate various elements of the design.
 - b. Integrate them into the overall form and design of the building.
 - c. Consider slight wall recesses to accommodate projecting elements without encroaching into the ROW.
 - d. Maintain balcony projections within the lot and ensure they are minimum of 1.5m deep and 3m² in area, to provide sufficient space for chairs and a small table. Include weather protection if possible.
- 9 Allow balconies to encroach in minimum setbacks and separation distances between buildings while not contributing excessively to the building massing.
- 10 Incorporate recessed balconies, fully or partially, to provide for greater privacy and shelter from wind, reduce the building bulk, and minimize the impact of shadow on other amenity spaces below.
- Incorporate architectural treatments to the undersides of balconies visible from the public realm, such as attractively revealed support beams or complementary materials such as wood.
- 12 Ensure a consistent canopy/awning style throughout the building, and select colours/ materials that complement those of the building.









E. UTILITY/SERVICE METERS AND MECHANICAL EQUIPMENT/ROOMS

- 1 Locate utility/service elements/metres away from public frontages and/or screened from public view, interior to the building (internal rooms) and/or integrated unobtrusively into the elevation design.
- 2 Consolidate natural gas and/or other utility leaders, wherever possible. Consider their design early and integrate them into the building form.
- 3 Locate mechanical equipment/rooms away from public frontages/view, to the center of the rooftop and screened through architectural features or rooftop amenities.
- 4 Use integral architectural features to screen rooftop mechanical elements rather than single-purpose screens. Ensure they are made of materials that complement those used on the building elevations.
- 5 If visible, ensure the mechanical room's exterior structure complements and enhances the design of the building top.
- 6 Where possible, use and design usable spaces (i.e., amenity or living areas) to screen mechanical rooms.
- 7 Clearly identify utility locations and treatment on site plan and elevation drawings.

F. MATERIALS, SIGNAGE AND LIGHTING

- Select high quality and durable materials that complement and enhance the building design, as well as the neighbourhood character and adjacent streetscape. Natural materials such as stone, brick and glass are strongly encouraged.
- 2 Use the highest quality materials at the building base, adjacent to the public realm and pedestrian areas, to create a visually appealing and functional urban environment, while contributing to its durability, safety, and overall value.
- **3** Avoid the use of materials that imitate another natural/more expensive materials.
- 4 Ensure materials are consistent among elevations.
- 5 Strategically use lighter materials to minimize the building mass, and heavier ones to emphasize important elements of the building design and its articulation.
- 6 Encourage lighter materials and colour palettes on levels above 6 storeys to mitigate the impact of taller mid-rise buildings.
- 7 Enhance vertical breaks and changes in plane through different materials, especially for buildings with long elevations that might otherwise become monotonous.





- 8 Ensure changes in materials are provided at changes in planes.
- **9** Lighting should complement the elevation design and reflect the uses on it. Incorporate high efficiency lighting (LED) wherever possible.
- 10 Minimize bird strikes by:
 - a. Avoiding untreated reflective glass or clear glass that reflects trees and the sky.
 - b. Ensuring glass has visual markers and reflections are muted within the first 12m of building height.
 - c. Locating and managing lighting to reduce reflections that might confuse migratory birds.
- Meet LEED standards and the City of Brampton Sustainable Community Guidelines. Energy efficient measures and materials are strongly encouraged.











HIGH-RISE DEVELOPMENTS (+13 STOREYS)

C5.1 INTRODUCTION	03
C5.2 CONTEXT CONSIDERATIONS	07
C5.3 SITE ORGANIZATION	15
C5.4 BUILT FORM	23



c5.1 INTRODUCTION



This section addresses the design of High-Rise buildings, +13 storeys in height, as defined by the Official Plan / Zoning By-law and including all forms of high-rise building development, including residential, mixed-use, commercial uses and office uses.

The guidelines provide a framework for the development of high-rise developments as individual buildings and/or part of a larger development (several buildings on site). They aim to create a vibrant and street-focused built form that is compatible with its surroundings and contribute to pedestrian-scaled public spaces and placemaking. The guidelines recognize fundamental principles of expert design while allowing for creativity and innovation that responds to the site and use-specific contexts. As such, these guidelines address site planning and built-form conditions that are common to all high-rise building forms and organized to include guidelines with respect to site planning, built form design and landscape design.

Note: As with other Built Form sections of this document, this section may be amended from time to time to reflect changes in best practices and changes in the building industry / market.

5.1.1 AVOIDANCE

In order for high-rise buildings to better structure and frame city streets, free standing towers shall be avoided.

Avoiding large floor plates will provide an elegant built form within the City and mitigate shadow impacts on abutting low-rise neighbourhoods and developments. Limiting floor plate sizes can also minimize negative wind conditions and impacts on the micro climate of surrounding streets, parks and open spaces.

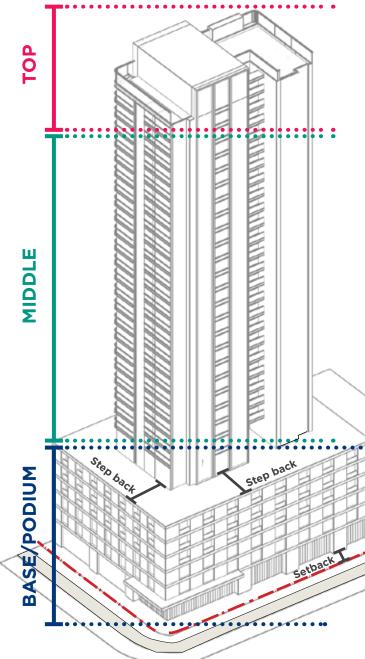


Free standing towers without a base/podium to frame the street



Large slab-like floor plates cast more shadow on the open spaces and streets

5.1.2 HIGH-RISE BUILDING ANATOMY



The Top of the building is a combination of the uppermost storey(s) and the rooftop, where typically, mechanical equipment and/or roof gardens are located. Due to their prominent scale (location), tops are generally visible from an afar distance and should therefore be carefully designed with respect to height, location, configuration and proximity to other high-rise buildings.

The Middle (or Tower portion) of a building is located above the base/podium. The middle should be distinguished from the base through step backs and material changes that lighten the middle's appearance. As the most prominent part of the building, it is visible from a distance and casts shadows on neighbouring developments, open spaces and parks. It can also affect wind intensity levels at the street level. Building location and orientation, tower separation distances, step backs and building articulation are key considerations to ensuring appropriate architectural expression while minimizing shadow and wind impact.

The Base (or Podium) of a building, as the name suggests, is typically in the shape of a podium and has a larger floorplate than the rest of the building. The role of the podium is to ground the building and to frame and animate groundlevel spaces and the street. Building location and configuration, setbacks, podium height, podium scale and articulation are key considerations to ensuring appropriate architectural expression and to defining the pedestrian realm. The base is the primary interface with the surrounding context. It should be designed to address and enhance the public realm.

operty

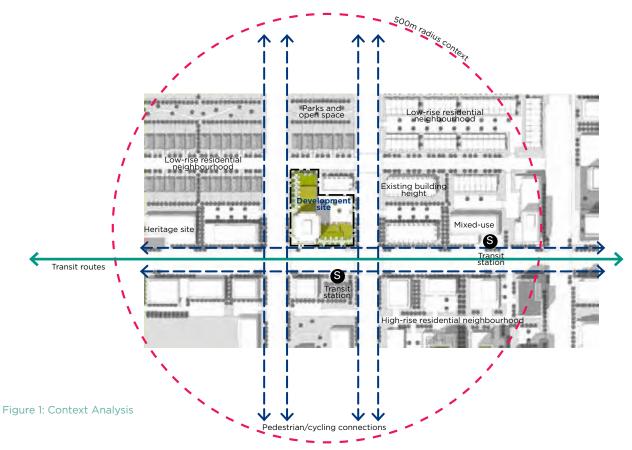
THIS PAGE INTENTIONALLY LEFT BLANK

CONTEXT CONSIDERATIONS

5.2.1 GENERAL CONSIDERATIONS

- Ensure proposed developments are designed to appropriately respond to the existing and planned context, and to positively impact their context. They should take into consideration a 500m radius context analysis that assess (Figure 1):
 - a. Site topography.
 - b. Block sizing and arrangement of parcels or lots, as well as street/block patterns.
 - c. Adjacent existing and planned land uses and built form (regarding massing, scale and height, as well as architectural treatment).

- d. Surrounding public transit and active transportation network including any pedestrian and cycling connections.
- e. Surrounding amenities/destinations (e.g., community centres, libraries, schools, retail areas) and open space system (e.g., natural heritage, parks, parkettes, etc.
- f. Existing or potential heritage properties and Heritage Conservation Districts.
- g. Shadow and wind impacts.
- h. For detailed requirements, refer to the 'Urban Design Brief Terms of Reference'.



- 2 Coordinate the proposed high-rise development with the existing and future streets, open spaces, surrounding buildings and transit. Design the new development to (Figure 2):
 - a. Appropriately locate and size the building base and middle components to enhance the streetscape and minimize shadow/ wind impacts on adjacent buildings and public realm.
 - b. Generally reflect the existing/desired setbacks along the streetscape and other adjacent public spaces.
 - c. Ensure minimum separation distances to existing and potential buildings on adjacent parcels or on site by providing minimum rear and side setbacks and stepbacks.

- d. Incorporate heights that relate to site conditions (e.g., gateways, corners, adjacent buildings, etc.) and provide for appropriate transitions when required.
- e. Clearly delineate pedestrian and vehicular networks including site servicing, cycling facilities, accesses.
- f. Include a comprehensive landscape strategy that complements the proposed built form and adjacent public realm.
- g. For larger sites, ensure any new blocks/ parcels generally reflect the dimensions of those in their surroundings and respond to the adjacent street network.
- h. For detailed requirements, refer to the 'Precinct Plan Terms of Reference'.

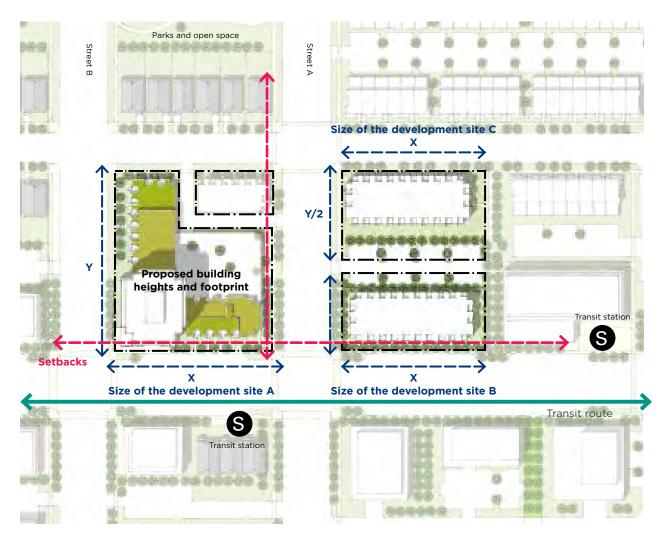


Figure 2: Precinct Plan

5.2.2 FIT AND TRANSITION IN SCALE

- 1 When high-rise buildings or a group of them are proposed in Strategic Growth Areas, design buildings to provide a progressive transition in height and scale from the centre of the growth area down to the surrounding lower scale area. (Figure 3).
- 2 When high-rise buildings or a group of them are proposed in a site surrounded by existing high-rise buildings, the new highrise building(s) needs to fit within the area of existing high-rise buildings and provide height variations. (Figure 4).
- When a high-rise building is proposed outside Strategic Growth Areas, provide a minimum 20m tower setback from the abutting low-rise residential properties. (Figure 5)
- 4 When a proposed high-rise building in Strategic Growth Areas is adjacent to sites with low-rise residential buildings that have the potential to be redeveloped as mid-rise and/or high-rise, provide a minimum 12.5m tower setback from the abutting low-rise residential property line. (Figure 6)
- 5 Ensure the height and scale of the base matches the existing and/or planned street wall.

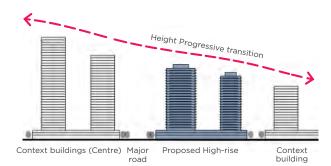


Figure 3: Progressive transition in the height and scale of high-rise buildings from the centre of a growth area down to a lower scale area

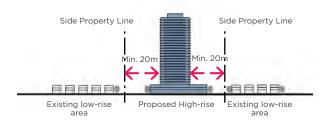


Figure 5: A minimum tower setback apply to a transition zone from high-rise to low-rise

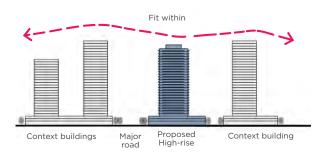
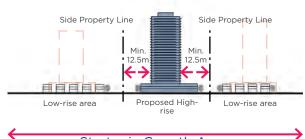


Figure 4: Proposed high-rise buildings fit within an existing context



Strategic Growth Areas

Figure 6: A minimum tower setback applied to a transition zone from high-rise to low-rise with potential for redevelopment to mid-rise or high-rise

A. SETBACKS AND ANGULAR PLANES

In order to ensure that light, view, privacy, and appropriate transition are maintained for adjacent low-rise residential neighbourhoods:

- 1 When a high-rise development is proposed in Strategic Growth Areas and abuts a lowrise residential neighbourhood where lowrise residential developments are planned to remain, provide a Max. 7.5m rear yard or side yard setback, measured from the abutting rear yard property line. In addition, a 45-degree angular plane measured from a point located 15.0 meters above the 7.5 meter setback will be taken. Subsequent storeys must fit within the 45-degree angular plane. (Figure 7)
- 2 In situations where the proposed high-rise development is proposed in the City, and is located on the opposite side of a street fronting a low-rise residential neighbourhood, where low-rise residential developments are planned to remain, the angular plane will be measured from the opposite side of the right of way (ROW) at grade. (Figure 8).

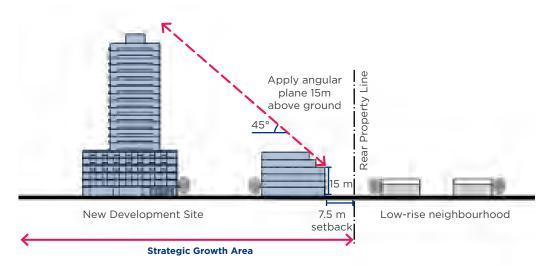


Figure 7: An angular plane measured from a height of 15m above a 7.5m setback from the rear property line.

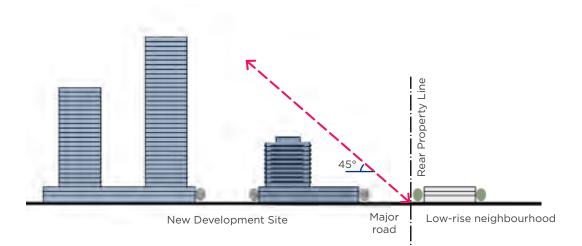


Figure 8: An angular plane measured from the opposite side of the Right of Way at grade.

- When a high-rise development is proposed in areas other than Strategic Growth Areas and abuts a low-rise residential neighbourhood, where low-rise residential developments are planned to remain, provide a minimum 7.5m rear yard or side yard setback, measured from the abutting rear yard property line. In addition, a 45-degree angular plane measured from the rear property line for deep lots (Figure 3a), or a point located 10.5 meters above the 7.5 meters setback for shallow lots, will be taken. Subsequent storeys must fit within the 45-degree angular plane.(Figure 3b).
- 4 For high-rise developments proposed on shallow lots (defined as less than 36m in depth), incorporate efficient building footprints that comply with minimum, setbacks and angular plane controls, and consider a parking strategy that integrates below-grade, structured, and/or on-site parking.

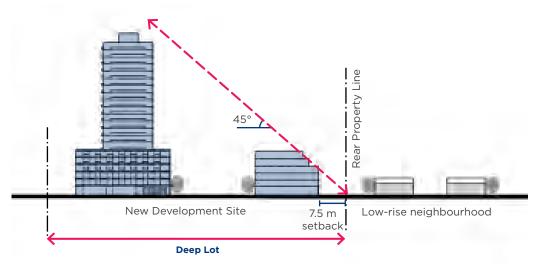


Figure 9a: An angular plane measured from the rear property line at grade for a deep lot.

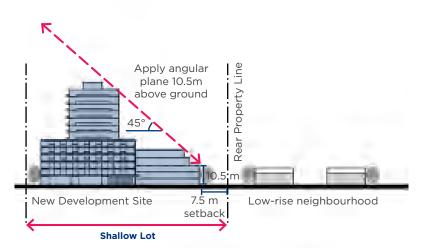


Figure 9b: An angular plane measured from a height of 10.5m above a 7.5m setback from the rear property line for a shallow lot.

5.2.3 LANDMARK BUILDINGS

As outlined in the Brampton Plan, landmarks are prominent, memorable landscapes and buildings that are recognizable for their symbolic significance, cultural heritage values, special visual appeal or a combination of these factors.

- Design high-rise buildings with a prominent role and function to stand out from their context and support their role as landmarks.
- 2 If a proposed high-rise building is determined to be a landmark building in a specific area, ensure its context analysis clearly demonstrate how the landmark building responds to the characteristics of the neighbourhood, community, and/or the City.

- 3 Design landmark high-rise buildings to be clearly discernible from their context through prominent height, unique massing and the highest architectural quality.
- 4 Ensure landmark high-rise buildings relate to and enhance their context through careful placement, orientation and unique building massing and elevation design.



Landmark Office Building 18 Robison in Singapore



Landmark Mixed-used Building Manhattan Loft Gardens in London, England, U.K.

5.2.4 HERITAGE PROPERTIES AND HERITAGE CONSERVATION DISTRICTS

When designing a high-rise building development on or adjacent to a property containing a heritage structure, it is imperative to incorporate measures to preserve and integrate such structure in a manner that highlights its presence and individuality, while complimenting its character through the new building's design.

As not all sites within or adjacent to heritage properties are appropriate for high-rise building development, the discretion of such should depend on the objectives for long-term preservation, integration, and re-use of heritage properties.

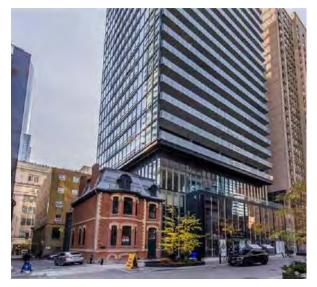
- At the podium level, keep the scale of new buildings proportionate to the size of adjacent and on-site heritage buildings.
- 2 Conserve the integrity of the cultural heritage values, attributes, character, and threedimensional form of an on-site heritage building structure or property within an Heritage Conservation District (HCD).
- **3** Provide at least 3m step back for levels immediately above the top of a heritage building(s) on-site or adjacent to it.
- 4 Design building base facade to complement the proportions (e.g., glass/hard surfaces) and geometry of the heritage buildings elevations/ design, and to take cues from their vertical and horizontal attributes (wall articulation, fenestration/architectural elements sizing and placement, etc.).
- Ensure high-rise buildings reflect contemporary design while incorporating high quality materials complementary to those used on the heritage building(s).



Modern high-rise building base is step back to highlight the presence of a heritage building on-site. Bisha Condo in downtown Toronto



New high-rise building design to embed an existing heritage while providing steps back from the heritage -Heritage building on-site 134 Peter Street in downtown Toronto



New high-rise building built adjacent to an existing heritage while keeping heritage character integration 15 Grenville Street in downtown Toronto

A. HERITAGE BUILDING ON-SITE

- 1 Use existing heritage buildings to inform the site plan in terms of existing setbacks, step backs and podium placement.
- 2 New development sites within HCD or designated heritage properties shall be consistent with the policies and guidelines contained within the respective HCD plan.
- 3 Ensure the height of the base does not surpass that of the heritage building(s), unless a reasonable transition in height is provided by a series of stepping backs and appropriate articulation is provided.
- 4 Consider cantilevers over heritage structures where appropriate, and ensure it highlights and compliments the heritage building(s).

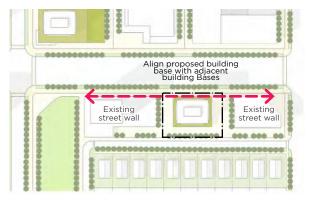
B. HERITAGE BUILDING ON ADJACENT PROPERTIES

- Design buildings to respect and compliment the character of the surrounding heritage structure(s).
- 2 High-Rise buildings will not visually impede the setting of properties on the heritage register.

c5.3 SITE ORGANIZATION

5.3.1 ORIENTATION, PLACEMENT AND SETBACKS

- Locate buildings along the street edge to frame and animate the public realm.
- 2 Where a well-established street wall exists, maintain and reinforce existing setbacks of adjacent built forms by aligning the base with adjacent building bases. (Figure 1)
- Where a well-established street wall exists, but the existing setback varies on either side of a high-rise building site, place the building base to resolve the differences (average distance between the differing setbacks). (Figure 2)
- 4 Where a street does not have an existing setback pattern or is planned to change, building placement should follow the required setback of the street as per below (Figure 3):
 - a. Provide at least 6m from the curb to the high-rise building facade.
 - b. Ensure the front setback between the high-rise building wall at grade and the property line is at least 3m.
 - c. Allow for front setback greater than 3m to accommodate anticipated higher volume of pedestrian traffic (e.g., denser developments).
- 5 Wider streets, i.e. major and minor arterial roads that typically carry higher volumes and speeds of vehicular traffic, may benefit from additional setback width to improve pedestrian safety and comfort.





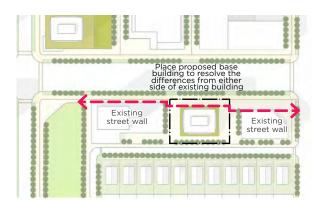


Figure 2: Building placement on an existing well-established street wall that varies on either side of the proposed high-rise building site

Minimum 6m from curb to building Minimum 3m setback

Does not have an existing setback pattern

- 6 Encourage greater setbacks, beyond the zoning requirements and existing prevalent patterns, at corners, transit stops, building entrances, and other locations where:
 - a. Heavy pedestrian traffic is anticipated, to provide for walkable and safe environments.
 - b. Public/private amenities need to be accommodated.
 - c. Greater planting conditions are required to maximize greening opportunities, guarantee adequate plant growing and contribute to achieving sustainable communities.
- 7 For entrances to at-grade residential units, provide a minimum 4.5m setback from the property line to allow for some usable private amenity space properly delineated, while still maintaining a visibility to the public realm ('eyes-on-the-street').
- **8** Orient main building elevations to align with major streets.

- **9** Use building orientation and placement to:
 - a. Avoid and minimize elevation overlap.
 - b. Protect and create view corridors and vistas.
 - c. Maximize views and privacy for building residents.
 - d. Protect and enhance sky views.
 - e. Provide Pedestrian Level Wind (PLW) comfort and safety.
 - f. Take advantage of the seasonal paths of the sun across the sky to improve natural daylighting, liveability, and energy efficiency.
 - g. Optimize wind circulation throughout the site.
- **10** For corner sites, locate taller parts of the development at the corner, oriented to both intersecting streets and public spaces.
- 11 Encourage at-grade landscaped open spaces consist of at least 25% of the total site area to prevent buildings from being situated too close to one another, help creating livable micro-climate environments and achieve positive design for wind control at grade level. At-grade landscaped open spaces might include private open spaces, POPS, at-grade amenity areas and general landscaping (i.e.: planters, setbacks and buffers).

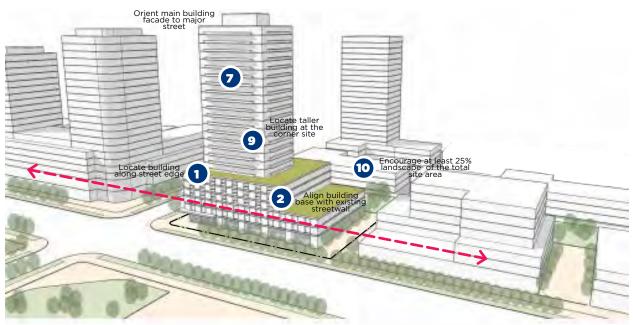


Figure 4: Building Placement

5.3.2 MINIMUM LOT AREA

- Ensure high-rise developments are proposed only on sites with a minimum area of 2500m^{2*}, to ensure appropriate setbacks, step backs, and podium and tower separation distances are provided, and urban design excellence is achieved.
- 2 Determine the feasibility of high-rise development on a site by applying the recommended minimum tower setbacks and step backs to establish the resultant/potential floor plate area/dimensions.

- * The minimum lot area was calculated based on:
- Minimum 3m setback from front (street side) property line;
- Minimum 7.5m setback from the base to side and rear property line;
- Minimum 3m step back from the middle to the base;
- Minimum 12.5m from the middle to side and rear property line.
- See figure 1.

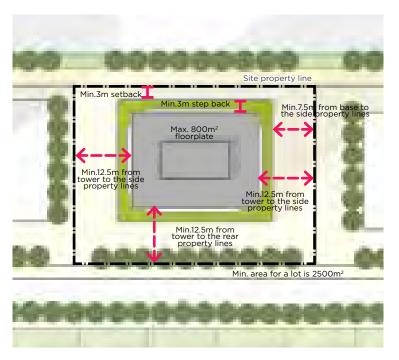


Figure 1: Minimum development lot area

5.3.3 ACCESS, PARKING AND SERVICING

- Provide access to parking, servicing and loading areas from secondary streets or rear laneways, where feasible, to promote safer, more comfortable and attractive public realm and pedestrian environment along the site's main frontages. Design these areas to incorporate special treatments to minimize their impact and improve safety for pedestrians and cyclists crossing them.
- 2 Combine/pair access driveways between adjacent sites, and align them, as well as any internal driveways/lanes, to the adjacent network of roads and lanes, whenever possible. Ensure sidewalks are continuous and clearly delineated through private accesses.
- **3** Add new curb cuts only when there is no alternative means of site access, preferably along secondary streets.
- 4 Encourage public or private through lanes to minimize vehicle turnarounds.

- 5 Ensure site and building accesses, services, utilities and mechanical equipment are not visible from public streets and public/ private open spaces. Screen them from adjacent buildings and public view through architectural features, preferably, and/ or landscape elements (hard and soft); if possible, use these elements to also mitigate any noise and air quality concerns related to the servicing areas.
- 6 Consolidate utility leaders/metering and integrate them into the building design, preferably into internal rooms.
- 7 Avoid free-standing vehicle ramps, loading areas, garbage depot and collection areas or enclosures.
- 8 Ensure the height required for overhead loading for bulk refuse within a collection area conforms to the Region on Peel's standards for overhead clearance.

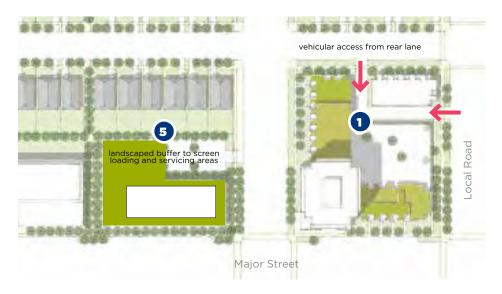


Figure 1: Site Servicing, Access and Parking

- **9** Provide facilities for handling, storing and separating waste and recycling, locate them indoor to mitigate noise, and integrate them into the building design and ensure they are screened from public view through landscape and/or architectural elements.
- **10** Provide long-term bicycle storage inside the building on the ground floor and short-term bicycle parking areas/racks outside close to entrances.
- Provide drop-off areas (e.g., ride-hailing, ridesharing vehicle and private bus) on site for High-Rise developments which contain hotels, or commercial and office uses. (Figure 3)
- 12 Locate parking below grade.
- 13 Screen any permitted at-grade parking from the public view through a combination of soft and hard landscaping, as well as other integrated architectural elements (walls, pergolas, etc.).
- 14 Ensure above-grade parking structures are screened from public view by wrapping them with active uses along public frontages. Consider green roof tops where appropriate.
- **15** Provide pedestrian and cyclist access to/ from parking areas, and ensure they are clearly visible, well-lit, convenient, and easily accessible from the street.





Figure 2: Entrance to the public parking at high-rise development underground



Figure 3: Servicing and drop off area



Figure 4: Vehicular access and servicing provided from lower hierarchy street

5.3.4 PEDESTRIAN LEVEL SUNLIGHT AND WIND EFFECT

A. SUN AND SHADOW

- Place and orient high-rise buildings to ensure a minimum of 5 hours of sunlight on the sidewalk on the opposite side of the street directly across the site and on more than 50% of any public open space averaged over the course of the day on the fall equinox. This should be demonstrated during the design stage through a Sun/Shadow Study that shows how the high-rise building development is designed, placed and oriented to minimize shadowing of streets, public realms, public and private open spaces at the ground level.
- 2 For high-rise buildings located adjacent to low-rise residential, strategically locate the tallest portion of the building to minimize shadow impact on the low-rise areas.
- **3** Ensure a Sun/Shadow Study is submitted as part of:
 - a. A development application for a Zoning By-law Amendment or Site Plan for development projects over 6-storeys in height.
 - b. For developments under 6-storeys, in particular on rezoning applications where additional height near shadow-sensitive areas is anticipated.

For more information (such as test times, submission requirements, and evaluation criteria), please refer to City of Brampton - Sun/Shadow Study Terms of Reference.

B. WIND EFFECT

- Orient high-rise buildings to encourage air circulation throughout the site, and to minimize negative wind effects on the street, open spaces, and the public realm.
- **2** Design high-rise building to incorporate the following Wind Control Mitigation Strategies:
 - a. Building form strategic reshaping of the building can allow wind flow around it to either be more streamlined (chamfered or rounded corners) or diffused at corners (stepped or re-entrant corners).
 - b. Architectural details features such as facade articulations, canopies, covered walkways and recessed entrances are effective solutions for localized wind mitigation.
 - c. Smaller-scale measures features such as wind screens, trellises, public art and other localized features can be considered at an advanced design stage for area-specific wind speed reductions and refinements.
 - d. Trees and landscaping elements the impact of trees and landscaping elements are also typically limited to a small area around them.

For more information, please refer to City of Brampton - Wind Study Terms of Reference

REFER TO SECTION C2 FOR ADDITIONAL GUIDELINES REGARDING PRIVATE OPEN SPACE, AMENITY AREAS, LIGHTING, ACCESSIBILITY, SAFETY, PUBLIC ART, AND BUILT HERITAGE CONTEXT

THIS PAGE INTENTIONALLY LEFT BLANK



Figure 1: Height and scale of the building base

c5.4 BUILT FORM

5.4.1 BASE (PODIUM)

Building Bases constitute the foundation of a high-rise building and frame the adjacent public realm (streetscape or open spaces). As such, the objective of a building base is to reflect and enhance the pedestrian nature of these public spaces. It should be clearly demarcated by a change in the building profile, a step back from the main wall or a combination of both. It is then imperative to design bases to enhance and complement the pedestrian experience and to frame the streetscape.

A. BASE HEIGHT AND MASSING

- Ensure the height of the base matches existing adjacent structures or is a minimum of 3 storeys (10-10.5m) to reinforce the pedestrian scale of the streetscape and provide for appropriate transition to the tallest component of the development.
- 2 Limit the height of the base to 6 storeys or 80% of the adjacent street right-of-way, whichever is lower, to provide for generally consistent streetwalls along the street and ensure at least 5 hours of sunlight on the sidewalk on the opposite side of the street directly across the site on the fall equinox.
- 3 Allow for additional base height up to 100% of the adjacent street right-of-way by providing a step back of minimum 3m from the top of the base wall.
- 4 Provide a step back of a minimum of 2-3m between the 3rd and 6th storey of the building (or at the level of the existing established streetwall) to create/promote a consistent streetwall scale along the street.

- 5 Ensure the height (floor to ceiling) of ground floors is minimum 4.5m for either residential or non-residential uses, to enhance visibility and safety while strengthening the relation between internal uses and the adjacent public realm.
- 6 On corner sites, design the building base to respect and respond to the height, scale/ massing and character of the existing context on both streets.



Figure 2: Building base height and scale respects the adjacent existing heritage - 134 Peter Street in downtown Toronto

B. ARCHITECTURAL DESIGN AND BUILDING/ELEVATION ARTICULATION

- Encourage active uses at grade, depending on the Zoning By-law and street hierarchy (retail, commercial use, day-care facilities, townhouses, etc.), to animate the public realm and promote safe environments. (Figure 1)
- 2 Design all elevations of the base to:
 - a. Reflect the same architectural style and proportions; the level of detail may vary dependent on each elevation exposure to the public realm.
 - b. Ensure the elevation design reflects the internal uses (i.e., residential, employment, or commercial).
- **3** Provide highly, well articulated bases, both vertically and horizontally, that fit harmoniously within the existing street wall context and effectively frame the public realm. I.e. changes in planes, entrances, windows, canopies, balconies, and other types of fenestration.
- 4 Incorporate vertical articulation elements or fractures (generally every 50-60m) at long bases to provide for breaks in the street wall. Coordinate these with opportunities for outdoor spaces and covered mid-block connections.



Figure 1: Active retail and commercial uses, mid-block pedestrian connection at base , Toronto

- 5 Clearly differentiate/distinguish between different uses on the same elevation through distinct but complementary architectural treatments (windows and entrances proportions,sizes and treatment, materials, colours). (Figure 4)
- 6 Along main streets, mixed-use and commercial buildings should not have projected balconies within the first 10.5m (3 storeys) of the base building. Between 3 and 6 storeys, balconies behind the streetwall may be allowed. (Figure 2)



Figure 2: Building address, setbacks and upper storey windows to animate the street and promote safety.

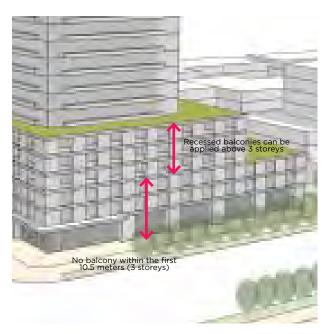


Figure 2: Mixed-use and commercial building base balconies



Figure 1: Art, creative use of materials and lighting to screen blank walls exposed to the public.

- 7 Break down the scale of the building base through:
 - a. Wall recesses and projections coordinated with interior uses (e.g.,residential and/or commercial units)
 - b. Multiple building and at-grade units/ storefront entrances, spaced an average of 6-10m along the street and open space frontages, to create multiple points of interaction between the building interior and adjacent public realm.
- 8 Provide building entrances and transparent windows on all elevations facing streets, parks, and open space.
- **9** For corner sites, encourage the location of main entrances at the corner of building.
- 10 Encourage substantial amount of transparent glazing along at-grade elevations related to non-residential uses (such as commercial, retail, office and institutional spaces), as well as those related to lobbies/entrances and common/amenity areas. Aim for minimum 75% of the at-grade elevation(s) along public spaces.

- **11** For at-grade residential units, encourage a landscaped setback and a small grade change as a transition from the public sidewalk to private residential units.
- 12 Ensure upper floors of the building base (above the ground level) include windows overlooking the public realm.
- 13 Design special features to wrap around corners and terminate them at logical locations such as a change in plane.
- 14 Design building name/address elements to complement the building's elevation, animate the ground level and enhance the streetscape.
- **15** Avoid blank elevations at any edge exposed to the public view.
- 16 Consider art and/or special wall treatment (screens, green walls, metallic/wooden textures, etc.) where blank walls exposed to the public view can't be avoided. (Figure 1)



Figure 4: Base/podium differentiates uses and entrance locations Hong Kong Metro Retail



Figure 1: Accessibility at grade by using ramp

C. ENTRANCES, WINDOWS AND BALCONIES/ TERRACES

- Design entrances to be prominent, provide visual interest and act as focal points of elevations. Where possible and appropriate to the building's design, incorporate doubleheight entrances.
- **2** Design entrances to be universally accessible.
 - a. Ensure entrances are at grade level and step-free
 - b. Ensure entrances are wide enough for mobility devices, strollers, etc.
 - c. Incorporate ramps as integral components of the building and landscape design.
- 3 Incorporate secondary entrances at strategic locations (back/side of the building or at midblock connections/courtyards).
- 4 Clearly distinguish between the building's main entrance and secondary entrances, such as those related to at-grade units.
- Porches, overhangs and cantilevers should be utilized to emphasize residential townhouse and/or commercial units at the base.
- 6 Limit front steps to 6 risers for raised residential townhouse units.
- Consider raising the ground floor of residential townhouse units at grade between 0.9-1.2m above the sidewalk level to provide for added privacy and an appropriate transition from the public to the private realm.

- 8 Incorporate permanent pedestrian weather protection elements such as canopies (Figure 3), awnings (Figure 1), and overhangs at the ground level, and, where appropriate, for balconies above.
 - a. Ensure the integration, strategic location and appropriate sizing of weather protection elements to maximize their function.
 - b. Ensure they are at least 1.5m deep.
 - c. Fully integrate them to the elevation design.
 - d. Incorporate them as environmental tools that help protecting building interiors from direct summer sun, minimize wind effects on the public realm and help reduce reflections on glazing to achieve birdfriendly design.
- 9 Upper storey cantilevers may be incorporated above a height of 7.5 metres, projected from the face of the main building a maximum of 3.5 metres and occupying a maximum of 80% of the building frontage.
- 10 On rapid transit corridors, projections/ overhangs of weather protection elements on the right-of-way may not be permitted.



Figure 2: Weather protection canopy as architectural detail along the base part of mixed-use buildings, integrated with signage



Figure 1: Awnings animate the base design while providing additional articulation



Figure 3: Base canopy design to provide weather protection



Figure 4: Artful canopy as architectural detail and weather protection along the base Maple Leaf Square, Toronto

5.4.2 MIDDLE (TOWER)

The 'Middle' part of a high-rise building is the portion that sits on top of the base. Its size, shape, placement, and orientation rely on the site context and the base conditions. They should be designed to minimize negative shadow/wind impacts on surrounding areas, and to positively contribute to the skyline.

A. MIDDLE HEIGHT AND MASSING

- Determine appropriate height based on adjacent high-rise developments, land-use/ street hierarchy and impacts on adjacent communities and open spaces (i.e. shadow and wind impacts). Refer to section '5.2.2 Fit and Transition in Scale'.
- Minimize shadow/wind impacts through building height and massing, Refer to section '5.3.4 Pedestrian Level Sunlight and Wind Effect' for more details.
- **3** For developments/blocks with more than one building, ensure middles (towers) work together and provide for elegant, visually pleasing skylines by:
 - a. Providing a range of heights and establishing a height hierarchy related to site conditions and context (existing and planned).
 - b. Considering at least 5 storey difference between buildings.

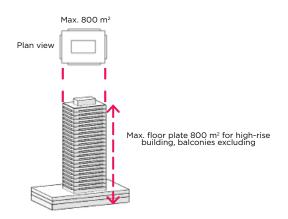


Figure 2: Tower/middle maximum floor plate size

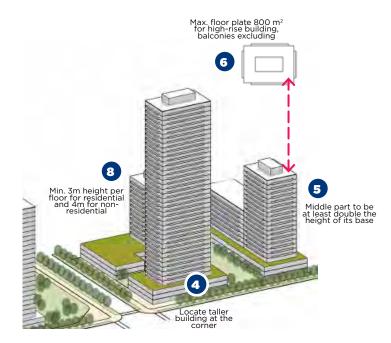


Figure 1: Tower/middle maximum floor plate size and floor height

- 4 Place taller buildings closer to the primary street and/or corner.
- 5 Ensure the middle part of the building is at least double the height of its base.
- 6 Limit tower's floorplate, excluding balconies, to 800m2 for high-rise building to minimize shadow/wind impacts on surrounding areas (Figure 2), maximize views/sky views and improve privacy between neighbouring buildings.
- 7 To avoid middle massing that overwhelms the pedestrian zone, design slab type buildings to:
 - a. Incorporate major multi-storey vertical massing breaks, ideally ground to top, of minimum 6m width by 2m deep.
 - b. Provide highly articulated elevations that include changes in planes and materials.
 - c. Alternatively, for larger sites, favour 2+ buildings of differing heights over one large slab building.
- 8 Ensure residential floors are a minimum of 3.0m high, and non-residential floors are a minimum of 4.0m high.

B. ORIENTATION, PLACEMENT, SETBACKS AND SEPARATION DISTANCE

- Place and orient middles (towers) to maximize sky views and natural daylight, provide proper privacy and dynamic skylines, and minimize wind/shade impacts on surrounding areas (Figure 3). Ensure:
 - a. A minimum separation distance of 25m between middle parts of buildings.
 - b. Middles (towers) are setback at least 12.5m from the side/rear property lines or lane centre line. Refer to section '5.2.2 Fit and Transition in Scale".
 - c. High-rise developments taller than 30 storeys provide greater separation distances between middles (Figure 2).
 - d. A minimum of 5 hours of sunlight on the sidewalk on the opposite side of the street directly opposite the site and on more than 50% of any public open space averaged over the course of the day on the fall equinox. Refer to section '5.3.4 Pedestrian Level Sunlight and Wind Effect' for more details.

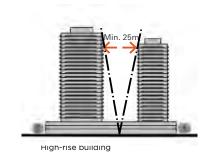
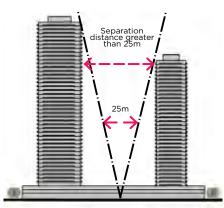


Figure 1: Section highlighting tower separation distance for high-rise Building lower than 30 storeys



High-rise building 30 or greater storeys

Figure 1: Section highlighting tower separation distance for high-rise Building with 30 or greater storeys



Figure 3: Shift high-rise Buildings' locations to provide more distance from building face to building face

- 2 Setback middles (towers) at least 3m from the base (podium) wall, including balconies, to clearly differentiate both building components, minimized shadow/wind impacts and maintained the pedestrian scale along the streetscape. Incorporate greater setback and/ or additional step backs to properly fit within and respond to the existing and/or planned context.
- 3 Where appropriate, encourage terraces and/ or roof top amenities where greater setbacks/ step backs are provided (i.e., the location of middle part (tower) in relation to the base (podium) base).
- **4** Orient longest face of the building's middle to minimize shadows.

- **5** Consider solar orientation in middle (tower) placement, orientation and design.
- 6 Place and orient middles (towers) to minimize overlap (i.e., parallel elevations), where possible.
- 7 Allow up to 1/3 of a tower frontage to extend straight down to grade within the step back area and without the presence of a base (podium).
- 8 Ensure high-rise developments are not allowed on sites that cannot comply with the minimum middle (tower) separation distance, setbacks and stepbacks. (Figure 1)

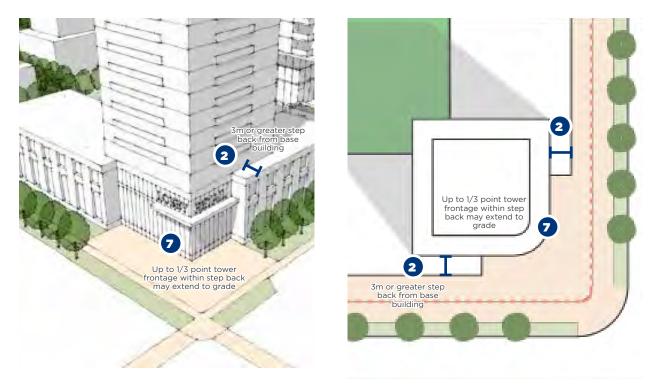


Figure 1: Tower step back and step back part extend to the ground

C. ARCHITECTURAL DESIGN AND BUILDING/ELEVATION ARTICULATION

- 1 Ensure a cohesive elevation design between the building's base, middle and top in terms of architectural style, proportions, rhythm and materials. (Figure 2)
- **2** Design all elevations of the middle to:
 - a. Reflect the same architectural style and proportions; the level of detail may vary dependent on each elevation exposure to public view.
 - b. Ensure the elevation design reflects the internal uses (i.e., residential, employment, or commercial).
- 3 Design floor plates to effectively accommodate the building's program while breaking its mass, creating interesting and articulated elevations.
- 4 Design all elevations to be highly articulated, both vertically and horizontally, through changes in planes, multi-storey breaks enhanced fenestration including windows and balconies, as well as coordinated materials, patterns, etc. (Figure 1)
- 5 Clearly differentiate/distinguish between different uses on the same elevation through distinct but complementary architectural treatments (windows/balconies proportions, sizes and treatment, materials, colours).
- 6 Encourage variation in the design and articulation of the middle's (tower's) elevations to provide visual interest and to respond to design opportunities and differing conditions within the adjacent context.
- 7 Design special features to wrap around corners and terminate them at logical locations such as a change in plane.



Figure 1: Highly articulated Middle part elevation



Figure 2: Cohesive elevation design between the base and the middle One York, Toronto



Figure 4: Minimize shadow/wind impacts through building height, massing, placement and orientation One Bloor Street in Toronto



Figure 5: Curved building to help mitigate the wind Leeza Soho in Beijing

- 8 Include windows on all elevations, specially those facing streets, parks, and open space, as well as balconies where appropriate (i.e., residential buildings).
- **9** Where possible, include operable windows to provide natural ventilation and help reduce mechanical heating and cooling requirements.
- **10** Avoid continuous balconies which negatively impact the perceived mass of the building (i.e., larger floorplates) by:
 - a. Incorporating breaks in relation to internal units and uses.
 - b. Ensuring wrap around balconies do not extend along the entire length of any elevation.
 - c. Incorporating balconies of different but complementary configuration, sizes and materials (e.g., recessed vs. projecting).
- **11** Avoid blank elevations at any edge exposed to the public view.
- 12 Consider art and/or special wall treatment (screens, green walls, metallic/wooden textures, etc.) where blank walls exposed to the public view can't be avoided. (Figure 3)
- 13 Incorporate design treatments that help mitigating any negative wind impacts at grade (e.g., screens, materials, etc).

D. WINDOWS AND BALCONIES/TERRACES

- 1 Include windows on all middle part elevations, and incorporate balconies/terraces on those related to residential uses, where possible.
- 2 Incorporate different but proportionate window/balcony sizes to animate elevations and reflect different internal uses.
- **3** Ensure that balcony design is integrated to and coordinated with the overall massing and design of the building.
- 4 Consider inset or partially inset balcony arrangements which may offer greater privacy and be more comfortable, particularly on upper floors. (Figure 1)
- **5** Maintain balconies within the site's property boundaries.
- 6 Ensure balconies are minimum 1.5m deep and have an area of minimum 3m2 to provide sufficient usable space and properly function as private amenities. (Figure 2)



Figure 1: Partially inset balcony to provide privacy



Figure 2: Balconies shall provide adequate usable space

- 7 Where appropriate to the building's design and architectural style, consider canopies over projecting balconies to provide for weather protection (rain, snow and direct sun exposure).
- 8 Carefully consider wrap around balconies to avoid increasing their visual impact on the building massing, as well as shadowing. This includes:
 - a. Ensuring that they are designed as integrated and articulated elements of the building design (i.e. not 'add-ons').
 - b. Avoiding continuous balconies that extend the entire width of the elevation and providing breaks of at least 3-4m in between.
 - c. Providing a return of a minimum of 2m along around corners.
- 9 Design balconies to enhance sustainable design objectives through their arrangement, materials and construction methods, which can significantly impact building energy performance. (Figure 3).
- 10 Transparent glass balconies are generally discouraged, since they can pose a collision risk for migratory birds. Refer to section '5.4.4 Bird-Friendly Design' for more details.



Figure 3: Rich green Balconies

5.4.3 TOP (ROOFTOP)

The Top (Rooftop) is the highest part of a high-rise building. It sits above the middle, terminating it and covering its last level, while accommodating mechanical rooms. Depending on its design, the top can include more than one floor, contain livable spaces like terraces and common amenity areas, and impact the skyline with a distinctive/unique profile.

A. GENERAL GUIDELINES

- Design high-rise buildings to include a visually appealing and clearly defined top that is complementary to the architecture of the overall building and proportionate to its scale (e.g., building tops of taller buildings may include multiple storeys). (Figure 2)
- 2 Incorporate design elements that add interest to the overall skyline and provide a sense of orientation, such as unique geometry, lighting features, etc. (Figure 1)
- **3** Address important locations in the community by designing the top part of the building to become a visual landmark.
- 4 Favour reflective, low intensity colours for rooftops to reduce heat island effect, and reduce HVAC loads.
- 5 Where appropriate, incorporate green rooftops as a way to enhance the building appeal from the street, reduce urban heat island effects and improve air quality and noise insulation. Only consider them where planting could thrive.



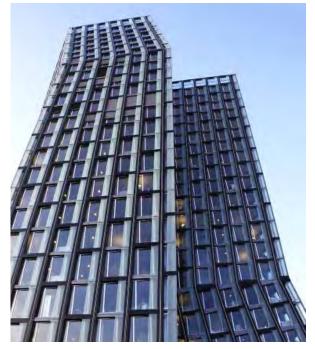


Figure 1: Slight change in direction provides a unique and simple Top design

B. MECHANICAL ROOMS/EQUIPMENT

- Locate and design mechanical rooms as integral components of the building top and to complement and enhance the overall building's design.
- 2 Screen mechanical rooms/equipment through:
 - a. Integral architectural features rather than single-purpose screens.
 - b. Usable spaces such as rooftop amenities or living areas (penthouses).
 - c. Ensure they are made of materials that complement those used on the building elevations and enhance their design.
- **3** Exposed telecommunications equipments are generally discouraged. If necessary, integrate telecommunications equipment into the rooftop design.

Figure 2: Office building Top TD Trust Building Toronto

5.4.4 BIRD-FRIENDLY DESIGN

The built environment can have strong negative impacts on birds. Design and system selection can result in fewer bird collisions and deaths. New buildings will consider birds through the treatment of glazing, landscape and lighting to reduce the incidence of bird strikes and create an urban environment in which birds can thrive.

- Incorporate a combination of Bird-Friendly Design strategies to at least 85% of contiguous glass areas greater than 2m² within the first 16m of the building abovegrade (including interior courtyards) and above green roofs.
- 2 The remaining 15% of glazed areas are not required to be treated unless they are larger than 2m² or in close proximity to open spaces, a green roof or a natural heritage feature.
- **3** Apply Bird-Friendly Design strategies to ground related residential development that is adjacent to the natural heritage system, parks and other open spaces.
- 4 Incorporate overhangs, canopies and awnings to help mute reflections on glazing and achieve bird-friendly design.
- **5** Bird-Friendly Design Strategies may include:
 - a. Visual patterns on glass (Figure 2),
 - b. Visual markers provided on the glass of proposed buildings with spacing no greater than 50mm by 50mm.
 - c. Window films.
 - d. Fenestration patterns (Figure 1).
 - e. Angled glass downwards.
 - f. Reduced night sky lighting.

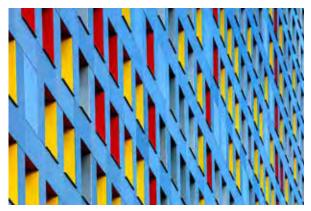


Figure 1: Deeply recessed windows can block viewing of glass from most angles



Figure 2: Patterns on the outside of glass are more effective than patterns on an inside surface



Figure 3: Colourful treatment to add special feature to building facade



Figure 2: Break mass through different materials Picasso condo



Figure 1: Incorporate energy efficient measures and materials

5.4.5 MATERIALS

- Select materials and colours to complement the architecture, character, size and style of the building design, as well as the streetscape.
- 2 Ensure building elevations incorporate high quality, permanent and durable materials, that have greater longevity and represent a high-value contribution to city building. These include materials such as glass, stone, brick, concrete, and metal, with appropriate texture, and carefully crafted details to provide visually pleasing designs.
- **3** Encourage natural materials, such as brick and stone, at the pedestrian level of the building.
- **4** Avoid using stucco on high-rise building elevations.
- **5** Maintain consistency of materials among elevations.
- 6 Use changes in materials to break the building mass and enhance the elevation articulation/ design. (Figure 1 and 2)
- **7** Strategically use lighter materials to minimize the building mass, and heavier ones to emphasize important elements of the building design and its articulation.
- 8 Ensure changes in materials are done at changes in wall planes.
- **9** Encourage environmentally sustainable materials and construction methods.
- 10 Incorporate energy efficient measures and materials that can significantly impact building energy performance. (Figure 1)



Figure 3: High quality materials on the base facade Vanke Binhai Cloud Center, China

5.4.6 EXTERIOR LIGHTING

A. DECORATIVE

- Select exterior decorative lighting to respond to site context and be based on a cohesive illumination and lighting vision/strategy. (Figure 1)
- 2 Provide lighting that complements the design of the elevation and reflects it's uses.
- **3** Encourage the use of decorative lighting at the top of the building; ensure:
 - a. It balances energy efficient objectives.
 - b. No negative impacts on adjacent buildings and migratory birds.

B. SUSTAINABLE

- 1 Use appropriate lighting strategies, and avoid uplighting and overlighting. (Figure 1)
- 2 Incorporate high efficiency lighting.

C. SAFETY

- Provide appropriate building lighting (pedestrian and vehicular) at primary and secondary entrances, stairways and accesses to underground parking.
- **2** Use fully shielded lights that only emit light downward to reduce glare and light trespass, and to promote better visibility at night.
- Ensure lighting affixed to the building elevation is provided at the ground level, as this type of lighting is usually meant to provide lighting for pedestrian areas only. Allow for affixed lighting on upper levels of the base where it enhances and complements the elevation design. (Figure 2)



Figure 1: Special lighting design for high-rise building Centre Park Tower, NYC



Figure 2: Lighting apply only at ground level for pedestrian areas. Chicago night view

NON-RESIDENTIAL DEVELOPMENT

C6.1 INTRODUCTION C6.2 GENERAL DESIGN GUIDELINES C6.3 DESIGN GUIDELINES FOR SPECIFIC USES	03 04



C6.1

The Non-Residential Development guidelines address commercial, institutional, office and industrial development within Commercial, Employment and Mixed-use Employment areas.

The intent of the guidelines is to create street focused built form and vibrant places which are compatible with their surroundings, support a pedestrian-scaled public realm and contribute to a sense of place.

The section are structured in three parts -Principles and Objectives and General Design Guidelines which apply to all forms and types of development in this category, followed by Design Guidelines for Specific Uses, which apply to the different uses, in addition to the General Design Guidelines.

This includes:

- Institutional and Community Centres (including places of worship)
- Business Park Employment
- Industrial Employment
- Large Format Commercial
- Drive-through Facilities
- Automotive Service Centres

This list may be updated from time to time to account for new / changing forms of nonresidential development.

6.1.1 PRINCIPLES/OBJECTIVES

PROMOTE PLACE MAKING

- Provide quality building and landscape designs
- Ensure integration with the community
- Provide built form and public realm transition to the surrounding areas
- Build upon the distinguishing characteristics of the neighbourhood
- Integrate built and natural heritage

CREATE HUMAN SCALED DEVELOPMENT AND PUBLIC SPACES

- Reduce the reliance on and dominance of cars
- · Prioritize pedestrians and cyclists
- Animate the streets and public spaces

CREATE A HIGHLY CONNECTED AND PERMEABLE CIRCULATION SYSTEM

• Provide safe access and movement for all modes of transportation.

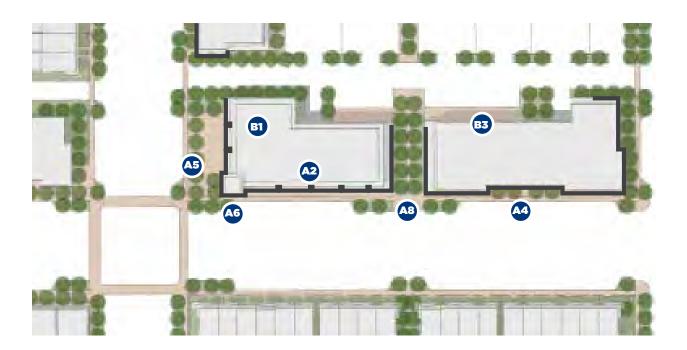
GENERAL DESIGN GUIDELINES

6.2.1 SITE ORGANIZATION

A. BUILDING ORIENTATION, PLACEMENT AND SETBACKS

- 1 Provide appropriate buffers and transitions to adjacent neighbourhoods and different land uses (i.e. setbacks, landscaping, location of servicing and parking areas).
- 2 Locate buildings at or near the street edge to generally align with buildings on adjacent properties and/or to create a consistent street wall.
- 3 Locate buildings no more than 6.0m from the street. For urban contexts, encourage front setbacks to generally reflect those of adjacent buildings and be maximum 3.0m where no active uses (such as patios) are proposed on the front yard.

- **4** Orient the longer side of the building parallel to the street.
- **5** Arrange, place and orient buildings to:
 - a. Frame streets (public and private), as well as public spaces such as plazas and parks.
 - b. Allow for patios and spill out areas which animate the site/street.
 - c. Create comfortable and protected pedestrian spaces that have a sense of enclosure.
- 6 Address corner and gateway locations through building placement and orientation to provide a strong presence at these important locations in the community.
- 7 Provide a minimum 3.0m wide landscaped strip (buffer) adjacent to residential areas.



- 8 For larger developments with multiple blocks/ buildings:
 - a. Create a pedestrian-scaled, permeable and connected internal layout (block and street pattern).
 - b. Establish a street wall for a minimum of 40% of the site's frontage along public streets.
 - c. Arrange buildings to create comfortable and protected pedestrian spaces that have a sense of enclosure.
 - d. Incorporate mid-block connections to avoid long, uninterrupted streetwalls and promote permeability through the site/ block.
- **9** For fronting elevations with active uses and windows, ensure building separation distances of:
 - a. Minimum 15m between buildings of up to 4 storeys.
 - b. Minimum 20m between buildings above 5 storeys.
- **10** Avoid locating mechanical rooms adjacent to the street and/or sidewalk.

B. ACCESS, PARKING AND SERVICING

- 1 Provide prominent and easily accessible entry points to each site from the adjacent road system.
- 2 Provide access to parking and/or servicing areas from secondary streets or lanes, wherever possible.
- 3 Where possible, provide access to parking and service areas through the creation of a shared laneway system, coordinated across multiple sites or through redevelopment.
- 4 Provide direct, barrier-free pedestrian access to at-grade uses from sidewalks and parking areas.
- **5** Prioritize pedestrian and bicycle movements through design and signage.
- **6** Encourage the development of a coordinated and integrated pedestrian system between facilities.
- 7 Ensure walkways are at least 2.1m wide, as per AODA requirements.

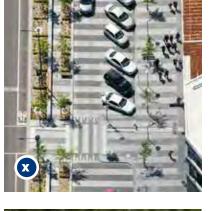




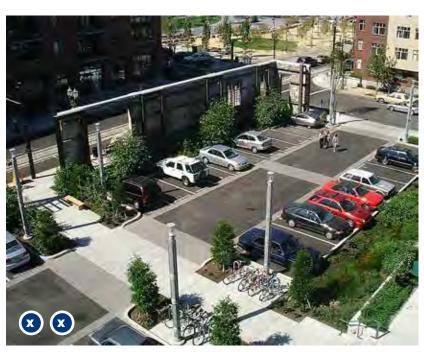


- **8** Minimize interruptions to the sidewalk and potential conflict between vehicles, cyclists and pedestrians.
 - a. Consolidate vehicular access points wherever possible, or pair them with those on adjacent sites.
 - b. Clearly delineate driveways and sidewalks/ walkways through distinct materials.
 - c. Using special paving and/or pavement markings, and other traffic calming measures.
- **9** Consider shared parking facilities with adjacent buildings/developments. Pair or share driveways where possible.
- **10** Avoid locating parking areas between the street/sidewalk and the building; if required, minimize parking in these locations to a maximum of 50% of the street frontage, and design them to:
 - a. Be screened through enhanced landscaped strips that are a minimum of 3m in width.
 - b. Be limited to one aisle of parking and a driveway, wherever possible (doublemodule is discouraged).
 - c. Incorporate high quality materials such as decorative pavings.

- 11 Locate servicing areas (including loading and garbage/recycling areas) and surface parking at the rear or side of buildings, away and fully screened from public view, through a combination of:
 - a. Building orientation.
 - b. Fences, walls, and other architectural structures/elements.
 - c. Enhanced planting and landscape strips.
- 12 Design surface parking to:
 - a. Be screened from public view through building placement, architectural structures and enhanced landscaping.
 - b. Be dispersed throughout the site.
 - c. Avoid large areas of surface parking; instead, design parking areas as courtyards delineated by landscaped strips and walkways.
 - d. Incorporate significant landscaping; aim for 20% to 30% of parking area.
 - e. Incorporate Low Impact Development measure, including bioswales, permeable paving materials, and reduce heat island effect through light materials or canopy coverage.
 - f. Include clearly delineated pedestrian connections through the parking area, as well as pedestrian-scaled lighting to enhance safety/security.









- g. Include accessible parking spaces located close to building entrances.
- h. Incorporate the use bioswales, permeable paving materials, and reduce heat island effect through light materials or canopy coverage.
- i. Provide electrical vehicle parking and preferential parking spaces for fuel efficient vehicles, and incorporate charging stations wherever possible.
- **13** For larger developments, provide a safe, clear and accessible site circulation system for pedestrians, cyclists and vehicles, including:
 - a. Prominent and easily accessible entry points to the site.
 - b. A pedestrian network that works as an extension of the adjacent pedestrian and active transportation system, and provide direct access to nearby transit stops and parking areas.
 - c. A logical and direct internal road network aligned and connected to the surrounding street system.
 - d. Clearly demarcate crosswalks at all street and driveway crossings.







CITY-WIDE URBAN DESIGN GUIDELINES / PART C

- **14** Favour underground or above-grade structure parking wherever possible/feasible.
- **15** Ensure loading/structure parking doors not to face the public street/space.
- **16** Design above-grade parking structures to be integrated with and/or located behind principal buildings.
- **17** Line parking structures along street/public frontages with active uses at grade.
- **18** Design above-grade parking visible elevations to be articulated through high quality design and materials.
- **19** Provide accessible and secure bike parking and racks, and locate them closer to building entrances. Provide covered bicycle parking, where feasible.
- **20** Avoid locating parking and servicing areas facing residential areas and major streets. If not possible, incorporate substantial landscaped strips (minimum 3m wide) that act as buffers.
- **21** Integrate garbage/recycling, loading and service areas within buildings wherever possible.

- **22** Incorporate garbage storage bins that can be accessed for garbage pick up into the principal building design; ensure food waste is stored in climate controlled rooms.
- **23** Provide on-site recycling facilities for handling, storing, and separation of recyclables for large developments, such as employment and office buildings, and institutional or public buildings.
- **24** Encourage incorporating earth-bins and molocks, wherever possible, and ensure they are:
 - a. Located away from public spaces and view
 - b. Appropriately built to avoid any negative impacts related to odours.
- **25** Locate utility meters, service meters, vents, telecommunications gear and other necessary mechanical equipment discretely and, where they are visible from public spaces, integrate them into the design of the building through techniques such as recesses, enclosures and under steps or porches, or screen them with landscaping or architectural elements.
- **26** Screen transformer boxes and any other service/mechanical elements that must be separated from the building with landscaping or architectural elements.



C. LANDSCAPING AND COMMON AREAS

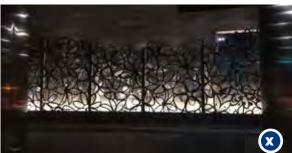
- 1 Coordinate the landscaping within the private areas and public interface, and designed it to:
 - a. Enhance the character of the development and the community.
 - b. Reinforce the structure, nature and use of the site with a focus on creating safe, comfortable and animated pedestrian environments (streets, edges, corners, gateways, transitions, public spaces, building entrances, etc.)
- **2** Maximize opportunities for open/green spaces on site.
 - a. Encourage the creation of common spaces such as POPS, mid-block connections, parkettes or plazas to promote connectivity/permeability, and to reinforce a sense of place.
 - b. Take advantage of greater setbacks to provide for patios and other common spaces, where appropriate.
- Ensure a comprehensive landscape strategy including planting, built features, fencing, walls, paving, lighting, signage, and site furnishings such as benches and bike racks.
- **4** Use high-quality, durable materials for paving, walls, screenings, planters, site furniture, shade structures, etc.

- 5 Minimize the use of hard, paved areas to reduce surface run-off and heat island build-up, and ensure the have a function on site.
- 6 Use permeable pavings wherever possible.
- 7 Create planting strategies base on year-round interest, hardiness, drought, salt and disease tolerance, and to promote bio-diversity.
- 8 Provide landscaping and planting that enhance and contribute to the broader environment - ecological function, stormwater management functions, urban forest, and biodiversity.
- **9** Enhance the urban forest with the use of a diverse range of canopy trees; ensure they are hardy, tolerant and high-branching.
- 10 Incorporate high branching deciduous trees and/or tall coniferous trees and shrubs along rear and side property lines abutting residential uses.
- 11 Design fences, walls and any other landscape structures to be coordinated and complement the building design in terms of style and materials.
- 12 Locate common amenities such as patios away from areas where vehicular activity is expected, and from servicing, garbage and loading areas.

















6.2.2 BUILT FORM

A. HEIGHT AND MASSING

- Design buildings to generally reflect the height and massing of adjacent existing and planned built form.
- 2 Encourage multi-storey buildings wherever possible. Provide at least 2 storeys or doubleheight 1 storey buildings of at least 7.5m in height.
- **3** Ensure at-grade level is at least 4.5m high and upper levels at least 4m high.
- **4** For development adjacent to existing built form, generally maintain the ground level height.
- 5 Accentuate and highlight corner and gateway conditions through buildings of prominent massing and the location of tallest elements closer to the corner portion of the development.
- 6 Consider roof forms other than flat roofs to respond to the context/character of the neighbourhood, particularly where there is a heritage context.

B. ARCHITECTURAL DESIGN AND BUILDING ARTICULATION

- 1 Encourage a range of design expressions to promote architectural variety.
- **2** Design elevations to be compatible and complement surrounding neighbourhood character.
- **3** Locate active uses at-grade to animate the public realm.
- **4** Ensure highly articulated building elevations face onto streets and public spaces. Design them to include:
 - a. Changes in planes and materials.
 - b. Enhanced fenestration.
 - c. Roof articulation including strong cornice lines and overhangs.
 - d. Prominent entrance areas.
 - e. Horizontal and vertical architectural elements such as projecting volumes, display windows, arcades, colonnades, etc.
 - f. Coordinated building materials.
- 5 Avoid blank, uninterrupted walls along public frontages. Where blank walls are partially visible from public areas, incorporate a combination of changes in plane, materials, lighting, signage, art, metallic screens and/ or living walls as ways to screen and mitigate them. Consider clerestory windows, where possible.









- 6 For longer buildings (those that are greater than 60m):
 - a. Establish a rhythm of vertical breaks in the wall plane and/or vertical wall articulation elements on the elevation. This could involve breaks/articulation that helps to distinguishing each unit (retail at grade) or building component. Take cues from adjacent buildings when considering the rhythm, scale and proportion of these elements.
 - b. Create floor plans that inform pedestrianscaled exterior wall articulation.
 - c. Use different materials, changes in plane (minimum 0.5m), projecting/recessed elements, generous windows openings and any other vertical elements.
 - d. Enhance and complement the wall articulation at grade through the use of entry features, weather protection elements, lighting and signage.
- Recess the wall of loading/garage doors where these face the public street/space.
- 8 Ensure elevations of corner buildings are designed to equally address the two main street frontages in terms of architectural treatments, fenestration, articulation and materials.
- Locate main entrances strategically to generally face the street, be highly visible from the surrounding public space and design them to:
 - a. Be prominent/focal elements of the elevation.
 - b. Incorporate weather protection elements such as canopies, overhangs and awnings.
- 10 Ensure a high level of glazing (vision glass) on the building main elevations, especially at grade and on elevations including main entrances, to provide visual interest and create a sense of connection to interior uses. A minimum of 40% to 50% glazing is recommended, including entrances, windows, or upper level glazing. Aim for 75% for retail frontages to maximize display areas.















- Incorporate windows/glazing on any elevation that overlooks public areas (streets, SWM facilities and other open space features).
- **12** Design rear and side elevations exposed to public view, highways or abutting residential areas to incorporate wall articulation, fenestration and materials generally consistent with those on main elevations.
- **13** Consider clerestory windows and vertical glazing panels to break otherwise blank walls such as those relate to warehouses.
- 14 Coordinate the design of ancillary buildings with that of the main building(s) in terms of height/ massing, architectural style and details, lighting, signage, materials, and colours.
- **15** Screen roof top mechanical equipment from view through the use of architectural screens, parapet walls and/or integration into the design of the building.
- **16** For sites adjacent to highways, ensure elevations exposed to views from the highway display the same level of architectural design, wall articulation, fenestration and materials as those of the main elevation.
- 17 Ensure individual buildings within a complex are coordinated in design including architectural style, elevation articulation and materials.

C. ENTRY FEATURES, DOORS AND WINDOWS

- Ensure pedestrian entrances are accessible, as well as safely and clearly connected to the adjacent pedestrian network, including sidewalks and walkways on parking areas.
- 2 Ensure all building entrances and transitions from outside to inside are barrier free and accessible through smooth grading of surfaces.
- **3** Design building entrances to be clearly visible and prominent elements of the building elevation.
- 4 Incorporate weather protection at entrances (main and secondary) and design them as integral components of the elevation in terms of form, style, materials and colours. Ensure they are at least 1.5m deep and maintain a minimum overhead clearance of 2.1 m.
- **5** Where appropriate, recess entrances to provide for door swings and provide weather protection.
- 6 Incorporate window and glazing elements of different sizes, that reflect the internal uses while complementing and enhancing the overall elevation design/articulation.
- 7 Where appropriate, and specifically on elevations of schools and public use buildings facing open spaces or common areas, consider designing ground level windows to include sill heights and depths suitable for seating.





D. MATERIALS, SIGNAGE AND LIGHTING

- Use high-quality, durable exterior building materials that complement the character and style of the building design, as well as that of the surrounding area.
- 2 Create visual interest by incorporating a dominant and 1-2 subordinate materials for main elevations, in addition to glass and window surround materials.
- **3** For larger developments with more than one building, coordinate building materials throughout the buildings on site.
- 4 Ensure changes of material to be purposeful and coincide with substantial massing elements or organizing lines of the building. Changes of material should not occur at building corners; a material return is preferred.





- Favour vision glass, and avoid/minimize the use of spandrel, mirrored and reflective glass. Coloured glass is strongly discouraged and if used, should be subtle.
- 6 Ensure spandrel glass complements the colour and mullion design of the vision glass.
- 7 Provide an overall lighting strategy that coordinates site, building elevation and landscape lighting to ensure pedestrian safety and comfort.
- 8 Minimize light spill over into adjacent residential areas.
- **9** Consider lighting powered by alternate energy sources such as solar power.
- **10** Provide an overall signage strategy that coordinates the site and buildings within a multi-tenant site.





11 Design signage to :

- a. Be integrated with the building design.
- b. Complement the design of the building in terms of sizing/proportions, style, materials and colour, while allowing some flexibility for tenant branding.
- c. Avoid neon signs, and rooftop signs that promote visual clutter.
- d. Not obscure windows, cornices or other architectural elements of the building elevation.
- e. For multi-tenant developments, ensure consistent signage location along the elevation ("signage band").
- f. Minimize the number of monument signs on a site.
- g. Discourage stand-alone ground and pylon sings.
- h. Design stand-alone/monument/pylon signs as integral part of the landscape strategy and to be coordinated with the building design.
- i. Refer to City's Signage By-law for specific provisions.
- 12 Within heritage areas, special requirements may be required in terms of materials, signage and lighting.

C6.3 DESIGN GUIDELINES FOR SPECIFIC USES

THE DESIGN GUIDELINES CONTAINED IN THIS SECTION APPLY TO NON-RESIDENTIAL BUILDINGS OF SPECIFIC USE, IN ADDITION TO THOSE CONTAINED IN SECTION 6.2 OF THIS DOCUMENT.

FOR NON-RESIDENTIAL BUILDINGS TALLER THAN 4 STOREYS, ALSO REFER TO SECTIONS C4 MID-RISE DEVELOPMENTS OR C5 HIGH-RISE DEVELOPMENTS.

6.3.1 INSTITUTIONAL BUILDINGS AND COMMUNITY CENTRES

A. SITE ORGANIZATION

- 1 Ensure main buildings are:
 - a. Placed close to the primary street with building presence of at least 60% along the street frontage.
 - b. Located prominently to anchor corner/ gateway locations and or view termini.
- 2 Ensure main entrances are directly accessible from public streets.

- **3** Locate drop-off areas away from the street frontage, preferably at the sides of the main building; if these areas are located along the street due to site constraints, design them as integral components of an enhanced front landscaped area including continuous paving, rolled/flush curbs, street furniture, seating, planting, etc.
- 4 Provide an enhanced public realm interface along the street and any adjacent public space through high-quality landscaped areas and gathering spaces associated with main entrances and/or walkways.



- 5 Encourage locating buildings of community use adjacent to each other to maximize the potential for greater, more significant public gathering spaces and promote facility sharing, where appropriate.
- 6 Schools and day cares should incorporate drop off/pick up lanes or alternative transportation demand management solutions to provide short term parking locations to reduce traffic bottlenecks and congestion during peak hours.

B. BUILT FORM

- 1 Promote prominent and highly articulated massing that reinforce the community focal nature of these buildings, act as 'landmarks' in the community and provide opportunities for place-making.
- 2 Ensure main building elevations include prominent, highly visible entrances and substantial windows addressing the adjacent public realm.
- **3** Design buildings to:
 - a. Be of the highest architectural design and quality to create recognizable and enduring structures.
 - b. Incorporate unique and distinct architectural features, especially at corners and view terminus.











6.3.2 BUSINESS PARK EMPLOYMENT

A. SITE ORGANIZATION

- 1 Design and organize components of the site plan to provide:
 - A connected grid of roads that respond to the existing site topography and natural features, and is well connected to the surrounding existing and planned road system.
 - b. A road network that facilitates the safe and efficient circulation of vehicles.
 - c. A connected pedestrian/cyclist network that encourages active transportation and functions as an extension to the surrounding existing and planned active transportation system.
 - d. Sidewalks on both sides of all streets.
 - e. Clearly demarcate crosswalks at all street and driveway crossings.

- Integrate Low Impact Development (LID) techniques into the site plan design to address storm water quality, quantity control and infiltration objectives. These include:
 - a. Achieving water balance targets by the application of LID technologies that promote infiltration.
 - b. Integrating LID technologies into the landscape design (e.g. aesthetic features).
 - c. Incorporating permeable pavement, bioretention cells, biofilters and infiltration galleries as alternatives to site specific SWM solutions.
 - d. Deploying LID technologies by using a 'Treatment Train' approach to maximize effectiveness.
 - e. Incorporating elements that will facilitate maintenance and monitoring into LID solutions design.
 - f. At the site plan stage, ensuring that the location, configuration and design of LID elements compliment the architectural design of the buildings within the site and address practical functional requirements including vehicular and pedestrian circulation.







- 3 Encourage feature wall(s) related to signage and/or other branding elements, at gateway locations. Ensure they are placed, configured and designed to complement the business park overall character, as well as any the adjacent building.
- 4 Orient the main elevation of the building to face the street and include main entrances and a substantial amount of windows on it.
- 5 Ensure buildings cover a minimum of 50% of the lot frontage (i.e. no parking).
- 6 Incorporate any sloping topography within parking and landscaped areas.
- 7 Avoid locating mechanical rooms adjacent to the street and/or sidewalk.
- 8 Provide an on site walkway network that is connected to the public sidewalk and adjacent open spaces.
- **9** Provide accessible and secure bike parking and racks, and locate them closer to building entrances. Provide covered bicycle parking, where feasible.

- **10** Consider underground or above-grade structure parking wherever possible/feasible
- **11** Design above-grade parking structures to be integrated with and/or located behind principal buildings.
- **12** Line parking structures along street/public frontages with active uses at grade.
- **13** Design above-grade parking visible elevations to be articulated through high quality design and materials.
- 14 Provide an enhanced public realm interface along the street and any adjacent public space through high-quality landscaped areas and gathering spaces associated with main entrances and/or walkways.
- **15** For sites abutting highways:
 - a. Incorporate fully landscaped buffers between the site and the highway, including large mature canopy trees, coniferous trees and mass plantings of native shrubs such as sumacs, dogwoods and viburnums.
 - b. Provide landscaped berms where parking, loading and storage areas are located along the highway corridor.



- 16 For sites facing major roads, provide:
 - a. A generous landscaped strip (minimum 3m wide is recommended) along the front yard to accommodate a double row of trees planted at between 6 - 8 metres.
 - b. Incorporate tall under storey plantings within the landscape strip. Examples of tall under storey plants include dogwoods, viburnums and serviceberry.
- 17 For internal roads:
 - a. Coordinate the design of the boulevard (public zone) and the landscape strip (private zone) to ensure a consistent treatment and design approach.
 - b. Provide a continuous row of large canopy deciduous trees within the boulevard spaced between 6.0 to 8.0 metres on centre.
 - c. Provide pedestrian scaled street lights.
- **18** Design stormwater management facilities:
 - a. As naturalized open spaces.
 - b. To include amenities such as pedestrian amenities and trails.
 - c. To enhance viewing opportunities to adjacent natural heritage systems.
- **19** Provide an overall signage strategy that:
 - a. Generally guide the design of signage for buildings throughout the business park to ensure a cohesive look.
 - b. Coordinates the site and buildings signage within a multi-tenant site.
- **20** Ensure a coordinated program of wayfinding/ signage for the Employment Lands/Business Park.

B. BUILT FORM

- Design multi-storey buildings to clearly define the base, middle and top components through massing articulation, architectural details, varied fenestration and materials.
- 2 Design buildings to generally reflect the height and massing of adjacent existing and planned built form, and to relate to the scale of the adjacent public street.
- **3** Prioritize the location of the tallest and greatest massed buildings at Gateways, with primary building elevations oriented to the intersection.
- 4 Provide greater massing at the ends of buildings and where office components are located.
- Encourage a diversity of building architectural designs/expressions that incorporate complementary and unifying elements such as architectural details and materials.
- 6 Encourage creative and innovating building design that reinforce the character of prestige industrial employment areas through unique massing and high quality of architectural design and materials.
- 7 For prominent locations, those with two or more publicly visible frontages, orient the main building elevations to the most visible public frontage and incorporate the highest degree of articulation on all elevations visible from public areas (including highways and major roads).
- 8 Locate office spaces (internally) along the street and/or at prominent corners.
- **9** Clearly differentiate office from warehouse portions of buildings through design, massing, materials and detailing.
- **10** Incorporate a high standard of design detailing and materials on front elevations.
- **11** Provide highly articulated elevations, vertically and horizontally, along streets and public spaces. Ensure they include enhanced fenestration, main entrances, articulated walls and roof lines, highest degree of architectural detail and coordinated materials.

- 12 For elevations related to offices, encourage substantial amount of glazing and ensure a minimum of 30%. Where this is not feasible, other enhanced/upgraded design measures shall be required, including for example, upgraded building materials and articulated facades.
- **13** Locate building entrances along the main building façade and oriented towards the public street frontage.
- **14** Ensure all building entrances and transitions from outside to inside are barrier free and accessible through smooth grading of surfaces.
- **15** Incorporate weather protection at entrances (main and secondary) and design them as integral components of the elevation in terms of form, style, materials and colours. Ensure they are at least 1.5m deep and maintain a minimum overhead clearance of 2.1 m.
- **16** Where appropriate, recess entrances to provide for door swings and provide weather protection.
- **17** Provide landscaping (hard and soft elements) at building entrances.









6.3.3 INDUSTRIAL/EMPLOYMENT

A. SITE ORGANIZATION

- Ensure buildings are placed close to the primary street with building presence of at least 50% along the street frontage.
- 2 Locate main building entrances along the primary building elevation(s). If possible, encourage its location facing the street; otherwise, ensure it is visible from the public realm.
- **3** For prominent locations, those with two or more publicly visible frontages, orient the primary building elevations to the most visible public frontage.
- 4 Use building orientation to screen loading areas from public view wherever possible, and incorporate fences, walls and landscaping to fully screen these areas.

B BUILT FORM

- Incorporate the highest degree of articulation on all elevations visible from the public realm.
- 2 Locate office spaces (internally) along the street and/or at prominent corners.
- **3** Provide greater massing at the ends of buildings and where office components are located.
- 4 Incorporate windows/glazing on any elevation that overlooks public areas.
- 5 For elevations related to offices, encourage substantial amount of glazing and ensure a minimum of 30%. Where this is not feasible, other enhanced/upgraded design measures shall be required, including for example, upgraded building materials and articulated facades.
- **6** Clearly differentiate office from warehouse portions of buildings through design, massing, materials and detailing.





6.3.4 LARGE FORMAT COMMERCIAL (LARGE FLOOR PLATES)

A. SITE ORGANIZATION

- Design large format commercial buildings to include a combination of the following strategies:
 - a. Incorporate smaller shops wrapped around their edges.
 - b. Have their primary footprint located above the ground floor.
 - c. Include other uses above them, to better integrate these buildings and provide a greater density of uses and destinations.
- 2 Ensure that a minimum of 75% of a building frontage facing a public street is highly articulated and animated, with windows and entrances.
- **3** Avoid locating long, non-active building frontages along any public street. Where this is unavoidable, they should be limited to a maximum of 25% of the building frontage.

B. BUILT FORM

- 1 Incorporate frequent entrances and transparent (clear glazing) shop front windows.
- 2 Where new large floor plate commercial buildings are proposed in proximity to existing development, design elevations to respond to the prevailing street character by incorporating wall articulation and fenestration (windows and entrances) consistent with the established patterns along the street.











6.3.5 DRIVE-THROUGH FACILITIES

A. SITE ORGANIZATION

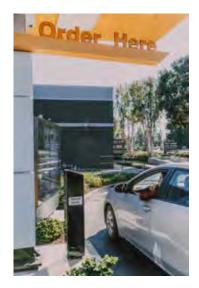
- 1 Avoid locating drive-through facility at corner lots.
- 2 Within larger developments:
 - a. Locate drive-through facilities at midblock locations.
 - b. That contain two or more drive-through facilities, ensure clear separation of their respective driveways and queue lanes.
- **3** Ensure separate entrances/exits for drivethrough facilities and the site are provided.
- 4 Locate queueing and drive-through lanes at the side or rear, away from public streets and public/pedestrian areas.
- **5** Locate queue lanes and intercom stations away from residential areas and outdoor amenity areas.
- 6 Avoid locating queueing and drive-through lanes between the street and the building; for exceptions where this condition occurs, provide a minimum 4.5m landscape strip separating the street and the drive-through / queue lanes. Design landscape strip to include plantings, fences and walls to fully screen these areas from public view.



- Ensure parking is available and visible to drivers entering queue lanes to provide a clear alternative to entering the queue.
- 8 Provide a minimum 2.0m separation between queue lanes and parking areas, and use landscape elements such as raised medians, planting, fences and low walls to clearly demarcate queue lanes from parking areas even when painted lines may not be visible.
- **9** For establishments where the service may also be provided to customers within the building, provide clearly marked and prioritized pedestrian paths to access the building from the parking areas.
- **10** Avoid pedestrian routes that cross driveways and queue lanes; if they must cross these areas, locate and design them to minimize potential conflict, prioritize pedestrian and ensure safety through the use of distinctive pavement markings, special pavement and enhanced signage.
- **11** Separate payment and pick-up windows where possible.
- 12 Design site plan to block or limit vehicle headlights spill over onto adjacent residential properties, public streets and public spaces. This may include lane alignment and building placement.

B. BUILT FORM

1 Provide weather protection for payment / pick-up windows.



6.3.6 AUTOMOTIVE SERVICE CENTRES

A. SITE ORGANIZATION

- Within larger developments, locate automotive services centres away from corner locations.
- 2 Site principal buildings of gas bars:
 - a. Close to the front lot line.
 - b. At the corner closest to the intersection and with the gas pumps / canopy structure located behind, away from the street frontage.
 - c. With active and animated elevations, including significant areas of glazing, facing and/or clearly visible from the public street.
 - d. With storage areas facing the rear or side lot line.
 - e. With consideration for present or future installation of electric vehicle charging station infrastructure.
- **3** Locate gas bars/pumps/canopy:
 - a. Parallel to the side lot lines, with short sides facing the street.
 - b. Diagonally behind the building (corner lot).
- 4 Locate and design car wash facilities to minimize noise and spill over on adjacent residential areas.
- 5 Ensure car wash exits:
 - a. Face away from abutting residential properties.
 - b. Be fully screened from neighbouring residential view.
- 6 Locate outdoor storage areas (including shipping containers) behind buildings and screened from view from the street, residential uses or parks by fences or landscaping.
- 7 Shipping containers should not be stacked more than 2 units high and should be located a minimum of 4.5 metres from the property line.

B. BUILT FORM

- 1 Ensure buildings address the public realm by incorporating substantial windows and entrances with direct pedestrian connection to the adjacent sidewalk.
- 2 Ensure canopy structures and pumps have a consistent and complementary design with the main buildings(s) in terms of height/ massing, architectural style and details, lighting, signage, materials, and colours.





MIXED-USE DEVELOPMENTS

C7.1 INTRODUCTION	03
C7.2 SITE ORGANIZATION	05
C7.3 BUILT FORM	11



Note: Section C7 will be further informed by the work and conclusions of the MTSA analysis/study

C7.1 INTRODUCTION

The Mixed-Use Development guidelines address developments that integrate combinations of residential and non-residential uses within a site. This include sites that have:

- Live-work units. Refer to sections C3.2 General Guidelines, and C3.3.3 Townhouses.
- Low, Mid- and High-rise mixed-use buildings with:
 - Commercial /retail uses usually within the ground floor and/or base, and residential units within upper floors.
 - A combination of commercial/retail, office and residential uses, usually organized in this order from ground to top, each occupying one or more levels of the building.
- Multi-storey commercial/office buildings

The intent of the guidelines is to ensure that mixed-use developments are vibrant and animated places that are seamlessly knitted into their surrounding fabric and where the quality of the public realm supports pedestrian-oriented environments and connected communities.

The section includes Principles and Objectives, as well as guidelines for the Site Organization - all elements related to the creation of the development plan - and Built Form - which cover all elements related to the building massing and the design and articulation of elevations.

Depending on the type of development proposed (i.e., low, mid- or high-rise), these guidelines should be read in conjunction with those specific for each built form type and included in other sections of Part C of this document.



7.1.1 PRINCIPLES/OBJECTIVES

PROMOTE PLACE MAKING

- Provide varied, unique and high quality building and landscape designs.
- Provide enhanced private to public space interfaces.
- Build upon the distinguishing characteristics of the neighbourhood ('compatible 'fit') including natural and built/landscape features.
- Reinforce community structure and destinations.

CREATE HUMAN SCALED DEVELOPMENT AND PUBLIC SPACES

- Create pedestrian-oriented, appealing and functional environments that allow for comfortable and immediate interactions.
- Animate the public realm.
- Reduce the reliance on and dominance of cars.
- Ensure pedestrian connectivity and safety.

DESIGN COMPATIBLE DEVELOPMENT

- Provide appropriate transitions in built form and intensity of uses.
- Incorporate desirable characteristics of the surrounding built form and landscape treatments.

ENSURE COHESIVE, WELL-DESIGNED DEVELOPMENTS

- Provide clear structure, organization and articulation of the different parts within mixed use developments/buildings.
- Avoid conflicts between ground related uses/ areas.
- Design building elevations to reflect and complement different uses.

ENCOURAGE MULTI-FUNCTIONAL SPACES

• Encourage multi-functional spaces that can accommodate different uses in symbiotic ways to promote full day activity and animation.

SUPPORT CITY-WIDE SUSTAINABLE STRATEGIES

- Provide compact forms of development that include a diversity of uses.
- Encourage active transportation choices.
- Encourage redevelopment of underutilized sites.



C7.2 SITE ORGANIZATION

THE DESIGN GUIDELINES CONTAINED IN THIS SECTION APPLY TO MIXED-USE DEVELOPMENTS, IN ADDITION TO THOSE CONTAINED IN SECTIONS C2 TO C6 OF THIS DOCUMENT.

7.2.1 URBAN FABRIC (STREETS, BLOCKS, PUBLIC SPACE)

- Create a fine-grained, pedestrian-scaled, connected street and block pattern and knit new streets to the existing street grid (refer to B2 - Built Environment)
- 2 Provide urban parks in prominent, accessible places within mixed-use areas; these public spaces should be designed to enhance the liveability of the community (refer to Part B4.5 - Urban Parks).
- **3** Provide a combination and network of urban parks and private open spaces that are also connected to existing parks and open spaces; these should be connected by way of the pedestrian system.
- **4** Provide transition to surrounding neighbourhoods through the placement, orientation and massing of buildings.

7.2.2 BUILDING ORIENTATION, PLACEMENT AND SETBACKS

- Locate the tallest building / greatest massing towards the main intersection, away from lowrise neighbourhoods.
- 2 Orient main building elevations and main entrances to the primary street frontages.
- **3** Design and orient buildings to:
 - a. Protect and create view corridors and vistas;
 - b. Maximize views and privacy for building residents;
 - c. Protect and enhance sky views; and,
 - d. Frame pedestrian and vehicular connections to community amenities/uses and transit nodes.









- 4 Locate/place mixed-use buildings to define and enclose the street/public realm edge and to create a continuous, pedestrian-scaled street wall.
- **5** Encourage a direct relation between internal uses and the adjacent public realm by:
 - a. Locating active uses on the ground floor.
 - b. Minimizing setbacks for buildings with commercial uses at grade, and providing continuous storefront windows and frequent, highly-visible entries.
 - c. Locating shops and restaurants next to sidewalks and pedestrian routes.
- 6 Encourage greater front yard setbacks (greater than the minimum Om identified in the ZBL) that allow for the creation of comfortable and protected pedestrian environments including enhanced landscaping that contributes to the streetscape, unobstructed/accessible pedestrian walkway/ sidewalks and spill out areas for adjacent businesses (e.g. cafes and patios).

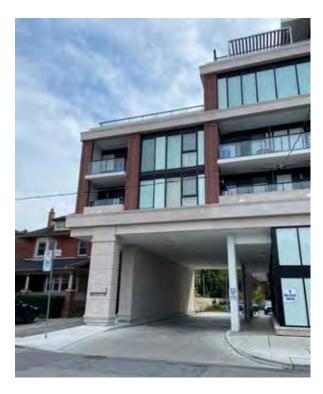
- 7 Create dynamic, continuous street walls and pedestrian environments by:
 - a. Providing generally consistent building setbacks.
 - b. Avoiding excessive side yard setbacks between buildings.
 - c. Encouraging no interior side yard setbacks where possible (regarding adjacent uses).
- 8 Where an established street wall exists, maintain the existing setback(s) of the adjacent buildings. If they are different, the setback distance should be the average setback distance of the flanking buildings.
- **9** Promote animated streetscapes and pedestrian activity by:
 - a. Incorporating individual business entrances at grade with unobstructed views from the public realm.
 - b. Locating the most active uses, such as storefronts, restaurants and lobbies, as well as other small-scale retail/commercial uses, at-grade along the street edge.
 - c. Locating medium to large-scale retail/ commercial uses, as well as residential common amenities, away from the street frontage, on upper floors of buildings, or towards the rear/side of the development.

- 10 Ensure the residential component of mixeduse developments adjacent to residential properties is located, designed and integrated as functional part of the residential area/ streetscape. For example, residential units shall have their primary entrance from the residential street, and provide views to the adjacent residential neighbourhood.
- 11 Strategically locate residential areas away from the non-residential components of the development to mitigate noise impacts on them, as well as any conflicts between residents and clients/workers related to nonresidential areas.
- 12 Where appropriate to the existing/planned context and the proposed uses at grade, consider greater setbacks to allow for:
 - a. Building entrances and substantial elevation articulation.
 - b. Patios, outdoor cafes and spill out areas.
 - c. Plazas, gathering spaces or other high activity public areas.
 - d. Maintain greater setbacks relate to above uses to a maximum of 25% of the overall building frontage.
 - e. Consider greater setbacks along the entire site frontage to accommodate wider sidewalks/walkways where existing ones are too narrow.
- **13** Consider moderate setbacks along retail frontages for outdoor seating or product displays.
- 14 Provide landscaped strips of minimum 3m of width where mixed-use developments abut residential or institutional uses.









7.2.3 ACCESS, PARKING AND SERVICING

- 1 Ensure prominent and easily accessible entry points to the site from the adjacent road system.
- 2 Provide access to parking and service areas:
 - a. From the rear or side of the building/ development, and preferably from a private lane. Or,
 - b. Through the creation of a shared laneway system, coordinated across multiple sites or through redevelopment.
- **3** Minimize interruptions to the sidewalk and potential conflict between vehicles, cyclists and pedestrians.
 - a. Consolidate access points wherever possible, or pair them with those on adjacent sites.
 - b. Clearly delineate driveways and sidewalks/ walkways through distinct materials.
 - c. Use special paving and/or pavement markings, and other traffic calming measures.
- **4** Provide parking underground or in abovegrade parking structures.

- **5** Design above-ground parking structures to:
 - a. Be integrated into the building mass.
 - b. Be located to the rear of the development, away from public view.
 - c. Be lined (wrapped) with active uses along public frontages, especially at grade (e.g., liner townhouses/live-work units and/or retail units)
 - d. Where parking is exposed to public view, incorporate an attractive elevation, articulated through high quality design and materials, to animate the streetscape and enhance pedestrian safety.
- 6 Consider areas of surface parking only for stand-alone live-work units or as short-term parking option for larger developments. They should be:
 - a. Be located to the rear, preferably, or side, way from public view. No surface parking should be located between the street and the building.
 - b. Be screened from public view through architectural and landscaping elements.
 - c. Incorporate accessible parking, as well as electrical vehicle parking and charging stations wherever possible.





- 7 Provide drop-off areas (e.g., ride-hailing, ride-sharing vehicle and private bus) on site for mixed-use developments which contain hotels, or commercial and office uses.
- 8 Avoid vehicular conflicts on site by clearly differentiating between parking and servicing areas and routes, and incorporating complementary signage.
- 9 Incorporate servicing areas (including loading and garbage/recycling areas) into the building mass and design them as an integral part of the building's architecture. Where not possible, locate these areas at the rear or side of buildings, away and fully screened from public view, through a combination of:
 - a. Building orientation
 - b. Walls, and other architectural structures/ elements.
 - c. Enhanced planting.
- 10 Ensure doors related to parking or servicing areas are located to not face the street/public realm. If not possible due to site constraints, ensure doors are located:
 - a. On recessed walls at least 1.5m from the building's main wall.
 - b. Staggered, if possible, where more than 1 door is required.
- 11 Provide direct, barrier-free pedestrian access to at-grade uses from sidewalks and parking areas. Ensure walkways are at least 1.5m wide, as per AODA requirements, and encourage wider walkways (+3m) where along activity and retail areas, as well as publicly used spaces.
- **12** Prioritize pedestrian and bicycle movements through design and signage. Consider incorporating dedicated bicycle circulation facilities (e.g. cycle tracks), especially on larger sites.
- **13** Provide accessible and secure bike parking and racks, and locate them closer to entrances. Provide covered bicycle parking, where feasible.

7.2.4

LANDSCAPING, COMMON AREAS AND GATHERING SPACES

- Ensure a comprehensive landscape approach that supports the immediate adjacent uses and includes:
 - a. An overall planting strategy.
 - b. Hardscape areas related to entrances and non-residential uses.
 - c. Shaded and sitings areas, where appropriate.
 - d. Consistent, high quality landscape elements such as planters, grids, pavings, fences and walls.
 - e. Coordinated, high quality street furnishings, such as lighting, signage, benches, bollards, bike racks and garbage receptacles.
- 2 Coordinate the landscaping between private and public areas. Ensure it:
 - a. Enhances the character of the development and the community.
 - b. Complements the building uses at grade.
 - c. Reinforces the structure, nature and use of the site with a focus on creating safe, comfortable and animated pedestrian environments (streets, edges, corners, gateways, transitions, public spaces, building entrances, etc.)
 - d. Incorporates high-quality landscaped areas and element associated with main entrances and/or walkways.











/EMBER 2023

- e. Coordinates hard and soft landscape elements, special paving materials, site furniture and pedestrian lighting.
- **3** Maximize opportunities for open/green/ gathering spaces on site.
 - a. Encourage the provision of at-grade open spaces that enhance connectivity and provide opportunities for social engagement. These types of spaces may be provided in various forms including mid-block connections, urban parks, plazas etc., and may be considered park, POPS or private space.
 - b. Provide areas of open space that can function as pedestrian gathering areas, in and around buildings and walkways.
 - c. Take advantage of greater setbacks to provide for patios and other common spaces, where appropriate (regarding context and uses).
- 4 Locate common amenities and patios away from areas of high vehicular activity and from servicing, garbage storage and loading areas.
- 5 Where possible and appropriate, incorporate mid-block pedestrian connections between buildings and/or through covered building arcades/lobbies.
- 6 Design open spaces, pathways and mid-block connections with safety in mind, including active frontages, adequate lighting and visible security features.
- 7 Enhance the urban forest with the use of a diverse range of canopy trees; ensure they are hardy, tolerant and high-branching.
 - a. Space tree plantings in front of atgrade retail uses to allow for increased pedestrian activity and visibility of signage.
 - b. Consider raised planters, where appropriate, and design them to provide for seating.
- 8 Provide fully planted landscape strips to screen parking, service, loading areas from adjacent uses and public view.
- **9** Use sound barriers, such as walls, green spaces or landscaping, to mitigate noise impacts of commercial areas.

C7.3 BUILT FORM

THE DESIGN GUIDELINES CONTAINED IN THIS SECTION APPLY TO MIXED-USE DEVELOPMENTS, IN ADDITION TO THOSE CONTAINED IN SECTIONS C2 TO C6 OF THIS DOCUMENT.

7.3.1 HEIGHT AND MASSING

- Ensure the height and massing of new buildings relate to the context of the existing/ planned buildings adjacent to the site.
- 2 Provide prominent buildings at gateways, corners, view-terminus, and/or adjacent to open/public spaces and design them to include greater massing and/or taller building components, as well as enhanced elevation articulation.
- **3** Design corner/gateway buildings to address both street frontages with consistent elevation design (wall articulation and architectural detailing), locate the greatest height and massing at the corner, and ensure entrances are visible and accessible from the intersection.

- 4 Encourage multi-storey buildings on mixeduse sites, wherever possible.
- 5 Provide at least 2-storeys or double-height buildings of at least 7.5m in height (for lower developments).
- 6 Provide building step backs for buildings that are greater than 6 storeys. Consider step backs between the 3rd and 5th levels when appropriate, in relation to the adjacent existing context with streetwalls lower than 4 storeys.
- 7 Provide appropriate height and massing transitions to adjacent neighbourhoods, street and/or other uses.
- B Design the massing of buildings fronting or backing onto existing low-rise residential buildings to be residential in character, including projections/recessions of a residential scale, rhythm and proportion. Lower buildings (1 to 6 storeys) should also consider complementary roof lines or slopes.





- **9** Provide a minimum floor to ceiling height of 4.5m for the ground floor of mixed use buildings. Upper floors are encouraged to be at least 4m in height to allow for flexibility and opportunities for re-purposing.
- **10** For developments adjacent to existing built form, generally maintain the same / similar ground floor height as the adjacent existing forms.







7.3.2 ARCHITECTURAL DESIGN AND BUILDING ARTICULATION

- 1 Encourage a range of design expressions to promote architectural variety.
- 2 Design elevations to be compatible and complement surrounding neighbourhood character.
- **3** For buildings fronting onto public streets/ spaces, design building floorplans to accommodate active uses (non-residential uses, community uses) at-grade to animate the public realm.
- **4** Design the ground level of new developments along commercial streets to easily accommodate potential future retail uses.
- 5 Design all buildings, regardless of their height, to incorporate three distinct parts - base, middle and top, clearly differentiated through massing articulation, architectural details, varied fenestration and materials.
- 6 Design developments adjacent to existing built form to generally reflect the elevation elements, proportions and horizontal/vertical grid (placement/organization) of adjacent buildings.

- 7 Design mixed-use building elevations to reflect the different uses within the building (retail, offices, residential, etc) and create a clear distinction between them through distinct but complementary architectural treatments (windows/entrances proportions/ sizes and treatment, materials, colours)..
- 8 For live-work units, distinguish commercial uses through subtle variations in the design of roof lines, vertical facade, articulation, entrance, level of glazing, etc.
- **9** Differentiate individual units within the same building/elevation through variations on wall planes (projections/recesses) and the use of colour and materials, while maintaining a cohesive design.
- **10** Ensure the first 3 storeys of the building are designed with the greatest attention to detail and articulation, pedestrian-scaled architectural elements and material quality to provide for a streetwall that truly enhances the adjacent streetscape.





- **11** Establish a rhythm of minor breaks or wall articulation along the elevation, clearly distinguishing one unit (retail at grade) or building component from the next.
 - a. Take cues from adjacent buildings when selecting the rhythm, scale and proportion of these elements.
 - b. Design floor-plans to enhance the exterior wall articulation.
 - c. Mitigate the visual impact of larger and longer elevations by breaking them through the use of different materials, changes in plane, projecting/recessed elements, generous windows openings and any other vertical elements.
 - d. Enhance and complement the wall articulation at grade through the use of entry features, weather protection elements, lighting and signage.
- 12 Where possible, reduce the visual impact of large anchor stores by providing an engaging street frontage with smaller retail units integrated into the anchor stores elevation. Ensure each retail unit is provided with a separate entrance, different from that of the anchor store.











- 13 Locate and design building entrances to be highly visible from the surrounding public space, and prominent/focal elements of the elevation. Emphasize them through special architectural and landscape treatments.
- 14 Use and design entrances to ground related units to emphasize/highlight individual units and further animate and articulate the streetwall.
- **15** Encourage ample fenestration on all elevations exposed to public view, including upper levels, and use it to differentiate various building uses.
 - a. Incorporate fenestration of different sizes, that reflect the internal uses while complementing and enhancing the overall elevation design/articulation
 - b. Highlight residential uses through balconies on upper levels and windows of different sizes in relation to the unit's interior program/use.
 - c. Provide substantial amounts of clear glazing, minimum 75%, along elevations related to non-residential uses (such as commercial, retail, office and institutional spaces), especially those at grade, to maximize visual transparency and streetscape animation..
 - d. Ensure a significant amount of clear glazing at main entrances and lobbies, as well as along common/amenity areas, to provide visual interest and create a sense of connection to interior uses.
 - e. Aim for minimum 75% of at-grade frontages facing public streets/spaces to be clear glazing.
 - f. Emphasize the office component of a building through a greater amount of glazing, larger windows, and greater degree of vertical/horizontal element repetition.
- **16** Carefully consider the placement of windows and balconies in residential units to minimize exposure to noise related to non-residential uses.
- 17 Ensure the elevations of parking structures and major retail units are articulated to be consistent to those of the building's main elevation and incorporate architectural details, lighting, art features, and/or other design elements.

- **18** Incorporate covered walkways, arcades, and colonnades to enhance the building design and articulation while providing for weather protection.
- 19 Design elevations facing gateways, corners, view-terminus, and those adjacent to open/public spaces to incorporate greater architectural detailing, enhanced wall articulation and fenestration, and high quality materials.
- **20** Design corner buildings to include highly articulated elevations facing both public frontages (i.e., streets, parks, open spaces, plazas, etc.), as well as the main entrance to either the building or a commercial/retail unit at grade.
- **21** Blank, uninterrupted walls along public frontages, or internal driveways exposed to public view, are not permitted.
 - a. Where blank walls are visible from public areas, incorporate a combination of changes in plane, materials, lighting, signage, art, metallic screens and/or living walls as ways to screen and mitigate them.
 - b. Fake frontages are not permitted.
- 22 Ensure ground floors in mixed use buildings are designed to accommodate commercial/ retail uses and/or to be easily converted to accommodate commercial/retail uses in the future.
- **23** Recess the wall of loading/garage doors, and avoid locating them facing the public street/ space.
- 24 Screen roof top mechanical equipment from public view through the use of architectural screens, parapet walls and/or integration into the design of the building top component.
- **25** Ensure individual buildings within a complex are coordinated in design including architectural style, elevation articulation and materials.











7.3.3 ENTRY FEATURES, DOORS AND WINDOWS

- Ensure main pedestrian entrances, for both residents and businesses, are located facing the public realm, and are:
 - a. Accessible and highly visible from the public realm.
 - b. Safely and clearly connected to the adjacent pedestrian network, including public and private sidewalks and walkways (such as those within parking areas).
- 2 Where mid/high rise mixed-use developments are proposed, provide separate and easily identifiable entrances for different users.
- **3** Where additional business entrances are proposed at the rear or side of the building, in relation to rear/side parking areas, ensure they are designed as integral and attractive components of the elevation.
- 4 Ensure all building entrances and transitions from outside to inside are barrier free and accessible through smooth grading of surfaces.

- 5 Design entrances at grade to be clearly differentiated (i.e., residential vs. commercial) and reflect the scale and use related to them.
 - a. Main entrances should be prominent, clearly visible and focal elements of the elevation.
 - b. Lobby areas with substantial glazing and highly visible address signage should complement main residential entrances.
 - c. Entrances to businesses at-grade should be proportionate to the overall unit size and include complementary weather protection, signage and pedestrian lighting.
 - d. Secondary entrances should be strategically located to provide for efficient alternative entry points, connected to the pedestrian system, interior courtyards and/or parking lots, and include weather protection elements, where possible.
 - e. Highlight and enhance entrances through architectural elements such as canopies, awnings, as well as steps or stoops, and enhanced, complementary landscaping (hard and soft elements).

- 6 Incorporate weather protection at entrances (main and secondary) and design them as integral components of the elevation in terms of form, style, materials and colours. Ensure they are at least 1.5m deep and maintain a minimum overhead clearance of 2.1 m.
- 7 Where appropriate, recess entrances to provide for door swings and provide weather protection.
- 8 Incorporate ramps into the design of entrances.
- **9** Ensure window style, sizing and materials complement the related use as well as the design of the building.















7.3.4 MATERIALS, SIGNAGE AND LIGHTING

- Use high-quality, durable exterior building materials that complement the character and style of the building design, as well as that of the surrounding area.
- 2 Select materials to reflect and complement the building uses.
- **3** Use the highest quality materials at the building base, adjacent to the public realm and pedestrian areas, to create a visually appealing and functional urban environment, while contributing to its durability, safety, and overall value.
- 4 Create visual interest by incorporating a dominant and 1-2 subordinate materials for main elevations, in addition to glass and window surround materials.
- 5 For larger developments with more than one building, coordinate building materials throughout the buildings on site.
- 6 Ensure changes of material to be purposeful and coincide with substantial massing elements or organizing lines of the building. Changes of material should not occur at building corners; a material return is preferred.
- 7 Ensure spandrel glass complements the colour and mullion design of the vision glass.
- 8 Encourage the use of acoustic materials, and incorporate noise insulation and soundproofing measures to mitigate noise impacts from non-residential uses
- 9 Provide an overall, coordinated signage strategy that includes retail/commercial/office and building/address signage, and wayfinding signage if necessary. Ensure it generally guide the design of all signage on the development to ensure a cohesive look, while allowing some flexibility for tenant branding.

- **10** Design signage as an integral component of the elevation design. Signage:
 - a. Should complement the design of the building in terms of sizing/proportions, style, materials and colour.
 - b. Should use high quality materials.
 - c. For multi-tenants along the ground level, signage location should be consistent along the elevation ("signage band").
 - d. Should not overwhelm the building and/or storefront, nor obscure windows, cornices or other architectural elements of the building elevation.
 - e. Avoid back lit illuminated rectangular sign boxes, neon signs, large freestanding signs, rooftop signs and large-scale advertising, such as billboards.
 - f. Avoid highly animated and illuminated digital signage where residential uses can be impacted.
- **11** Provide an overall lighting strategy that coordinates site, building elevation and landscape lighting to ensure pedestrian safety and comfort.
- **12** Minimize light spill over into adjacent residential areas.
- **13** Consider lighting powered by alternate energy sources such as solar power.
- **14** Within heritage areas, special requirements may be required in terms of materials, signage and lighting.







