

4.2 Boulevard Guidelines

Frontage Zone

This zone is located between the pedestrian clearway and the building frontage or property line. It provides a dedicated area for spill-out retail, patios, window shopping and building entrances. It may also contain street furniture and building or retail signage.



Objectives

The Frontage Zone demarcates the transition from public to private realm and can serve different uses depending on the adjacent land use and road typology. It is particularly important in urban areas, where street-related retail and pedestrian activity is common and encouraged. This zone should be designed to add to the character and activity of the street by introducing the potential for patios and spill-out retail to the street.

Guidelines

- The Frontage Zone may contain private seating areas, planters, signage and temporary retail displays. In areas with retail at-grade, this zone should be wider to accommodate active at-grade uses
- Elements from this zone should not impede the pedestrian clearway in any manner
- The Frontage Zone may be within the public right-of-way or on adjacent private property
- If located in the public right-of-way, no permanent elements may be installed without

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Regional or Municipal approval

- Overhanging signage can be installed if it does not interfere with pedestrian travel and meets local signage regulations

Further Details

- [York Region Pedestrian and Cycling Planning & Design Guidelines](#)



The Frontage Zone supports active at-grade uses

Pedestrian Clearway

The Pedestrian Clearway is the portion of the boulevard which is dedicated to the movement of pedestrians. It should be located directly adjacent to the building frontage, property line or frontage zone, depending on the road typology.



Objectives

The Pedestrian Clearway is critical in creating a pedestrian-oriented street, as this is the main space for pedestrian movement. All Regional roads, except Rural Roads, should include the pedestrian clearway to achieve goals of creating complete, walkable communities that are also friendly to all ages and abilities. In active urban areas, the pedestrian clearway should be as wide as possible within the boulevard. It must also meet accessibility standards and should remain clear of obstructions, horizontally and vertically, at all times.

Guidelines

- Pedestrian Clearway should be designed to meet the *Accessibility for Ontarians with Disabilities Act* standards and must remain unobstructed both horizontally and vertically
- A continuous, even and level public sidewalk should be provided on both sides of Regional roads, unless an alternate pedestrian route such as a multi-use path is provided
- The sidewalk should be constructed of brushed concrete to facilitate pedestrian movement and

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barrier-free accessibility

- Where crossings over unsignalized driveways occur, clearways should be continuous and marked with materials that provide visual contrast from the roadway pavement.
- Sidewalk edges and curbs should be graded at intersections to provide barrier-free access for people with disabilities. Tactile pavers at sidewalk edges are required to help warn pedestrians
- Signage boards within the pedestrian clearway should not be permitted when a Planting and Furnishing Zone or Frontage Zone is provided
- Overhead signage and canopies should not be located any lower than 2.5 metres above the clearway
- Seating and retail spill-out spaces should not be permitted within the pedestrian clearway
- Permeable or unit paving should generally not be used in the pedestrian clearway
- Additional width or a clearance are required to account for the comfortable operating space beyond the essential surface on which people walk or bicycle, as well as to provide a separation between people and hazards or objects
- Refer to the York Region Pedestrian and Cycling Planning & Design Guidelines for further details related to clearances and buffers

Further Details

- [York Region Pedestrian and Cycling Planning & Design Guidelines](#)
- [York Region Streetscape Design Review Manual](#)
- [York Region Road Design Guidelines](#)

Cycle Track

Cycle tracks are off-street bicycle facilities that provide additional safety and comfort for cyclists over on-street bike lanes or shared facilities. They are located within the boulevard, physically separated from vehicle traffic and designated for the exclusive use of cyclists.



Objectives

Cycle tracks provide additional safety for cyclists riding on Regional roads. As a result of separated design, the tracks appeal to a wider range of cyclists, including those not comfortable riding in mixed traffic. They also reduce the risk and severity of bike-vehicle collisions and conflicts such as 'dooring'.

Guidelines

- Cycle tracks can be uni-directional (one way) or bi-directional (two way). Care should be taken when considering a bi-directional cycle track as this configuration will have significant impact on intersection design
- Where a cycle track is located next to a sidewalk in constrained conditions, a clear delineation between facilities should be provided
- Ensure there are sufficient sight lines at intersections
- Ensure appropriate design treatments for pedestrian crossings and transit facilities where they meet or intersect with a cycle track
- Access points (or driveways) along a road

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with a cycle track should be eliminated or amalgamated wherever possible to avoid conflict with the cycle track

- Where cycle tracks cross driveways and intersections, they should be continuous
- In a City Centre Street and Avenue typology, locating the cycle track next to the edge zone may be more appropriate in cases where the posted speed is less than 60 km/h
- Refer to the York Region Pedestrian and Cycling Planning & Design Guidelines for further details related to clearances and buffers

Further Details

- [York Region Pedestrian and Cycling Planning & Design Guidelines](#)
- [OTM Book 18 - Bike Facilities](#)



Cycle tracks can encourage hesitant cyclists to use this mode of active transportation

Multi-Use Paths

Multi-use paths are located in the boulevard and shared by pedestrians, cyclists and other non-motorized modes of movement. Multi-use paths are appropriate on arterial roads in suburban, rural or industrial areas where no traditional pedestrian/cycling facilities are provided.



Objectives

Multi-Use Paths encourage alternate modes of travel on a safe, dedicated facility well-protected from vehicle traffic and provide important connections to larger cycling and trail networks.



Multi-use paths provide important connections to the wider trail system

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Guidelines

- Multi-use paths should be designed to distinguish between walking and cycling/rollerblading areas to minimize conflicts
- Multi-use paths should be constructed with a durable surface, such as asphalt or concrete, and should consider the seasonal nature of the path in choice of materials (e.g. if it is to be cleared of snow in winter)
- Multi-use paths should be connected to existing pedestrian and cyclist networks and provide access to natural heritage features
- Multi-use paths can be used as mid-block pedestrian crossings through adjacent development when appropriate
- Multi-use paths should be fully accessible to all ages and abilities
- Where appropriate, paths should include adequate amenities, such as seating, waste receptacles, lighting and signage and be designed according to site-specific conditions
- Multi-use paths can be provided for a Rural Road typology in higher demand areas or close to generators of pedestrian or cycling traffic
- Consider including marking multi-use paths with pedestrian/cyclist symbols
- Ensure appropriate design treatments for pedestrian crossings and transit facilities where they meet or intersect with a multi-use path
- Refer to the York Region Pedestrian and Cycling Planning & Design Guidelines for further details related to clearances and buffers

Further Details

- [York Region Pedestrian and Cycling Planning & Design Guidelines](#)
- [OTM Book 18 - Bike Facilities](#)

Planting and Furnishing Zone

The Planting and Furnishing Zone is located between the pedestrian clearway and the edge zone, and provides an additional buffer between vehicles and pedestrians. It should be included on all streets with a pedestrian clearway. It provides space for trees, raised planters, site furnishings and infrastructure such as benches, bicycle parking, transit shelters and utilities.



Objectives

The Planting and Furnishing Zone provides space for street amenities that activate the street and are easily accessible to pedestrians of all ages and abilities. It also creates optimal growing conditions for street trees to ensure a healthy and robust urban forest that provides shade and adds to the character of the street.



Planting and amenities are critical to a high quality public realm

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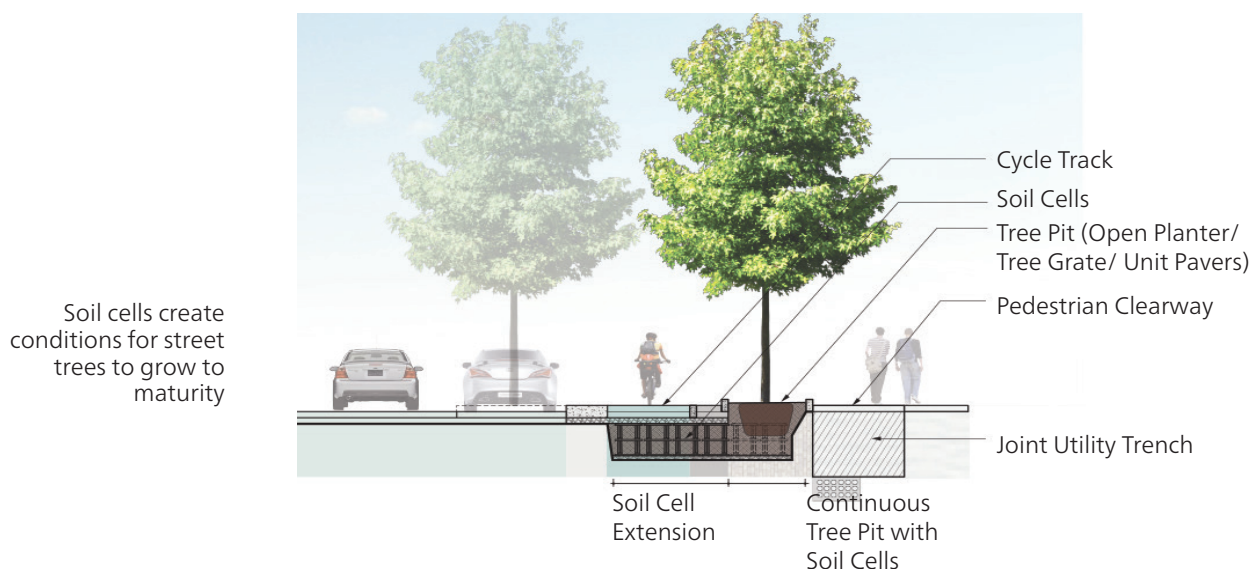
- Street furniture, street trees and public wayfinding signage, transit facilities/amenities should be located within this zone
- No part of the furniture or signage elements should impede travel within the adjacent pedestrian clearway
- This zone can be hardscaped or softscaped. Suburban and rural road typologies will include more softscaping, while urban road typologies may include a mix of hardscaped and softscaped areas
- Street trees should be included in Rural Road typologies where no trees exist adjacent to the roadway. They will function to reduce wind speed, protecting soil of adjacent fields from erosion and can be a buffer to reduce snow drifting
- Hardscaping and softscaping should be designed to be low maintenance and durable
- Where appropriate, low maintenance planting areas should be used at the street edge to soften hard surfaces and buffer the pedestrian clearway from the road
- Hardscaping should have a material difference from the pedestrian clearway to visually differentiate it from vehicle, cycling and pedestrian travel areas
- Permeable paving should be used above soil cells to allow for water and oxygen to reach tree roots
- Where possible and space permits, a double row of street trees should be incorporated
- In hardscape areas, trees should be planted in continuous tree trenches utilizing soil cells to encourage longevity and viability. Soil cells can be extended under on-street parking, multi-use

paths and bike facilities where soil volume is critical (see illustration below)

- Street trees are to be provided with a minimum of 30 cubic metres of soil volume per tree achieved through direct soil access with an additional 14 cubic metres of shared soil access. Trees should have enough soil volume to reach a minimum diameter of 40 cm at 40 years of age
- In softscape areas, trees should be planted in a continuous boulevard soil trench with access to additional soil volume within and outside the right-of-way. Break-out zones should be provided under pedestrian and cycling facilities to allow tree roots to access adjacent soils without damaging infrastructure
- Coordination with utility providers is important to minimize root and crown pruning during utility maintenance and to maximize tree pit and canopy size for healthy tree growth
- Consideration should be given to maintaining appropriate sight distances at major access points
- Where possible, the principles of low impact development should be applied to control stormwater on-site and minimize discharge to the local stormwater system
- Consider aligning street trees, pedestrian/feature lighting, street lighting and hydro poles to minimize conflict with pedestrians
- In a Main Street or Rural Hamlet Road where a full planting and furnishing zone with street trees is not possible due to right-of-way constraints, alternative plantings (shrubs/perennials) and/or furnishings should be discussed with the local municipality and/or business improvement associations

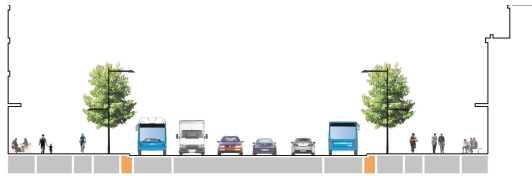
Further Details

- [York Region Street Tree Preservation and Planting Design Guidelines](#)
- [YRT Co-ordinated Street Furniture Urban Design Guidelines](#)



Edge Zone

The Edge Zone, located between the Edge of Pavement and the Planting and Furnishing Zone, is comprised of curb and gutter and maintenance strip, acting as a buffer between the roadway and boulevard.



Objectives

The Edge Zone provides a safety buffer against car doors/mirrors and to accommodate road signage and plays an important role in road maintenance, especially for snow storage in winter.

Guidelines

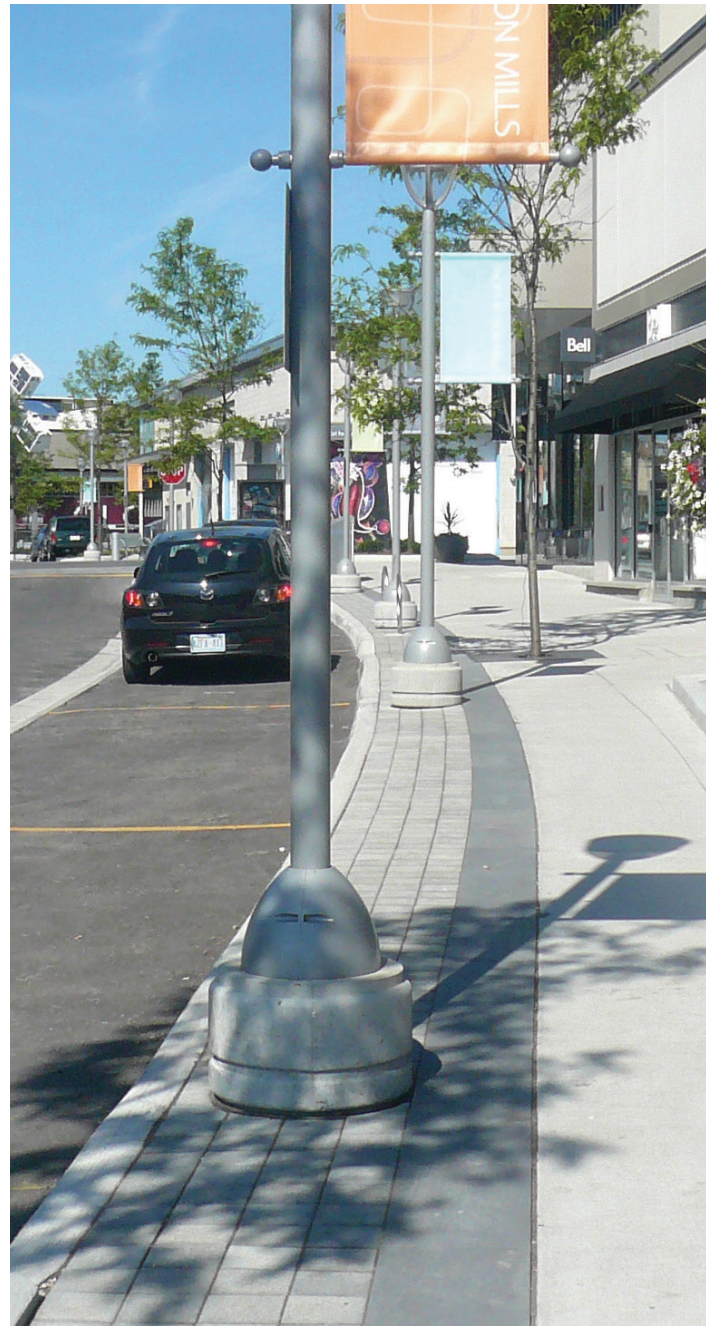
- The edge zone is 1.3 m including a 0.8 m maintenance strip, 0.2 m curb and 0.3 m gutter
- Overlap between the Edge Zone and the Planting and Furnishing Zone may be considered as long as minimum offsets between trees and roadway are maintained
- The edge zone should not overlap with cycling facilities
- The maintenance strip contains a paved splash strip which may take up all or part of the maintenance strip
- The Edge Zone's splash strip should be constructed of durable a material appropriate for snow storage
- A narrow curb and gutter should be considered in constrained Main Street typologies

Further Details

- [York Region Road Design Guidelines](#)

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The edge zone demarcates the boulevard from the roadway

Low-Impact Development

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Low-impact development (LID) is an approach to managing stormwater run-off at the source by replicating natural watershed functions. It uses simple, cost-effective streetscape elements to capture, detain and treat stormwater where it falls.



Objectives

LID involves the use of streetscape features to manage rainfall at the source and protect and enhance water quality by replicating the function of natural watersheds. LID options should be considered on all projects for new and existing streets. They play a critical role in improving water retention and should be designed to protect the quality of York Region's groundwater and watersheds. They can also help decrease the footprint of Regional Roads and impact of adjacent properties. LIDs can be designed to enhance the streetscape, protect animal habitats and provide additional streetscape space in the boulevard that is both functional and aesthetic. LID options should be considered where they offer reduced operations and maintenance costs and reasonable functioning lifespans when compared with traditional stormwater management systems.

Guidelines

- Incorporate LID practices where possible, as appropriate to road typology. Low-impact development options include:

- Bioretention planters, units or curb extensions
- Bio-swales or drainage swales
- Permeable paving
- Pre-cast tree planters or soil cells
- Identify appropriate low-impact development options for the road typology and planned maintenance and inspection practices
- Ensure appropriate monitoring and maintenance regimes are established
- Where possible, replace unnecessarily paved areas with permeable materials (medians, dedicated parking lanes/lay-bys, traffic islands)
- In rural areas, convert degraded culverts and ditches to grass swales
- Use salt tolerant, non-invasive shrubs and grasses
- Where possible, water should pass through engineered filter media and include an underdrain which conveys the filtered stormwater to a storm drain system or other suitable surface outlet
- All applicable environmental acts and regulations must be adhered to

Further Details

- [York Region Sight Triangle Manual](#)

Transit Facilities

Transit facilities include all amenities associated with the provision of transit, including seating, pads, shelters, waste receptacles, lighting and route information and should be located in the Planting and Furnishing Zone to maximize visual connections between the shelter and the approaching transit vehicle as well as minimize conflicts with pedestrian and cycling movement.



Objectives

Safe and comfortable transit facilities are critical to encouraging transit ridership. The design of transit facilities should emphasize connections with alternative modes of movement to provide seamless and convenient transfers from one mode to another. Well-designed transit facilities that are barrier-free and do not interfere with the pedestrian clearway also minimize user conflicts and facilitate convenient pedestrian access for all ages and abilities.

Guidelines

- Transit shelters should include a shelter for weather protection, appropriate seating with armrests, waste receptacles, lighting and route information, especially in busy pedestrian areas. Where adjacent to street lighting, lighting on shelters may not be required
- Sidewalks should connect directly to transit shelters to encourage active transit use and ensure safety and convenience

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- Transit stops and shelters should have barrier free access and be located in a way that does not interfere with pedestrian and cycling movement
- Protect sight lines in the location and design of transit facilities
- Provide concrete pads in the waiting and loading areas of transit stops. The pads should be flush with the sidewalk to provide accessibility to passengers using wheelchairs and textured to provide tactile directional cues for people with vision loss
- Use transit shelters with transparent walls to improve pedestrian safety and provide visual connection between waiting transit users and approaching transit vehicles
- In some cases it may make more sense to place the transit facility in between the sidewalk and the property line/frontage zone.
- Shelter openings should preferably face the sidewalk, especially if the shelter is between the road and the sidewalk. This reduces road splash and snow clearing problems
- Tree planting should be provided adjacent to the shelter to provide shade, a wind break and an attractive environment
- Run-off from shelter roofs should be directed to adjacent tree pits or other soft landscaping

Further Details

- [York Region Pedestrian and Cycling Planning & Design Guidelines](#)
- York Region Transit Drawings and Specifications (Latest versions available through the YRT Capital Assets group.)

Pedestrian/Feature Lighting

Pedestrian/feature lighting may be installed in addition to standard lighting fixtures to enhance pedestrian experience and safety. Lighting features may be installed directly on buildings, or located in the Planting and Furnishing Zone.



Objectives

Pedestrian/feature lighting animates streets and sidewalks, enhancing safety and emphasizing streetscape character. Its design should reflect its context and the surrounding cultural environment. Lighting can also be used to highlight special features, such as heritage buildings, character areas or landscaping and art features.

Guidelines

- In urban areas, lighting should be pedestrian-scale, while in more rural contexts or along multi-use paths, pedestrian/feature lighting should enhance safety and visibility to encourage use
- Design and location should consider sustainability and the impacts of light pollution (e.g. "dark sky" compliant), including energy efficiency, directional lighting that reduces wasted energy, LED lighting, solar power and street reflectors/street sensors (to help regulate brightness and when lights turn on and off)
- Downcast pedestrian-scale lighting should be provided in urban areas, at key intersections, along multi-use paths and at transit stops

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- Pedestrian/feature lighting can be located within the Planting and Furnishing Zone or within the Frontage Zone if affixed directly to buildings
- Consideration should be given to providing additional or feature pedestrian-scale lighting in areas with high volumes of pedestrian activity
- Consolidate road and pedestrian lighting onto one pole, where possible, to minimize visual clutter. Similarly, attach a light arm/luminaire to hydro poles where appropriate
- Downcast, pedestrian-scaled lighting enhances safety and visibility on streets. At gateways and focal points, lighting can be used to accent special features, such as heritage properties, landscaping and signage
- The design process for Regional roads should consider the potential and future locations of pedestrian lighting and should coordinate with local municipalities or business associations to determine if pedestrian lighting is required



Pedestrian/feature lighting adds to pedestrian safety and character