Tremaine Dundas Community Urban Design Guidelines, June 2018

These guidelines have been prepared in accordance with policies in Part II, Section 6 of the Burlington Official Plan and satisfy the requirements for design guidelines set out in Part II, Subsection 6.6 c) and urban design plans set out in Part VI, Subsection 5.3 b) of the Burlington Official Plan and have consideration of the sustainable development policies within Part II, Section 2. It is noted that the City is currently undertaking Mid-rise Urban Design Guidelines that will provide additional guidance with respect to midrise built form.

The objective of the urban design guidelines is to create an attractive, sustainable and livable community by developing well defined neighbourhoods, creating comfortable, pedestrian-scaled streets and public spaces, designing interfaces between compatible as well as differing land uses that are attractive and minimize any negative impact on residential areas and the streetscape, integrate and enhance natural features as components of the open space system based on an ecosystem approach to planning and design.

The following sections of the document describe the Urban Design Guidelines recommended for the Tremaine Dundas Community. The guidelines are organized into public realm guidelines, private realm and sustainable design guidelines.

Public realm guidelines include:

The Public realm guidelines include creating a strong sense of place through landscaping, enhanced streetscaping, public art, lighting and signage at gateway locations. The Public realm includes typical cross sections of each street type in the Community and describes the character of open spaces in the Community including parks, open spaces and pedestrian linkages.

Private realm guidelines include:

The private realm guidelines speak to the built form and landscaping of sites including preferred types of building materials, building and site orientation. The guidelines also speak to lighting, parking location and landscaping, landscape buffers and loading and outdoor storage. Description of each land use type: Residential Medium Density, Business Corridor, Mixed Use Corridor - General, and Mixed Use Corridor - Employment; and Guidelines for the features of each land use area including: guidelines for height, mass, scale and architectural elements as well as for parking, garages, servicing and landscaping, and sustainable building and community design.

The concept plan for the Community was based on a number of principles that

informed the basic street and block structure, and approach to built form and community design.

Sustainable Design guidelines include:

The sustainable design guidelines incorporate sustainable design features within the public and private realm. The guidelines apply carbon reducing and water conservation technologies such as renewable energy, green roofs, and community gardens.

1. Public Realm Guidelines

1.1 Public Realm - Streetscapes

The Tremaine Dundas Community includes three types of streets:

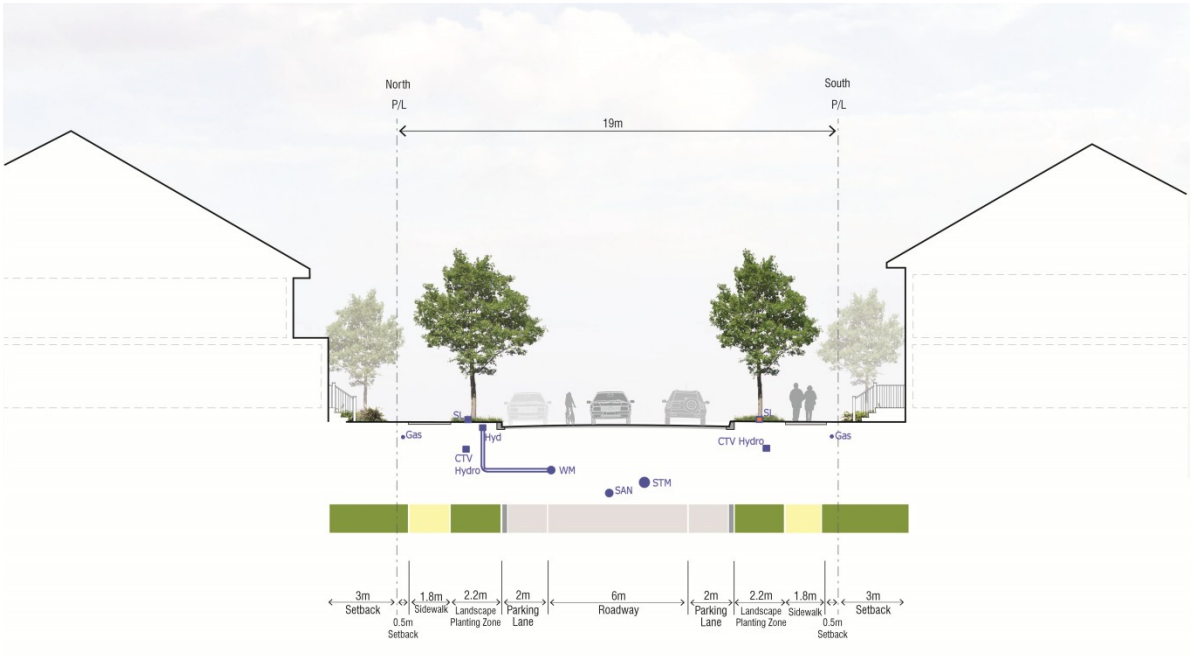
1. Collector Streets
2. Local Streets
3. A Special Treatment Zone to facilitate safe wildlife movement

The Tremaine Dundas Community is bounded to the east by Tremaine Road, a Minor Arterial street and Dundas Street to the south, a Major Arterial.
The following section provides typical street sections for each of the street types, illustrating how the built form, public realm and transportation corridors relate to each other and create safe, pedestrian-friendly streetscapes. Street sections provided here are conceptual in nature and final detailed design will be subject to review and approval by the City of Burlington. The street elements shown in the street sections are a representation of how the street right-of-way is organized. Actual street rights of way within the Community may differ during final detailed design as approved by the City, but should maintain the intent of the guidelines. Gateways will be provided at key locations through a combination of site planning, building form and landscaping to provide landmarks within the community, reinforce the sense of arrival and place and promote the character and identity of the Employment precinct and the Residential Neighbourhood.

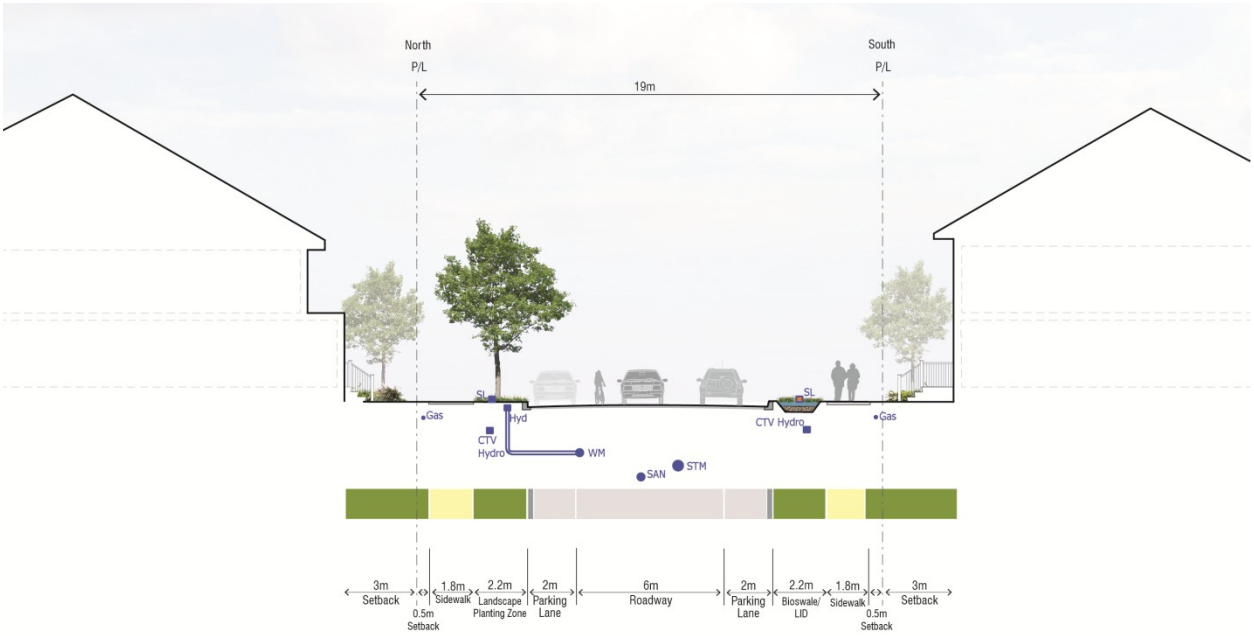
Gateways will be provided at key locations through a combination of site planning, built form and landscaping to provide landmarks within the community, reinforce the sense of arrival and place and promote the character and identity of the employment precinct and residential neighbourhood.

While not internal to the Tremaine Dundas Community, a section of Tremaine Road is provided to illustrate the relationship to future development in the Town of Oakville's North Oakville West Employment Area, east of the Tremaine Dundas Community. Similarly, a section of Dundas Street is provided to illustrate how the Community will relate to land uses south of Dundas Street.

1.1.1. Local Street:



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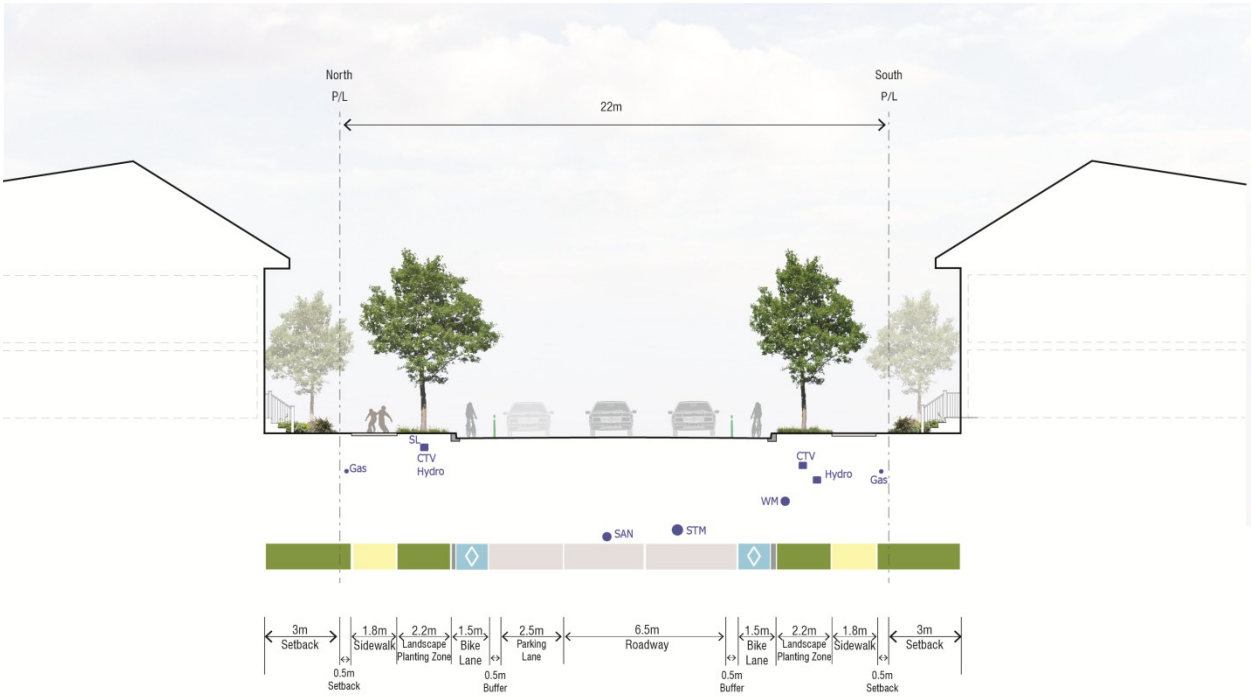


Local Streets are found throughout the interior of the Evergreen Community, servicing the Residential Medium Density area and connecting to the Collector Street network.

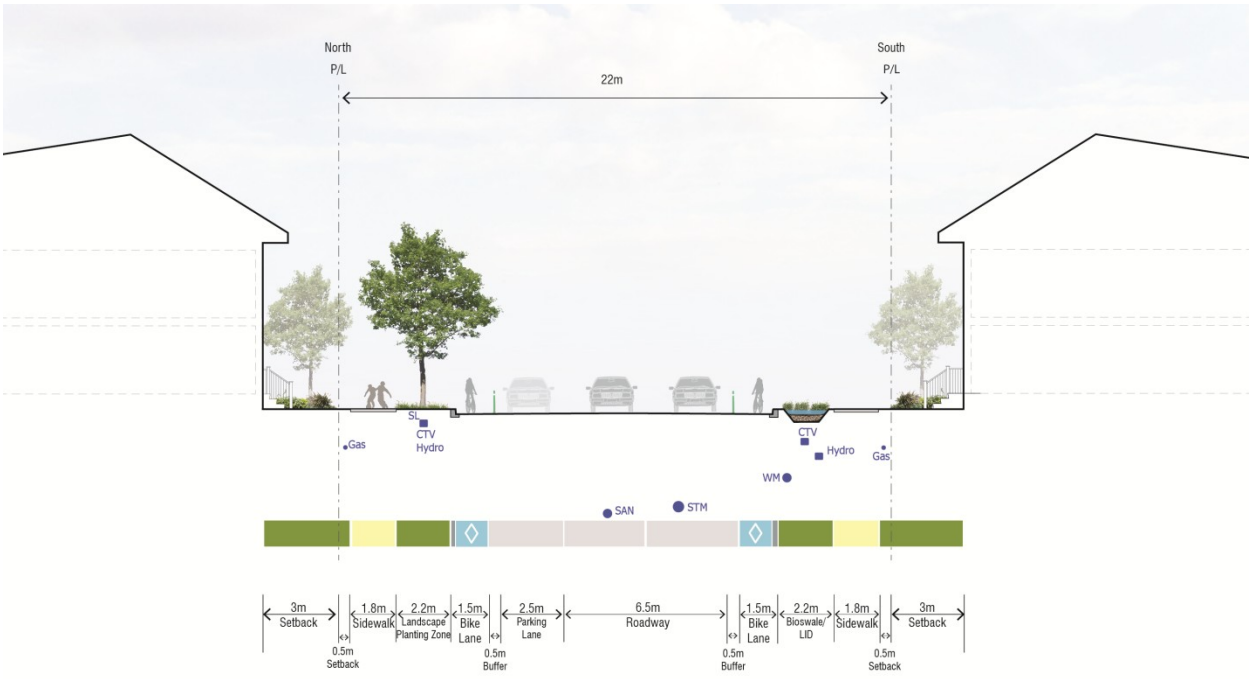
1. Local Streets should typically be designed with a 19 metre right-of-way.

2. Local Streets should be designed to promote a pedestrian-scaled public realm.
3. As part of the Local Street right-of-way, landscape planting zones should be provided between the roadway and the sidewalk.
4. A 1.8 m sidewalk shall be constructed on both sides of the roadway.
5. A multi-use trail may be provided in lieu of a sidewalk, if approved by the City.
6. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.
7. The primary entrances to buildings along Local Streets, including on corner lots, should be sited at the front elevation towards the street to provide eyes on the street and promote community interaction.
8. Local Streets may include community mailboxes. Where required, community mailboxes should be located and integrated into adjacent to open space / park blocks or along side yard flankages of lots.
9. Curb ramp designs at intersections have raised tactile surfaces or materials with contrasting sound properties to help pedestrians with visual impairments.

1.1.2 Local Collector Street:



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Local Collector Streets will provide the primary circulation system within the Tremaine Dundas Community. These streets connect to signalized intersections along Tremaine Road and to Dundas Street.

1. The right-of-way for Local Collector Streets may vary depending on its location and function; however, Local Collector Streets should typically be designed with a 22 metre right-of-way.

2. Local Collector Streets should be designed to promote a pedestrian-scaled public realm.

3. As part of the Collector Street right-of-way, landscape planting zones should be provided between the roadway and the sidewalk with gateway features located at the signalized intersections on Tremaine Road and Dundas Street to reinforce the character and identity of the employment and residential neighbourhoods.

4. A 1.8 m sidewalk shall be constructed on both sides of the roadway.

5. A multi-use trail may be provided in lieu of a sidewalk, if approved by the City.

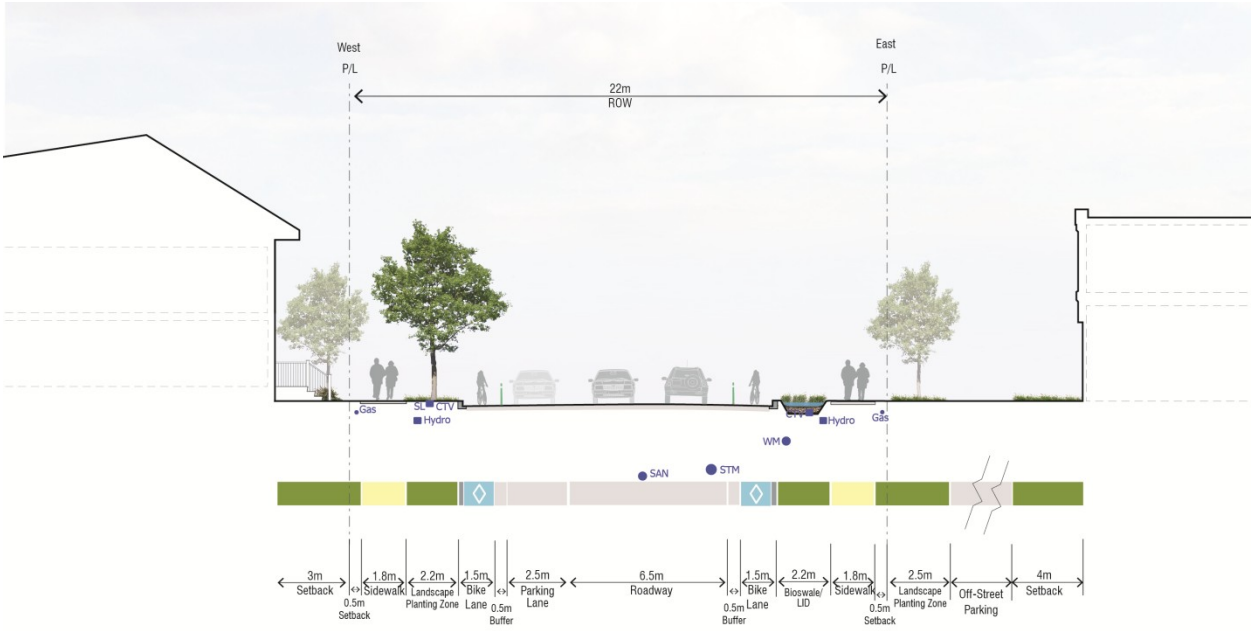
6. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.

7. The primary entrances to buildings along Collector Streets, including on corner lots, should be sited at the front elevation towards the street to provide eyes on the street and promote community interaction.

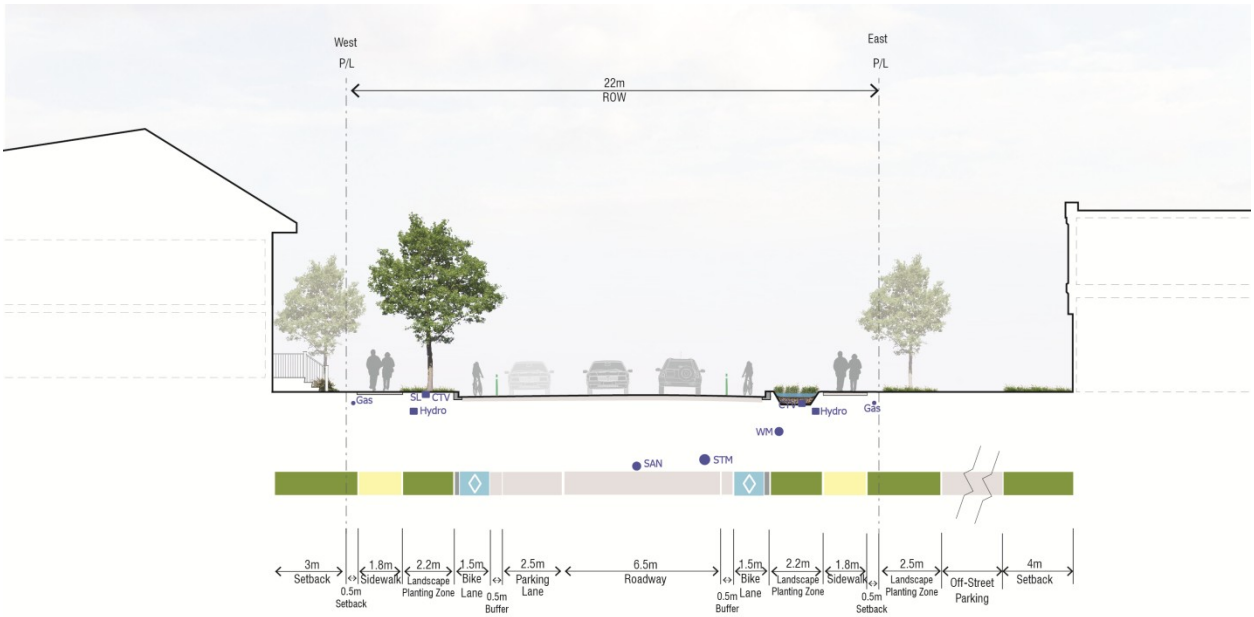
8. Collector Streets may include community mailboxes. Where required community mailboxes should be located adjacent to open space / park blocks or along side yard flankages of lots.

9. Curb ramp designs at intersections have raised tactile surfaces or materials with contrasting sound properties to help pedestrians with visual impairments.

1.1.3.Local Collector Street Between the Employment and Residential Blocks



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This portion of the Collector Street is planned along the west side of the employment blocks which front onto Tremaine Road. To the west of the street are predominantly residential uses. The design of this street will need to address the interface between employment uses to the east and residential uses located internally within the

Community.

The following guidelines are intended to guide the development of this street:

1. The right-of-way for Local Collector Streets may vary depending on its location and function; however, Local Collector Streets should typically be designed with a 22 metre right-of-way.

2. Local Collector Streets should be designed to promote a pedestrian-scaled public realm.

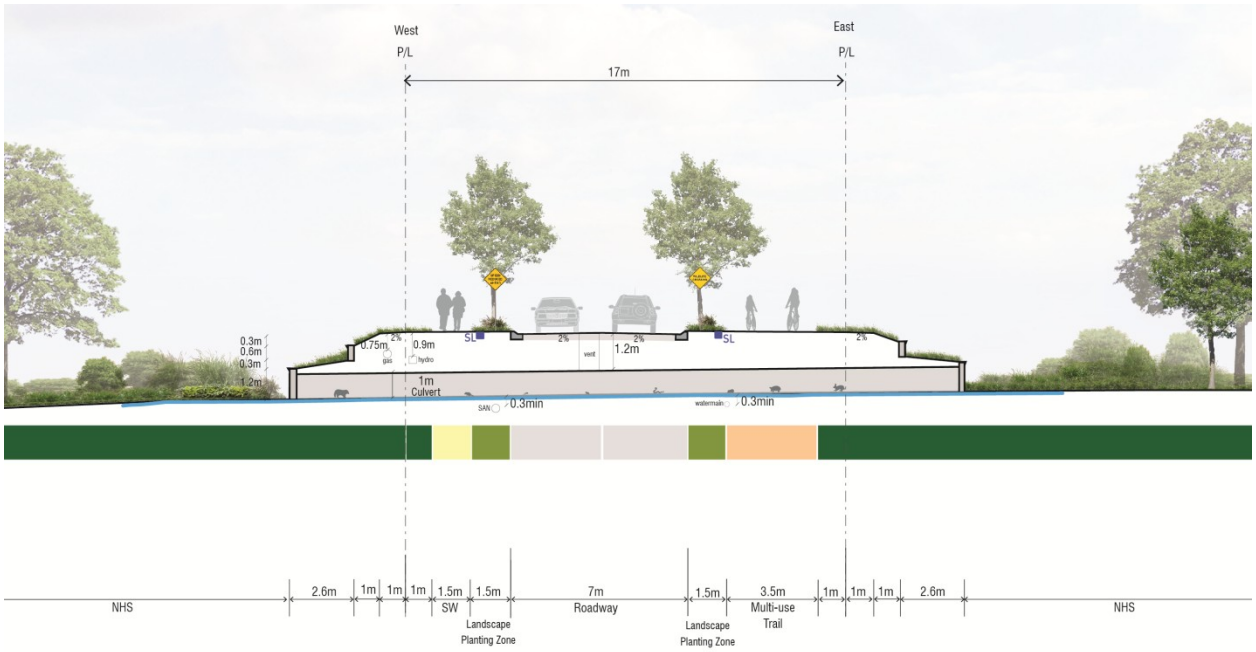
3. As part of the Collector Street right-of-way, landscape planting zones shall be provided between the roadway and the sidewalk.

4. A 1.8 m sidewalk shall be constructed on both sides of the roadway.

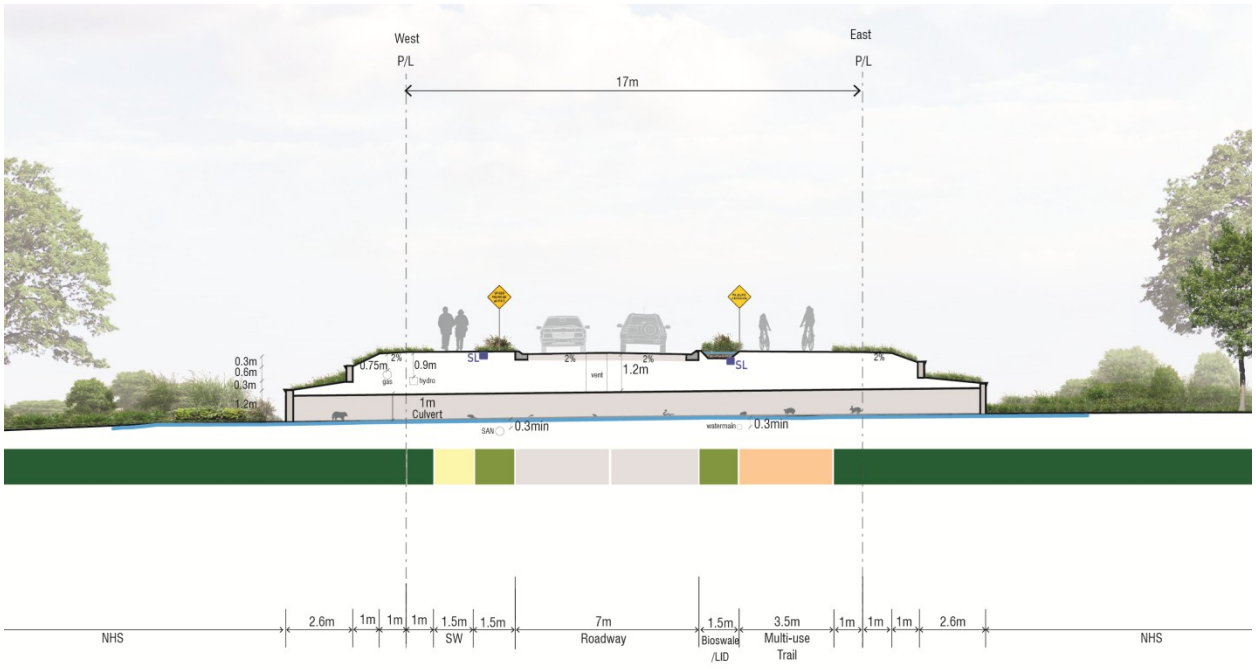
5. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.

6. Curb ramp designs at intersections have raised tactile surfaces or materials with contrasting sound properties to help pedestrians with visual impairments.

1.1.4 Special Treatment Zone



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The “Special Street” and treatment zone is located in a local scale linkage between two features of the Natural Heritage System being the Central Woodland and Bronte Creek valleylands. This Zone will feature a range of measures to support

safe movement of wildlife and minimize human-wildlife conflict. These measures include incorporation of an Eco-Passage in the “Special Street” design as well as other measures to facilitate safe wildlife movement within the Natural Heritage System.

This special zone is highlighted on Figure 2.

i. An Eco-Passage should be installed in an appropriate location within the Special Treatment Zone.

ii. An assessment shall be undertaken to design appropriate mitigation measures to achieve the best possible conditions for on-going wildlife movement. The following factors shall be included in the assessment:

- potential roadway width, traffic volume, traffic speed, road grade, road side slopes, road barriers and road lighting;
- known movement patterns of wildlife daily and seasonally and species most likely to cross;
- topography in the vicinity of the road crossing that may facilitate movement beneath the roadway via a constructed wildlife underpass, culvert or span bridge that include daylighting and the design and construction of funneling structures to lead animals into crossing structures;
- temporary road closure if there are known short-term movement patterns
- traffic calming through potential road modifications such as reduced traffic speed, road narrowing, signage, road lighting and improved sightline;
- provision for alternate basking sites and nesting habitat away from road crossings.

iii. The right-of-way of the road, in the vicinity of the Special Treatment Zone, shall include an appropriate mix of design features to support safe wildlife movement including naturalized road right-of-way and detailed signage to inform motorists and cyclist. Detailed educational signage to inform pedestrians that this is a wildlife crossing zone.

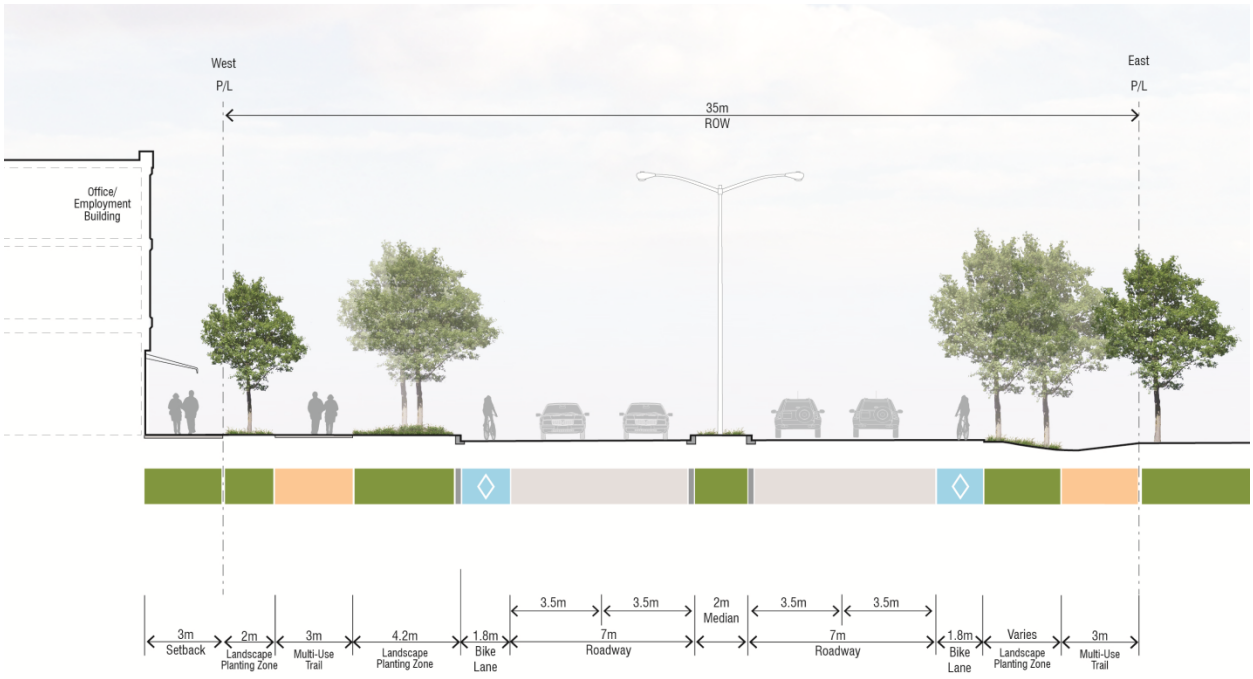
iv. The Eco-Passage shall be large enough to accommodate amphibians, reptiles and small mammals known to occur in the area; be filled with a substrate that retains moisture; and have some type of low fencing or retaining walls that direct small wildlife to the culvert.

v. The detailed design of the “Special Street” shall be undertaken to the satisfaction of the City, Conservation Halton and Halton Region to ensure the design is appropriate to facilitate safe wildlife movement.

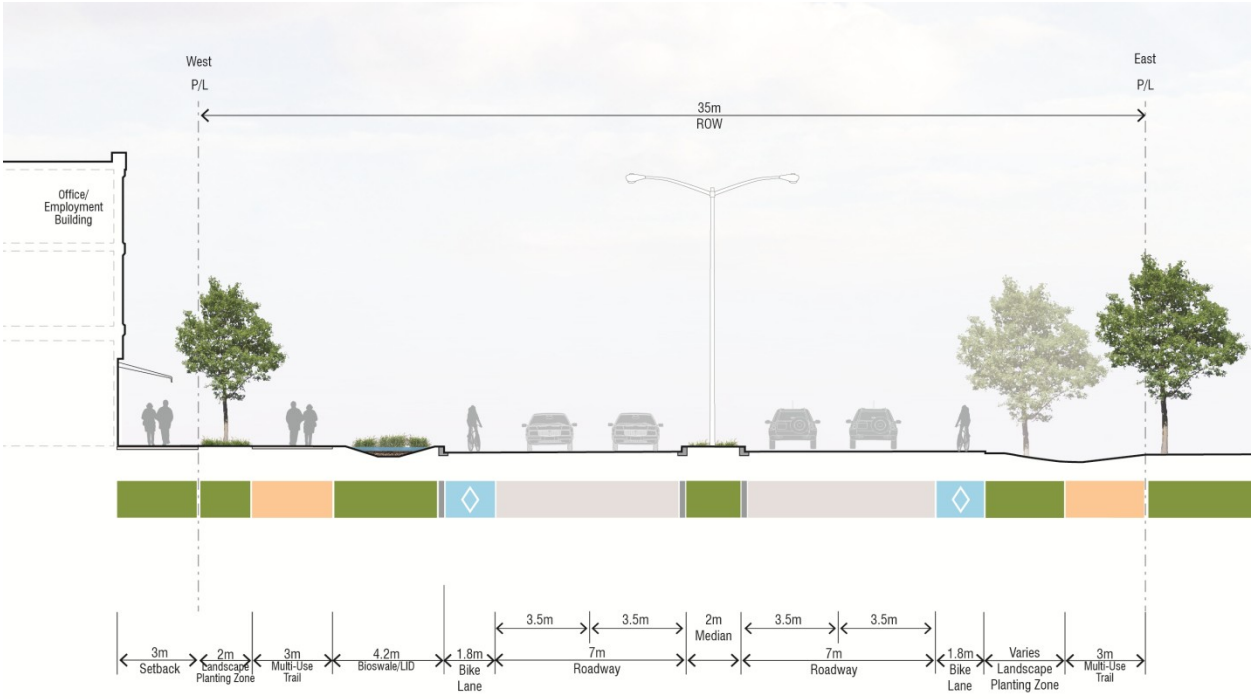
vi. A sidewalk/multi-use trail *should* be provided on both sides of the street.

vii. Tree planting and landscaping with native species is encouraged in the Special Treatment Zone.

1.1.5 Minor Arterial Street - Tremaine Road:



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While not part of the Tremaine Dundas Community, Tremaine Road plays an important role as a key corridor and boundary line between the City of Burlington and the Town of Oakville. The street is anticipated to accommodate a range of employment and business uses, and is planned to be widened to four lanes from

Dundas Street to Lower Base Line. The section above shows the proposed design of the Tremaine Road right-of-way.

1. Tremaine Road shall be designed with a 35 metre right-of-way.

2. Development within the Tremaine Dundas Community that fronts onto Tremaine Road shall include a minimum setback of 3 metres.

3. The right-of-way shall include roadway, dedicated bicycle lane, a landscape planting zone and construction of a minimum 2.0 m sidewalk.

4. The landscape planting zone should include street trees to enhance pedestrian comfort and safety

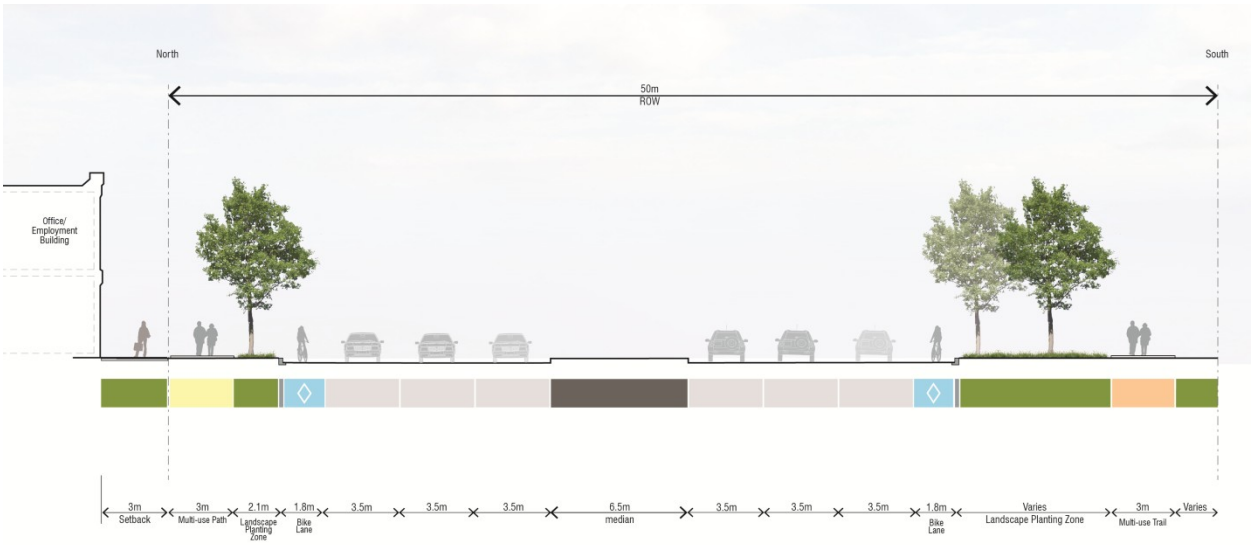
5. Buildings should front Tremaine Road and provide access to the street and sidewalk, encouraging an active street frontage.

6. Primary entrances of buildings should be provided along Tremaine Road or may be provided on the interior of the lot, reflecting the access provided by the street network.

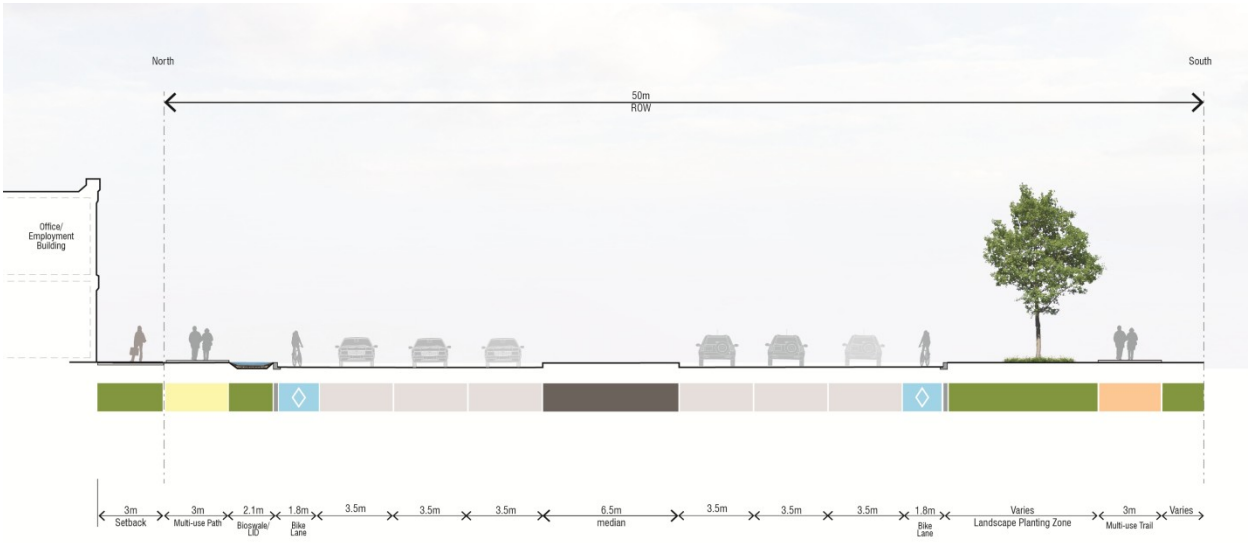
7. New public street intersections along Tremaine Road shall be coordinated with the intersection locations planned on the lands to the east of Tremaine Road within the North Oakville West Secondary Plan Area.

8. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington and the Region of Halton.

1.1.6 Major Arterial - Dundas Street



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While not part of the Evergreen Community, Dundas Street is an important street bordering the Evergreen Community.

The conceptual cross-section above shows the proposed relationship between potential future land uses on the Evergreen Community and the Dundas Street right-of-way.

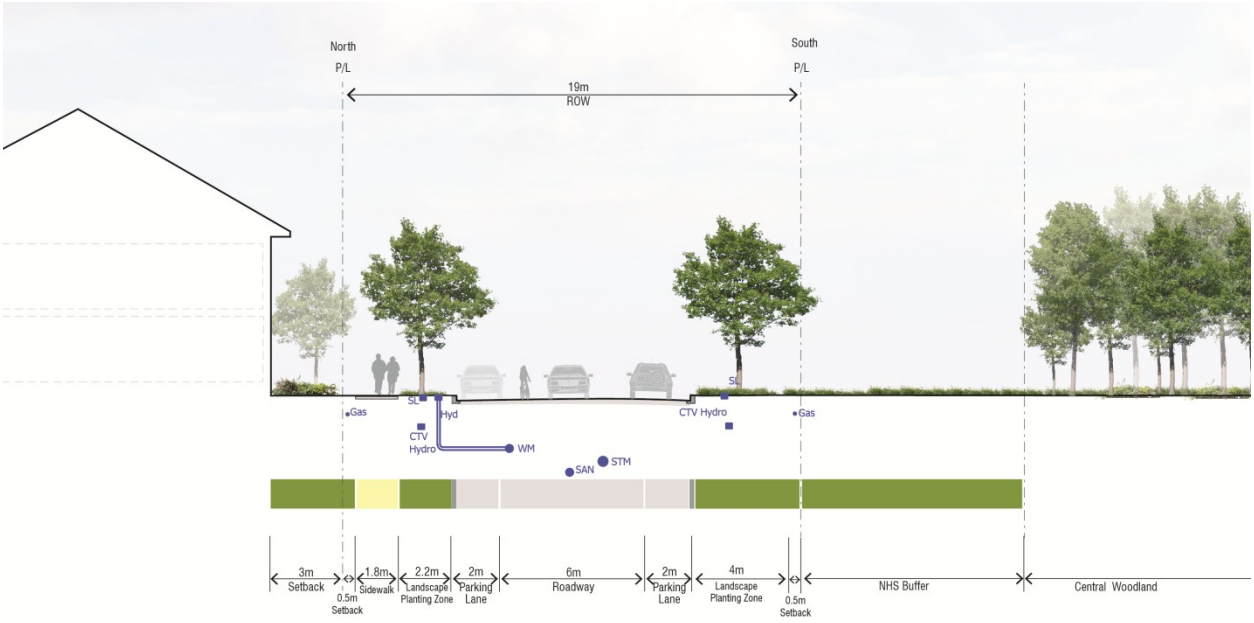
1. Dundas Street should be designed with a 50 metre right-of-way.

2. Development within the Evergreen Community that fronts onto Dundas

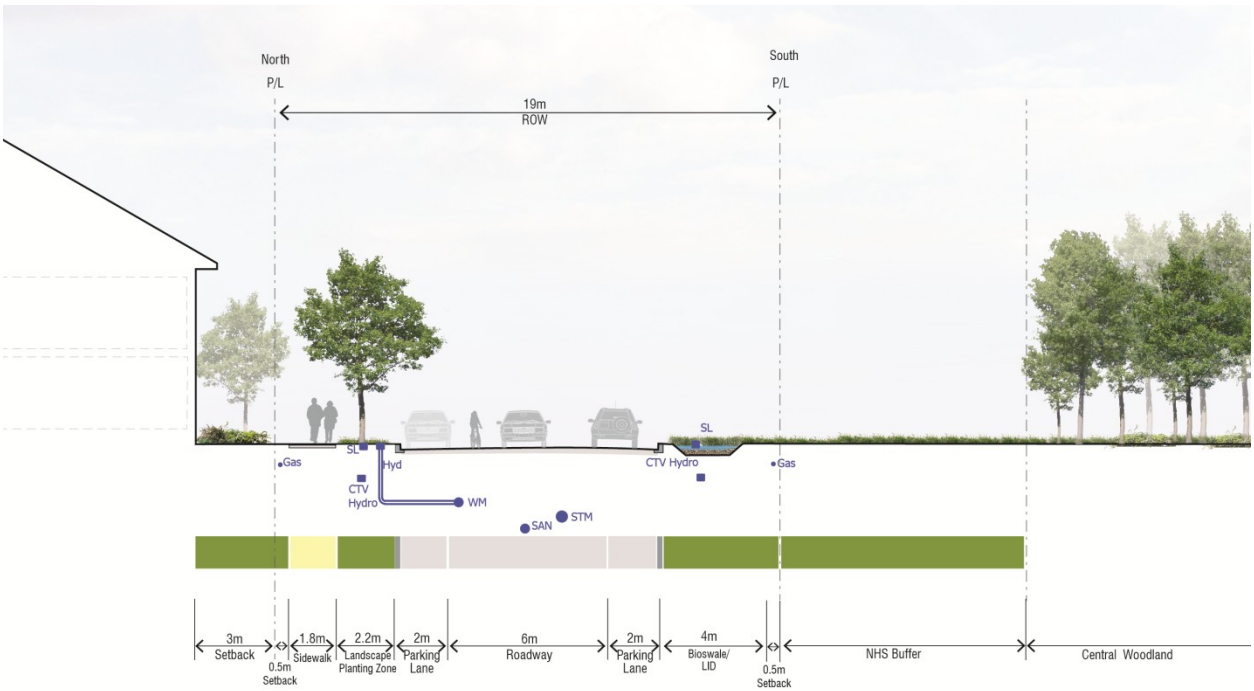
Street should incorporate a minimum 3 metre setback from the Dundas Street right-of-way.

3. The right-of-way should comprise a roadway, a median, a landscape planting zone, a bicycle lane and construction of a minimum 2.0 m sidewalk.
4. The landscape planting zone should include street trees to enhance pedestrian comfort and safety.
5. Built form should face Dundas Street and the public sidewalk, encouraging an active street frontage.
6. Primary entrances of buildings are encouraged to be provided along Dundas Street.
7. Pedestrian connectivity to future bus stations should be prioritized in the development of the Tremaine Dundas Community.
8. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington and Region of Halton.

1.1.7 Streets Abutting the Central Woodland:



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Where Local Streets or Collector Streets are located adjacent to Key Features or watercourses of the Natural Heritage System, including the Central Woodland and

Southern Woodland, the rights-of way will need to be designed to balance appropriate access to and protection of the Natural Heritage System.

1. The design of rights-of-way that are adjacent to Key Natural Features of the Natural Heritage System should generally adhere to the typically right-of- way cross-sections illustrated above for Local Streets and Local Collector Streets.

2. Reductions in the width of the right-of-way may be considered based on detailed design and proposed land uses abutting the street.

3. Design options that should be considered where rights-of-way are adjacent to Key Features of the Natural Heritage System include integration of trails and fencing between the roadway and the Key Feature, as well as plantings of native trees and other naturalization plantings.

4. Where trails and/or fencing are proposed within buffer areas, these should be located as far from the Key Feature as possible.

5. Protection of existing healthy, native vegetation in the lands adjacent to Key Features should be encouraged.

6. Tree planting and naturalization plantings with shrubs and ground covers, should be encouraged in the lands adjacent to Key Features where they do not exist already.

7. Species selection should incorporate a diversity of site-appropriate native species.

8. Street trees should be planted in the landscape planting zone to develop a rich continuous canopy over the street to the satisfaction of the City of Burlington.

1.2 Public Realm - Open Spaces

The Evergreen Community will provide a range of open spaces within the Public Realm across the development.

Included in the open space network is a major community park that is centrally located and will serve residents, employees and visitors within the local area. Additional open spaces include lands intended for use for stormwater management, naturalized areas, trails and enhanced pedestrian linkages. Guidelines for each of these areas are discussed in this section. This section also includes guidelines which address the preservation of and access to the Crooks/Norton Farm House as a cultural resource.

Guidelines are not provided for the Natural Heritage System components including

Key Features, watercourses, buffers, linkages and enhancements to Key Features.

1.2.1 Parks

The Evergreen Community is planned to include a mid- sized community park that is centrally located and will serve residents, employees and visitors within the local neighbourhood.

The following general guidelines apply to the public park.

1. The park should be designed to provide amenity to local residents, employees and visitors within the immediate area.

2. The park should be designed to accommodate a range of recreational activities, with a focus on passive recreational opportunities, including benches, seating areas, a playground, landscaped zones, picnic areas, and other outdoor gathering areas.

3. Opportunities for active park uses may also be considered, including a skating rink, a half-sized basketball court or a splash pad.

4. The park should be designed to accommodate the needs of residents of all ages and abilities.

5. Pedestrian walkways should be provided to promote connectivity throughout the Community and follow anticipated desire lines.

6. Enhanced sidewalks should be provided around the edges of the park to enhance the park setting and support connectivity.

7. Tree planting and other vegetative planting should be provided within the park to enhance the natural character of the park.

8. Integration of trees that will provide wind breaks in the winter and cooling/shading in the summer, particularly around play structures to be used by children, is encouraged.

9. Entrances to the park should be located along the public right-of-way and made visible through decorative paving, plantings, signage and street furniture.

10. New development around the park should be designed and oriented to front onto and help frame the park, where possible.

11. To the extent possible, the design of the park should be coordinated with the design of the stormwater management facility located across the street.

12. The City of Burlington will be responsible for undertaking a detailed park design and construction.

1.2.2 Crooks/Norton Farm House

The Crooks/Norton Farm House is a heritage asset that is located in the southwestern portion of the Evergreen Community. The Farm House is listed on the City's Inventory of Cultural Heritage Resources and is planned to be retained and designated under Part IV of the Ontario Heritage Act.

The following general guidelines apply to the Crooks/Norton Farm House and surrounding landscape.

1. The Crooks/Norton Farm House will be *preserved* and maintained in good condition.

2. The potential for adaptive reuse of the Farm House may be explored as part of the long-term heritage conservation strategy.

3. Pedestrian connections to the Crooks/Norton Farm House will be provided to support access to the site from Dundas Street and from within the Evergreen Community.

4. The design and layout of parking areas should not detract from the character and quality of the Farm House or the Natural Heritage System.

5. Landscaping treatment around the Farm House should include plantings in keeping with the history of the house, and strategically incorporate native trees that will provide wind breaks in the winter and cooling/shading in the summer.

6. Opportunities for commemorative plaquing of the Crooks/Norton Farm House should be explored.

	Photograph of the Crooks/Norton House

1.2.3 Pedestrian Linkages

Pedestrian Linkages in the Evergreen Community focus on enhancing pedestrian connectivity.

1. Pedestrian Linkages should be designed to optimize pedestrian circulation options and promote permeability throughout the community.

2. Pedestrian Linkages may be designed as sidewalks, laneways, pathways, trails, private streets, or connections used for internal block circulation.

3. Pedestrian Linkages may restrict vehicular movement but should always permit and support movement from one end of the Pedestrian Linkage to the other by way of a sidewalk or path.

4. Stormwater management *infrastructure* or underground parking may be incorporated below grade under Pedestrian Linkages.

5. Mid-block connections are encouraged to be provided through the Business Corridor and Mixed Use Corridor - General lots to support permeability between Dundas Street/Tremaine Road and the residential community. The exact location and design of the linkages will be determined through the draft plan approvals process.

6. A pedestrian trail should be provided within the top-of-bank setback area of the watercourse at the southeast corner of the Community to improve access to and from Dundas Street. This area should also be naturalized.

7. Pedestrian Linkages should promote clear connectivity from the Community to future transit stops along the adjacent arterial roads.

8. A network of enhanced sidewalks should be provided to connect to and from parks and open spaces and major roads, such as Tremaine Road and Dundas Street. Additional landscaping and public realm improvements are encouraged along the enhanced sidewalk network.

1.2.4 Stormwater Management and Naturalization

The Public Realm Open Space areas also include areas intended for stormwater management, including stormwater management ponds, naturalization areas, and the potential for Low Impact Development features, such as bio-retention areas and grassed swales.

1. Stormwater management and naturalization areas should provide enhanced stormwater management to improve water quality and provide erosion control.

2. Stormwater management and naturalization areas should enhance visual natural character of the Community and demonstrate environmentally progressive community design.

3. Where stormwater management and naturalization strategies are incorporated into the public realm, pedestrian movement and connectivity should be maintained and not compromised because of these strategies.

2. Private Realm Guidelines

The Evergreen Community includes a range of different types of built form, each with distinct design features.

The following section describes each land use type: Residential - Medium Density, Business Corridor, Mixed Use Corridor - General and Mixed Use Corridor - Employment; and provides guidelines related to built form, parking, garages, servicing, landscaping and sustainability initiatives.

2.1 Residential - Medium Density

The Residential - Medium Density area includes lands designated for residential uses. This area is located in the interior of the Community, taking advantage of the relationship with the robust Natural Heritage System. The following subsections set out guidelines that address built form and architectural treatment; as well as requirements related to garages, parking, servicing; fencing and landscaping; and sustainable design in Residential - Medium Density areas.

2.1.1 Built Form and Architectural Detailing

Detached Residential Houses

1. The front door of a detached house should be oriented towards the street.
2. Different detached house types may be distributed among the different lots to create a more interesting and varied streetscape.
3. Detached houses should be massed to contribute to the spacial character of the street and should frame adjacent open spaces.
4. Individual units should incorporate outdoor useable areas, such as porches or front patios and promote ‘eyes on the street.’
5. Facades should contribute to street life and utilize elements such as porches, generously proportioned windows, window bays and doors.
6. Facades should have recesses to add articulation and interest to the development to reduce the visual mass of the block.
7. Single houses should vary in their architectural massing, materiality, colour and texture, in order to avoid the creation of monotonous streetscapes. Primary building materials should be of organic materials such as brick, stone and wood.
8. The design of detached houses should promote a high level of internal daylight exposure and maximize the usable internal space. Outdoor spaces, such as terraces or balconies should be provided where possible.
9. For lots which flank a Collector Road, decorative solid screen or acoustic fencing (if required by noise study) shall be provided along the side lot line, for the privacy area, accompanied by landscaping consisting of a combination of deciduous and coniferous plants. The architecture of the house should be consistent with that of corner lots.
10. For corner lots and units adjacent to open space, both the front and side elevations shall be of equal quality in terms of architectural components, number and proportions of openings, materials and attention to detail and include features such as corner bay windows, entrance porticoes and wrap-around porches.
11. For detached residential dwellings adjacent to parks and open space, housing forms should utilize design features such as upper floor balconies or french windows to promote ‘eyes on the open space’.

12. Utility meters and air conditioning units should not be located along the front facing façade. If located along the front façade, they shall be integrated into the design so that they are not visible from the street

Townhouses

1. The front door of a Townhouse should be oriented towards the street.

2. Facades should contribute to street life and utilize elements such as generously proportioned windows, window bays and doors.

3. Facades should have recesses to add articulation and interest to the development to reduce the visual mass of the block.

4. Townhouses should vary in their architectural massing, materiality, colour and texture, in order to avoid the creation of monotonous streetscapes. Primary building materials should be of organic materials such as brick, stone and wood.

5 Individual units should incorporate porches or front patios and promote 'eyes on the street and for units adjacent to parks and open space, units should utilize design features such as upper floor balconies or french windows to promote 'eyes on the open space'.

6 The design of townhouses should promote a high level of internal daylight exposure and maximize the usable internal space. Outdoor spaces, such as terraces or rooftop-decks should be provided where possible.

7 For lots which flank a Collector Road, decorative solid screen or acoustic fencing (if required by noise study) shall be provided along the side lot line, for the privacy area, accompanied by landscaping consisting of a combination of deciduous and coniferous plants. The architecture of the house should be consistent with that of corner lots.

8 For corner lots and units adjacent open space, both the front and side elevations shall be of equal quality in terms of architectural components, number and proportions of openings, materials and attention to detail and include features such as corner bay windows, entrance porticoes and wrap-around porches.

9 Utility meters and air conditioning units should not be located along the front facing façade. If located along the front façade, they shall be integrated into the design so that they are not visible from the street.

2.1.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City's Sustainable Development and Building Guidelines.

	Visual impact of garages should be minimized
	Single detached 2 1/2 storey houses with varied architectural character and texture and rear laneways
	Townhouses with landscaped front yard and rear laneways

2.1.3 Garages, Parking and Servicing

Detached Residential Houses

Where detached houses contain a garage in the front, the width of the garage

should not exceed 50% of the lot.

1. The garage should be recessed from the building facade a minimum of 1 metre and set back a minimum of 6.7 metres from the front property line to minimize impact on the streetscape.

2. Garages or parking pads should be accessible directly from the street.

3. Where driveways are provided, the use of permeable pavement is encouraged.

Townhouses

1. The garage should be recessed from the front building facade a minimum of 1 metre and set back a minimum of 6.0 metres from the front property line to minimize impact on the streetscape. Dwelling units within a plan of condominium shall have a minimum driveway length of 6.7 m measured from back of curb to front of garage.

2. Where driveways/parking pads are provided, the use of permeable pavement is encouraged.

2.1.4 Fencing and Landscaping

Detached Residential Houses

1. Where the lot associated with a detached residential house abuts the Natural Heritage System, park or other public open space, a 1.5m high black vinyl chain link fence (or equivalent) should be installed along the property line. No gates should be permitted in fences that are located along this interface.

2. Noise attenuation may be required along the rear yard and/or side yard of detached residential lots (if required by a detailed noise study). The decorative solid screen or acoustic fencing shall be provided for the privacy area and be accompanied by landscaping consisting of a combination of deciduous and coniferous plants.

3. With the objective of enhancing canopy cover throughout the community, consideration should be given to planting one full-crowned deciduous tree in the rear yard area for every 2 detached residential lots.

Townhouses

1. Where a lot associated with a townhouse abuts the Natural Heritage System, park or other public open space, a 1.5m high black vinyl chain link

fence (or equivalent) should be installed along the property line. No gates should be permitted in fences that are located along this interface.

2. Noise attenuation may be required along the rear yard and/or side yard of townhouse lots (if required by a detailed noise study). The decorative solid screen or acoustic fencing shall be provided for the privacy area and be accompanied by landscaping consisting of a combination of deciduous and coniferous plants.

3. Privacy screens may be installed between the adjacent townhouse units in order to provide visual and physical separation between rear yard amenity areas. Privacy screens may be constructed using wood, metal, glass or composite materials and should be located along the joint property line between the two adjacent lots. Coniferous trees or shrubs may also be used as privacy screens. Privacy screens should be a maximum of 2.0 m high.

2.2 Business Corridor

2.2.1 Built Form and Architectural Detailing

1. Buildings should be massed to contribute to the spacial enclosure of the street. The buildings should include pedestrian-scaled elements and details.

2. Buildings located along Tremaine Road shall be at least two storeys in height, or if single storey, be of architectural design incorporating a ridge roof parallel to Tremaine Road with the elevation of the roof peak equivalent to a building of at least two storeys, to provide screening and noise mitigation for residential development to the west.

3. The visual scale and massing of the buildings should be designed in order to provide an appropriate transition to the adjacent open spaces and to respect the scale of the street and rest of the development.

4. Mid-block pedestrian connections should be provided to support access from Tremaine Road into the Evergreen Community.

5. The primary entrance to the buildings should face the street, be clearly identifiable and be reinforced by architectural detailing in the facade of the building.

6. Facades should contribute to active street life and should be designed with elements such as generously proportioned windows, doors and extensive use of transparent glazing on the ground floor to provide visual interest for pedestrians and passing motorists.

7. The use of techniques such as variation in massing, material, color and texture is encouraged.

8. Buildings located adjacent to the Natural Heritage System are encouraged to incorporate bird friendly design measures to discourage bird/glass collisions.

9. Buildings along the east side of the street will front onto Tremaine Road but are encouraged to create address along the internal Collector Street.

10. Where surface parking areas are located along the east side of the street, landscaping, trees and public realm treatments will be encouraged to facilitate a transition to the residential areas and create a more attractive streetscape environment for pedestrians and cyclists.

11. The incorporation of bio-swales within parking lots are encouraged to direct surface runoff to landscaping and trees so separate watering is not required.

2.2.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City's Sustainable Development and Building Guidelines.

	Extensive use of window awnings and articulation in façade of a 3 storey office building.

	Office building providing a building articulation, clearly visible entrances, pedestrian link and ground-floor animation as a result of use of glazing and light
	Examples of various Landscape buffers

2.2.3 Parking and Servicing

1. Service entrances should be located at the rear of the building and should be accessible from the parking lot.

2. Parking, access, loading and servicing elements should be designed to minimize their visual impact on the street.

3. Bicycle parking facilities should be located as close as possible to the entry points of buildings and should not obstruct pedestrian circulation. A variety of bicycle parking formats, such as sheltered racks and lockers, catering to both employees and visitors should be required, where appropriate.

4. No surface parking should be permitted between the front of the building and the primary street.

5. Trees should be integrated into parking lots and other impervious areas within bio-swales to utilize surface runoff, mitigate urban heat island effects and provide shade and cooling for users.

6. Service elements, such as garbage and utilities should be integrated within the building design.

7. Parking lots in the Business Corridor areas should be framed by vegetation and tree plantings to promote the creation of an extended tree canopy cover.

8. Where parking lots abut a park, natural heritage feature or Residential - Medium Density area, special attention should be made to screen the parking area using vegetation.

9. If outside storage is required, it should be adequately screened and buffered to mitigate potential visual impacts.

10. Use of planting and landscaping to provide safe and pleasant pedestrian linkages through a surface parking lot.

11. Use of landscaping elements and permeable pavement in a surface parking lot to contribute to sustainability goals.

	Use of planting and landscaping to provide safe and pleasant pedestrian linkages through a surface parking lot.
	Use of landscaping elements and permeable pavement in a surface parking lot.

2.2.4 Landscaping

1. Open spaces within the Business Corridor Area around employment buildings should be used as landscaped separation zones between the building and the street, or the building and the parking lot.

2. Throughout the site a diverse canopy of trees should be established. Species should be selected to be sustainable in consideration of micro-climate and context within the site.

3. Loading and service areas should be screened from view from the adjacent roads using a combination of plant material, landform and fencing.

4. Where a Business Corridor lot abuts the Natural Heritage System, park or other public open space, a 1.5m high black vinyl coated chainlink fence should be installed along the lot line. Gates / openings may be permitted only where private open space or a pedestrian linkage proposed within the lot connects to a proposed trail within adjacent the Natural Heritage System or public open space lands.

5. Entrance features should be provided to demarcate the main entry driveways into the Business Corridor lots. Entrance features should complement the architectural detailing of the buildings. Entrance features may be illuminated utilizing downlighting or backlighting. Upward aiming floodlighting should be avoided. Entrance features should be located within the limits of the private lot.

2.3 Mixed Use Corridor - General

2.3.1 Built Form and Architectural Detailing

Mid-Rise Buildings

1. Mid-rise buildings within the Mixed Use Corridor - General area should be massed to contribute to the spacial character of the street and to frame adjacent open spaces.

2. Active at-grade uses such as restaurants and retail establishments are permitted in all the mid-rise buildings in the Mixed Use Corridor - General.

3. To create a vibrant focal point within the community, pedestrian areas within the site should be pedestrian oriented to encourage gathering and include the provision of casual seating areas.

4. Entrances and active facade treatments should be promoted along Dundas Road and frontages along local and collector roads.

5. The floor to ceiling height of the ground floor shall be a minimum of 4.5 metres to accommodate commercial uses.

6. Secondary entrances to buildings should be provided facing the internal circulation network of the Mixed Use Corridor - General area.

7. Blank walls or building “backs” are discouraged along Dundas Road, local or collector roads.

8. All facades of mid-rise buildings should contribute to street life and utilize elements such as generously proportioned windows, doors and extensive use of transparent glazing on the ground floor to provide visual interest for pedestrians.

9. Buildings should be a maximum of 75m in length, although longer buildings may be considered where it can be demonstrated that they appropriately address the street and provide sufficient articulation to reduce the visual impact of their length. Ensure that frontages longer then 35m are articulated to break up the building’s massing.

10. When located in proximity of low-rise residential buildings, mid-rise buildings should be designed using techniques such as angular planes or step-backs to create a proportional relationship with the surrounding buildings and transition in height, avoiding blocking key views or projecting shadows to the adjacent development.

11. Mechanical penthouses should be incorporated within the structure of the building.

12. The use of techniques such as variation in massing, material, color and texture is encouraged in the design of mid-rise buildings.

13. Residential units should be designed to promote high levels of internal daylight exposure and maximize the usable internal space. Outdoor living spaces, such as terraces, balconies or rooftop decks should be provided where possible.

Townhouses

1. The front door of a Townhouse should be oriented towards the street.

2. Where a Townhouse is situated at a corner lot, both street-facing facades should be designed of equal quality and detail.

3. Facades should contribute to street life and elements such as generously proportioned windows, window bays and doors should be utilized.

4. Facades should have recesses to add articulation and interest to the development and to reduce the visual mass of the blocks.

5. Townhouses should vary in their massing, materiality and colour, in order to avoid the creation of monotonous streetscapes.

6. Individual units should incorporate front porches or patios to provide “eyes on the street” and rear laneways should be considered.

7. The design of townhouses should promote high levels of internal daylight exposure and maximize the usable internal space. Outdoor living spaces, such as terraces, balconies or rooftop-decks should be provided when possible pedestrian linkage.

2.3.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City’s Sustainable Development and Building Guidelines.

	Mixed use 4-storey building with retail at grade, surface parking and landscape/pedestrian area.

	Mixed use mid-rise building with extensive pedestrian area

2.3.3 Parking and Servicing

1. An internal circulation network should be provided to serve the mid-rise and townhouse buildings, and provide vehicular and pedestrian access.

2. Parking for mid-rise buildings and townhouses in the Mixed Use Corridor - General area should be primarily provided underground.

3. Mid-rise buildings and townhouses may share common underground parking facilities.

4. Convenience parking to serve the at-grade commercial and retail uses within mid-rise buildings may be permitted on-street and within the internal circulation network.

5. Loading and servicing elements should be internal to mid-rise buildings, integrated as part of the building design.

6. Bicycle parking facilities should be located as close as possible to the entry points of buildings and should not obstruct pedestrian circulation. A variety of bicycle parking formats, such as sheltered racks and lockers, catering to both employees and visitors should be required, where appropriate.

7. Underground parking access should be provided off of the internal circulation network. No access to underground parking should be provided off of Dundas

Road.

8. No surface parking should be permitted between mid-rise buildings and Dundas Street.

9. No front garages should be permitted in Mixed Use Corridor - General areas.

2.3.4 Landscaping

1. Landscaping should be provided around buildings within the Mixed Use Corridor - General block to enhance the quality of place and create an attractive pedestrian realm.

2. Throughout the site a diverse canopy of trees should be established. Species should be native and selected to be sustainable in consideration of micro-climate and context within the site.

3. Loading and service areas should be screened from view from the adjacent roads by a combination of plant material, landform, fencing of other screening elements.

4. Where parking lots abut a natural heritage feature, Residential - Medium Density area, or public trail or walkway, special attention should be made to screen the parking area using vegetation.

5. Entrance features may be installed to annunciate the locations of major entry points into the Mixed Use Corridor - General block. Entrance features should be located entirely within the private lot. Where entrance features are proposed to be illuminated, downlighting or backlighting should be utilized. Upward aiming floodlights should be avoided.

2.4 Mixed Use Corridor - Employment

2.4.1 Built Form and Architectural Detailing

1. Mixed Use Corridor - Employment buildings should be massed to contribute to the spatial enclosure of the street and to frame adjacent open spaces.

2. The primary entrance to the buildings should face the Dundas Street and/or Tremaine Road and be clearly identifiable.

3. Facades should contribute to street life and elements such as generously proportioned windows, doors and extensive use of transparent glazing should be utilized on the ground floor to provide visual interest for pedestrians.

4. The floor to ceiling height of the ground floor should be a minimum of 4.5 metres to accommodate commercial uses.

5. The visual scale and massing of the buildings should be designed in order to provide an appropriate transition to the adjacent open spaces and natural areas, and to respond to the scale of the street and rest of the development.

6. The use of techniques such as variation in massing, material, color and texture is encouraged.

7. Mechanical penthouses should be incorporated within the structure of the building.

2.4.2 Architectural Treatment

The following images are provided to illustrate aspects of architectural treatments for the Community. These images are provided for illustrative purposes only and should not be interpreted as a requirement for development in the Tremaine Dundas Community. All development shall also address the building envelope in conjunction with the City's Sustainable Development and Building Guidelines.

	Office employment building creating prominent corner condition
	Office employment buildings with associated service commercial and retail

2.4.3 Parking and Servicing

1. Service entrances should be located at the rear of the building, and be accessible through the driveways or off of the collector street bordering the Mixed Use Corridor - Employment area.

2. Parking access, loading and servicing such as garbage and utilities elements shall be designed in a way that minimizes their visual impact from the street and when it is possible integrated into the building.

3. No surface parking should be permitted between the front of the building and Tremaine Road or Dundas Street

4. Bicycle parking facilities should be located as close as possible to the entry points of buildings and should not obstruct pedestrian circulation. A variety of bicycle parking formats, such as sheltered racks and lockers, catering to both employees and visitors should be required, where appropriate.

5. Underground parking is encouraged to service the Mixed Use Corridor - Employment area.

6. Surface parking to provide visitors parking spots is permitted; however the majority of required parking should be underground to ensure adequate greenspace. Where surface parking does exist, it should be framed by vegetation, promoting the creation of an extended tree canopy cover.

7. Opportunities to implement transportation demand management (TDM) strategies at the development approvals stage are encouraged, including car sharing and priority parking, carpool users, and end-of-trip facilities for cyclists.

	Curbless Surface Parking framed by vegetation
	Office buildings and associated landscaped areas.

2.4.4 Landscaping

1. Fencing may be required along the interface of the Mixed Use Corridor - Employment lot and the adjacent watercourse corridor contingent on the design of landscape and pedestrian movement patterns within the lot. Where connectivity is desired, a fence will not be required but the property line should be demarcated by other means. Where connectivity is not required, a 1.5m high ornamental metal fence should be installed along the lot line.

2. Loading and servicing areas should be screened from view from the adjacent roads and public open spaces using fencing, plant material, landform or a combination of the three.

3. Entrance features may be installed at key entry points into the site. Entry features may comprise masonry, natural stone, plant material and other elements. Design and material selection should complement the architectural detailing of the building. Entrance features may be illuminated using downlighting and backlighting. Upward aiming floodlights should be avoided.

4. Light poles and luminaries should be selected to complement the architectural character of the buildings and should be sized to reflect their intended locations. In private open spaces and pedestrian areas, light poles should not exceed 5.5m in height. Taller poles and larger luminaries may be utilized to illuminate parking lots, driveways and loading / service areas.

5. Throughout the lot the installation of site furniture such as benches, trash/recycling receptacles, bicycle racks and pedestrian shelters is recommended. Site furnishings should be complementary to the architecture and should represent a consistent “family” or elements in terms of colour, style, materials and detailing.

6. The installation of public art may be considered to create a focal point at the intersection of Dundas Street and Tremaine Road or to punctuate the private landscaped area within the lot.

7. Throughout the site a diverse canopy of trees should be established. Species should be selected to be sustainable in consideration of micro-climate and context within the site.

3. Sustainable Design Guidelines

3.1 Public Realm Sustainable Design

Public Realm Open Space areas should be designed with the intent of contributing to the overall a long- term sustainability of the Tremaine Dundas Community. The following guidelines are proposed to achieve a range of sustainability objectives within the public realm.

3.1.1 Landscaping and Tree Planting

1. Trees shall be integrated into parking lots and other impervious areas through the implementation of Landscape Areas in the Zoning By-law.

2. High-reflective paving materials should be utilized in the construction of walkways and paved areas in order to mitigate urban heat island effect.

3. The planting of large-crowned native trees is encouraged in all Public Realm Open Space areas with the intent of increasing the extent of canopy cover and achieving other associated benefits (such as cooling, shading and improved air quality) with a target of 20% canopy cover of non-building hard surfaces at two-thirds mature size.

4. Trees should be planted with an adequate amount of suitable growing medium in order to sustain long-term growth and vitality via sufficient soil volume or soil cell product.

5. Trees integrated in areas outside of the Natural Heritage System should be diverse, native, drought tolerant, salt tolerant and low maintenance species.

6. Watercourse blocks and valleylands, and their buffer areas, should be naturalized where appropriate using native and non-invasive species.

7. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:

    - Maintain visual interest throughout the seasons
    - Use of selective species palate
    - Use of one or two species or elements to create an accent
    - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
    - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
    - Consider habitat attributes of plant material
    - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration

3.1.2 Community Infrastructure

1. Energy efficient Light Emitting Diode (LED) light fixtures should be utilized where illumination of public realm open space areas is required. Lighting systems should be “Dark Sky” compliant in accordance with the City’s Guidelines.

2. Connections within the Community should be supportive of active transportation by providing pedestrian and cycling connections from public sidewalks, pedestrian paths, transit stops and adjacent buildings and sites.

3. Opportunities to introduce Low Impact Development strategies shall be considered, such as bioswales and bioretention areas.

4. Stormwater management and naturalization areas may include a range of low impact development technologies to achieve stormwater management objectives including but not limited to: permeable pavement, stormwater planters, attenuation areas, biofilters, porous pipe systems, bioretention cells constructed wetlands, rain gardens, grass swales, surface attenuation areas, rainwater recycling systems, and conventional stormwater management ponds.

5. New public facilities shall be designed in accordance with AODA requirements and other applicable Provincial legislation to promote accessibility by all age groups and abilities.

6. Community gardens are encouraged as they promote sustainable local food production, increase access to healthy food, provide opportunities for community building in addition to creating local green space.

3.2 Private Realm Sustainable Design

Private Realm areas should be designed with the intent of contributing to the overall sustainable vision of the Tremaine Dundas Community. The following guidelines are proposed to achieve a range of sustainability objectives.

3.2.1 Residential - Medium Density

Detached Residential Houses

1. Dwelling units should be constructed to the equivalent of one of the following standards; LEED, Energy Star, Net Zero ready or R-2000 Certification.

2. The incorporation of renewable energy resources is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:

    - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
    - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
    - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
    - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
    - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.

3. Windows of detached residential houses should be oriented to minimize passive solar gain during the summer months and optimize passive solar gain during the winter season, where possible.

4. Landscaped areas shall incorporate friable topsoil placed at a minimum depth of 150mm within all lawn and landscaped areas.

5. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:

    - Maintain visual interest throughout the seasons
    - Use of selective species palate
    - Use of one or two species or elements to create an accent
    - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
    - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
    - Consider habitat attributes of plant material
    - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration

6. Rain gardens should be encouraged in front yards to support attenuation and help filter run-off.

7. Paving and roofing materials that have a high reflectivity should be utilized where possible to reduce urban heat island effect.

8. The use of rain barrels to collect, store and reuse rainwater will be encouraged.

9. Where driveways/parking pads are provided, the use of permeable pavement is encouraged to minimize impervious surfaces and reduce stormwater run-off.

Townhouses

1. Dwelling units should be constructed to one of the following standards; LEED, Energy Star, Net Zero ready or R-2000 Certification.

2. The incorporation of renewable energy resources is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:

    - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.

- Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
- Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
- Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure of renewable energy source features, such as wiring, conduits, pipes, etc., into the design of the building
- Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts

3. Landscaped areas shall incorporate friable topsoil placed at a minimum depth of 150mm within all lawn and landscaped areas.

4. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:

    - Maintain visual interest throughout the seasons
    - Use of selective species palate
    - Use of one or two species or elements to create an accent
    - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
    - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
    - Consider habitat attributes of plant material
    - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration

5. Rain gardens should be encouraged in front yards to support attenuation and help filter run-off.

6. Paving and roofing materials that have a high reflectivity should be utilized where possible to reduce urban heat island effect.

7. Where driveways/parking pads are provided, the use of permeable pavement is encouraged to minimize impervious surfaces and reduce stormwater run-off.

3.2.2 Business Corridor

1. All building shall be designed to incorporate sustainable design features reducing carbon and utilizing water conservation technologies, examples include alternative energy sources such as district energy, wind turbines, solar and photovoltaic panels, and geothermal such as renewable energy resources and/or Low Impact Development such as bioswales, grey water recycling, permeable pavement, infiltration galleries.

2. Green roofs are encouraged to be installed over a minimum of 50% of the overall roof area. Green roofs should be designed to attenuate a certain volume of stormwater. Cool roofs may also be utilized provided over a minimum of 75% of the overall roof area, or a combination of green roof and cool roof material for a minimum of 75% of the roof area to reduce heat island effect and contribute to building energy efficiency..

3. The integration of alternative energy sources on-site is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:

    - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
    - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
    - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
    - Buildings fronting onto major arterial streets/roads should use black solar panels, framing and back sheets.
    - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
    - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.

4. High efficiency LED lights that are “Dark Sky” compliant should be utilized to illuminate exterior areas within Business Corridor blocks in accordance the City’s Guidelines for Outdoor Lighting.

5. All lawns and landscaped areas should be covered with friable topsoil with a minimum depth of 150mm.

6. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:

    - Maintain visual interest throughout the seasons
    - Use of selective species palate
    - Use of one or two species or elements to create an accent
    - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
    - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
    - Consider habitat attributes of plant material
    - Enhanced LID function related to pollutant uptake, temperature mitigation,

filtration and evapotranspiration

7. Incorporate bird friendly design measures to discourage bird/glass collisions, such as “bird friendly” film.

8. High reflectivity paving materials should be used wherever possible to maximize albedo (reflectivity) and reduce urban heat island effect.

9. Large deciduous trees should be planted throughout the site to maximize canopy cover, promote interception of rainfall and maximize evapotranspiration.

10. Trees should be planted with the appropriate volume of suitable growing medium in order to ensure long term growth and vitality.

3.2.3 Mixed Use Corridor - General

1. All building should be designed to incorporate sustainable design features reducing carbon and utilizing water conservation technologies, examples include alternative energy sources such as district energy, wind turbines, solar and photovoltaic panels and/or geothermal and/or Low Impact Development such as bioswales, grey water recycling, permeable pavement.

2. The integration of alternative energy sources on-site is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:

    - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
    - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
    - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
    - Buildings fronting onto major arterial streets/roads should use black solar panels, framing and back sheets.
    - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
    - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.

3. High efficiency LED lights that are “Dark Sky” compliant should be utilized to illuminate exterior areas within Mixed Use Corridor - General blocks.

4. All lawns and landscaped areas shall be covered with friable topsoil with a minimum depth of 150mm.

5. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:

    - Maintain visual interest throughout the seasons
    - Use of selective species palate
    - Use of one or two species or elements to create an accent
    - Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
    - Avoid sparsely spaced greenery; bedding plants should be fully vegetated
    - Consider habitat attributes of plant material
    - Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration

6. Green roofs are encouraged to be installed over a minimum of 50% of the overall roof area. Green roofs should be designed to attenuate a certain volume of stormwater. Cool roofs may also be provided over a minimum of 75% of the overall roof area, or a combination of green roof and cool roof material for a minimum of 75% of the roof area to reduce heat island effect and contribute to building energy efficiency.

7. Incorporate bird friendly design measures to discourage bird/glass collisions, such as “bird friendly” film.

8. High reflectivity paving materials should be used wherever possible to reduce urban heat island effect.

9. Large crowned deciduous trees should be planted throughout the Mixed Use Corridor - General area to promote interception of rainfall and maximize evapotranspiration.

10. Trees should be planted with the appropriate volume of suitable growing medium in order to ensure long term growth and vitality.

11. All planting areas that are located over underground garages should be irrigated using an efficient automated irrigation system that utilizes recycled rainwater or grey water.

12. Mixed Use Corridor - General sites shall include adequate sheltered parking for bicycles and the installation of charging stations for electric vehicles.

13. Parking lots should incorporate generous islands that include bioswales and are planted with trees and landscaping with the objective of enhancing shading

and reducing the heat island effect.

14. Business Corridor sites should include adequate sheltered parking for bicycles. The installation of charging stations for electric vehicles is encouraged.

3.2.4 Mixed Use Corridor - Employment

1. All building should be designed to incorporate sustainable design features reducing carbon and utilizing water conservation technologies, examples include alternative energy sources such as district energy, wind turbines, solar and photovoltaic panels, and geothermal and/or Low Impact Development such as bioswales, grey water recycling, permeable pavement.

2. The integration of alternative energy sources on-site is encouraged, such as district energy, wind turbines, solar and photovoltaic panels, and geothermal. Renewable energy sources should consider the following:

    - Solar panels must be within the boundary defined by the eaves of the roof and roofline. Panels must not extend beyond the roof eaves and the peak of roof.
    - Solar panels should be flush with the angle of the roof for a pitched roof and angled no more than 1.5 metres from the roof for a flat roof.
    - Solar panel colours should be integrated/compatible with colours of the roof and any visible frames should be coloured to match or complement the roof colours.
    - Buildings fronting onto major arterial streets/roads should use black solar panels, framing and back sheets.
    - Screening, decoration, landscaping or other technique should be used to integrate supporting infrastructure features, such as wiring, conduits, pipes, etc., into the design of the building.
    - Wind turbines should have consideration for birds and bats and be appropriately sized and located to mitigate any potential negative impacts.

3. High efficiency LED lights that are “Dark Sky” compliant should be utilized to illuminate exterior areas within Mixed Use Corridor - Employment blocks.

4. All lawns and landscaped areas shall be covered with friable topsoil with a minimum depth of 150mm.

5. Landscape design of LID features, such as rain gardens and bioswales, should be intentional, appropriate and visually pleasing and consider the following:

    - Maintain visual interest throughout the seasons
    - Use of selective species palate
    - Use of one or two species or elements to create an accent

- Consistency of plant placement and spacing; incorporating mass groupings, repeating plant groupings, materials and/or design elements
- Avoid sparsely spaced greenery; bedding plants should be fully vegetated
- Consider habitat attributes of plant material
- Enhanced LID function related to pollutant uptake, temperature mitigation, filtration and evapotranspiration

6. Green roofs are encouraged to be installed over a minimum of 50% of the overall roof area. Green roofs should be designed to attenuate a certain volume of stormwater. Cool roofs may also be provided over a minimum of 75% of the overall roof area, or a combination of green roof and cool roof material for a minimum of 75% of the roof area to reduce heat island effect and contribute to building energy efficiency.

7. Incorporate bird friendly design measures to discourage bird/glass collisions, such as “bird friendly” film.

8. High reflectivity paving materials should be used wherever possible to reduce urban heat island effect.

9. Large crowned deciduous trees should be planted throughout the Mixed Use Corridor - Employment area to maximize canopy cover, promote interception of rainfall and maximize evapotranspiration.

10. Trees should be planted with the appropriate volume of suitable growing medium in order to ensure long term growth and vitality.

11. All planting areas that are located over underground garages should be irrigated utilizing an efficient automated irrigation system that does, where possible, utilize recycled rainwater or grey water.

12. Parking lots should incorporate generous islands that include bioswale and are planted with trees and bioswales with the objective of enhancing shading.

13. Mixed Use Corridor - Employment sites should include adequate sheltered parking for bicycles. The installation of charging stations for electric vehicles is encouraged.

4 Implementation

The Urban Design Guidelines for the Evergreen Community have been prepared to fulfill policy 5.3 b) Part VI of the Burlington Official Plan.

The Urban Design Guidelines are intended to be read in conjunction with the City of Burlington Official Plan and the Tremaine Dundas Secondary Plan.

The guidelines are intended to complement the numerous reports and documents which were prepared as a product of the planning process for the Evergreen Community. This document provides illustrations and clarity around the design intent for development of the Evergreen Community.

These guidelines are intended to be an element of the design review process for future development proposals within the Evergreen Community and may be amended. They provide additional guidance to the development process while maintaining a degree of flexibility to accommodate appropriate design solutions.

The guidelines are not prescriptive but are intended to set out preferred approaches to how the Evergreen Community will be developed into an urban, sustainable community, thus setting a new standard for mixed use development in the City of Burlington.