

**Kingston Road Corridor and  
Specialty Retailing Node**

City of Pickering

# Draft Urban Design Guidelines

November 2019





# Acknowledgments

These Draft Urban Design Guidelines have been developed through a collaborative process that included landowners, developers, City and Regional staff and community members, together with other relevant stakeholders.

The City and consultant team would like to thank all those involved in the process for their commitment to making this document a practical and useful tool to guide the implementation of the Kingston Road Intensification vision.

## City of Pickering

### Participating Stakeholders

#### Landowners

#### The Public

#### Agencies

- The Province of Ontario Ministry of Transportation
- Region of Durham
- Parks Canada
- City of Toronto
- Town of Ajax
- Durham District School Board
- Toronto Region and Conservation Authority

### Consultants

SvN, AECOM and 360 Collective commenced this document in May 2019.

The Draft Urban Design Guidelines will be presented to the Planning and Development Committee (PDC) at the end of 2019.

# Table of Contents

## 0.0 Intent & Structure of Document

## 1.0 Introduction

- 1.1 Study Area
- 1.2 Local and Regional Context
- 1.3 Vision Statement
- 1.4 Goals and Objectives
- 1.5 Intensification Plan

## 2.0 Built Form

- 2.1 Introduction
- 2.2 Block Structure
- 2.3 Building Placement and Orientation
  - 2.3.1 Building Entrances
  - 2.3.2 Building Separation Distances
  - 2.3.3 Building Setbacks
- 2.4 Grading and Access
- 2.5 Parking
  - 2.5.1 On-Street Parking
  - 2.5.2 Structured Parking
  - 2.5.3 Surface Parking
- 2.6 Loading, Services and Utilities
- 2.7 Landscape Design
- 2.8 Sustainable Design
- 2.9 Signage and Lighting
- 2.10 Transition and Massing
- 2.11 Materials and Facade Treatment
- 2.12 Streetwall
- 2.13 Active Frontage Network
- 2.14 Gateways
- 2.15 Building Types
  - 2.15.1 Tall Buildings
  - 2.15.2 Mid-Rise Buildings
  - 2.15.3 Low-Rise Buildings



## 3.0 Place-making

- 3.1 Introduction
- 3.2 Natural Heritage Network
- 3.3 Heritage Path
- 3.4 Public Green Spaces
- 3.5 Public Parks
- 3.6 Gateway Plazas
- 3.7 Public Lookouts
- 3.8 Privately Owned Publicly-Accessible Spaces (POPS)
- 3.9 Public Art
- 3.10 Heritage Buildings
- 4.4 Transit
- 4.5 Street Types
  - 4.5.1 Primary Streets
  - 4.5.2 Secondary Streets
  - 4.5.3 Service Streets and Laneways
  - 4.5.4 New Public Streets
  - 4.5.5 New Private Streets
  - 4.5.6 Existing Streets

## 4.0 Connectivity

- 4.1 Introduction
- 4.2 Pedestrians
  - 4.2.1 Sidewalks
  - 4.2.2 Pedestrian Paths
  - 4.2.3 Pedestrian Crossings
- 4.3 Cycling
  - 4.3.1 Multi-Use Paths
  - 4.3.2 Bicycle Lanes and Cycle Tracks
  - 4.3.3 Shared Facilities

## 5.0 Illustrative Blocks

- 5.1 Introduction
- 5.2 Mid-Block Sites
- 5.3 Intersection Sites

# 0.0 Intent & Structure of Document

This document provides a toolkit to guide new development within the Kingston Road Corridor and Specialty Retailing Node, with an emphasis on place-making and sustainability on a study area-wide scale.

This document further articulates the vision set by the Intensification Plan and aims to serve as a practical and user-friendly reference manual for all parties engaged in development projects.

The intent of the document is to guide readers from the high-level principles set out in the Intensification Plan to specific design considerations for elements of progressive scale: neighbourhood, block, site and building. Based on best practice standards, this document has been structured through a principle-based approach to site-specific design, while providing a degree of flexibility, creativity and adaptability for future development.

**The Urban Design Guidelines will provide direction and guide the City’s review of site-specific applications within the Kingston Road Corridor and Specialty Retailing Node, and must be read in concert with the Pickering Official Plan and Zoning By-law regulations.** The Urban Design Guidelines are one of the tools to implement the Intensification Plan.

The document is divided into 5 sections: Introduction, Built Form, Place-making, Connectivity and Illustrative Blocks. Chapter 5 combines the guidelines found throughout the document and provides a series of Illustrative block plans and massing showing a possible design utilizing the guidelines. The colour attributed to each section is consistent throughout the document, and all colour-coded annotations shall guide the reader to the corresponding section being referred to.

Although the Urban Design Guidelines express the City’s design objectives, they do not preclude alternative options. As guidelines, they offer flexibility in their application, provided that the overall intent of the Urban Design Guidelines is being met.

YOU ARE HERE



## 1.0 Introduction

Understanding of the site and the vision and objectives. Introduction to the Intensification Plan.

## 2.0 Built-Form

Toolkit of built-form guidelines for intensification.



## 3.0 Place-making

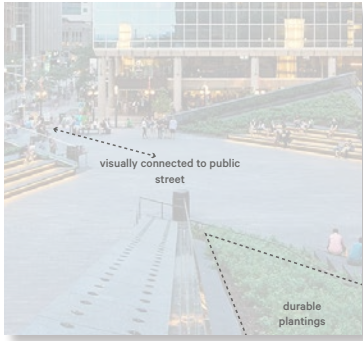
Toolkit of place-making guidelines for intensification.



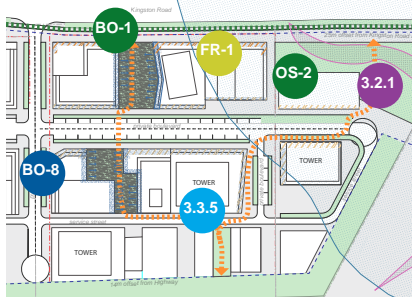
## Structure of the Urban Design Guidelines

# Annotated Elements

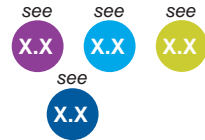
Annotations over images identify best practices illustrated by the precedent.



Annotated letters on diagrams within Section 5.0 Illustrative Blocks refer to the corresponding guideline.



This callout type directs the reader to the related section and/or subsection.



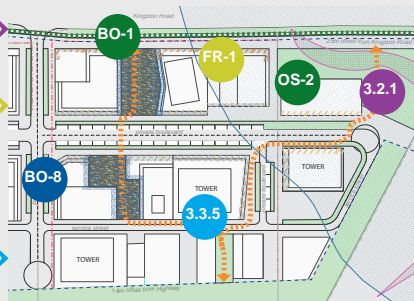
## 4.0 Connectivity

Toolkit of connectivity guidelines for intensification.



## 5.0 Illustrative Blocks

Illustrative block plans utilizing the toolkit guidelines.





# 1.0 Introduction

- 1.1 Study Area
- 1.2 Local and Regional Context
- 1.3 Vision Statement
- 1.4 Goals and Objectives
- 1.5 Intensification Plan



# 1.1 Study Area

The approximately 152-hectare Study Area is centred on Kingston Road, which spans the entire width of the City of Pickering, paralleling Highway 401. The Study Area generally includes properties that front onto the north and south sides of Kingston Road, between Rouge National Urban Park in the west and Pine Creek in the east. The Study Area also includes a number of properties that front on to the north side of Kingston Road west and east of the intersection of Brock Road, as well as all properties that fall within the Specialty Retailing Node to the southeast of the intersection of Kingston Road and Brock Road (see Figure 1).

There are two areas along Kingston Road that are excluded from the Study Area. These include flood prone areas to the north and east of the Specialty Retailing Node and the City Centre, where a detailed planning study has already been undertaken result in Council-

approved area-specific Official Plan policies, zoning, and urban design guidelines.

For the purposes of the study, the Study Area has been divided into the following four precincts:

**Rougemount Precinct** – extending from the Rouge Valley in the west to Rosebank Road in the east

**White Precinct** – extending from Rosebank Road in the west to Fairport Road in the east

**Dunbarton/Liverpool Precinct** – extending from Fairport Road in the west to Pine Creek in the east

**Brock Precinct** – incorporating the portions of the Study Area around the intersection of Kingston Road and Brock Road and the entirety of the Specialty Retailing Node located south of Kingston Road, east of Brock Road, and north of Highway 401

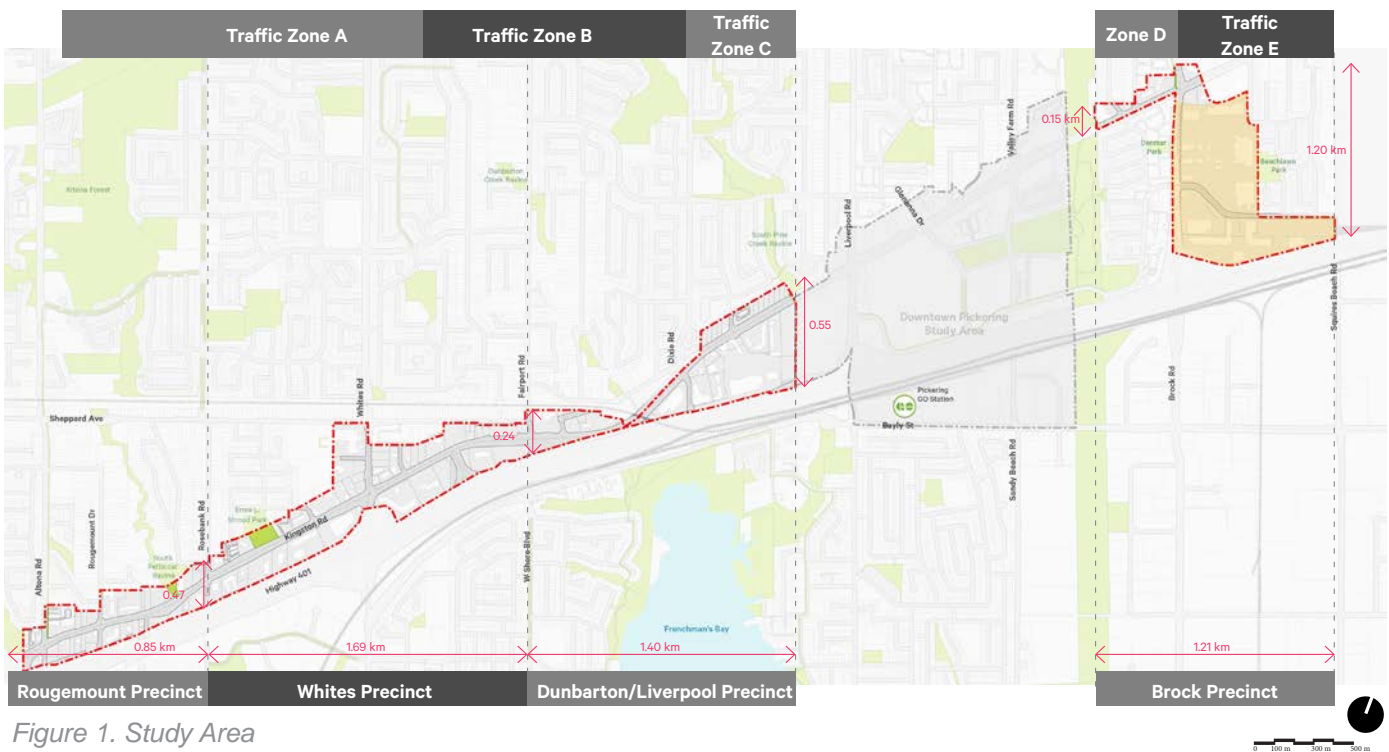


Figure 1. Study Area

## Legend

- - - Study Area Boundary
- Parks / Open Space
- Specialty Retailing Node
- Rail Corridor

# 1.2 Local and Regional Context

Kingston Road is a key connection route at the regional, city and neighbourhood scale, linking together various local destinations, neighbourhoods, and municipalities.

Kingston Road serves a significant regional role, providing connections between Pickering, Toronto, Ajax, Whitby and Oshawa. It also serves as a connector between a number of regionally significant natural heritage features, including the Highland Creek and Rouge River in Toronto, the Petticoat Creek and Duffins Creeks in Pickering, and the Caruthers Creek in Ajax. This major regional link/connection is shown in Figure 2. The Specialty Retailing Node also serves a regional role, providing specialty retailing to a broad regional market with access provided by the Highway 401 interchange at Brock Road.

At the city scale, Kingston Road is a major east-west spine with branch connections to important growth areas such as the Seaton Urban Area. It also connects to recreational amenities such as the Pickering Waterfront and Rouge National Urban Park, including Glen Rouge Campground and its associated trails which are to be expanded significantly over the coming years. These city-scale north-south links/connections are shown conceptually in Figure 2.

At the neighbourhood scale, Kingston Road serves as a spine for key north-south connections across Highway 401, connecting neighbourhoods in the South Pickering Urban Area to one another at Rougemount Drive, Whites Road, Liverpool Road, and Brock Road (see conceptual major links/connections in Figure 2). Likewise, the Specialty Retailing Node plays a city/neighbourhood-scale role, providing destination retail and local retail within its boundaries, serving customers from within the City of Pickering and the immediate areas that surround it.

The role the corridor plays at multiple scales necessitates that the ultimate vision for intensification contemplate and seek a balance between these varied functions, through new connections, new open spaces, public realm improvements, new uses, and new, denser development.

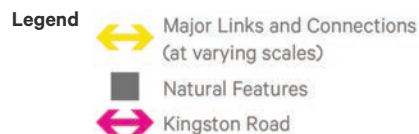
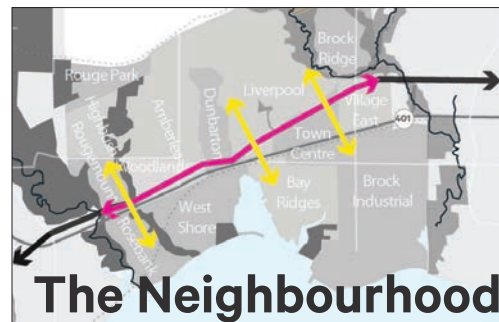
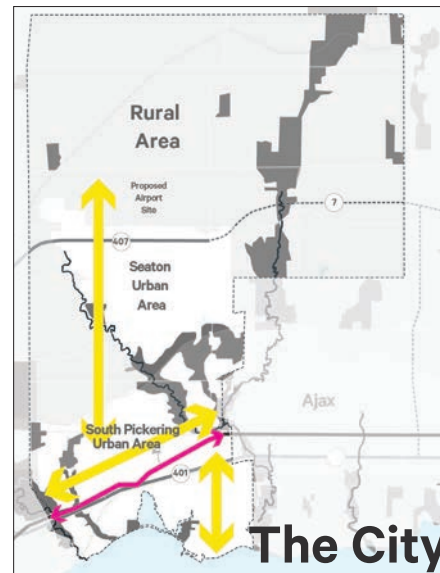
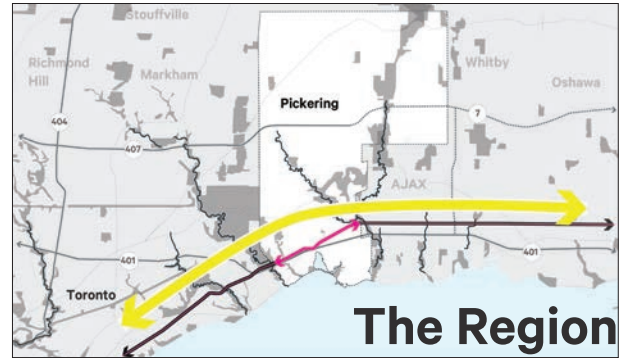


Figure 2. Regional, City-wide and Neighbourhood Context

# 1.3 Vision Statement

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Throughout the course of this study, a renewed Vision was developed for the Kingston Road Corridor and Specialty Retailing Node. This Vision built upon the existing vision for the corridor and node as expressed in the City of Pickering Official Plan, the Kingston Road Corridor Development Guidelines, and the Specialty Retailing Node Guidelines. The renewed Vision was also informed by the updated planning framework, specifically the Growth Plan for the Greater Golden Horseshoe's increased emphasis on planning for complete communities and integrating transportation and land use planning through transit-supportive development. Lastly, the renewed Vision was developed in light of the review of existing conditions, analysis of issues and opportunities and consultation with Focus Groups and the Public Agency Advisory Committee.

Based on all of the above, the following was endorsed by Council as a new Vision for the corridor and node:

By 2041, the Kingston Road Corridor and Specialty Retailing Node will be...

- A sustainable place that embraces its significant natural heritage assets, connecting to the valleys and creeks that the corridor crosses, mitigating greenhouse gas emissions and adapting to climate change, and building communities centred on new public open spaces in both the corridor and node
- A walkable place in all four precincts, with safe, comfortable and green sidewalks and pedestrian connections on both sides of Kingston Road, and within larger parcels that are likely to redevelop with an internal street network, particularly within the node
- An urban, livable, transit-supportive community, with a higher density mix of uses, located in buildings that are pedestrian oriented, and that transition in height and mass to the scale of adjacent established neighborhoods, particularly to the north of the corridor and to the east of the node
- A place that continues to serve as both a destination for shopping and a place of employment, with retail, commercial services and offices within mixed use buildings or on mixed use sites, and generally fronting directly onto Kingston Road, Whites Road and onto new internal streets on larger parcels, to provide active uses at grade that encourage pedestrian traffic
- A regional and local multi-modal connector, with regional gateways at Altona Road and Brock Road, and with gateways to the neighborhoods north and south of the corridor at Rougemount Drive, Whites Road, Fairport Road, Brock Road and Pickering Parkway.

# 1.4 Goals and Objectives

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In addition to the new Vision, a series of guiding goals and objectives for the corridor and node were prepared to guide the development of the Intensification Plan.

These goals and objectives are as follows:

## **1. Advance the concept of place-making and create complete communities**

- 1.1 Create a distinct character for the corridor and node as a whole while also providing for variation based on the unique conditions and adjacencies within each precinct
- 1.2 Create a strong sense of community, a context for healthy lifestyles and a high quality of life
- 1.3 Plan for a full range of housing types and tenures in a variety of building forms
- 1.4 Provide for and ensure the accessibility of a full range of services and amenities for all walks of life

## **2. Promote sustainability in the design and full life-cycle of the streetscape, open spaces and buildings**

- 2.1 Ensure that the ultimate streetscape, open space and redevelopment concepts have capacity to support growth beyond the horizon of the plan
- 2.2 Ensure that sustainability principles and green infrastructure are incorporated as a foundational element of all streetscape, open space and built form concepts

## **3. Stimulate economic growth and vitality**

- 3.1 Maintain space for various sizes of retail uses and encourage the expansion of office and commercial service uses

## **4. Promote mixed used development with an emphasis on higher density residential and employment uses integrated within a building or site**

- 4.1 Plan for existing single use sites to transition over time to a mix of uses, either through full scale redevelopment or infill on underutilized portions of a site
- 4.2 Plan for higher density forms of employment including office uses, within close proximity to higher order transit stops
- 4.3 Plan for the greatest mix of uses and highest densities within close proximity to higher order transit stops

## **5. Design all public roads and private connections to be complete streets and emphasize transit and pedestrian oriented development**

- 5.1 Ensure that all users of public roads and private connections have distinct and delineated spaces to separate modes of travel moving at different speeds
- 5.2 Ensure that buildings are located in close proximity to and are oriented towards the public realm and provide active edges to create an environment that encourages walking

## **6. Improve access management and connectivity for all transportation modes**

- 6.1 Plan for the consolidation of driveways with access to and from Kingston Road
- 6.2 Plan for the creation or enhancement of internal street networks on larger parcels to provide alternative routes and new frontages for development

## **7. Encourage the optimization of infrastructure**

7.1 Establish a density target for areas or sites within proximity to higher order transit stops to optimize transit ridership

7.2 Ensure that intensification can be supported by existing infrastructure capacity and that additional infrastructure is phased in step with development

## **8. Enhance and restore natural heritage features and functions**

8.1 Provide physical and visual connections between the corridor and the natural heritage features that it intersects

8.2 Restore natural heritage corridors, ensure no incremental loss of natural heritage and consider stormwater management on an area wide basis

## **9. Support implementation by considering phasing, flexibility and intermediate interventions**

9.1 Ensure that the overall arrangement of streets, blocks, open spaces and buildings can be achieved in multiple ways and that sites are designed in a manner that anticipates change over time



# 1.5 Intensification Plan

The Intensification Plan provides a comprehensive framework for future development of the Kingston Road Corridor and Specialty Retailing Node. It sets out a detailed land use strategy to support higher-density mixed-use development, identifies place-making opportunities for an improved public realm, and proposes improvements to the street, transit, cycling and pedestrian network to increase connectivity.

For ease of reference and to aid understanding of the overall context, the Intensification Plan (Figure 3) of the Kingston Road Corridor and Specialty Retailing Node is presented on the following page.

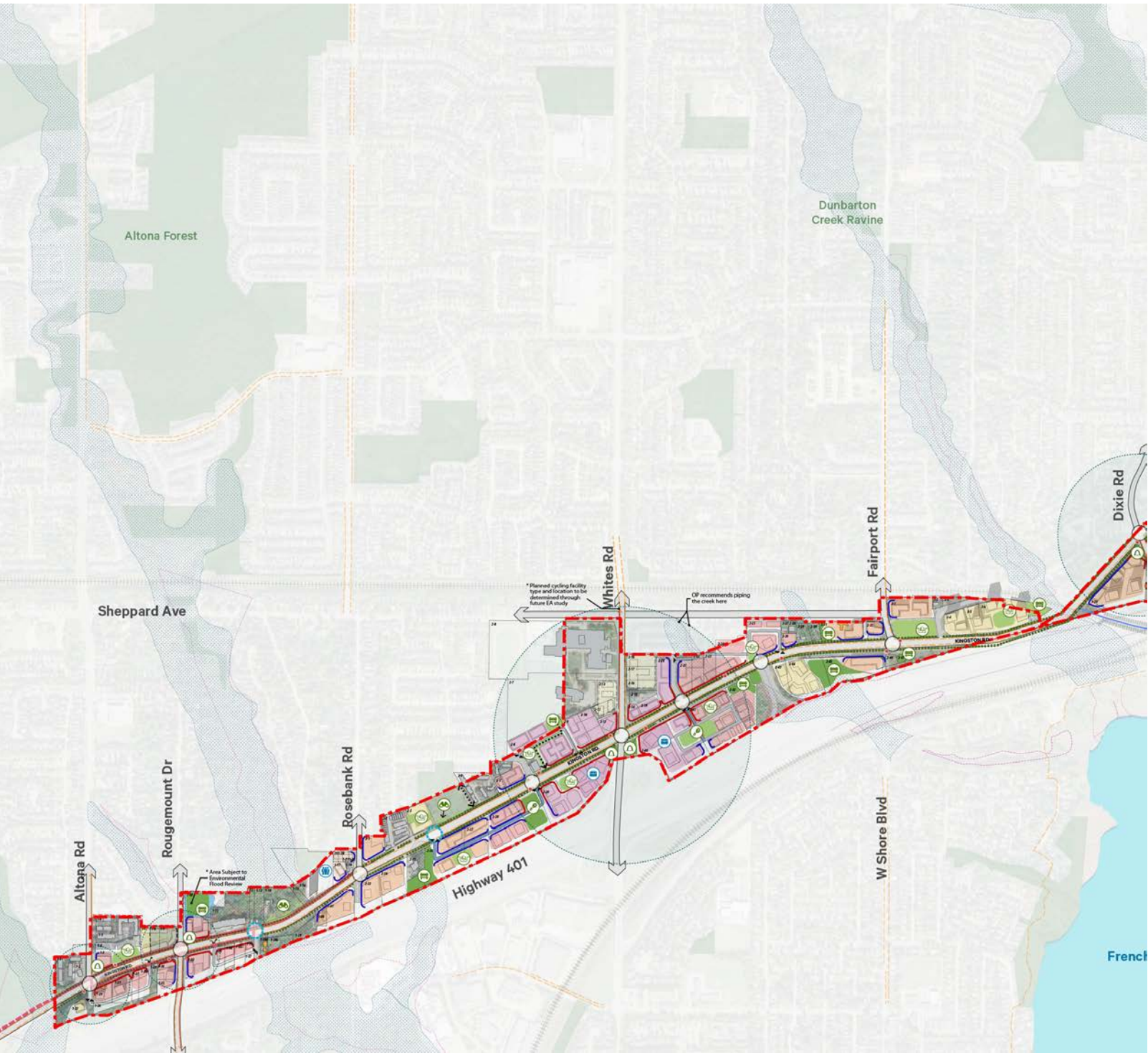
This is followed by precinct-specific figures, showing each precinct at a larger scale and with a greater amount of detail. Intensification Plans are accompanied by Illustrative Urban Design Plans for each of the Rougemount (Figures 4-5), Whites (Figures 6-7), Dunbarton/Liverpool (Figures 8-9) and Brock (Figures 10-11) Precincts.

These Illustrative Urban Design Plans are used as an underlay for all maps produced for this document, and include existing natural heritage features, transportation infrastructure, and lot boundaries, along with potential placement and orientation of buildings and potential location of landscape features in a manner which is consistent with the Urban Design Guidelines. It is important to note that the diagrams are illustrative in nature, and that they represent only one of many possible built form configurations.

The following legend outlines the features shown on the Illustrative Urban Design Plans.

## LEGEND

 Study Area Boundary	 Existing Main Road	 Lot Lines
 Valleylands and Stream Corridors	 Existing Street/ Laneways	 Developable Lots
 Regional Stormwater Flood Plain	 GO Railway	 Lot Identifier
 Existing Park	 Future & Planned Connection Subject to EA	 Proposed Streets
 Existing Controlled Intersection	 Buildings To Remain	 Buildings and Shadows - Illustrative Only (March 21st at 1:00 pm)
 Bus Stops	 Properties of Heritage Significance	 Landscape - Illustrative Only

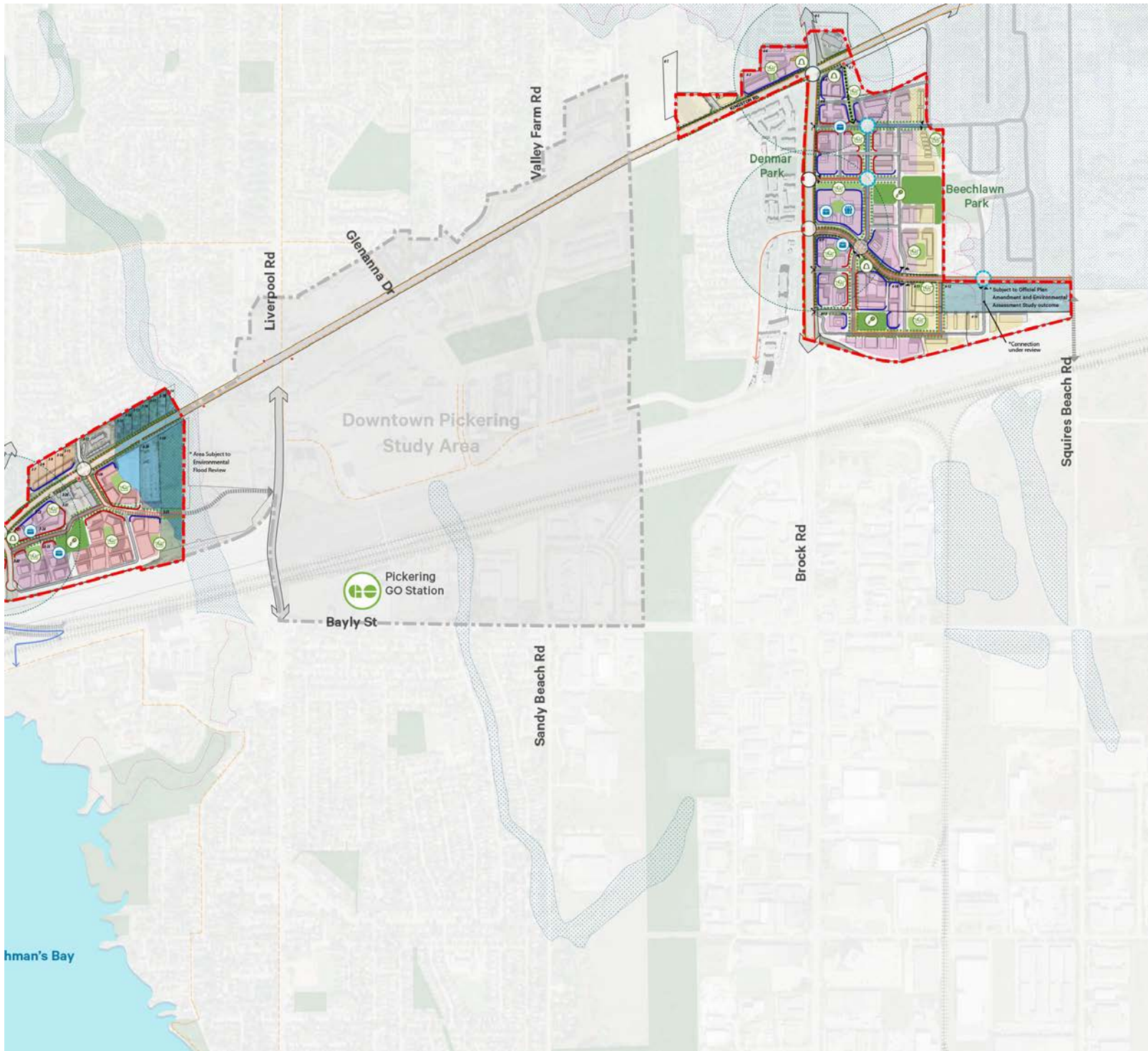


**LEGEND**

- Study Area Boundary
- Valleylands and Stream Corridors
- Regional Stormwater Flood Plain
- Existing Park
- Buildings To Remain
- Properties of Heritage Significance
- Existing Main Road
- Existing Road / Laneways
- Existing Cycling Network
- Planned Cycling Network
- Lot Lines
- Developable Lots
- Lot Identifier
- Area Subject to Further Assessment
- Existing Controlled Intersection
- Bus Stops
- GO Railway
- Future & Planned Connection Subject to EA

Figure 3. Intensification Plan





**LAND USE / BUILT FORM**

- Gateway
- Mixed Use A - Residential/ Retail/ Office
- Preferred Office Location
- Mixed Use B - Residential/ Retail
- Mixed Use C - Residential/ Retail
- Residential
- Primary Retail Frontage
- Secondary Frontage
- Existing Development Application
- Buildings and Shadows - Illustrative Only (March 21st at 1:00 pm)

**PLACE MAKING**

- Gateway Plaza
- Public Green Space
- Public Park
- POPS
- Public Lookout
- Heritage Path
- Potential Community Facility

**CONNECTIVITY**

- Pedestrian Path
- Multi-Use Path
- Proposed Public Streets
- Proposed Private Streets
- Proposed Cycling Facility
- Potential Controlled Intersection and Pedestrian Crossing - Location Subject to Further Review
- Indicative Enhanced Boulevard
- Right-In, Right-out
- Access



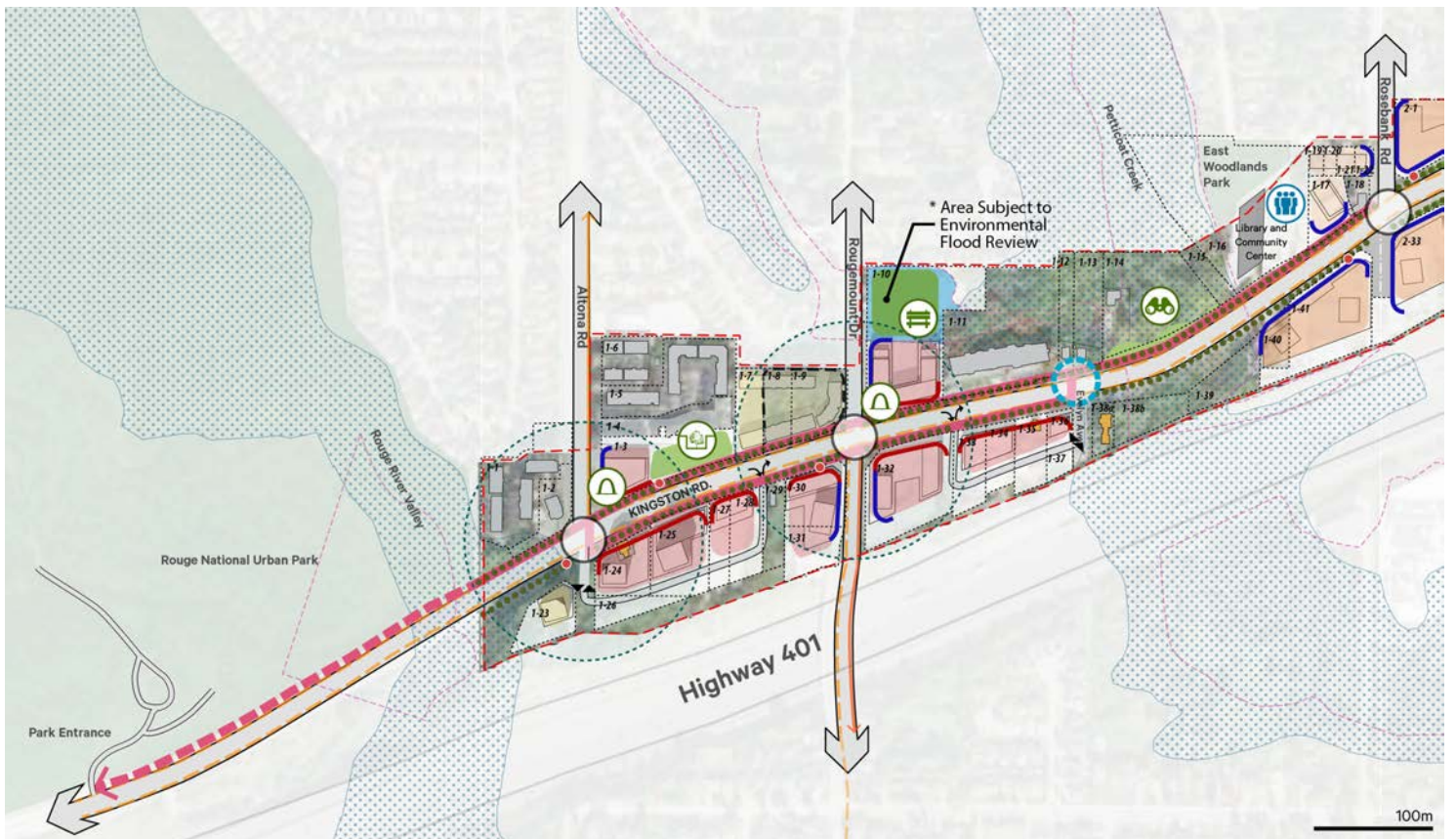


Figure 4. Rougemount Precinct Intensification Plan

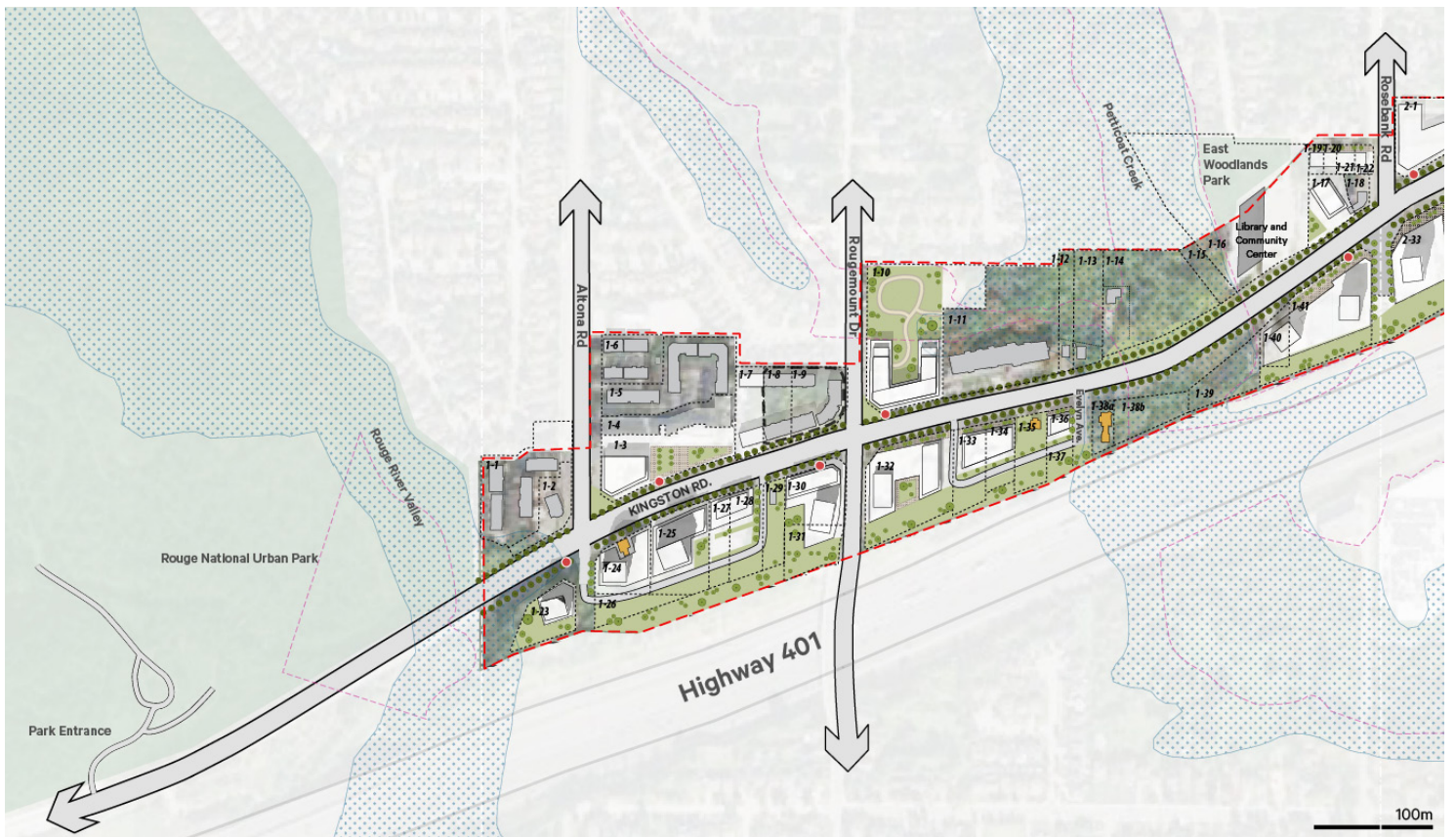


Figure 5. Rougemount Precinct Illustrative Urban Design Plan



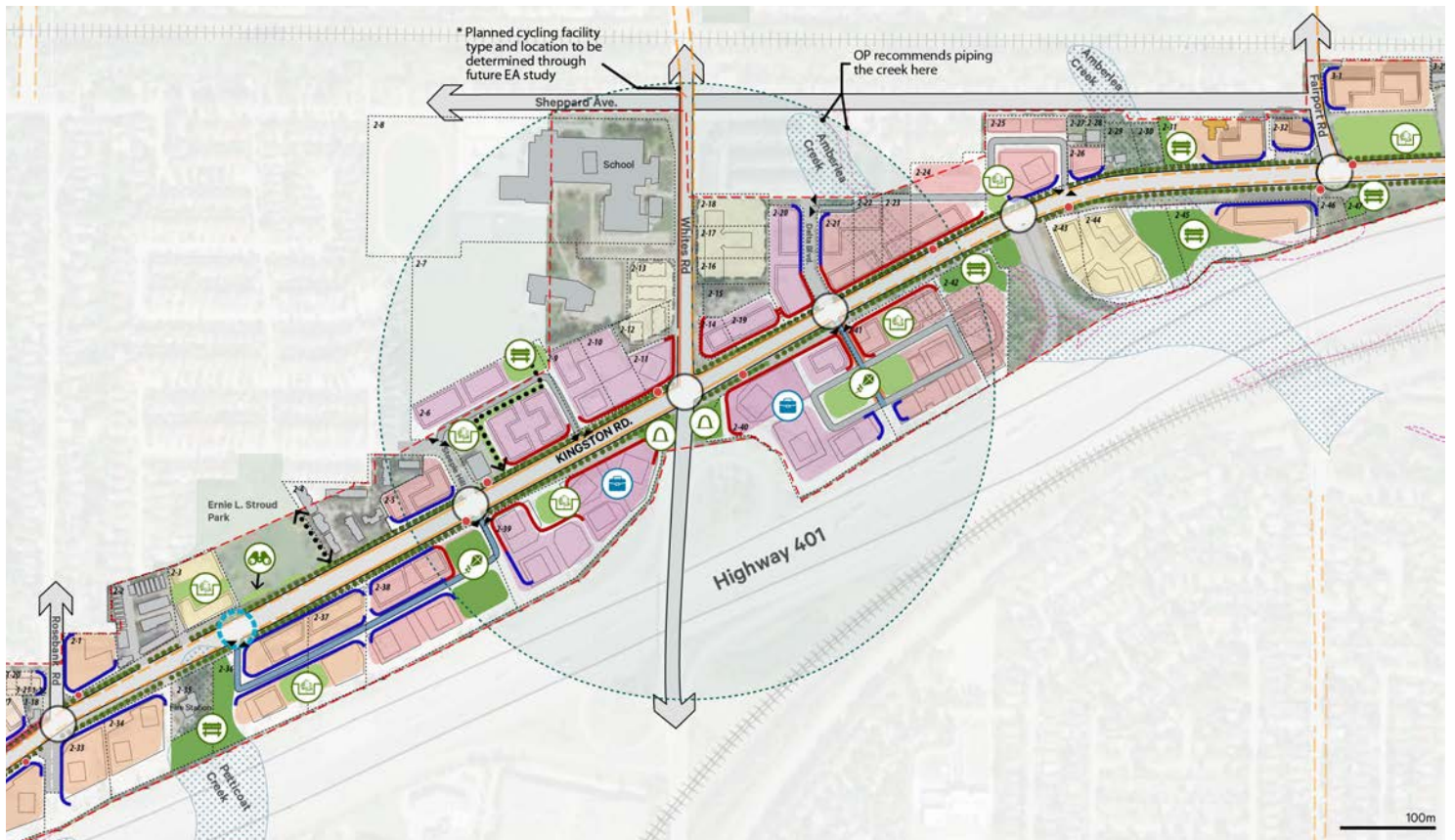


Figure 6. Whites Precinct Intensification Plan

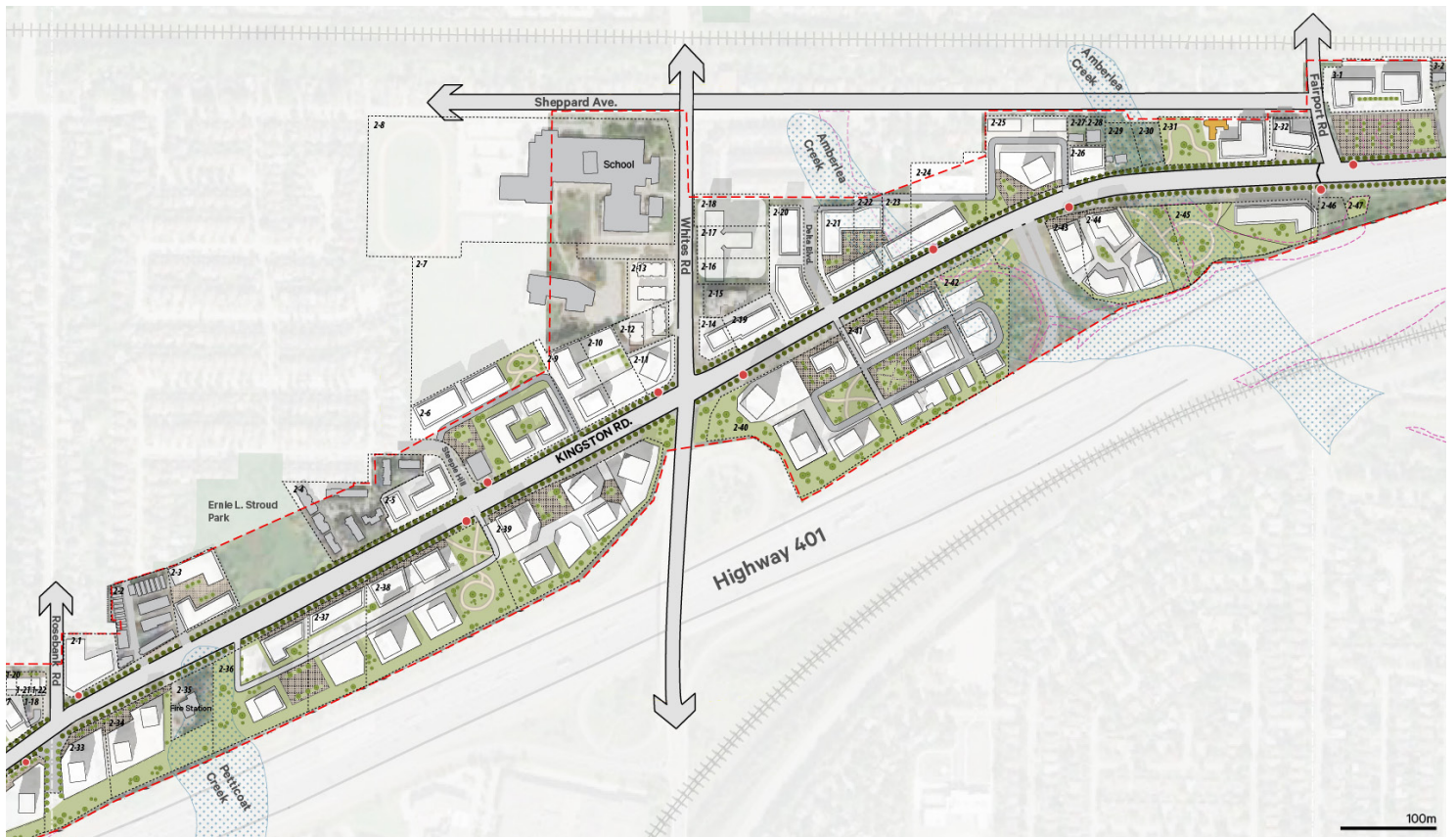


Figure 7. Whites Precinct Illustrative Urban Design Plan





Figure 8. Dunbarton/Liverpool Precinct Intensification Plan



Figure 9. Dunbarton/Liverpool Precinct Illustrative Urban Design Plan



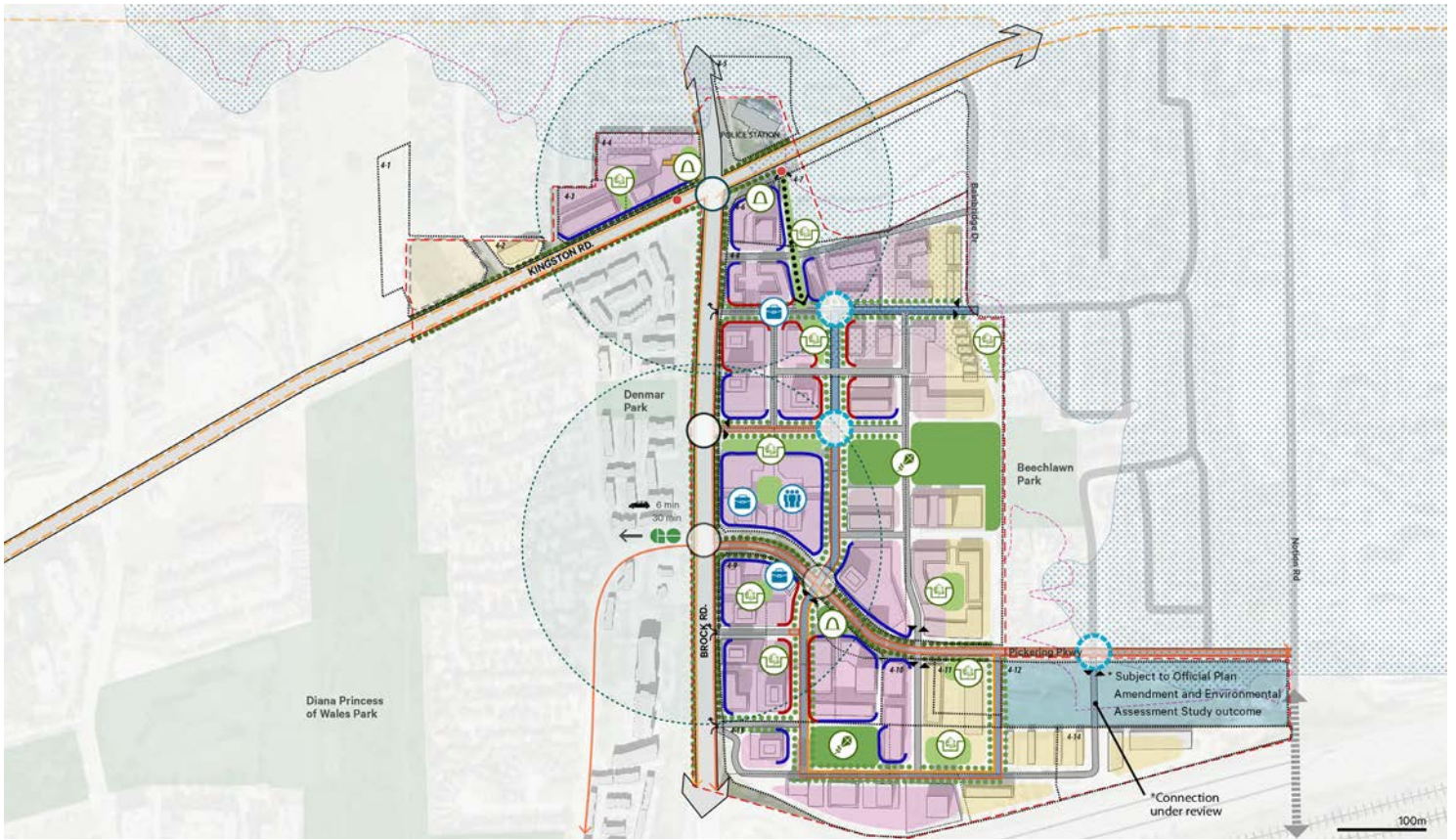


Figure 10. Brock Precinct Intensification Plan



Figure 11. Brock Precinct Illustrative Urban Design Plan



# 2.0 Built Form

- 2.1 Introduction
- 2.2 Block Structure
- 2.3 Building Placement and Orientation
- 2.4 Grading and Access
- 2.5 Parking
- 2.6 Loading, Services and Utilities
- 2.7 Landscape Design
- 2.8 Sustainable Design
- 2.9 Signage and Lighting
- 2.10 Transition and Massing
- 2.11 Materials and Facade Treatment
- 2.12 Streetwall
- 2.13 Active Frontage Network
- 2.14 Gateways
- 2.15 Building Types



# 2.1 Introduction

Built form is critical in realizing a high-quality urban environment that successfully integrates a wide range of uses and promotes a vibrant streetscape.

These Guidelines will facilitate attractive, efficient and responsive urban design within the Kingston Road Corridor and Specialty Retailing Node, helping to support a diversity of land uses, articulate a clear relationship and interface between building components and streets, and enhance the experience of users in terms of visibility, animation, comfort, safety, and accessibility.

Block, site and building design will determine the overall expression of both individual buildings and of each neighbourhood as a whole. Guidelines relating to block structure, building placement and orientation, parking facilities, site grading and access, servicing, sustainable and landscape design, signage and lighting, streetwall, active frontage, gateways and building types are outlined in this chapter.

## Key Objectives

- Promote higher-density mixed-use development while respecting the character and scale of established neighbourhoods through proper transitioning, and careful building design and placement.
- Introduce an animated public realm through encouraging active uses at grade and an enjoyable pedestrian experience.
- Retain and emphasize the distinct character of local streetscapes and precincts, including heritage protection.

The section begins with a description and diagrammatic illustration of the Built Form Plan for each precinct, followed by design guidelines.



Figure 12. Marine Gateway, Vancouver (Image Credits: Perkins+Will)



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## Rougemount

There are two gateways in the Rougemount precinct, located at the intersections of Kingston Road and Altona Road and Kingston Road and Rougemount Drive.

Due to small lot sizes and the existing scale of the area, the Rougemount Precinct is characterized by predominantly mid-rise buildings with some additional height at gateways and near Highway 401. These moderate heights help reinforce the 'main street' character of this stretch of Kingston Road.

Greater heights and densities are located on the south side of Kingston Road, away from the stable residential neighbourhoods to the north. The south side is made up of mid-rise and tall buildings while the north side includes mostly low-rise buildings, which are massed

and scaled to provide a gradual transition to the lower-scale residential areas.

Primary frontages are proposed across nearly the full length of Kingston Road between Altona Road and the Petticoat Creek. This provides the opportunity for more street-oriented development that supports a high level of pedestrian activity. It also creates an attractive and vibrant route which connects key destinations within and adjacent to the precinct, from Rouge National Urban Park in the west to the library and community centre in the east.

Secondary frontages are located along north-south streets and along sections of Kingston Road just west of Rosebank Road.

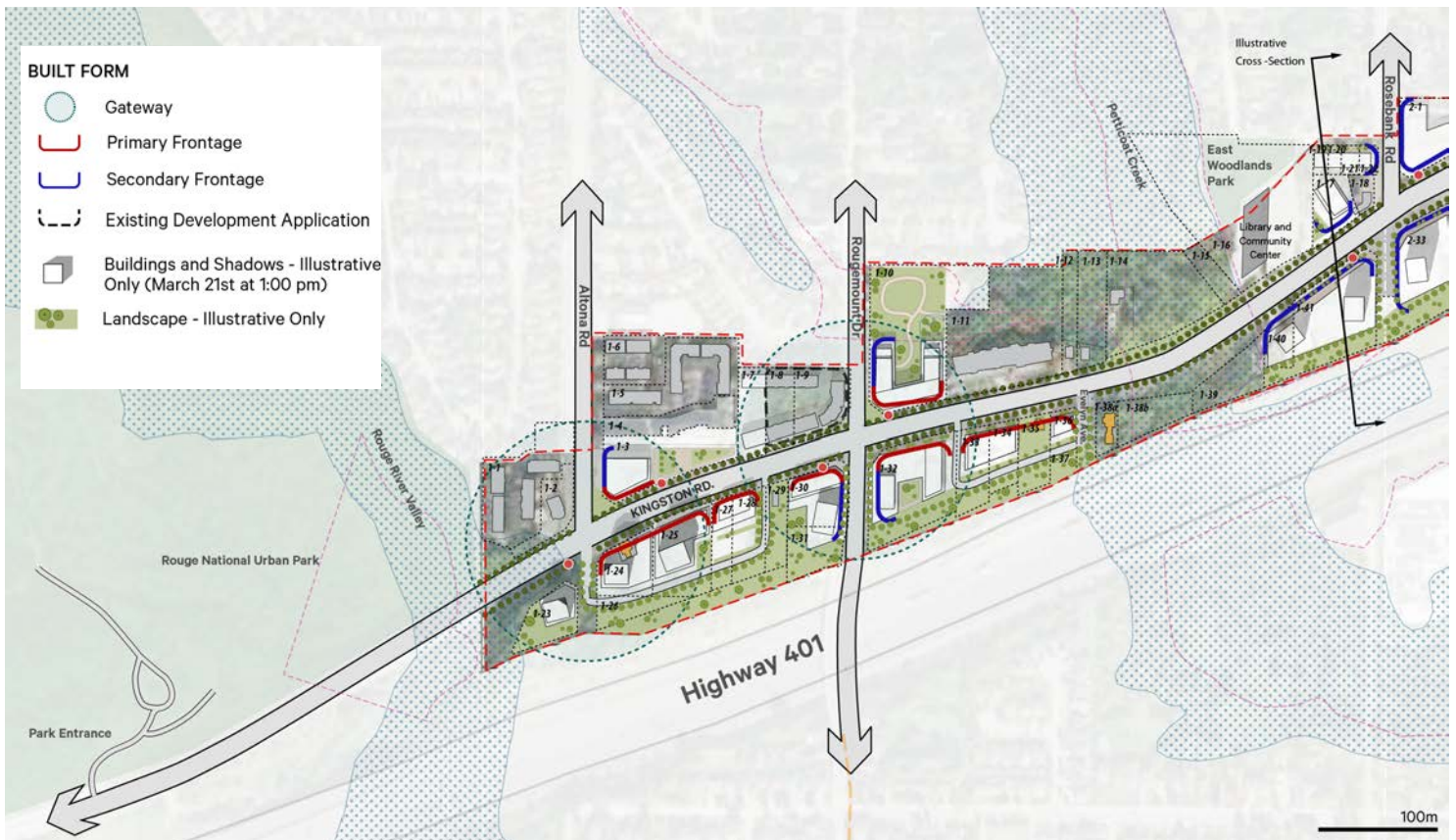


Figure 13. Rougemount Precinct Built Form Plan





Figure 14. Rougemount Precinct Overall Massing



## Whites

The gateway intersection of Kingston Road and Whites Road is the focal point for the Whites Precinct. The greatest heights and densities are clustered in close proximity to the gateway, with additional tall buildings extending east and west of the intersection at Kingston Road and Whites Road within the southern portions of the parcels to the south of Kingston Road.

Low-rise buildings are located along the northern edge of the White Precinct, including along the northern portion of Whites Road close to existing community facilities and east-west along Kingston Road close to the Amberlea creeklands. This transition in height responds to the existing low-density residential neighbourhoods to the north.

The Whites Precinct is typified by relatively larger parcels with greater lengths and depths than those found in the Rougemount Precinct. Primary frontage is concentrated along both the northern and southern sides of Kingston Road, centered on the gateway at the intersection of Kingston Road and Whites Road. Coupled with increased heights and densities, this will help to create a vibrant commercial district which attracts a significant amount of pedestrian foot traffic.

Secondary frontages are located along Kingston Road on either side of the gateway, as well as along the public road connection south of Kingston Road with access points at the eastern edge of Petticoat Creek and the intersection of Kingston Road and Steeple Hill Road.

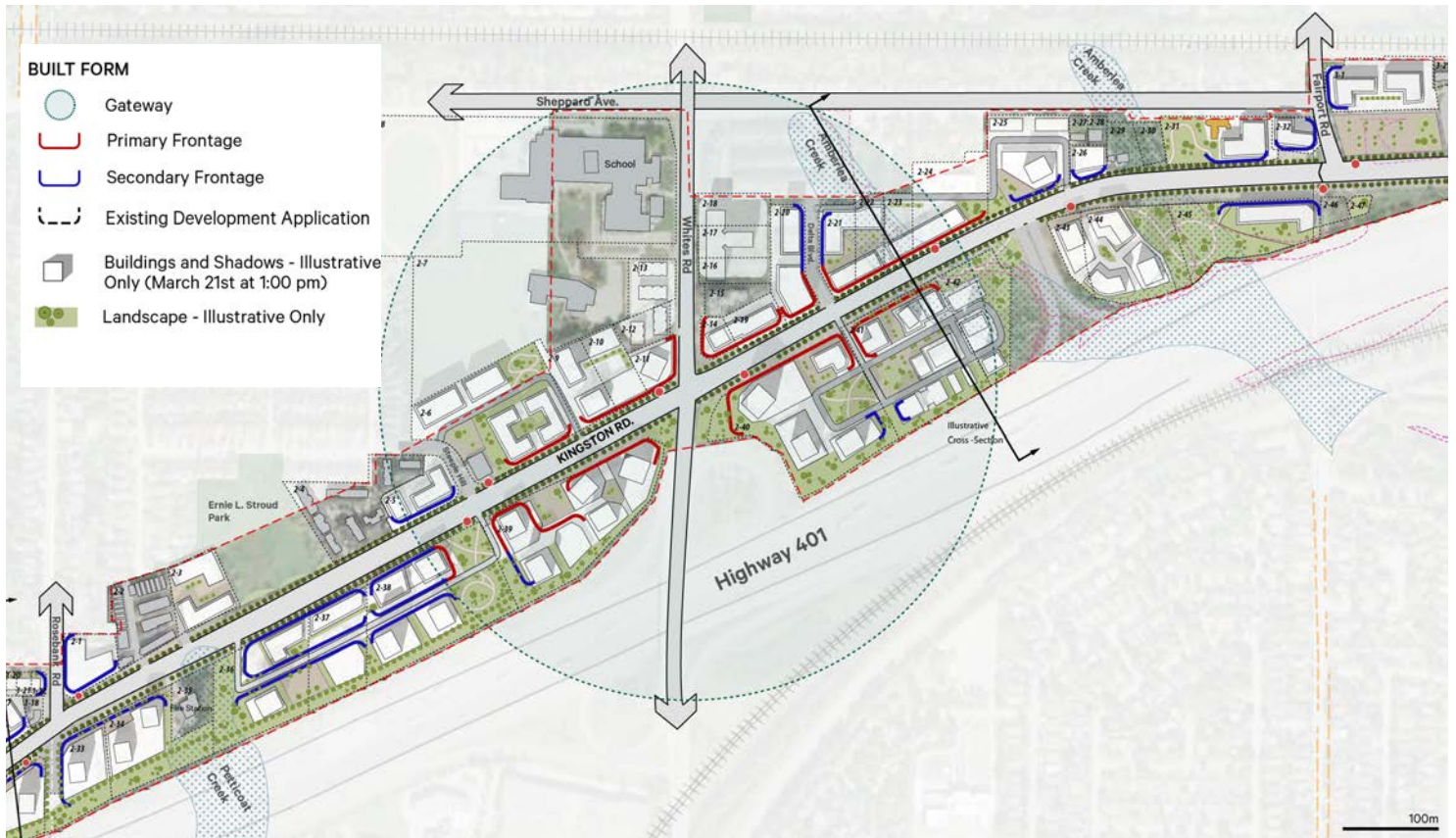


Figure 15. Whites Precinct Built Form Plan





Figure 16. Whites Precinct Overall Massing



## Dunbarton/Liverpool

Due to the relatively large size of parcels and their location away from existing residential development, the built form of the Dunbarton/Liverpool Precinct is characterized by moderate to significant heights and densities throughout. A gateway is identified at the intersection of Kingston Road and Dixie Road, where it is surrounded by mostly mid-rise buildings.

East of Dunbarton Creek, mid-rise buildings are proposed along of Kingston Road in recognition of the low-density residential neighbourhoods to the north. These mid-rise buildings create a gradual transition between the established residential areas and the denser southern portions of the precinct, and help to achieve a more balanced and responsive streetscape.

The greatest heights and densities are located internal to the precinct along the new east-west street running parallel to Kingston Road. The street is flanked by primary frontage on both sides, allowing for the creation of a double-sided main street running through the center of the precinct. Additional concentrations of height are located along the Highway 401 edge.

Additionally, a pocket of mid-rise and tall buildings is located west of Dunbarton Creek on Merritton Road. Additional height is proposed here in response to the railway tracks to the north, which create separation between the intensification area and the residential neighbourhoods to the north. This creates somewhat of stand-alone community that is removed from the rest of the precinct to the east of the creek. However, it remains within walking distance to the new internal main street.

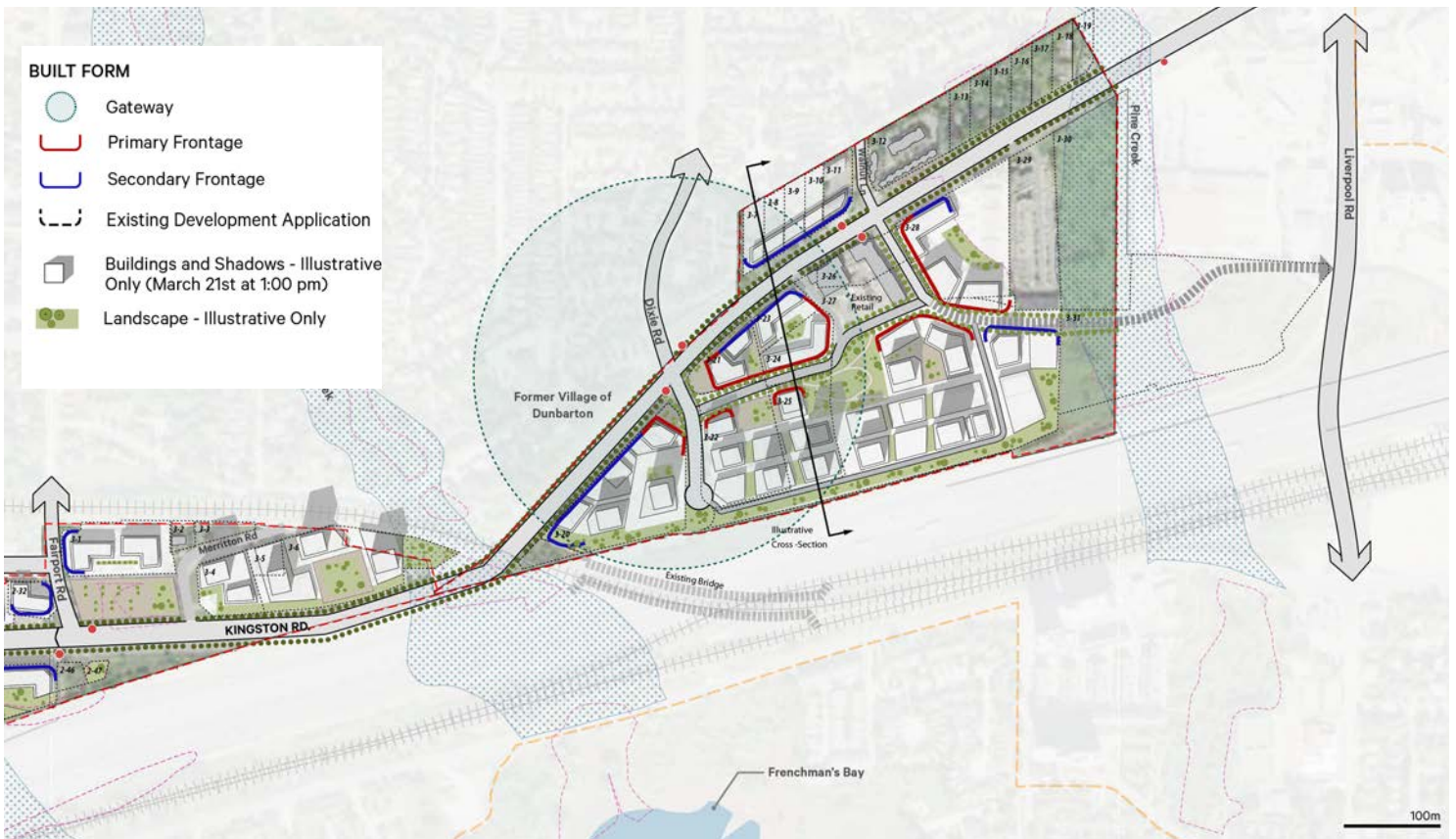


Figure 17. Dunbarton/Liverpool Precinct Built Form Plan





Figure 18. Dunbarton/Liverpool Precinct Overall Massing



## Brock

Within the Brock Precinct, the greatest concentration of height and density is found at gateway locations along Brock Road. The first gateway is situated at the intersection of Brock Road and Pickering Parkway, where it takes on a role of a more 'localized' gateway to provide access into the precinct and its related hubs. The second is located at the intersection of Brock Road and Kingston Road, serving as an eastern gateway providing access into the wider Kingston Road corridor. Additional concentrations of tall buildings exist within the southern portions of the precinct near Highway 401.

Responding to the adjacent low-rise residential neighbourhoods, low-rise buildings are located along the length of the eastern edge of the precinct. This built

form reflects an appropriate transition to the established neighbourhoods, and also takes into account proximity to Beechlaw Park, a large park located eastwards of the precinct area.

Primary frontages within Brock Precinct are distributed along a series of internal roads, particularly along the new north-south roads which cross Pickering Parkway. The most active streetwalls will be within the centre of the precinct, drawing activity inwards. Secondary frontages are concentrated at gateway intersections, along the western portion of Pickering Parkway, and within blocks that front onto public open spaces.

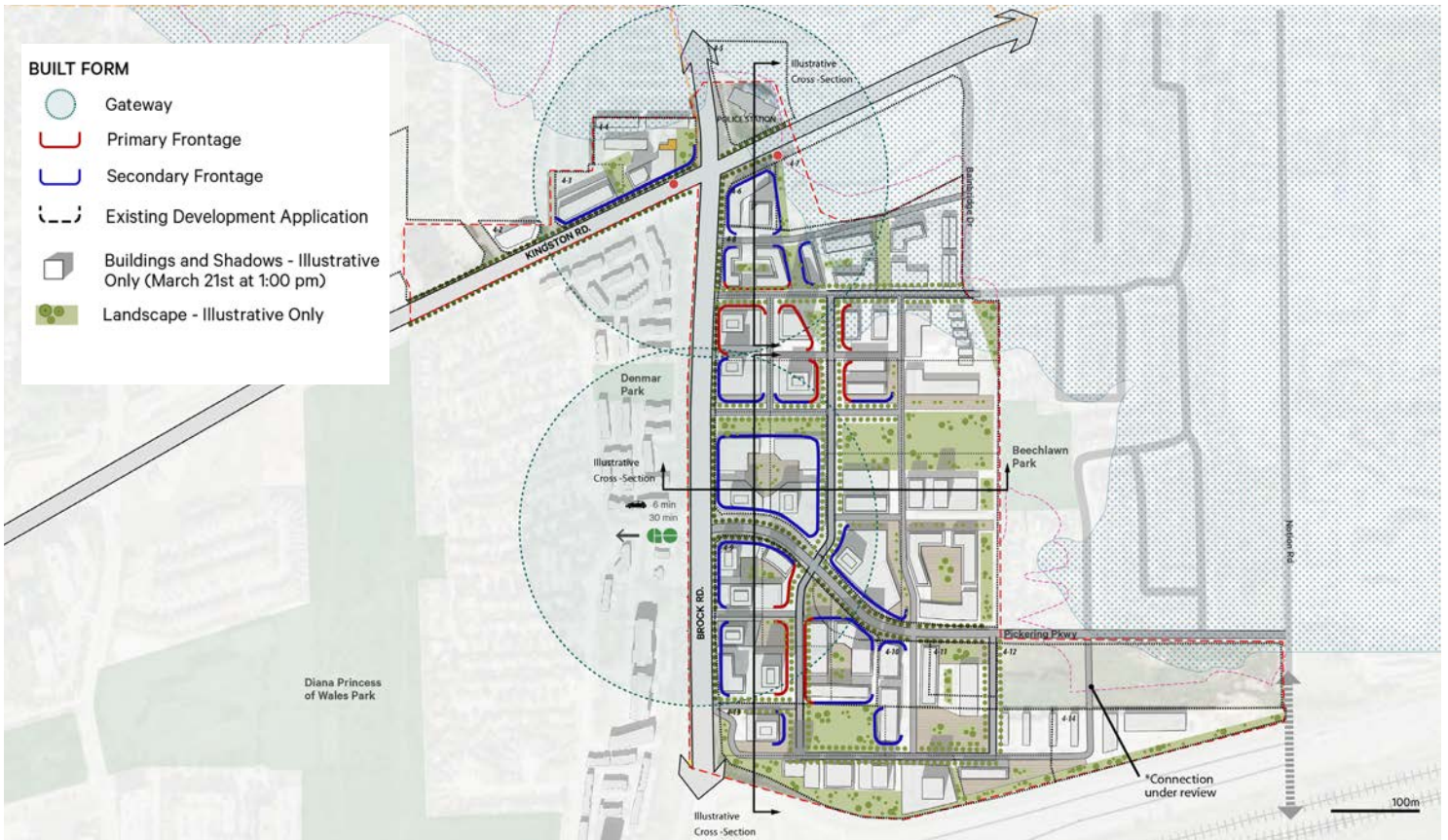


Figure 19. Brock Precinct Built Form Plan





Figure 20 Brock Precinct Overall Massing



## 2.2 Block Structure

Block structure plays a critical role in structuring neighbourhoods and shaping how users experience the urban environment. Blocks dictate the efficiency of mobility connections, the expression of neighbourhood character and the look and feel of the public realm.

### Design Guidelines

- i. Block lengths should generally range between 100 and 150 metres to promote permeability within the streetscape, support walkability and increase the ease of pedestrian and cyclist movement (Fig. 21).
- ii. Where a block is longer than 150 metres and shorter alternatives are not feasible, mid-block connections shall be introduced through pedestrian paths or linear parks. Pedestrian-scale lighting should be implemented along these paths to increase comfort and safety.
- iii. A mix of lot sizes, configurations and orientations should be provided to accommodate a variety of uses and enhance visual interest along the streetscape.
- iv. Generally, a standard rectilinear lot is preferred to maximize design and siting options. The traditional lot shape may be varied to account for irregular slopes or property boundaries.
- v. Corner lots may require greater widths to account for increased building setbacks from both the front and side yards.
- vi. Block layouts should be designed to maximize views and vistas through development blocks and towards gateways and natural heritage features.

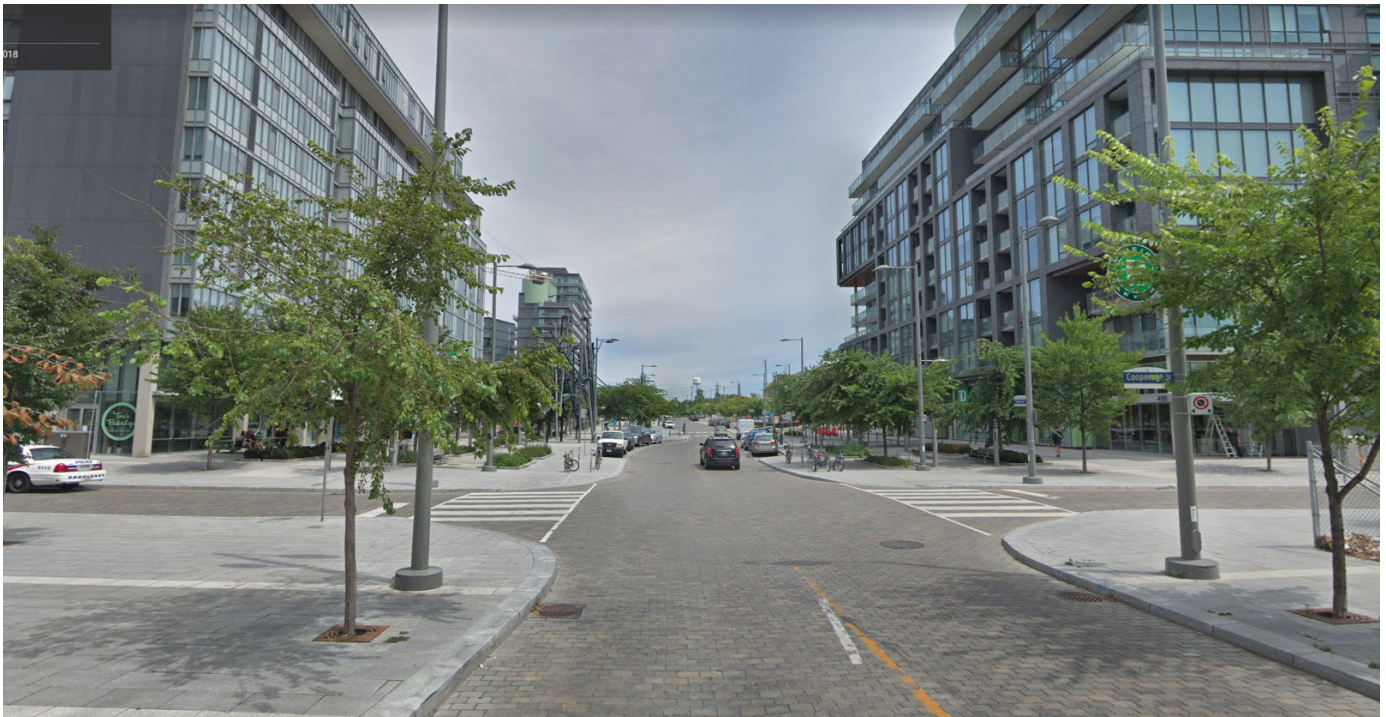


Figure 21. West Donlands, Toronto, Canada (photo credits: Google Maps)

## 2.3 Building Placement and Orientation

Sensitive building placement helps ensure integration into the surrounding context and limits negative impact on adjacent streets and open spaces. To achieve this, attention should be given to building entrances, building separation distances, and building setbacks.

### 2.3.1 Building Entrances

#### Design Guidelines

- i. Entrances should be highly visible, front onto the public street, and connect to pedestrian walkways or sidewalks. Entrances should promote visibility and views between interior and exterior spaces (Fig. 22).
- ii. Entrances should be emphasized as focal points in the building façade and be complementary to the building's overall articulation and material palette.
- iii. Entrances should be well lit. Natural lighting is encouraged through the use of sidelights, fanlights or door glazing. Wall-mounted down-cast lighting is also appropriate adjacent to building entrances.
- iv. Patios associated with building entrances should be consistent and proportionate in scale with the architectural style and massing of the building.
- v. Weather protection features such as canopies, awnings, overhangs and recessed entrances should be incorporated, where possible, to provide users shelter from wind, rain, snow and other harsh elements.

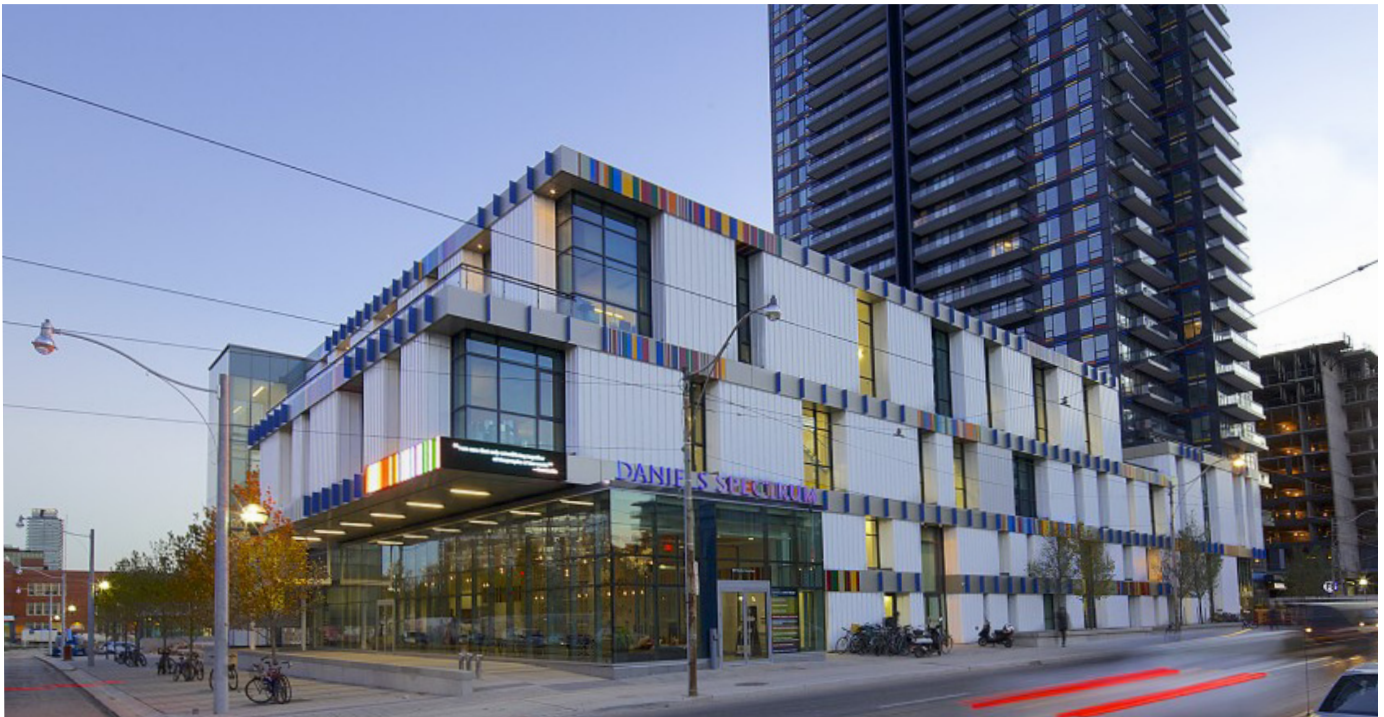


Figure 22. Paintbox Condominium, Toronto, Canada (photo credits: Lisa Logan)

## 2.3.2 Building Separation Distances

### Design Guidelines

- i. For low-rise buildings up to 4 storeys, a minimum separation distance of 11 metres shall be maintained between facing buildings.
- ii. For low-rise buildings up to 4 storeys, a minimum 8 metre separation distance shall be maintained between the face of a building containing primary living space, such as bedrooms and living rooms, and the side of another building.
- iii. For mid-rise buildings up to 8 storeys in height, a minimum separation distance of 11 metres shall be maintained. This may be reduced if there are no primary windows on the wall facing an abutting building.
- iv. For mid-rise buildings between 8 and 12 storeys in height, a minimum separation distance of 18 metres shall be maintained. This may be reduced if there are no primary windows on the wall facing an abutting building.
- v. For tall buildings over 13 storeys in height, a minimum separation distance of 25 metres shall be maintained between towers.
- vi. A minimum separation distance of 15 metres shall be provided between facing buildings on sites with multiple buildings. On multi-building sites, it is encouraged that buildings are offset or angled away from each other to maintain privacy between facing units.
- vii. A minimum separation distance of 15 metres should be provided between adjacent buildings where windows are proposed within a podium. No side-yard separation is necessary where a continuous streetwall is desirable.

## 2.3.3 Building Setbacks

### Design Guidelines

- i. Buildings fronting Kingston Road in the Rougemount Precinct shall be setback 3 metres from the front property line.
- ii. In all other precincts, buildings fronting Kingston Road, Brock Road and Pickering Parkway shall be setback 5 metres from the front property line.
- iii. Buildings fronting existing public roads intersecting Kingston Road shall be setback 5 metres from the property line in the Whites and Brock Precincts and 3 metres in the Rougemount and Dunbarton/Liverpool Precincts, or match the setback of adjacent buildings. In the case that the two adjacent buildings have differing setbacks, the new building setback shall match whichever is closer to the street.
- iv. In all precincts, buildings shall be setback a minimum of 2 metres from new public and private streets that are internal to the development block.
- v. In all precincts, buildings shall be setback a minimum of 3 metres from parks and other open spaces.
- vi. Where retail and commercial uses are located, setback areas should accommodate spill-out uses from commercial activity (i.e. patios, displays, waiting areas) to improve the pedestrian experience. These areas should be primarily hardscaped to act as an extension of the sidewalk and accommodate for higher levels of foot traffic.
- vii. Where residential uses are located, softscape elements such as plantings should be used in setback areas to provide screening and maintain privacy for grade-related residential units. These areas may also include some public amenities (i.e. benches, bicycle racks).



## 2.4 Grading and Access

Site grading is critical to ensuring access within and between lots. In conjunction with building and landscape design, it supports the provision of convenient, safe and integrated development.

### Design Guidelines

- i. Grading between adjacent sites shall be considered during site design. Accesses between sites should be provided in the form of internal roadway connections or pedestrian walkways (Fig. 23).
- ii. To minimize access off Kingston Road, consolidated private rear accesses should be provided. These should be developed with a coordinated approach across landowners to ensure that clear accessways are maintained, no properties are landlocked and all lots have a viable connection back to a public road.
- iii. Any redevelopment should seek to remove or minimize grade differences between its adjacent lots, including Kingston Road. Where this is not possible due to site topography, measures should be taken to make the transition walkable for pedestrians and accessible for cars.
- iv. Site grading shall consider facilities designed to provide access for persons with disabilities, including the provision of ramp access.
- v. Entrances and access points should be integrated with at-grade design. Informational signage, pavement markings and soft landscaping can help to orient users, enhance safety and minimize confusion.
- vi. Where possible, vehicular entrances and access points shall be located within the centre of the block and below grade with access from local streets/lanes. Vehicular access from main streets shall be limited.
- vii. Vehicular entrances and access points should have minimal impact on walkways and the pedestrian realm and where possible should be intergrated with building design.



Figure 23. Ulus Savoy Housing by DS Landscape, Istanbul, Turkey (photo credits: Cemal Emden)



## 2.5 Parking

As intensification occurs throughout the corridor and node, changes in parking demand are likely to occur. This demand can be supported through a range of parking facilities, including street parking, surface parking and structured parking.

### 2.5.1 On-Street Parking

#### Design Guidelines

- i. To achieve a vibrant district and to minimize the need for parking lots that have greater impacts on the pedestrian realm, on-street parking is encouraged on public and private roads in strategic locations. This includes destinations such as community facilities, large open spaces, parks, and grade-related retail streets.
- ii. Where possible, street parking should be separated from the sidewalk by a landscape buffer to allow for safe loading in and out of cars

without impeding on clear paths for pedestrian movement along the sidewalk. Landscape buffers shall also 'green' the streetscape and improve stormwater infiltration (Fig. 24).

- iii. On-street parking on arterial roads should be reviewed on a case-by-case basis.
- iv. The design of each precinct shall accommodate sufficient parking capacity to support a dense and vibrant district.

### 2.5.2 Structured Parking

#### Design Guidelines

- i. Surface parking is discouraged for main street retail, and high-density residential, office and mixed-use developments. In these areas, parking shall be provided underground, behind or inside a structure on upper floors with appropriate screening, or inside a building.



Figure 24. On-street parking with landscape, Portland, USA (photo credits: PortlandOregon.gov)

- ii. Above-grade parking structures shall be encouraged to be designed with active uses on all sides (Fig. 25).
- iii. The sides and rear of multi-storey above-grade parking structures facing adjacent developments shall be screened as to not create blank facades around the building. They are encouraged to incorporate glazing, cladding, landscaping, or exterior finishes to complement the surrounding streetscape.
- iv. At-grade parking structures shall be designed with active uses fronting the public street and other pedestrian uses, such as retail or amenity areas. These should incorporate visually-appealing architectural and landscape treatments.
- v. Access points to parking structures should be located at the rear or side of buildings, and away from main streets and intersection corners.
- vi. Ground floor frontages may need to be set back adjacent to structured parking ingress/egress ramps to provide visibility at the exit.
- vii. Structured underground parking is preferred over surface parking or above-grade structured parking to reduce the urban heat island effect and minimize blank walls.
- viii. Consideration should be given to charging stations for electric vehicles and secure indoor bicycle storage space in the design of parking structures.
- ix. Parking structure design is encouraged to consider flexible designs, including designs which allow for future conversions into other uses (Fig. 26).



Figure 25. Denver Museum Residence, a 'Texas Doughnut' featuring buildings wrapped around interior parking structure, Denver, USA (photo credits: Google Earth)



## 2.5.3 Surface Parking

### Design Guidelines

- i. New developments are encouraged to reduce or minimize surface parking on site, in order to reduce the urban heat island effect and promote more compact development.
- ii. Parking shall be located at the side or rear of the site where it is neither visible from the street nor blocking pedestrian access.
- iii. In the design of surface parking areas that are visible from the highway and streets, edges along parking areas shall be defined and softened through tree planting, landscape berms, pergolas, and other similar features (Fig. 27).
- iv. Surface parking is discouraged adjacent to at-grade residential areas. A vegetated buffer should be provided between surface parking and residential areas.
- v. A strong integration of vegetation and soil volume solutions (i.e. large trenches, soil cells) that allow for large trees to grow should be used in landscape islands within surface parking lots to provide proper shade for cars and to increase stormwater infiltration.
- vi. Permeable pavement and/or pavement with good solar reflective index is encouraged. A combination of hardscape and softscape elements should be used to reduce the urban heat island effect (Fig. 26). Bioswales are highly encouraged as a means of mitigating automotive pollution impacts on water and reducing stormwater runoff loads on the sewage system.
- vii. Designs that include urban furniture and decorative pavements are encouraged to support a flexible use of the area and allow for other temporary uses, such as social and sport events, where suitable.

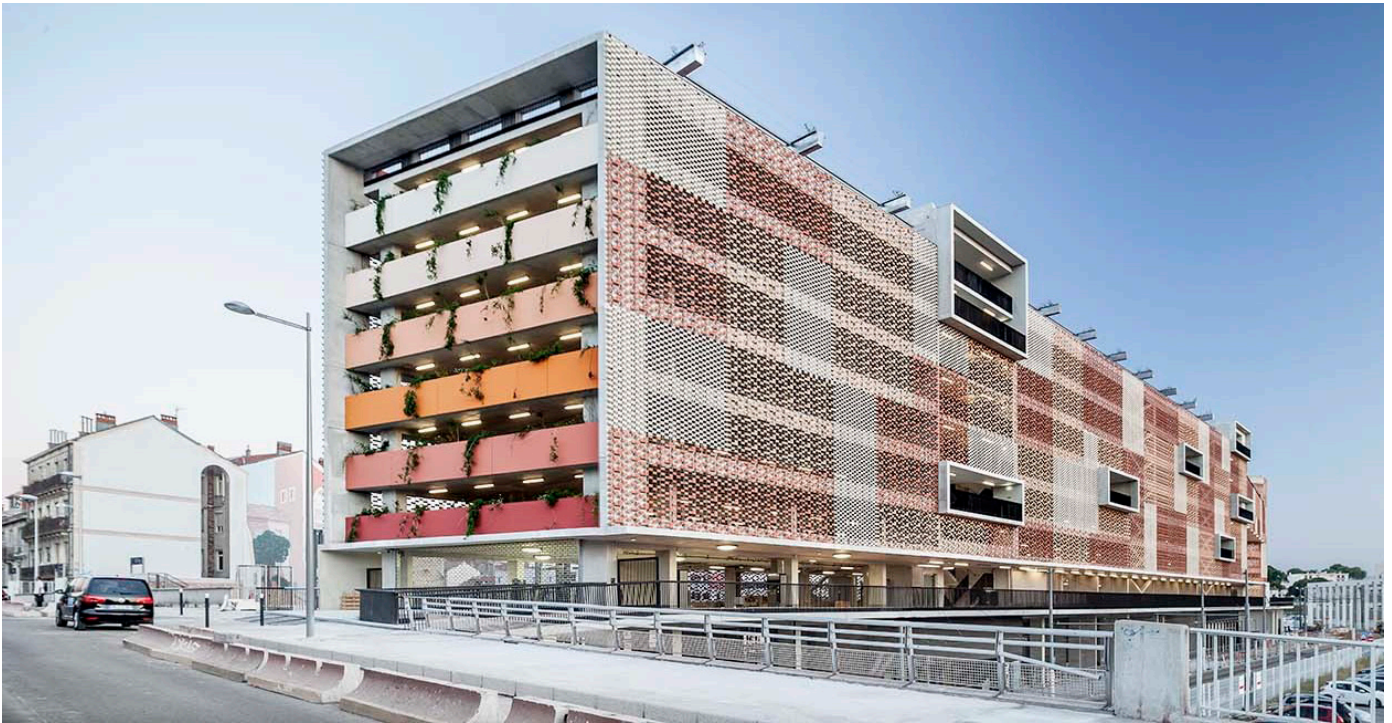


Figure 26. Saint Roche Parking Structure built to accommodate future office and residential uses, Montpellier, France (photo credits: Adria Goula).

- viii. The parking lot and walkways to parking lot areas should be visible from the main entrance of the building on the site, where practical.
- ix. Pedestrian walkways should be developed between parking lots and the street. These walkways should be landscaped, barrier-free and lighted to encourage convenient, safe, and frequent public use.
- x. Exclusive pedestrian routes inside parking lots should also be provided, be clearly marked and be integrated with landscaping to break up otherwise large pavement expanses.
- xi. When designing rear parking sites, Crime Prevention Through Environmental Design (CPTED) principles should be applied to the site, where good lighting and natural surveillance from adjacent buildings may act as safety measures.
- xii. Consideration should be given to charging stations for electric vehicles and short-term bicycle storage space in the design of surface parking lots.



Figure 27. Honfleur Normandy Outlet, Honfleur, France (photo credits: Le Compagnie du Paysage).



## 2.6 Loading, Services and Utilities

Loading areas, servicing areas, and utility equipment supports the essential functions of any development site. Their location and access requires strategic consideration.

### Design Guidelines

- i. Where possible, on-site loading and servicing areas shall be located internal to the development and below grade with access from local streets and lanes. Access points shall be coordinated to minimize impacts on the pedestrian realm, including minimizing the interruption of sidewalks.
- ii. Servicing lanes should be designed to welcome pedestrians with sidewalks on both sides of the lane, where practical, to accommodate safe pedestrian movement (Fig. 28).
- iii. Service and loading facilities shall be contained within building envelopes and consolidated for each block, when possible. Below-grade loading facilities are encouraged for higher-density, larger-format development. Garbage storage rooms shall be centralized indoors, below grade, and at the rear of buildings.
- iv. Vehicular routes shall support goods movement by designing right-of-ways and lanes to safely accommodate truck traffic and turning movement.
- v. Utilities and service equipment shall be located within buildings or internal to building sites, where practical, to reduce their visual impact on the streetscape and public view. In outdoor areas, their presence can be minimized through screening, fencing, strategically-positioned landscaping and integration with public art.
- vi. In the location and design of loading facilities, consideration should be given to implementation measures to mitigate potential impacts of noise and vibration on residents on the site or in adjacent developments.



Figure 28. Lower Donlands, Toronto, Canada (photo credits: Google Earth)

## 2.7 Landscape Design

Landscape design assists in defining building and site character while contributing to a greener and more sustainable streetscape.

### Design Guidelines

- i. Landscape shall be an integral piece of the site design and be developed to unify and enhance the overall architectural project. High-quality, durable and diverse landscape elements shall be encouraged.
- ii. A minimum of 10% of each lot shall be landscaped, with a significant proportion of that being soft landscaping.
- iii. Landscaping shall support and define a consistent and attractive street edge. The selection and spacing of all plantings should relate to the street type and adjacent land use and site conditions.
- iv. Within sites, landscaping shall define pedestrian routes and enhance visual imagery of the site. Large tree canopies are encouraged along pedestrian routes to provide shade and comfort (Fig. 29).
- v. Every effort should be made to retain existing trees and other mature vegetation during redevelopment. Where possible, these should be integrated into the site layout and landscape design for new developments.
- vi. Landscape buffers shall be encouraged along surface parking lots adjacent to public streets to soften and screen parking lot edges. They shall also be encouraged on lots abutting low-density residential uses to provide a privacy buffer. These should have a minimum width of 3 to 3.5 metres.
- vii. Within parking lots, curbed landscaped islands with a minimum width of 2.5 metres shall be encouraged to define major vehicle and pedestrian routes and break-up the expanse of paved areas.



Figure 29. Yorkville Village Park, Toronto, Canada (photo credits: Google Images)



## 2.8 Sustainable Design

Development should incorporate sustainability principles to support the positive integration of the natural environment into the built form.

### Design Guidelines

- i. Sustainable and Low Impact Development (LID) measures are encouraged for all development in order to reduce stormwater run-off and optimize water infiltration potential. This includes the use of bio-retention areas, rain gardens, grass swales, permeable pavement, and vegetated filter strips.
- ii. Development should prioritize plantings of native species that support ecological functions, are drought-tolerant, require minimal maintenance and increase biodiversity in the landscape.
- iii. The use of softscapes should be encouraged on flat roofs of all buildings, including residential, commercial and mixed-use buildings. Softscape features can include trees, grass, shrubs, flowers, and soil. The green roofs are encouraged to act as public amenity spaces (Fig. 30).
- iv. Development is encouraged to seek current Leadership in Energy and Environmental Design (LEED) building design certification, or equivalent.
- v. The incorporation of alternative or renewable energy resources (i.e. solar panels) in building design is encouraged. The design and orientation of buildings should seek the maximization of solar gain.
- vi. The use of bird-friendly glazing on mid-rise and tall buildings is encouraged.



Figure 30. ESRI Canada Garden in the Sky, Toronto, Canada (photo credits: Forrec Ltd.)



## 2.9 Signage and Lighting

Effective signage and lighting, particularly along streets and in the public realm, work to enhance the safety, attractiveness and usability of an area.

### Design Guidelines

- i. Signs should be clear, visible, and easy to understand. Signs should be properly lit to ensure safety on the road and walkways at night (Fig. 31).
- ii. Cohesive signage should be implemented within each precinct to improve neighbourhood character while providing valuable wayfinding information (Fig. 31).
- iii. The size, design and placement of signs shall be considered in accordance with the City's Sign By-law and through Site Plan Control.
- iv. The placement of signage shall not compromise pedestrian movement and vehicular safety. The use of illuminated sign boxes and channelized sign boxes are discouraged.
- v. Signage should be integrated with building design, and should be consistent with the overall streetwall and associated building facades (Fig. 31).
- vi. A dark-sky policy shall be promoted along Kingston Road with downward-directed lighting. All external light fixtures shall be full cut-off and dark-sky friendly to minimize sky glow effects and light pollution.
- vii. Pedestrian-scaled lighting shall be used for active public spaces, including inner-block walkways, parks, and courtyards (Fig. 31). The use of outdoor LED lighting systems is encouraged for energy efficiency.
- viii. Outdoor light shall be aimed and shielded to illuminate areas on site and adjacent sidewalk areas, including inner patios, but shall not illuminate the street or adjacent residential uses (Fig. 31).
- ix. Where there are architectural, landscape, and decorative features on a building, lighting may be directed upward to illuminate prominent details.



Figure 31. Marine Gateway, Vancouver, Canada (photo credits: Perkins+Will)

# 2.10 Transition and Massing

Building massing should implement appropriate transitions in the built form to create an attractive human-scaled environment, respect existing scale and character, and appropriately respond to local context. Transitions are provided to new and existing parks and open spaces, as well as lower-scale residential areas.

### Design Guidelines

- i. New buildings should be massed and scaled to establish compatible heights to adjacent streets and open spaces, while retaining a comfortable pedestrian scale.
- ii. Where mid and high-rise buildings are adjacent to low-rise buildings, increased setbacks or building setbacks should be employed, in consideration of an appropriate transition.
- iii. In cases where buildings have a height of 8 storeys or more proposed adjacent to the streetline, the upper storeys of the building should be sited on podiums having a minimum height of 3 storeys and a maximum height of 6 storeys.
- iv. Development shall incorporate building and landscape design which minimizes the extent and duration of shadows and maximizes access to sunlight for adjacent low-rise developments, parks, open space, primary frontages, and other intensively used areas of the public realm.
- v. The shadow impact of buildings on adjacent residential buildings, public parks and privately owned publicly-accessible spaces shall be assessed through a shadow impact study, where appropriate, and minimized to the extent possible.
- vi. Development shall incorporate building and landscape design which protects and buffers the pedestrian realm from prevailing winds.
- vii. The development of large mass buildings within areas that are characterized by a distinct architectural theme should reflect similar

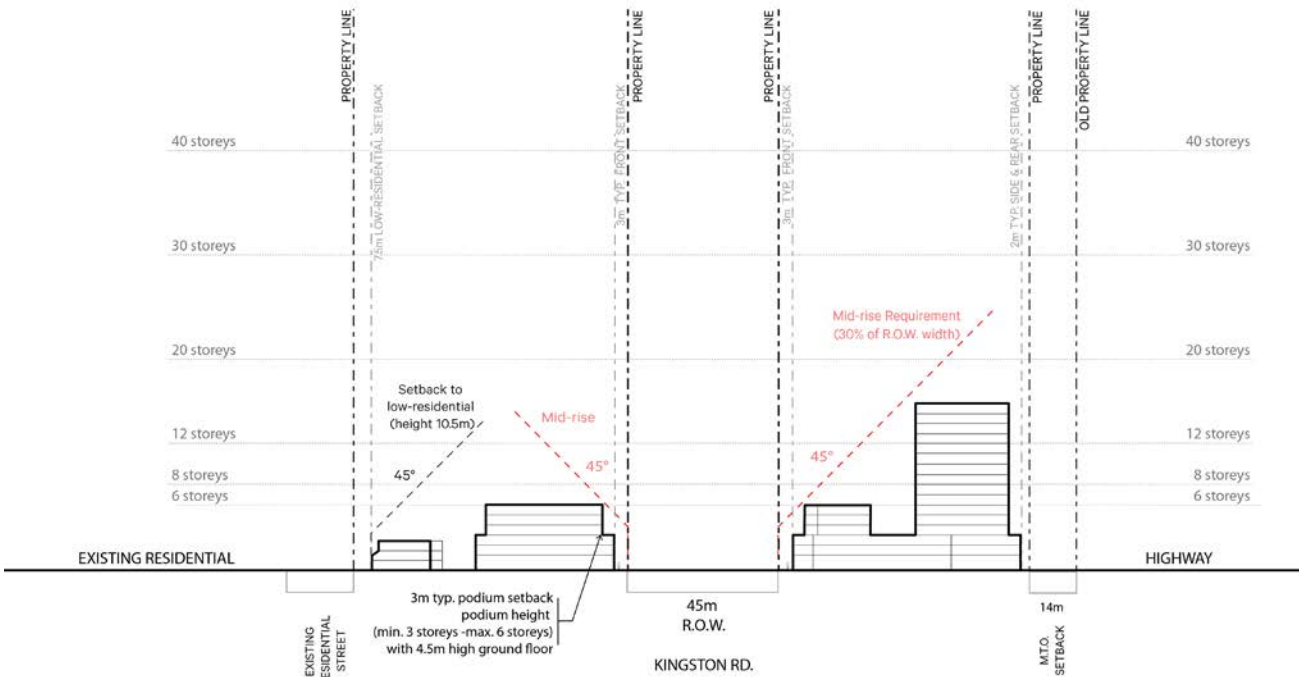


Figure 32. Illustrative cross-section in the Rougemount Precinct, for cross-section location see Figure 13.

architectural features, where practical, to blend in with the character of the particular area.

- To limit shadow and overlook impacts in low-rise residential areas, an angular plane shall be applied through the following:

viii. From the front yard of low-rise residential (i.e. where development is across the street from stable low-rise neighbourhoods), built form shall conform to a 45 degree angular plane measured from a height of 10.5 metres, set back 5 metres from the front property line.

ix. From the rear yard of low-rise residential (i.e. where development backs directly on to stable low-rise neighbourhoods), built form shall conform to a 45 degree angular plane measured from a height of 10.5 metres, set back 7.5 metres from the rear property line.

- To help create a human-scaled environment along public streets, an angular plane shall be applied through the following:

x. On Kingston Road, Brock Road, Pickering Parkway and existing north-south public roads intersecting Kingston Road, built form shall conform to an angular plane extended at a 45 degree angle from the front property line, beginning at a height 80 percent the width of the adjacent right-of-way.

xi. As an exception, on Kingston Road in the Rougemount Precinct and on Kingston Road between Dunbarton Creek and Pine Creek in the Dunbarton/Liverpool Precinct, built form shall conform to a 45 degree angular plane from the front property line, beginning at a height 30 percent the width of the adjacent right-of-way.

Figures 32 to 37 illustrate the application of built form principles along key streets within each precinct.

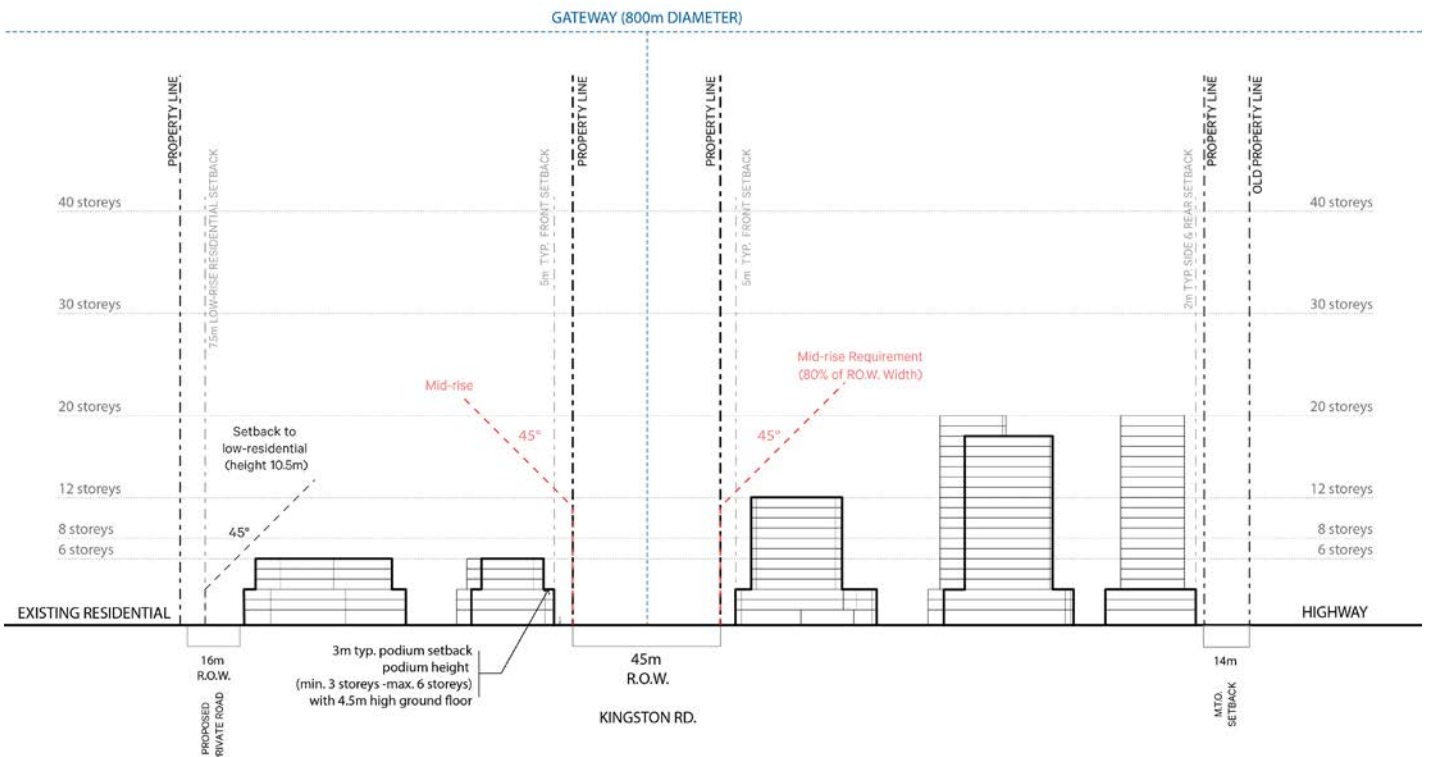


Figure 33. Illustrative cross-section in the Whites Precinct, for cross-section location see Figure 15.



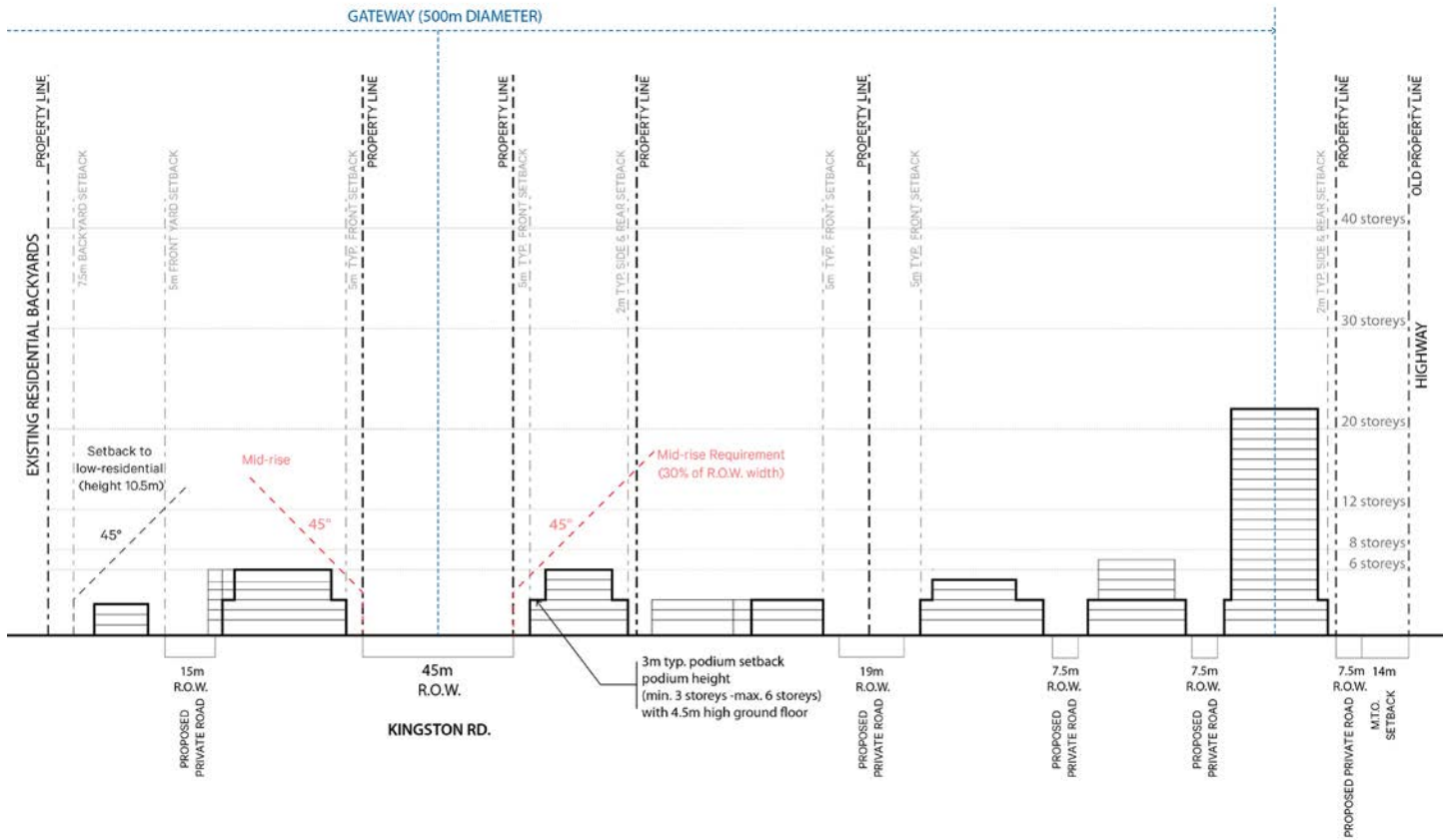


Figure 34. Illustrative cross-section in the Liverpool/Dunbarton Precinct, for cross-section location see Figure 17.

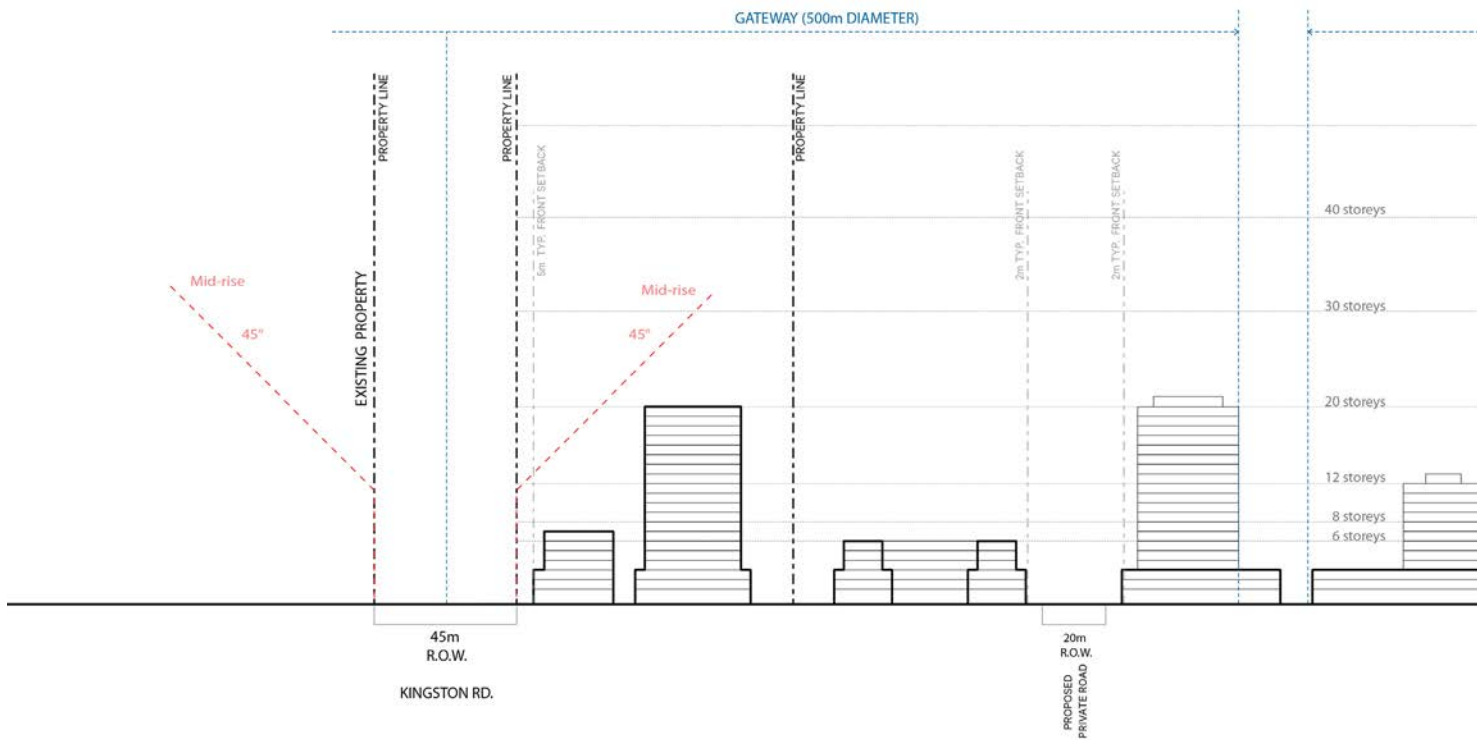


Figure 35. Illustrative cross-section in the Brock Precinct, for cross-section location see Figure 19.

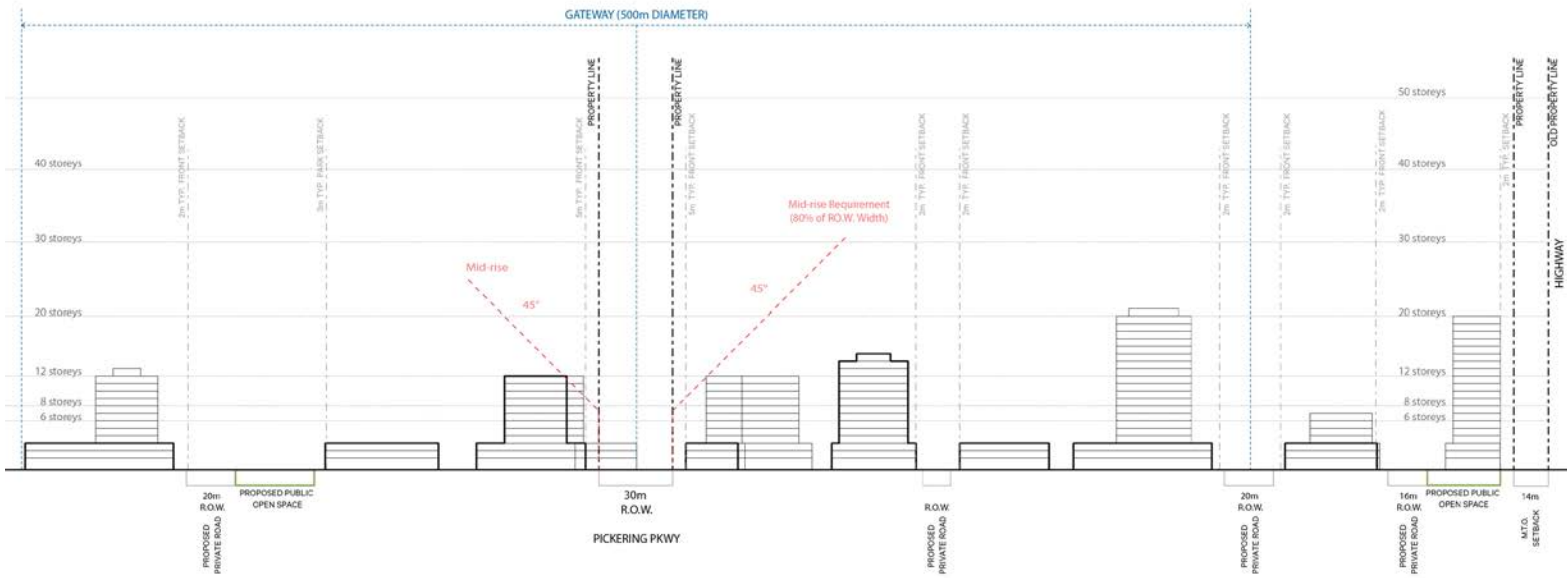


Figure 36. Illustrative cross-section in the Brock Precinct, for cross-section location see Figure 19.

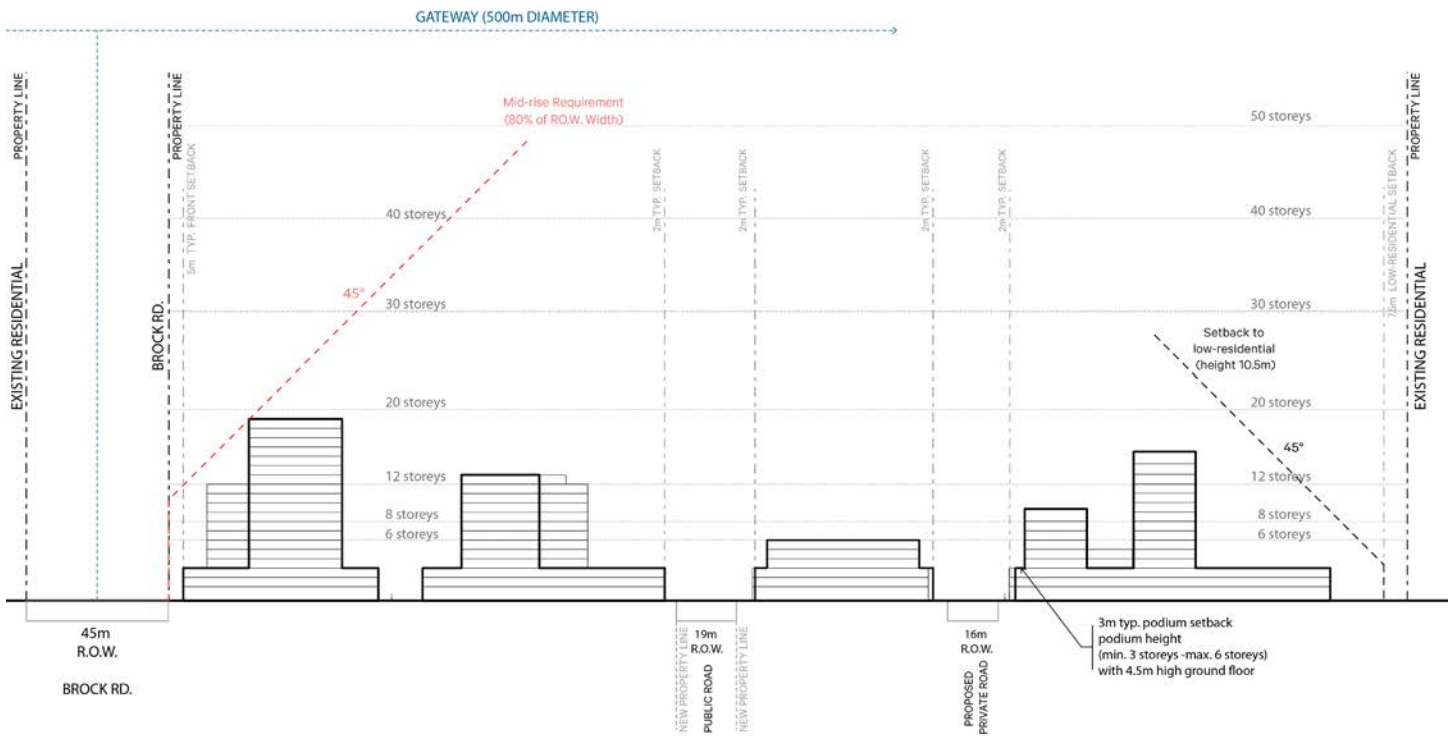


Figure 37. Illustrative cross-section in the Brock Precinct, for cross-section location see Figure 19.

# 2.11 Materials and Facade Treatment

Development should reinforce a coherent, attractive and animated streetscape through the use of high-quality materials and articulated facades.

## Design Guidelines

- i. Main wall cladding materials should be high-quality, aesthetically pleasing, and durable (Fig. 38). Materials such as brick, stone and glass are encouraged.
- ii. Building materials that are discouraged include: stucco, vinyl, concrete block, metal siding, highly reflective glass and mirror finishes for glazing.
- iii. Materials should be complementary to the character of the precinct. For example, the use of brick may help reinforce the 'urban village' character of Rougemount Precinct, while glass may be more appropriate to support the commercial gateway features of the Whites Precinct.
- iv. A variety of building materials, colours, and plane variations should be used to create visual interest along the streetscape and to avoid repetitive or monotonous streetscapes (Fig. 38).
- v. Building materials for higher floors may differ from base materials, but compatibility, transition and building proportions should be considered (Fig. 38). Higher buildings should have a lighter appearance in general to reduce perceived height, weight and bulk.
- vi. Facade articulation, including projections, recessions, design treatments and architectural details (i.e. decorative mouldings, fenestration, masonry banding) are encouraged to create enhanced visual interest and a human-scaled environment (Fig. 38).
- vii. Original architectural details and features should be restored where appropriate.

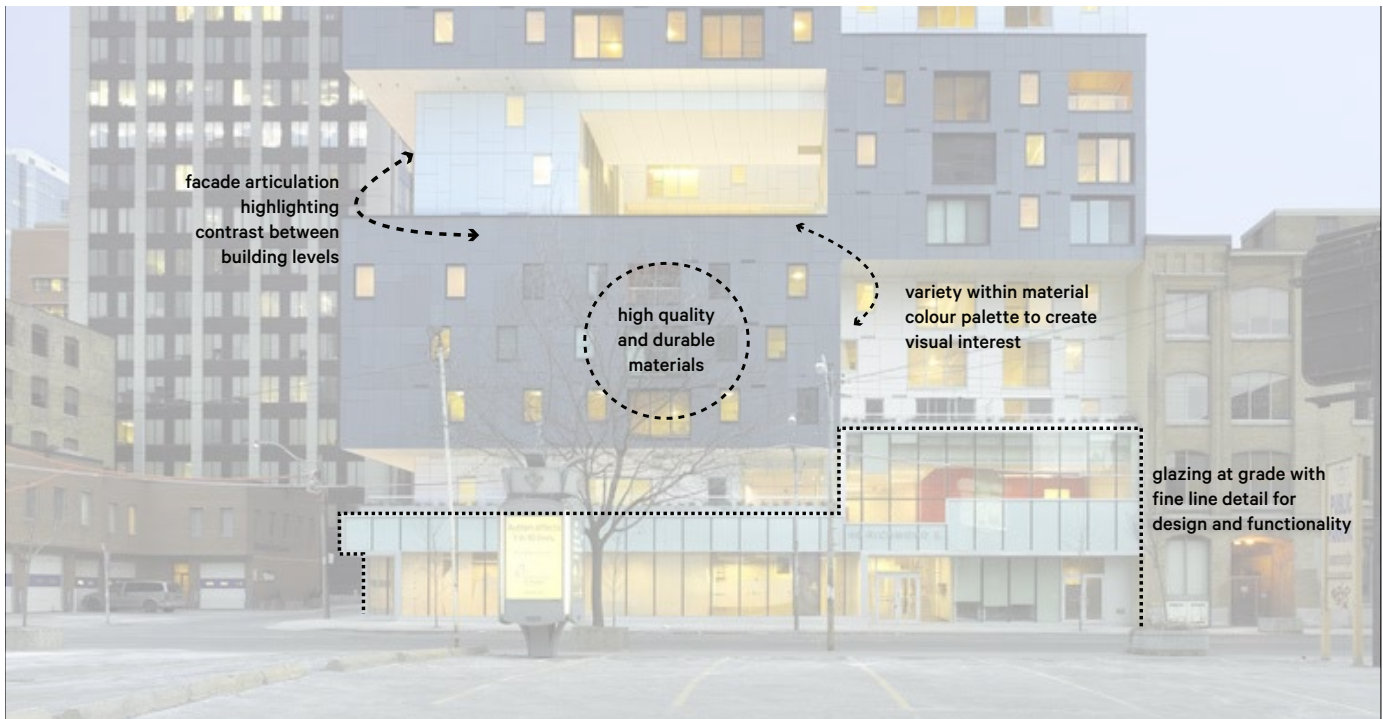


Figure 38. 60 Richmond Housing Cooperation, Toronto, Canada (photo credits: Teeple Architects)



# 2.12 Streetwall

## Streetwall

A consistent streetwall helps create a welcoming public realm, particularly for pedestrians, and cultivate a vibrant sense of place in local areas.

## Design Guidelines

- i. A consistent streetwall should be maintained along Kingston Road and all Primary Frontages.
- ii. The minimum streetwall height along all streets shall be 3 storeys, with a minimum ground floor height of 4.5 metres to accommodate for retail uses.
- iii. The podium portion of tall buildings shall have a minimum height of 3 storeys and a maximum height of 6 storeys.
- iv. All street-related uses should have primary entrances fronting onto the public street and feature transparent windows and doors to provide outlook and animation onto the street edge (Fig. 39).
- v. Generally, buildings shall have a podium of at least 3 storeys before any building setbacks are introduced. The first setback for any building, shall not occur higher than the sixth floor of a building.
- vi. Building setbacks should be a minimum of 2.5 metres.
- vii. A fine-grain pattern of retail units and/or residential entrances is encouraged to provide variety and variation in the streetwall. Variation in frontage width is encouraged to flexibly accommodate a range of street-related uses, including multiple internal formats and layouts for commercial/retail units.
- viii. To introduce further variety and visual distinction within the streetwall, the establishment of façade articulation, differentiation and rhythm through building projections, recessions, and the use of distinct building materials is encouraged.



Figure 39. Paintbox Condominiums, Toronto, Canada (photo credits: Lisa Logan)

## 2.13 Active Frontage Network

To help achieve a lively streetscape which encourages pedestrian activity, certain streets are required to have active uses at grade, with visual engagement between the street and the ground floors of buildings.

### Design Guidelines

- i. Primary Frontages shall contain predominantly street-related active retail or commercial service uses at grade, with primary entrances oriented towards the street to encourage a vibrant public realm. Other street-related active uses, including community and institutional uses, are also permitted.
- ii. Secondary Frontages should contain street-related active retail or other commercial service uses at grade, with primary entrances oriented towards the street to encourage a vibrant public realm. Other street-related active uses, such as community and institutional uses, are also encouraged.
- iii. Development applications which are already underway along Kingston Road and other major intersections are encouraged to develop active frontages.
- iv. Elevated main front entrances and large concentrations of steps along frontages should generally be avoided. Entrances should be ground-related and provide barrier-free access.
- v. A reasonable proportion of frontages shall have transparent windows at street level. Clear glass is preferred for all glazing in order to promote a high level of visibility (Fig. 40).
- vi. Large format retail development may negatively impact the pedestrian realm due to the scale of the uses. To fit into the surrounding urban character, large format retail shall be developed in a compact and integrated form. Location within a multi-storey building or in the podium portion of a mixed-use building is strongly encouraged.



Figure 40. Richardson Apartments by David Baker + Partners, San Francisco, USA (photo credits: Bruce Damonte)

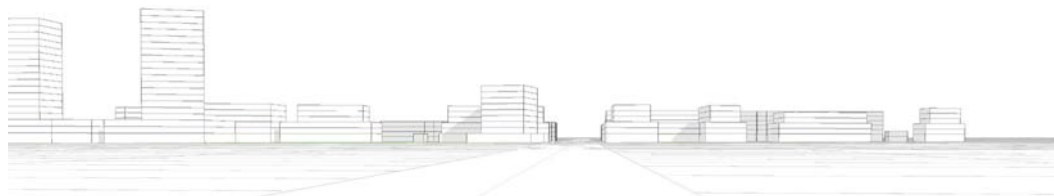


# 2.14 Gateways

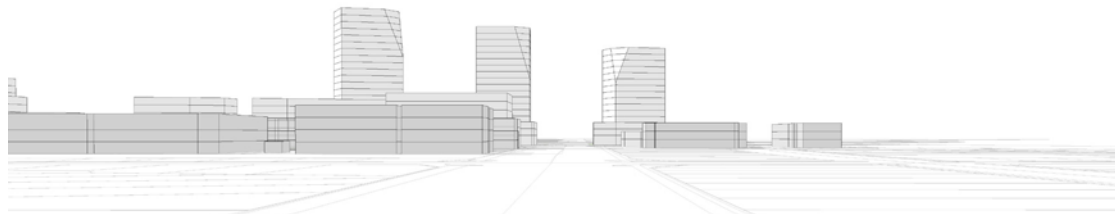
Gateways are entry points into significant streetscapes, areas or neighbourhoods, often signified by a distinctive public realm or built form and enhanced through site and building design.

## Design Guidelines

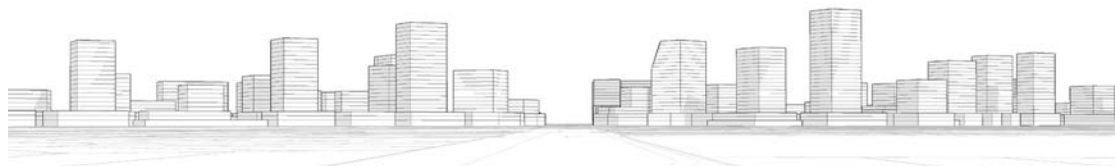
- i. Buildings with significant heights and massing should be located at gateway locations, including both mid-rise and tall buildings. Building and landscape design should aim to create a sense of arrival.
- ii. Gateways should incorporate public gathering spaces, such as plazas and urban squares.
- iii. Buildings at gateways are encouraged to include recessed corners to enlarge the public realm at key intersections to support additional spill-over space for active commercial uses.
- iv. Primary building entrances should be located at gateways.
- v. Building articulation, including vertical projections, recessions, design treatments and other architectural details, is encouraged at gateway locations to create enhanced visual interest and a distinct sense of place.
- vi. Heights, massing and articulation of buildings at gateways shall consider the aesthetics and orientation of view corridors approaching gateways to ensure a cohesive and prominent streetscape.
- vii. Careful consideration should be given to views of the gateway as traffic approaches from the north and south crossing the highway, with an aim to create a balance between the east and west sides and provide a sense of arrival (Fig. 41).



View Approaching Rougemount Gateway looking North



View Approaching the Altona Gateway looking South



View Approaching the Whites Gateway looking North

Figure 41. Building Massing at Rougemount Precinct and Whites Precinct gateway locations

# 2.15 Building Types

## 2.15.1 Tall Buildings

Tall buildings are generally defined as buildings that are 13 storeys or greater. They typically contain active uses at-grade with apartment, condominium, or office uses above. Tall buildings are defined by a podium base, tower middle, and building top.

### Design Guidelines

- i. Tall buildings should generally be located within gateways, including at the intersection of transit spines, major arterials, along the highway and proximate to highway access (Fig. 42).
- ii. Podiums shall have a minimum height of 3 storeys and a maximum height of 6 storeys to create a comfortable public realm. Towers should be stepped back a minimum of 3 metres from the podium wall.
- iii. Tall buildings should appropriately transition in height, particularly where high-rise development is directly adjacent to existing low-rise neighbourhoods, parks and open spaces, and POPS.
- iv. Tall buildings should be designed and sited to minimize shadows, maximize sky views, and reduce negative micro-climate impacts, particularly where high-rise development is directly adjacent to low-rise neighbourhoods, parks and open spaces.
- v. Building towers shall be subject to a minimum 25 metre separation distance, measured between the exterior edge of the building face. Buildings shall have a maximum tower floor plate of 750m<sup>2</sup>.
- vi. Upper floors should terminate the tower with distinctive crowning features and accent materials compatible with the overall building design.
- vii. Building tops should incorporate screening for rooftop mechanical equipment to minimize their visual impact.



Figure 42. Marine Gateway, Vancouver, Canada (photo credits: Perkins+Will)



## 2.15.2 Mid-Rise Buildings

Mid-rise buildings are generally 5 to 12 storeys, and can include residential apartments, condominium buildings, office towers, and mixed-use buildings that feature a mix of residential, commercial and office uses.

### Design Guidelines

- i. Mid-rise buildings are encouraged to be located throughout the corridor and node, including along primary and secondary streets.
- ii. The base of a mid-rise building should be at least 3 storeys. Above three storeys, mid-rise buildings should be stepped back a minimum of 3 metres from the streetwall.
- iii. Mid-rise buildings should appropriately transition in height where they are directly adjacent to existing low-rise neighbourhoods, parks and open spaces, and POPS.
- iv. Mid-rise buildings up to 8 storeys shall maintain a minimum separation distance of 11 metres.
- v. Mid-rise buildings between 8 and 12 storeys shall maintain a minimum separation distance of 18 metres.
- vi. Access points to parking and servicing areas should be consolidated where possible to limit curb cuts and opportunities for conflict between pedestrians and vehicles.
- vii. Building height and massing should be accentuated at street corners and intersections, and away from low-rise residential areas and internal roads. Public amenities and retail uses are also encouraged to be located at corners and intersections (Fig. 43).



Figure 43. Paintbox Condominium, Toronto, Canada (photo credits: Lisa Logan)

## 2.15.3 Low-Rise Buildings

Low-rise buildings are generally 3 to 4 storeys, and can include block townhouses, back-to-back townhouses, stacked townhouses and low-rise apartment buildings.

### Design Guidelines

- i. Low-rise buildings are typically located adjacent to low-rise residential areas and along streets without active frontages.
- ii. Low-rise buildings up to 4 storeys shall maintain a minimum separation distance of 11 metres between facing buildings.
- iii. Low-rise buildings shall maintain a 8 metre separation distance between the face of a building containing primary living spaces, such as bedrooms and living rooms, and the side of another building.
- iv. Buildings with residential units at-grade should have a primary entrance accessing the public street from the sidewalk, via a walkway (Fig. 44).
- v. Building entrances are encouraged to be enhanced through features such as stoops, porches, landings, canopies, decorative railings, and front yard landscaping. They are encouraged to clearly delineate the boundary between the public and private realm through increased setbacks.
- vi. Low-rise buildings are encouraged to incorporate private outdoor amenity space, where possible. This can include raised or below-grade terraces, rooftop terraces, and balconies.



Figure 44. Regent Park townhouses, Toronto, Canada (photo credits: SvN)



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# 3.0 Place-making

- 3.1 Introduction
- 3.2 Natural Heritage Network
- 3.3 Heritage Path
- 3.4 Public Green Spaces
- 3.5 Public Parks
- 3.6 Gateway Plazas
- 3.7 Public Lookouts
- 3.8 Privately Owned Publicly-Accessible Spaces (POPS)
- 3.9 Public Art
- 3.10 Heritage Buildings

# 3.1 Introduction

Placemaking involves the deliberate design of spaces to foster public interactions that bring cities to life.

These Guidelines will facilitate the design of the public realm, reflecting a high standard of quality and responding to the surrounding context, built form and land uses to create spaces that facilitate social interaction.

The Kingston Road Corridor and Specialty Retailing Node contains a variety of publicly and privately-owned and accessible spaces that significantly contribute to defining the structure, identity and character of the overall area and individual precincts. It features a system of public parks and green spaces, plazas, urban squares, Privately Owned Publicly-Accessible Spaces (POPS), and lookouts. The public realm also includes a prominent natural heritage network, culturally-significant heritage buildings and public art features. The Guidelines will support the creation of a more vibrant, inclusive, and sustainable public realm for residents and visitors alike.

## Key Objectives

- Enhance and restore natural heritage features to strengthen their relation to adjacent uses
- Promote sustainability in the design and full life-cycle of the streetscape, open spaces and buildings
- Create a unique sense of place and distinct feeling of arrival for each precinct and throughout the overall corridor and node
- Include high-quality urban environments with a diversity of public spaces and community amenities
- Contribute to overall placemaking goals in support of creating complete communities

The section begins with a description and diagrammatic illustration of the Placemaking Plan for each precinct, followed by design guidelines.



Figure 45. Chemin-Que-Marche, Montreal, Canada (Image Credits: Alexis Nollet)



## Rougemount

A range of placemaking features are located within the Rougemount Precinct. These include a Public Green Space, Public Lookout, POPS, Community Facility, Gateway Plaza and Heritage Path.

A Gateway Plaza is proposed on the north side of Kingston Road, at the intersection of Kingston Road and Altona Road. This gateway feature provides an entrance to the precinct from the west side, and should incorporate notable public art, site furniture and enhanced landscaping. An additional Gateway Plaza is located at the intersection of Kingston Road and Rougemount Drive as a gateway feature for those arriving from the south.

A Community Facility is located adjacent to the existing library and community center, and in close proximity to East Woodlands Park, to create a concentrated cluster of community amenities.

A proposed Public Green Space fronts the east side of Rougemount Drive to the north of Kingston Road. This space helps link and extend the natural heritage area around Petticoat Creek. The proposed Public Lookout is oriented north to offer views of the creek and surrounding natural heritage features.

To strengthen access to Rouge National Urban Park, a Heritage Path is proposed along Kingston Road. It provides an enhanced connection between the park to the west, the retail along Kingston Road and the community center and library to the east.

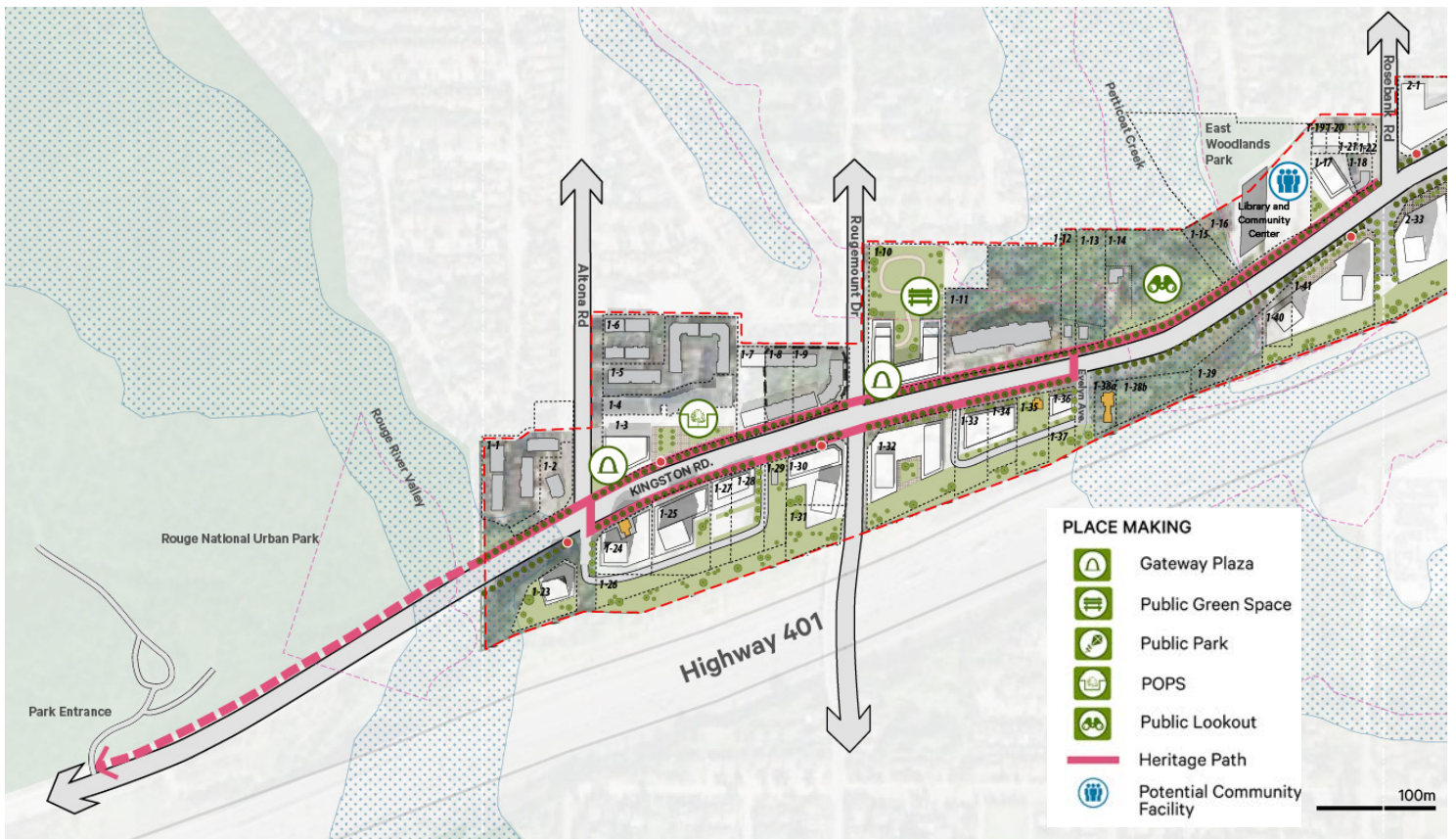


Figure 46. Rougemount Precinct Placemaking Plan

## Whites

The Intensification Plan identifies a well-spaced distribution of public realm features across the Whites Precinct. These spaces vary in size and function to ensure ease of access, and include Public Parks, Public Green Spaces, POPS, Public Gateway Plazas, and Public Lookouts.

Two Public Gateway Plazas are located on the south side of the intersection of Kingston Road and Whites Road, a major gateway. These Public Gateway plazas will act as prominent locations for public gathering and activity, and are expected to receive heavy pedestrian foot traffic as a key hub of commercial and retail activity. They should be designed together with similar theming,

including larger pieces of public art that may “play” off each other.

A number of POPS are provided within development blocks on the north and south side of Kingston, which will allow private development to contribute to the construction of open space for public enjoyment. Due to the scale and character of the precinct, these are recommended to take the form of hardscaped urban squares which are able to host active programming.

Another noteworthy feature is the Public Lookout identified off of Kingston Road, south of Ernie L. Stroud Park. This lookout is oriented north and allows users to stop along the sidewalk for a view of the park.

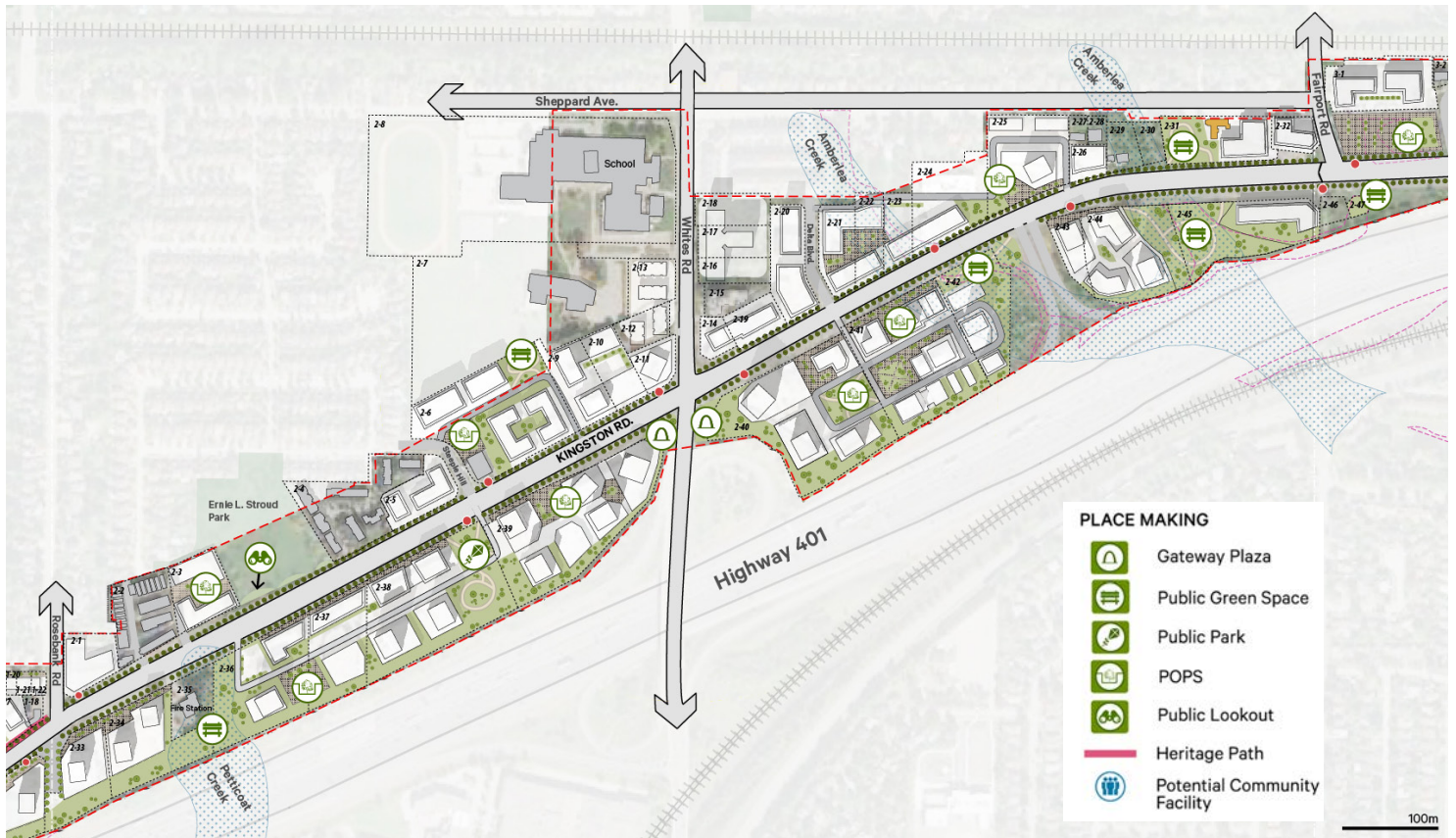


Figure 47. Whites Precinct Placemaking Plan



## Dunbarton/Liverpool Precinct

In the Dunbarton/Liverpool Precinct, placemaking features are concentrated along both Kingston Road and the proposed east-west internal road running parallel to Kingston Road.

Two Public Gateway Plazas are located on the southwest and south east corners of Kingston Road and Dixie Road, providing much-needed public space to meet the needs of several high-density mixed-use developments proposed in this area. They should be designed together with similar theming, with uniform public realm treatments that invoke the sense of a large, contiguous space. A Public Park, located on the south side of the proposed internal road, is imagined as a community hub. It is seen as having the potential to act

as a multi-use space for lively community events, such as weekend farmers markets.

Several POPS can be found throughout the precinct. One POPS, which is recommended to take the form of an urban square, is proposed at the northeast intersection of Fairport Road and Kingston Road, as a result of the limited redevelopment potential of the property due to underground utilities running east-west across its southern portion. Additional smaller POPS should be provided central to the development blocks.

A proposed Public Green Space is identified where the Kingston Road Corridor intersects with Dunbarton Creek and its associated creeklands. This will provide opportunities for recreation and relaxation while also acting as a buffer for sensitive environmental areas.

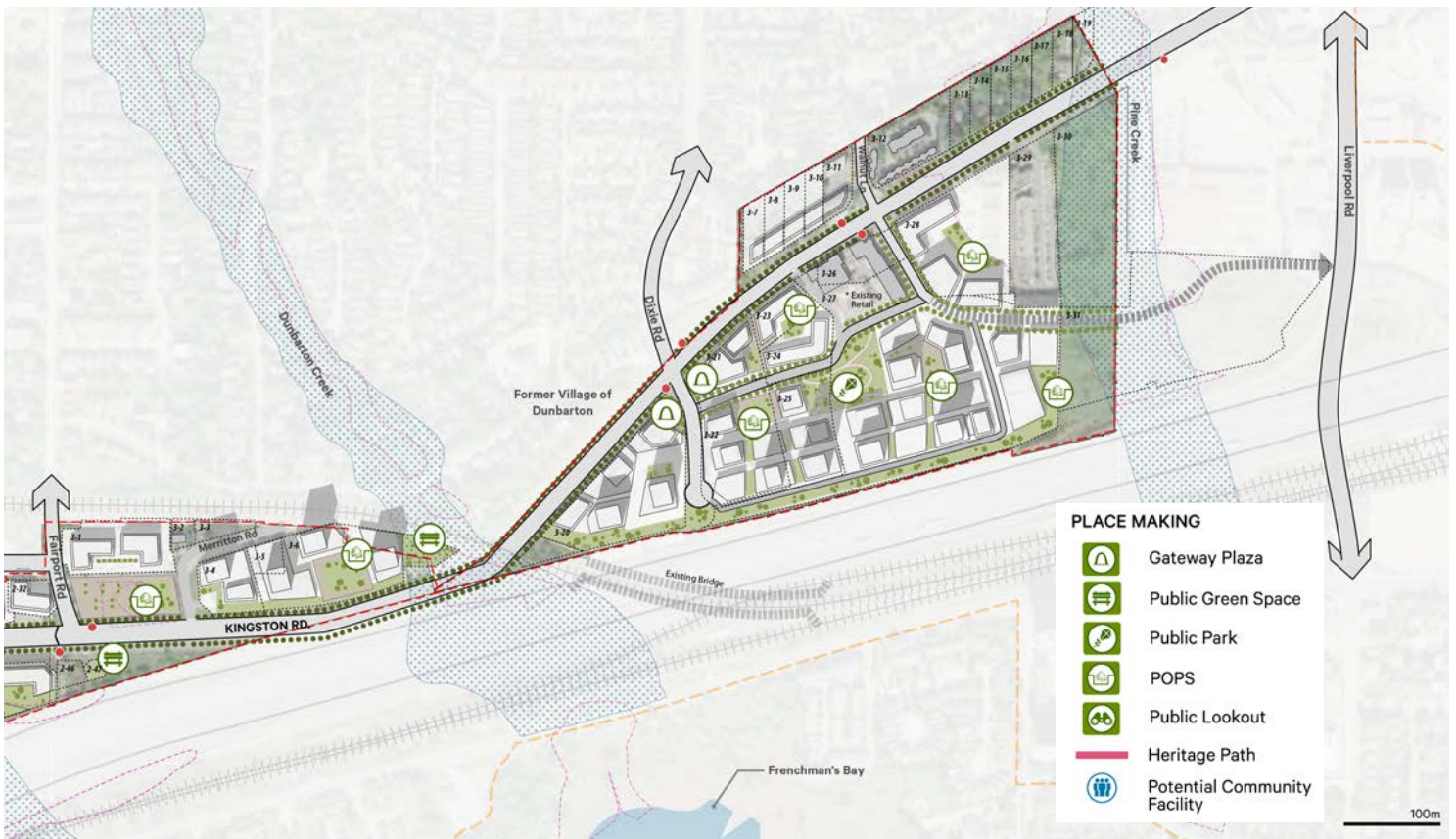


Figure 48. Dunbarton/Liverpool Precinct Placemaking Plan

## Brock Precinct

A number of publicly-accessible spaces of various shapes and sizes are proposed for the Brock Precinct to ensure a sufficient amount of open space for the increased resident population. This includes Public Parks, POPS and Gateway Plazas.

A series of linear parks, developed and maintained as POPS, are proposed as connectors between larger open spaces. One such linear park connects pedestrians from Brock Street to the central internal Public Park and to Beechlawn Park, located immediately east of the precinct. This central Public Park is intended to act as a community amenity for neighbouring residents; its location directly adjacent to Beechlawn Park opens up opportunities for park programming shared between

the two spaces. A potential Community Facility is envisioned in close proximity. The specific function and services of the facility will depend on local needs and preferences.

An additional Public Park is located in the southern end of the precinct. This park should be sized and programmed to service the residents south of Pickering Parkway. It should include features such as children's play structures, seating areas, unprogrammed open green space and a multi-use court, if possible.

South of Pickering Parkway, POPS are organized within blocks of mixed-use and residential development. They provide places of respite from retail activity, and contribute to complete communities offering residents places to live, work and play.



Figure 49. Brock Precinct Placemaking Plan



## 3.2 Natural Heritage Network

The Kingston Road Corridor and Specialty Retailing Node benefits from proximity and access to an extensive existing waterway system and natural heritage network. These areas should be conserved, managed and celebrated as a connected and integrated natural system.

### Design Guidelines

- i. Natural heritage assets should be connected and made accessible through sidewalks and trails, and integrated with the surrounding landscape and urban community without compromising their function and integrity (Fig. 50).
- ii. Natural heritage features should be buffered from intensification areas, through setbacks and appropriate building transitions, to ensure that natural heritage is protected and that important environmental ecosystems are not negatively disturbed.
- iii. Efforts should be made to facilitate greater connections to the Rouge National Urban Park and Petticoat Creek, subject to future study. Opportunities to connect trails and walkways providing access to these features should be explored, pending further transportation and environmental assessment.
- iv. Through redevelopment and streetscape design opportunities shall be sought to incorporate gateways and lookouts to maximize opportunities for views of natural heritage features. Streets and blocks should be configured to provide exposure to natural features, to amplify their significance and functions.



Figure 50. Arninge-Ullna Riparian Forest Park, Stockholm, Sweden (photo credits: Topia landskapsarkitekter)

## 3.3 Heritage Path

The Heritage Path provides an enhanced route along Kingston Road in the Rougemount Precinct for cyclists, leisure walkers and joggers while strengthening the area's connection to Rouge National Urban Park.

### Design Guidelines

- i. The Heritage Path shall be located along Kingston Road, running from the western boundary of the Rougemount Precinct to Rosebank Road on the north side of Kingston Road and from Altona Road to Evelyn Avenue on the south side of Kingston Road.
- ii. The Heritage Path should be designed to support an extension beyond the western boundary of the Rougemount Precinct to Rouge National Urban Park, in a manner coordinated with Parks Canada trail planning. The extension should create a link between the Precinct and park entrance.
- iii. The Heritage Path should feature an enhanced public realm, including heritage markers and informational plaques highlighting the history of the area and significance of surrounding natural heritage features. It should also include street planting, enhanced paving materials, directional signage and street furniture such as benches to enable a comfortable pedestrian experience (Fig. 51).



Figure 51. Indianapolis Cultural Trail, Indianapolis, USA (photo credits: Indianapolis Cultural Trail Website)



## 3.4 Public Green Space

Public Green Spaces are located adjacent to creeks and other sensitive environmental features throughout the Corridor and Node. They act as a buffer between development blocks and natural heritage features, provide areas of rest and respite in a more naturalized environment, and offer opportunities for active and passive recreation.

### Design Guidelines

- i. Public Green Spaces adjacent to natural heritage features shall be designed to help buffer and preserve the integrity of sensitive environmental areas.
- ii. Public Green Spaces shall front onto public streets where possible, and be of a shape, topography and size that reflects their intended use. Green Space design should incorporate a measure of flexibility to enable the potential for multi-use spaces.
- iii. Entrances to Public Entrances should be highly visible, aesthetically-pleasing and accessible for users with physical disabilities, and incorporate signage that assists in wayfinding and orientation. Where possible, efforts should be made to incorporate multiple access points.
- iv. Public Green Spaces are encouraged to have public or private street frontages, where possible.
- v. Developments adjacent to a Public Green Space will be setback a minimum of 3 metres and will provide an appropriate interface between public and private lands. Developments will avoid locating loading and service areas adjacent to green spaces.
- vi. Public Green Spaces shall serve a community function and incorporate an appropriate range and variety of active and passive recreational uses, subject to the size and shape of the green space and its proximity to sensitive environmental features (Fig. 52).
- vii. Green Spaces shall incorporate opportunities to educate the public about environmental conservation

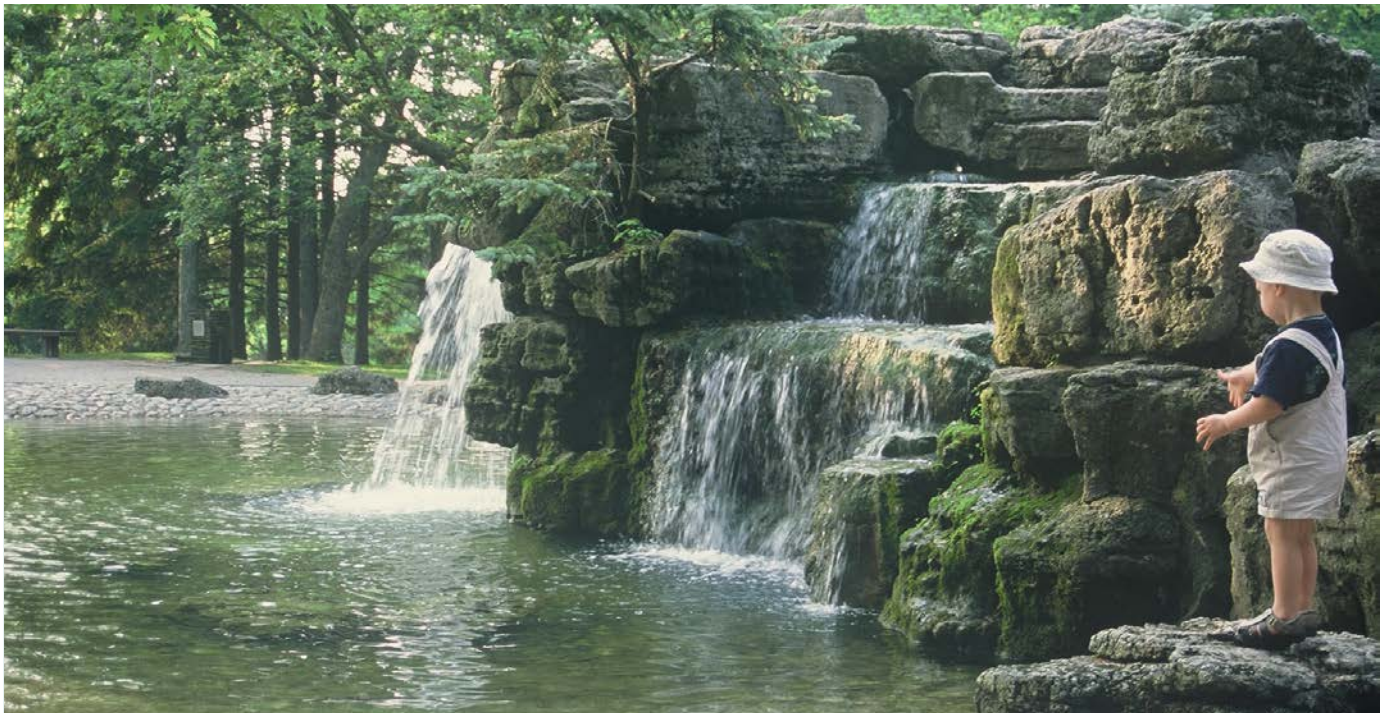


Figure 52. Riverwalk Stratford, Stratford, Canada (photo credits: Riverwalk B&B)

and the immediate natural heritage network, where appropriate, through features such as illustrated informational signs.

- viii. Amenity areas within Green Spaces should be located and oriented to maximize sunlight and be sheltered from the noise and traffic of adjacent streets and uses to increase user comfort.
- ix. Development should seek to adequately limit shadows on green spaces as necessary to preserve their utility. Development should adequately limit net-new shadow as measured from March 21st to September 21st from 10:18 a.m. – 4:18 p.m. on green spaces.
- x. Where Public Green Spaces are located adjacent to school sites or community facilities, the design of both entities should be coordinated in order to capitalize on opportunities for shared facilities and amenities.
- xi. On-street parking on streets adjacent to Public Green Spaces should be situated on the same side of the street as the park, in order to facilitate convenient, direct and safe access.
- xii. Plantings should comprise of species which are tolerant of urban conditions, emphasizing native and non-invasive species. Accent planting should be focused at entrances, around seating areas and in play areas (Fig. 53).



Figure 53. Westhaven Promenade, Auckland, New Zealand (photo credits: LandLAB )



# 3.5 Public Parks

Public Parks play a fundamental role in enhancing the public realm and the natural environment. They provide valuable outdoor activity space for communities to gather, socialize and engage in an active lifestyle.

In order to achieve the Recreation and Parks Master Plan’s parkland service targets, significant new park space is required throughout the Kingston Road corridor and node.

### Design Guidelines

- i. Public Parks shall front onto public streets, be accessible from adjacent public streets where possible, and be of a shape, topography and size that reflects their intended use. Park design should incorporate a measure of flexibility to enable the potential for multi-use spaces throughout all seasons.
- ii. Public parks should be a minimum of 0.3 hectares in size, although larger parks are preferred. The siting and sizing of new Public Parks should take into account planned residential and employment intensification to ensure adequate provision.
- iii. Public Parks should contain multiple access points (Fig. 54). Entrances should be highly visible, aesthetically-pleasing, accessible for users with physical disabilities, and incorporate signage that assists in wayfinding and orientation.
- iv. Public Parks should be physically and visually connected to the public street. New buildings should be positioned to define the shape and function of the public park and to create the impression of a cohesive public realm.
- v. Public Parks should have a minimum of one public street frontage and one private street frontage, although greater street frontages are encouraged.
- vi. Developments adjacent to a Public Park will be setback a minimum of 3 metres and will provide an



Figure 54. Mekel Park - Delft University of Technology Campus, Delft, Netherlands, (photo credits: Mecanoo)



appropriate interface between public and private lands, promote animated uses at grade and avoid locating loading and service areas adjacent to parks.

- vii. Public Parks shall serve a community function and incorporate an appropriate range and variety of active and passive recreational uses, subject to the size and shape of the park (Fig. 55).
- viii. Public Parks which are 0.3 ha or larger in size should include a playground with junior and senior children's play equipment, seating areas, pathways, open unprogrammed turf areas and tree canopy. Larger parks should accommodate water play features, multi-use courts or one-on-one basketball facilities.
- ix. Public Parks also should incorporate pedestrian-scaled lighting, bicycle racks, appropriate signage and public art, where appropriate.
- x. Amenity areas within Public Parks should be located and oriented to maximize sunlight and be sheltered

from the noise and traffic of adjacent streets and uses to increase user comfort.

- xi. Development should seek to adequately limit shadows on parks as necessary to preserve their utility. Development should adequately limit net-new shadow as measured from March 21st to September 21st from 10:18 a.m. – 4:18 p.m. on parks.
- xii. Where Public Parks are located adjacent to school sites or community facilities, the design of both entities should be coordinated in order to capitalize on opportunities for shared facilities and amenities.
- xiii. On-street parking on streets adjacent to Public Parks should be situated on the same side of the street as the park to facilitate convenient, direct and safe access.
- xiv. Public Parks and Green Spaces should connect to neighbouring natural heritage features through enhanced boulevards to contribute to a green, interconnected pedestrian network.



Figure 55. David H. Koch Plaza, New York, USA (photo credits: Olin Studio)



## 3.6 Gateway Plazas

Gateway Plazas are prominent publicly accessible spaces in high-traffic areas that provide places to gather and socialize, while adding aesthetic value to the built environment.

### Design Guidelines

- i. Gateway Plazas shall function as central gathering spaces which can be programmed for public or community events, and as pedestrian gateways and connections which complement the existing streetscape. The dimension, design and furnishing of these spaces should offer comfort and allow for a range of activities accommodating diverse user groups.
- ii. Gateway Plazas shall be physically and visually connected to the public street and well-designed to relate to surrounding buildings and create the impression of a cohesive public realm.
- iii. Gateway Plazas should be framed by adjacent streets, landscape and buildings which are designed to the highest architectural standard. They should respond to the form and function of the site and surrounding uses.
- iv. Commercial and mixed-use buildings adjacent to plazas should provide active frontages with direct views and access. Patios are encouraged to be located adjacent to these locations.
- v. Gateway Plazas should contribute to a cohesive streetscape through the consistent use of colour, texture and building materials to the surrounding the built form.
- vi. To create an enjoyable pedestrian environment, Gateway Plazas should incorporate appropriate lighting, signage, water features, and public art, where appropriate (Fig. 56). High quality paving treatments, in combination with landscaped elements including coordinated plantings and street furniture, should also be used.



Figure 56. Berczy Park, Toronto (photo credits: Jeremy Gilbert via Flickr)

## 3.7 Public Lookouts

Public Lookouts highlight important views within the urban structure of streets, parks and open spaces. These are located at natural vantage points typically present in close proximity to the creeks and valleylands.

### Design Guidelines

- i. Lookouts should be physically and visually integrated with the public street. They should be easily accessible and useable, with clear signage to indicate public use and connections to accessible paths.
- ii. New developments on sites adjacent to lookouts should preserve the existing views for public enjoyment. The location and massing of new developments should complement these views.
- iii. Lookouts should incorporate comfortable seating, appropriate lighting and public art, where appropriate. The design and placement of these amenity features should facilitate, rather than hinder, the movement and congregation of individuals and groups (Fig. 57).
- iv. Lookouts are encouraged to include informational plaques, maps, heritage markers and interpretive signage, where appropriate, to provide contextual information about the landscape, region and identifiable features in the view corridor.



Figure 57. The Chemin-qui-Marche Lookout, Montreal Canada (photo credits: Lemey)



# 3.8 Privately Owned Publicly-Accessible Spaces (POPS)

Privately Owned Publicly-accessible Spaces (POPS) form a key part of the public realm network, providing valuable amenity space through development. POPS are owned and maintained by private landowners, but open to the general public to enjoy. They can take a variety of forms, including parks, linear parks and urban squares.

### Design Guidelines

- i. POPS shall be publicly accessible, with signage to properly identify the space and indicate access for public use.
- ii. The locations of POPS will be identified in the implementing zoning by-law and their exact size, location and design shall be addressed through detailed block planning, to include matters such as connectivity and cost sharing between multiple landowners.
- iii. The size, shape and configuration of POPS will vary based on the existing and planned context and specific characteristics of the site and the building program.
- iv. POPS shall provide public easements as necessary over privately-owned open spaces to provide access to the general public.
- v. Private landowners shall be responsible for ongoing maintenance to ensure that POPS remain in a state of good repair through all seasons.
- vi. The location and design of POPS should seek to physically and visually connect to the public street.
- vii. POPS should be framed by and relate to surrounding buildings; at-grade active uses shall support the programming of the open space and offer a surveillance element to promote safety (Fig. 58).
- viii. All POPS should incorporate soft landscape and planting; trees shall have sufficient soil volumes to enable large mature growth and a significant tree canopy.



Figure 58. Artwork at Daniel's High Park Condos, Toronto, Canada (photo credits: Urban Toronto)

- ix. POPS should maximize sun exposure and strive to achieve 5 consecutive hours of sun as measured on March 21 and September 21.
- x. POPS should provide amenities including seating areas, pedestrian-scale lighting, bicycle racks, garbage cans, and public art to create a positive walking and cycling environment. Amenities should compliment the character of the surrounding public realm and active ground floor uses.
- POPS designed as Parks should:
  - xi. Be located to provide areas of open green space where intensified development is expected or planned to occur.
  - xii. Have a dimension of a minimum of 0.2 ha, with larger spaces preferred.
  - xiii. Include seating areas, walkways, a playground with junior children's play equipment, an open turf area, and tree canopy.
- POPS designed as Linear Parks should:
  - xiv. Be located where they are able to link several larger green spaces in close proximity, for example to connect Brock Road and Beechlawn Park to the newly proposed internal park on the development block east of Brock Road.
  - xv. Have a dimension which is based on local site conditions; however, generally the minimum width should be 6.5 metres or greater to provide adequate spacing for the park to act as a movement corridor as well as a landscaped activity space.
  - xvi. Provide a clear pathway with high-quality, durable paving materials.
- POPS designed as Urban Squares should:
  - xvii. Be located in commercial and areas and be designed to accommodate relatively higher levels of pedestrian foot traffic, with more hardscaped areas relative to softscape
  - xviii. Incorporate high-quality paving treatments, with distinct paving materials used to delineate between separated activity zones within larger squares.
  - xix. Have a dimension which is based on local site conditions; they could be as small as 100m<sup>2</sup> but should be large enough to allow for active programming and public events.
  - xx. Provide seating areas in the form of benches or seat walls, plant material (preferably in raised planters) and higher branching trees for shade. If located near dining establishments, tables with seats may be appropriate.



## 3.9 Public Art

Public art is an important part of the public realm, incorporating culture, beauty and vibrancy to streetscapes. They enhance neighborhoods by making communities more attractive, and help enliven areas with distinct character and identity.

### Design Guidelines

- i. Public art should be located in or with close proximity to community-oriented spaces, such as parks, open spaces, public squares, plazas, and gateways, to maximize visibility. It should be exhibited along streets and laneways that support a continuous flow of high pedestrian volumes.
- ii. Public art should be durable and low-maintenance.
- iii. Public art should explore opportunities to celebrate local history and culture, including notable events and figures (Fig. 59).
- iv. Opportunities to incorporate public art into building design as an architectural element are encouraged.
- v. Public art installations may be publicly or privately owned, and private developers are strongly encouraged to incorporate public art elements within their developments.



Figure 59. Dan Bergeon Public Art, Toronto, Canada (photo credits: Marcus Mitanis)

## 3.10 Heritage Buildings

There is one designated heritage building and four buildings of heritage interest within the Kingston Road Corridor and Specialty Retailing Node. Heritage resources play a valuable role in celebrating local history and preserving cultural identity.

### Design Guidelines

- i. Heritage buildings and historic elements should be integrated into the wider public realm, and connected to the surrounding public open space network when possible.
- ii. Built heritage features on focal sites should be accentuated to create a sense of place and enhance cultural identity.
- iii. Through the review of development proposals, the historical significance of designated heritage buildings and buildings with heritage merits shall be assessed to determine how the building or elements can be protected, enhanced or integrated into new development.
- iv. Distinct historical eras in the history of Kingston Road in the City of Pickering should be celebrated through public realm treatments on lands with specific ties to those activities, and incorporated into the landscape, lighting, signage, interpretation and art.
- v. New development should recognize heritage buildings and historic elements by facilitating opportunities for building and site design to reflect the scale, building materials, architectural style and other attributes of adjacent cultural heritage resources (Fig. 60).



Figure 60. Casey House, Toronto, Canada (photo credits: Marcus Mitanis)



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# 4.0 Connectivity

- 4.1 Introduction
- 4.2 Pedestrians
- 4.3 Cycling
- 4.4 Transit
- 4.5 Street Types

# 4.1 Introduction

Connectivity involves creating a robust, multi-modal transportation system that supports the freedom of movement for all users in the urban environment.

These guidelines will inform the creation of an integrated mobility network that takes into account the needs of pedestrians, cyclists, transit riders and drivers. To facilitate this network, proposed connections include pedestrian paths, pedestrian crossings, multi-use paths, bicycle lanes and cycle tracks, and new and improved public and private streets.

New or improved connections are used to provide alternate travel routes, break up larger blocks into smaller and more walkable blocks, allow for smooth vehicular and servicing access, and provide access to parks, open spaces and natural heritage features. The network will provide a range of safe, accessible and inviting transportation choices and support public and environmental health by encouraging the uptake of active modes.

## Key Objectives

- Design all public roads and private connections to be complete streets and emphasize transit and pedestrian-oriented development.
- Improve access management and connectivity for all transportation modes.
- Ensure that all users have distinct and delineated spaces to separate modes of travel moving at different speeds.
- Support current and future transit services through building and site design and public streetscape treatments.
- Encourage the optimization of existing and planned infrastructure, including transit facilities.

The section begins with a description and diagrammatic illustration of the overall Connectivity Plan for each precinct. Following this, within each subsection, the Pedestrian Connectivity Plan, Cycling Connectivity Plan, and Street Types Plan are detailed, along with accompanying design guidelines.



## Rougemount

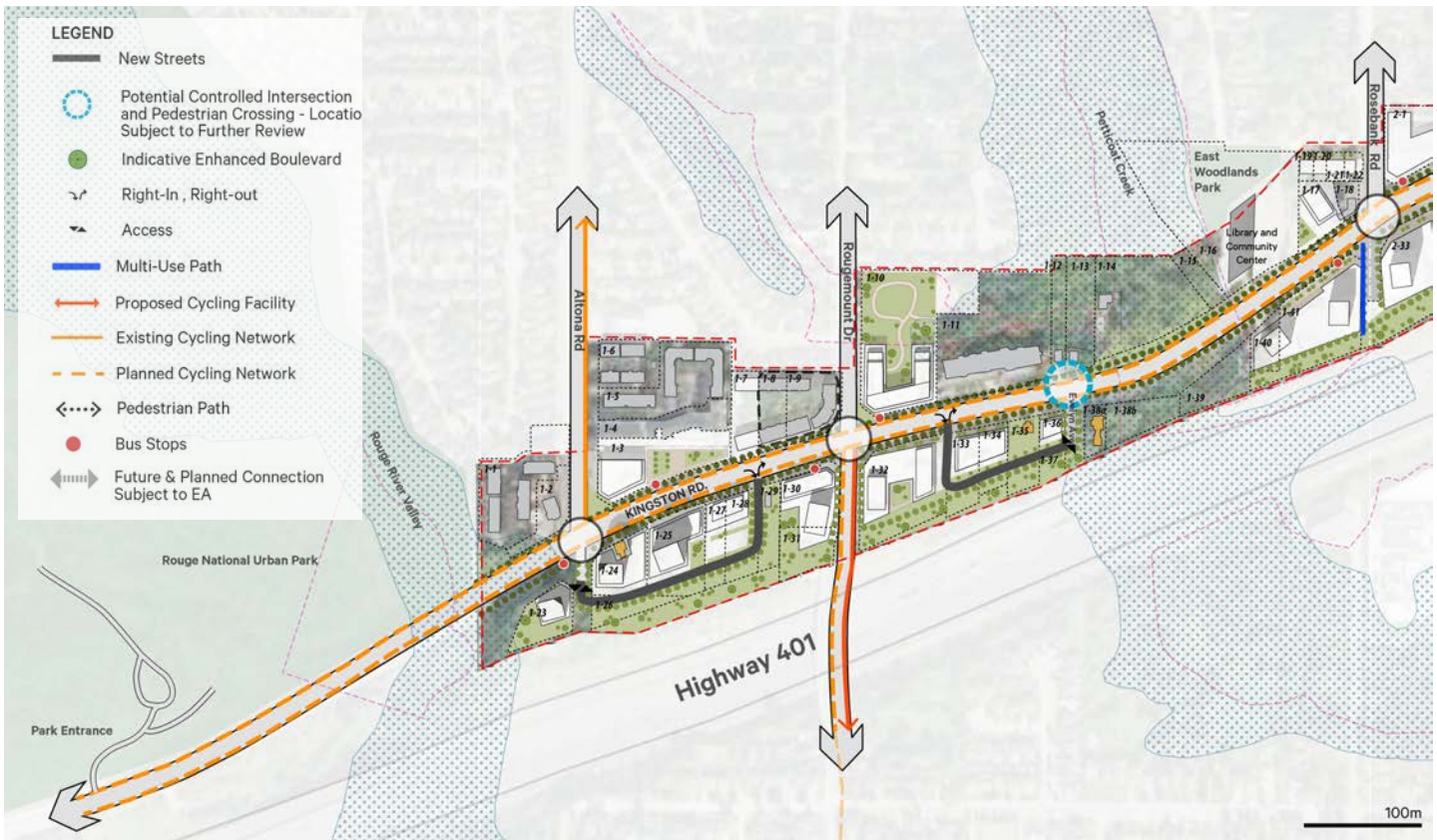
To better align with the planned 45 metre right of way and the ultimate provision of centre-running Bus Rapid Transit (BRT) service along Kingston Road, and to make this precinct truly pedestrian and cyclist-friendly, the Intensification Plan minimizes and consolidates multiple accesses off Kingston Road and increases the permeability of the precinct by the introduction of two rear service streets on properties south of Kingston Road.

The first of these potential service roads runs from the southern end of Altona Road, east across the southern limit of properties with frontage on Kingston Road, and then turns back up to Kingston Road two properties west of Rougemount Drive. The second commences at

Evelyn Avenue, running west to reconnect with Kingston Road closer to Rougemount Drive.

To improve connectivity between the properties south and north of Kingston Road, east of Rougemount Drive, and to create a better pedestrian connection between the existing Library and Petticoat Creek to the “Main Street” retail, it is recommended that provision of a controlled intersection be explored at Evelyn Avenue.

In addition, since Rougemount Drive is one of the key roads crossing the highway and thus connecting the southern neighbourhoods, a new cycling connection is proposed south of Kingston Road on Rougemount Drive.



## Whites

The Whites Precinct is typified by relatively larger parcels with greater depths. As a result, a number of opportunities for new connections within and through these larger parcels are proposed, featuring strategies to provide consolidated access, internal routes of circulation, and additional frontage opportunities through new connections.

The Intensification Plan features a mid-block public road connection south of Kingston Road with access points off Kingston Road at the eastern edge of Petticoat Creek and the intersection of Kingston Road and Steeple Hill Road. It also features a potential public road connection

on the south side of Kingston Road, east of Whites Road with the access aligning with Delta Boulevard. This would connect to a private secondary loop street. The configuration would reduce the number of individual access points from Kingston Road while improving connectivity and providing additional access points within the block.

Lastly, rear private service streets are proposed on the north side of Kingston Road, west and east of Whites Road, with connections to Steeple Hill Road and Delta Boulevard respectively, connecting with Kingston Road at existing controlled intersections. These are aimed at improving connectivity between the properties on the north-side of Kingston Road, and reducing the number of individual access points.

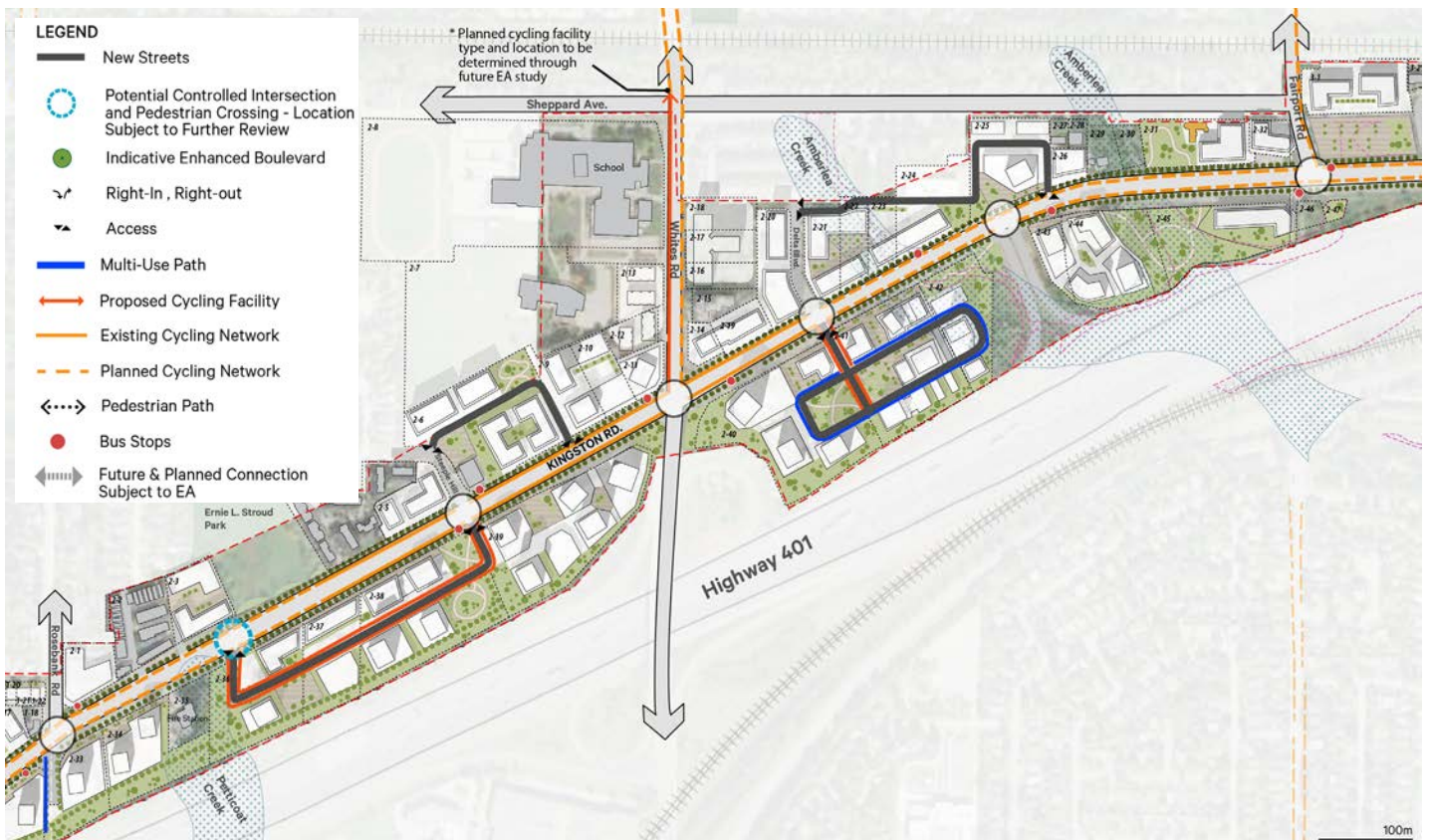


Figure 62. Whites Precinct Connectivity Plan



## Dunbarton/Liverpool

The Dunbarton/Liverpool Precinct is typified by relatively large parcels with even greater depths than those found in the Whites Precinct. As a result, opportunities for new road connections within and through these larger parcels are proposed, featuring a strategy to provide consolidated access, internal multi-modal routes of circulation and additional frontage opportunities through new connections. In addition, a new internal public street is introduced running parallel to Kingston Road, connecting Walnut Lane to Dixie Road, creating a more pedestrian friendly east-west connection, and opportunities for potential redevelopment with active frontages through the core of the Precinct.

The Intensification Plan also incorporates the planned extension of Walnut Lane across Pine Creek, of which the exact alignment is to be determined through a municipal class environmental assessment. All proposed roads within the Dunbarton/Liverpool Precinct are encouraged to be multi-modal. A pedestrian and cycling connection is proposed by re-using the existing rail bridge and underpass over the highway to connect the neighbourhood to the south, with an eventual connection to the waterfront trail.

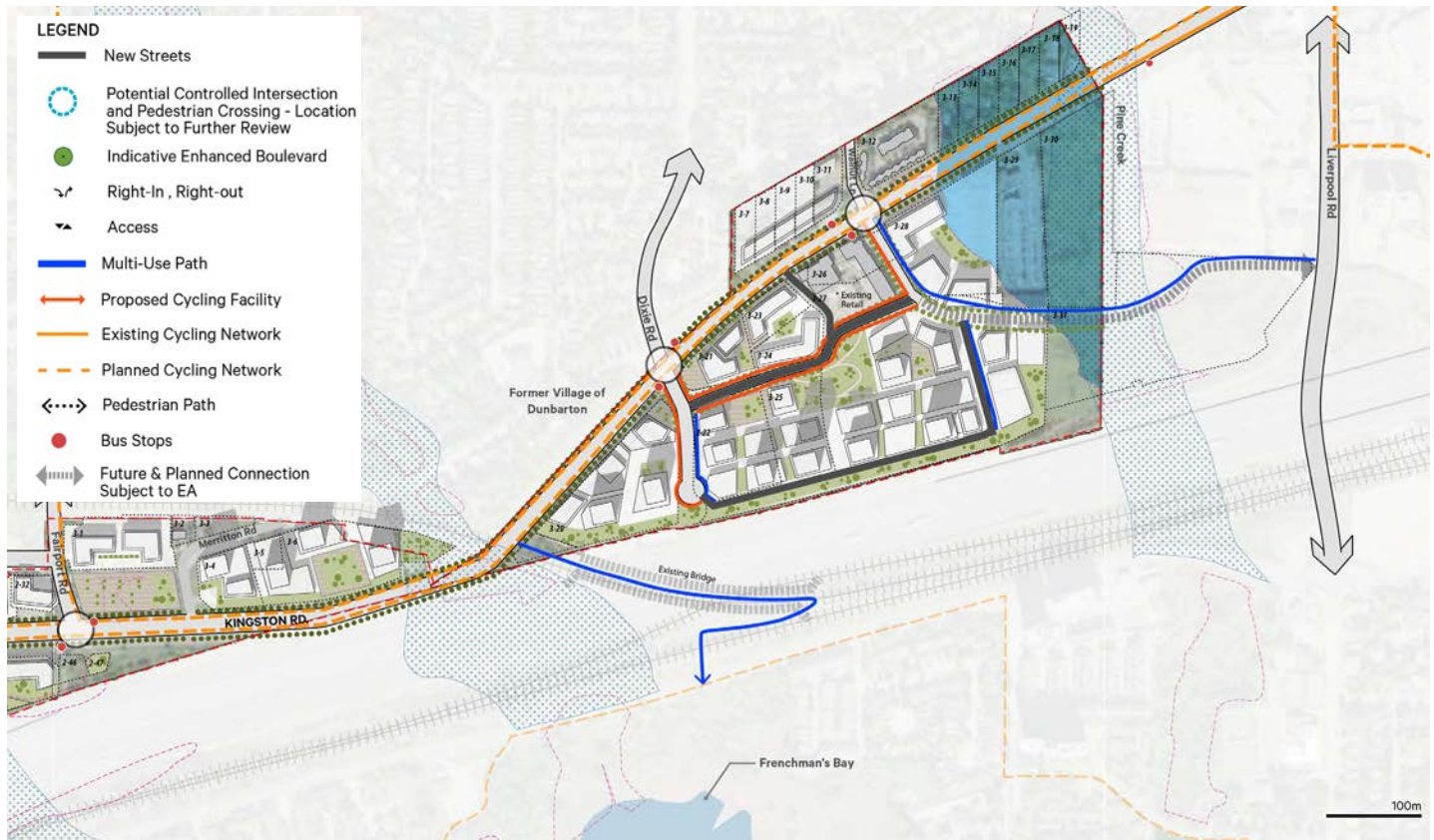


Figure 63. Dunbarton/Liverpool Precinct Connectivity Plan

## Brock

The Brock Precinct is typified by a mixture in size of parcels along Kingston Road and very large parcels off Pickering Parkway and Brock Road.

There are three main landowners within the Specialty Retailing Node Area within the Brock Precinct, and as a result, a number of opportunities for new connections and public roads within and through these very large parcels are encouraged.

These feature strategies to provide better access, more internal routes of circulation and multi-modal routes, and additional street frontage and activity hub opportunities through new connections.

The Intensification Plan features a new public road passing through the existing mid-block intersection east of the Brock Road on Pickering Parkway. The new proposed public street would become a “precinct collector”, forming the back-bone of a more strongly defined internal road network and improving walkability through the node. A series of private east-west streets are proposed to intersect it to form a more fine-grained street pattern.

Three new controlled intersections are proposed, including one along Pickering Parkway and two along the proposed public street, to improve traffic access and safety.

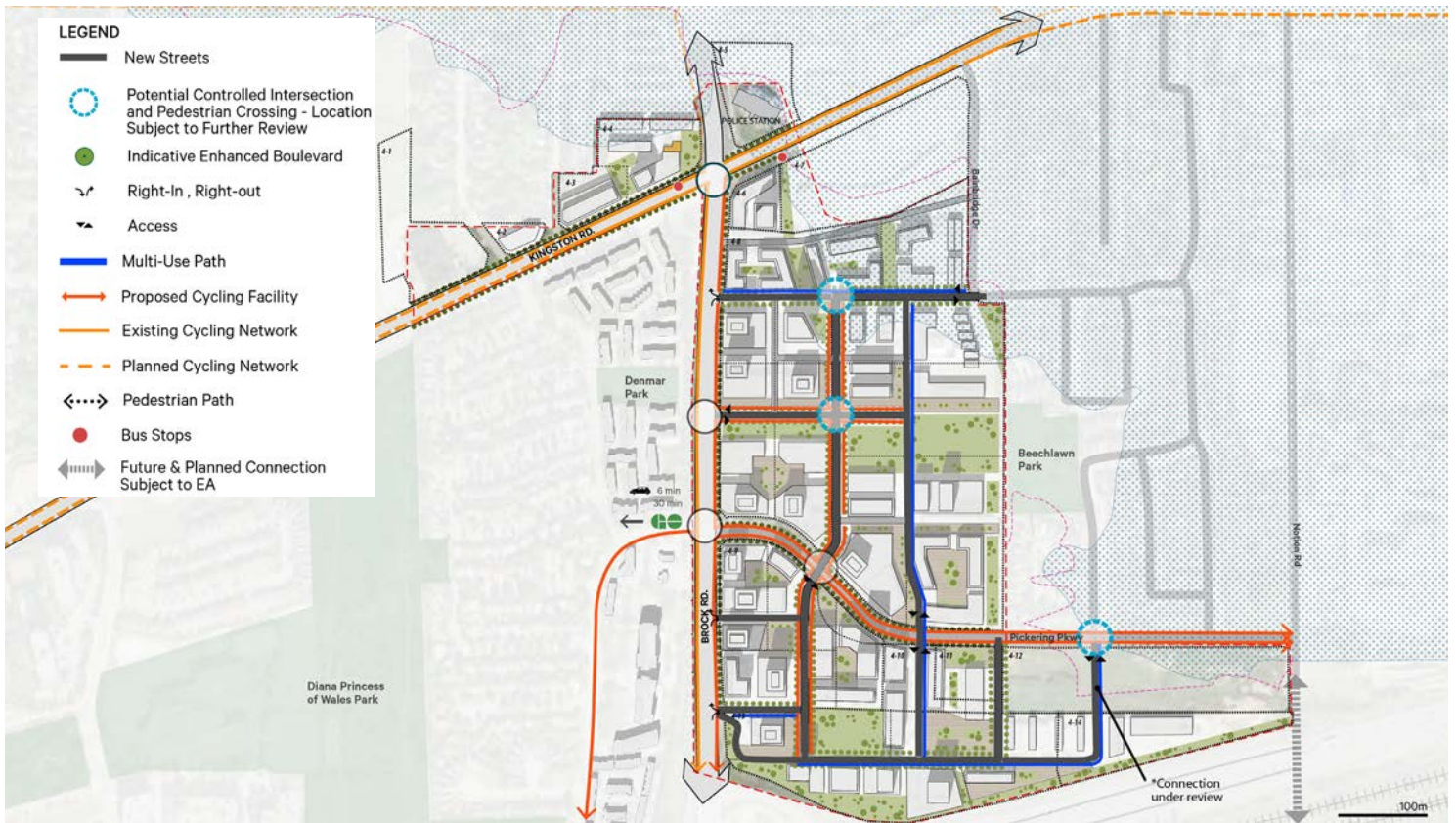


Figure 64. Brock Precinct Connectivity Plan



## 4.2 Pedestrians

A well-designed pedestrian network is critical to creating a comfortable and vibrant urban environment. The Kingston Road Corridor and Specialty Retailing Node is envisioned as a place where pedestrians are encouraged to walk between destinations, where pedestrians feel safe interacting with other road users, and where the pedestrian network supports broader place-making goals.

Sidewalks, multi-use paths, pedestrian paths, and controlled intersections are proposed as part of the Pedestrian Connectivity Plan, illustrated in Figures 66 to 69.



*Figure 65. Buffalo Niagara Medical Campus, Buffalo, USA (photo credits: Scape Studio website)*



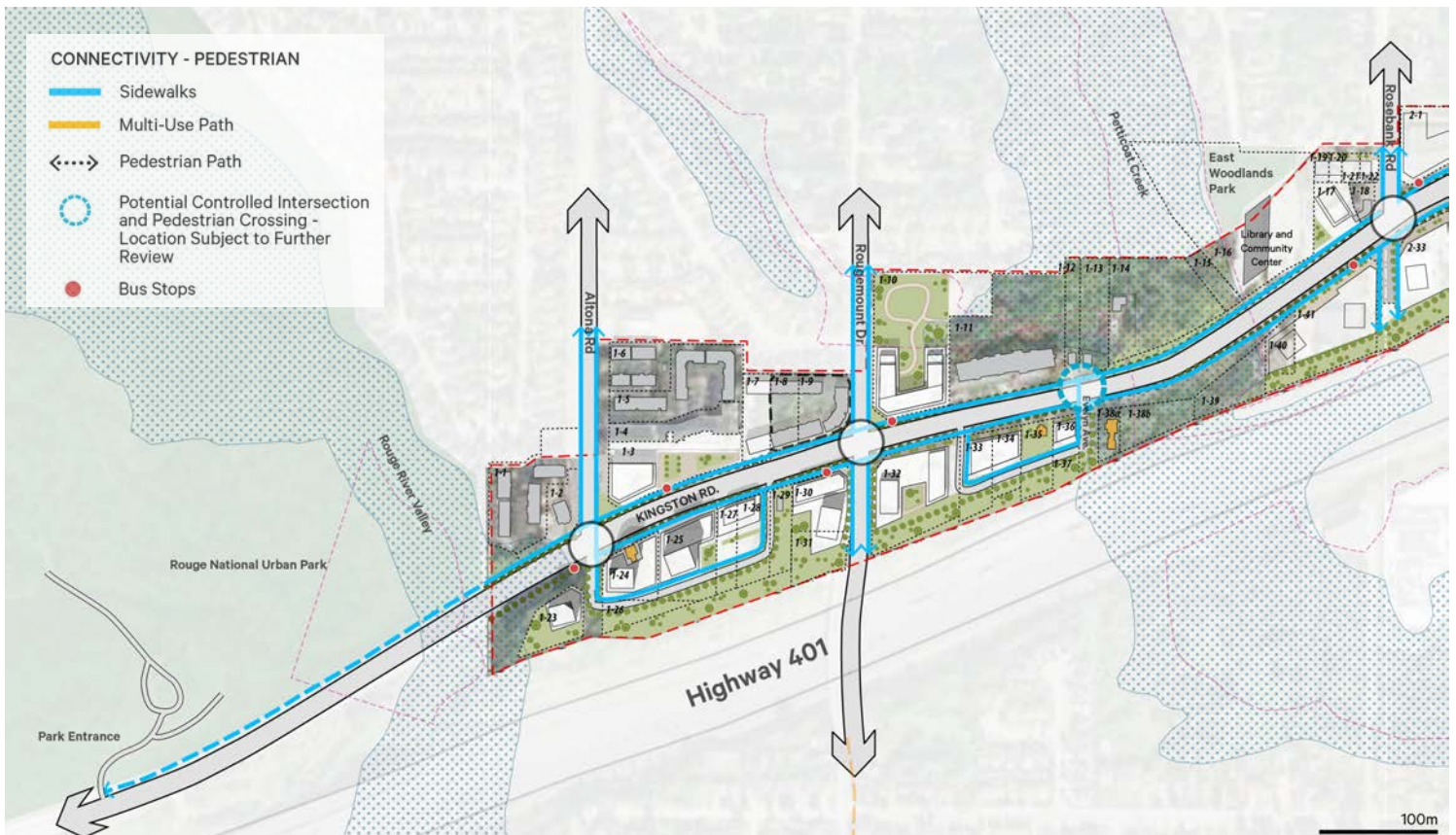


Figure 66. Rougemount Precinct Pedestrian Connectivity Plan

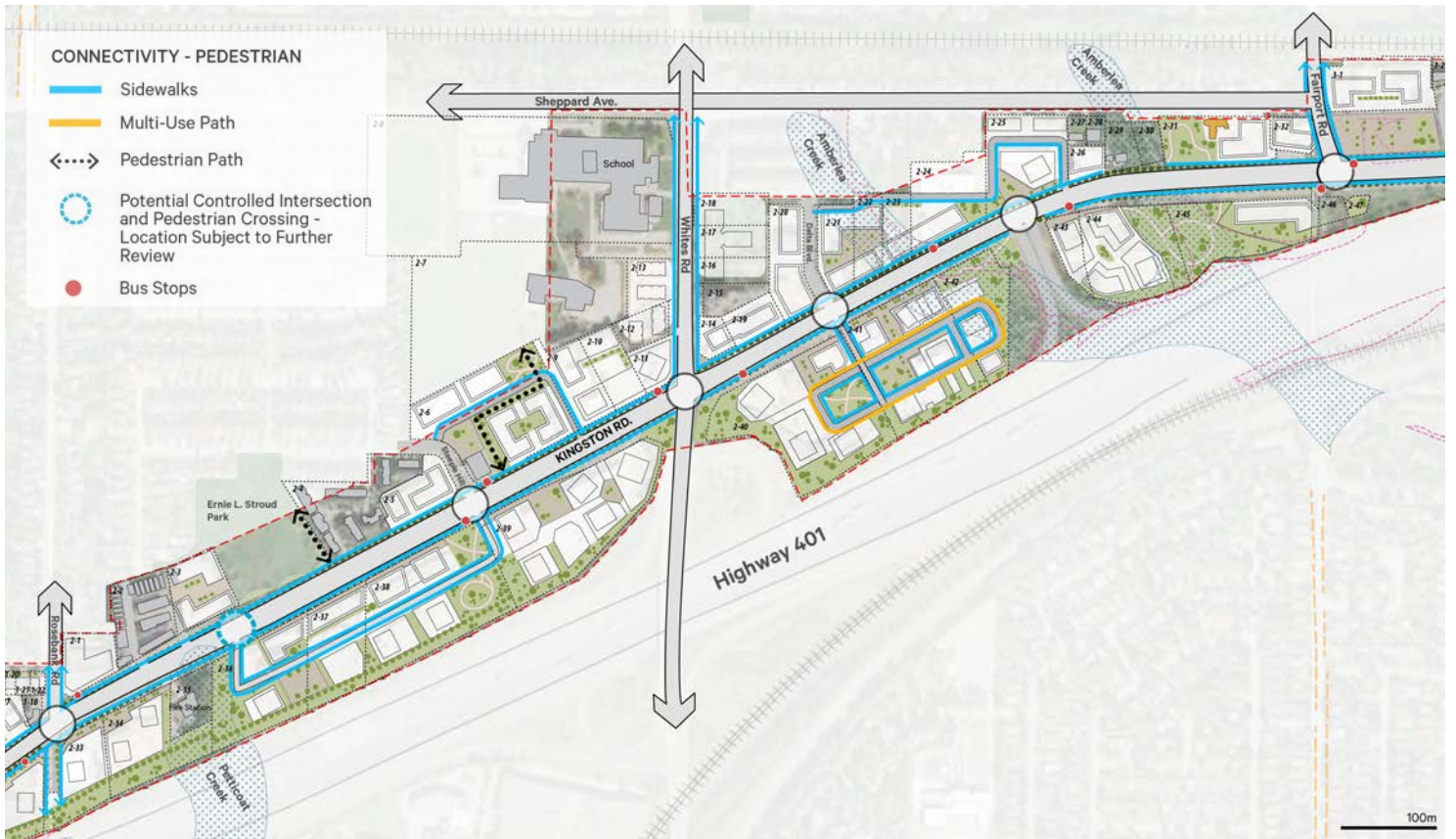


Figure 67. Whites Precinct Pedestrian Connectivity Plan



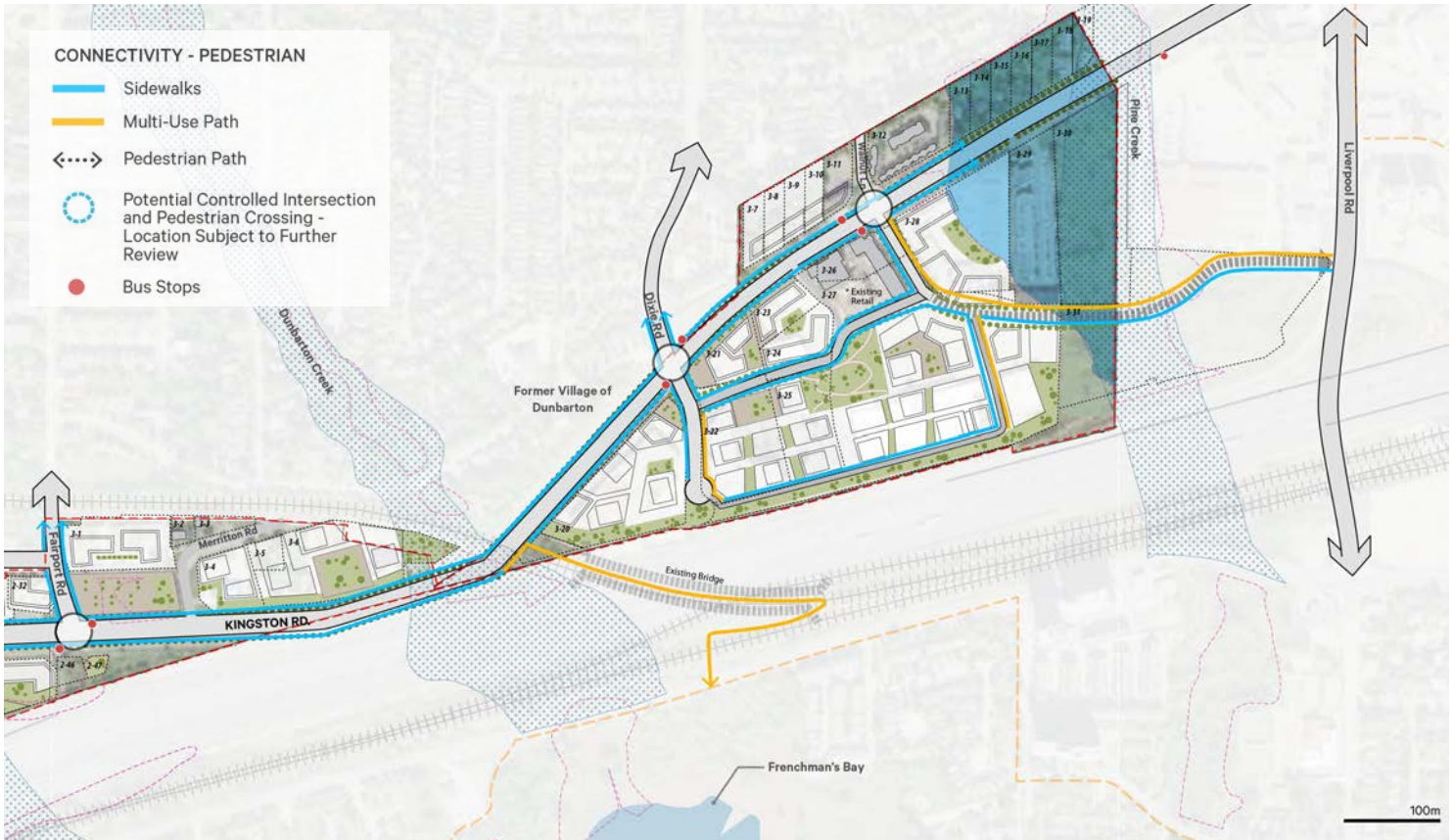


Figure 68. Dunbarton/Liverpool Precinct Pedestrian Connectivity Plan

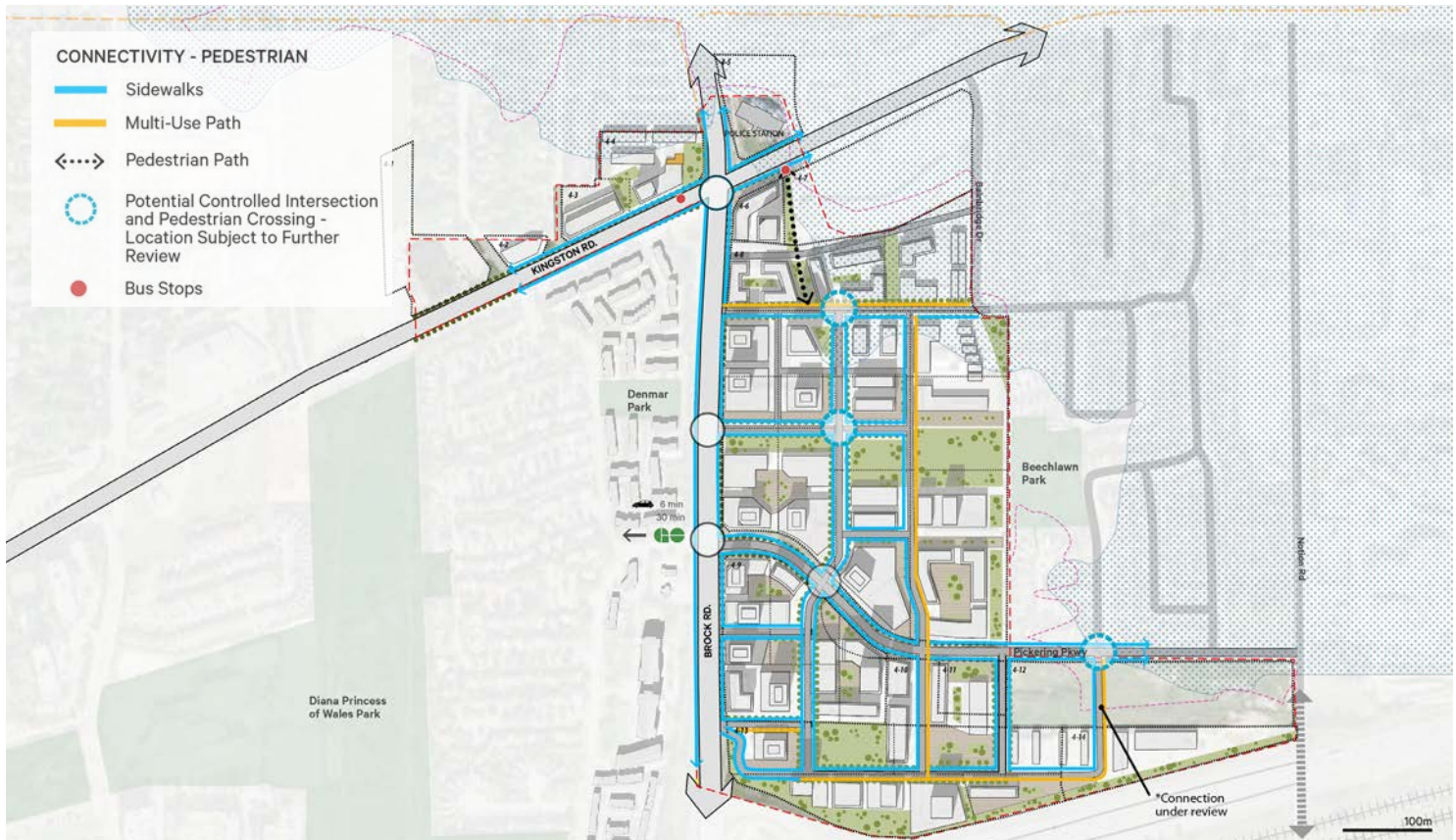


Figure 69. Brock Precinct Pedestrian Connectivity Plan



## 4.2.1 Sidewalks

Sidewalks are a critical component to creating a safe, coordinated and continuous pedestrian network.

### Design Guidelines

- i. Sidewalks should provide a network of accessible and inter-connected pedestrian routes which relate directly to surrounding buildings and destinations.
- ii. Sidewalks should provide a clear, unobstructed pathway and be a minimum width of 2 metres to ensure a comfortable walking environment (Fig. 70).
- iii. Sidewalks should be designed to serve all users, including children, older people, parents with strollers, the visually impaired, and those using wheelchairs and other assistive devices. Barrier-free surfaces should be in compliance with Accessibility for Ontarians with Disabilities Act (AODA) standards.
- iv. Sunlight exposure along sidewalks should be achieved and protected to maintain an inviting pedestrian realm, particularly at retail spill-out zones.
- v. Where appropriate, curb extensions/bump-outs may be incorporated at the street intersections or mid-block locations to expand the pedestrian path, provide additional queuing space, shorten roadway crossings and calm motorized traffic. Where on-road facilities exist, the bump-outs should not disrupt a continuous bike lane through the intersection.
- vi. Adequate space should be provided within the public right-of-way to allow for landscape and furniture zones adjacent to sidewalks.
- vii. Street furniture may include benches, tables, fountains, and newspaper boxes. These should be placed in high-traffic areas, particularly where public amenities or active frontages exist.
- viii. Where appropriate, street trees which provide significant canopy shading should be planted to soften the built form, reduce the heat island effect and maximize the urban tree canopy. Trees should be incorporated at intervals of 6 to 9 metres.



Figure 70. Yannan Avenue Highway Adaptation, Chongqing, China (photo credits: WallaceLiu)



## 4.2.2 Pedestrian Paths

Pedestrian paths provide enjoyable, human-scaled connections in the urban environment. They create inviting spaces to walk or run, providing short-cuts between blocks and encouraging exercise and leisure opportunities.

### Design Guidelines

- i. Pedestrian paths are reserved for the exclusive use of pedestrians, and should be implemented to provide additional connections and routes of circulation within blocks and to open spaces and destinations (Fig. 71).
- ii. Pedestrian paths should be designed with a minimum width of 2.5 metres to provide for a comfortable walking environment.
- iii. Pedestrian paths should be well-designed and inviting to users, with features such as soft landscaping, plantings, public art, wayfinding signage and pedestrian-scaled lighting implemented where appropriate. Where possible, a generous urban tree canopy is encouraged.
- iv. The placement of street furniture should ensure that pedestrian routes are free of obstruction and enable proper circulation and sight lines.
- v. Pedestrian paths should utilize high-quality and durable paving material. The paving treatment is encouraged to have a distinctive colour, texture or pattern to assist with wayfinding. Permeable paving materials should be used for pedestrian paths in areas intersecting with green space or natural heritage features.
- vi. Pedestrian paths should be designed to encourage strolling and gathering of people, and include spill-out spaces and other elements to keep the public realm active.

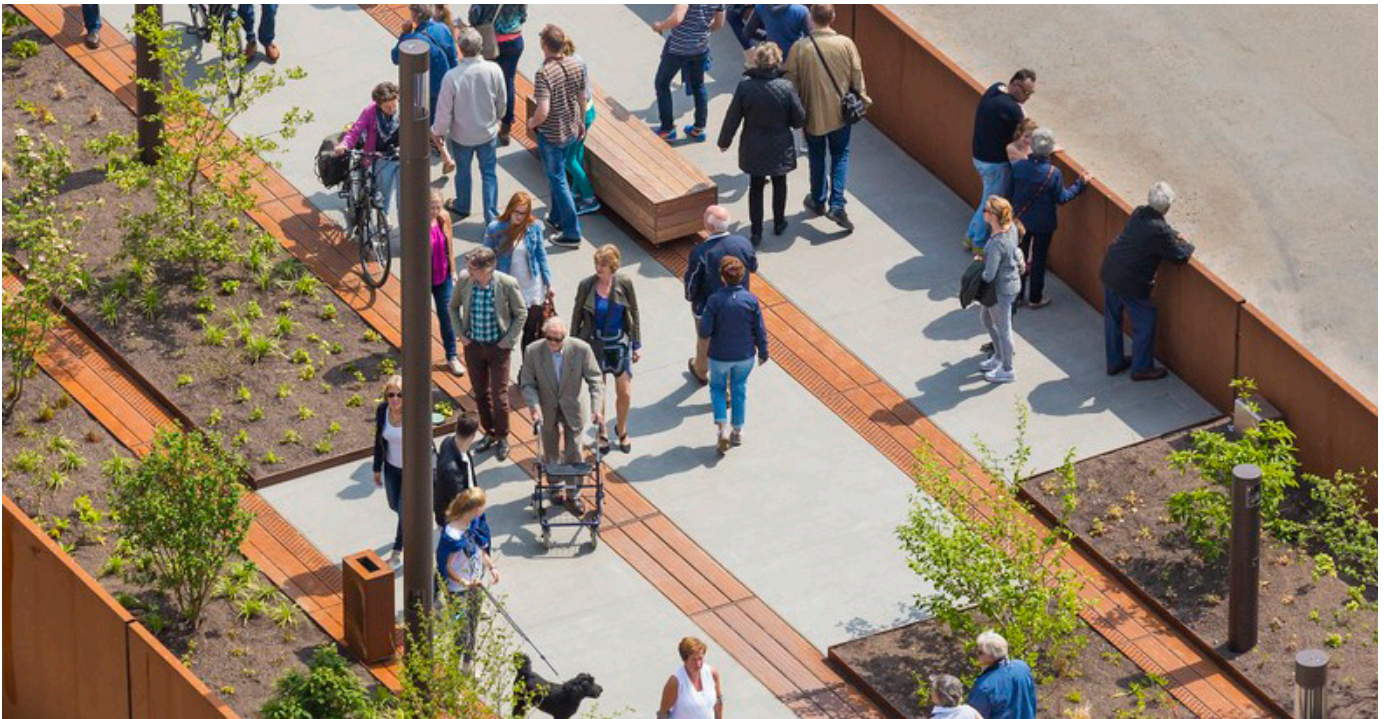


Figure 71. Requalification of Mermoz Avenue, Lyon, France (photo credits: Gautier Conquet)

## 4.2.3 Pedestrian Crossings

Pedestrian crossings contribute to an improved walking experience by providing designated locations where pedestrians can cross safely across the flow of vehicular traffic.

### Design Guidelines

- i. Pedestrian crossings should provide clear, unobstructed paths and be connected to adjacent sidewalks to allow ease of access for all users.
- ii. Crossings should be clearly designed for safety, with appropriate traffic control devices, surface markings or variation in construction material, lighting and signage (Fig. 72).
- iii. Examples of controlled pedestrian crossings are pedestrian crossover (PXO), intersection pedestrian signal (IPS) and mid-block pedestrian signal (MPS).
- iv. Signalized crossings should be located at all major intersections and areas of high pedestrian traffic such as gateways, parks, schools, libraries and major retail areas. Signalized crossings should be considered at these locations, where appropriate and warranted. Signalization should be prioritized for pedestrian crossings over traffic.
- v. The pedestrian network, including sidewalks and pedestrian paths, should be designed to bring pedestrians to safe, controlled crossing locations and discourage crossings at uncontrolled mid-block locations.
- vi. Accessible pedestrian signals with push-buttons and count-down signals should be provided at all signalized intersections.
- vii. On private sites where new road connections and blocks are established, pedestrians should be accommodated and given priority through stop signs or other signalization methods..



Figure 72. Requalification of Mermoz Avenue, Lyon, France (photo credits: Gautier Conquet)



## 4.3 Cycling

A high-quality, well-connected cycling network is critical to successfully providing residents with a sustainable active transportation alternative.

To complement existing and planned cycling facilities, the Intensification Plan identifies additions and upgrades to improve access and fill in gaps to the existing network. Proposed Cycling Facilities could take the form of on-street bike lanes or in-boulevard cycle tracks. The cycling network is also supplemented by proposed Multi-use Paths, which are accessible to both cyclists and pedestrians. These should be integrated into the wider active transportation network of sidewalks, trails, pedestrian connections and crossings, linear parks and cycling facilities to contribute to the establishment of walkable and cyclist-friendly neighbourhoods.

The Cycling Connectivity Plan is illustrated in Figures 74 to 77.



Figure 73. Group of People on a Cycle Track (photo credits: People for Bikes )



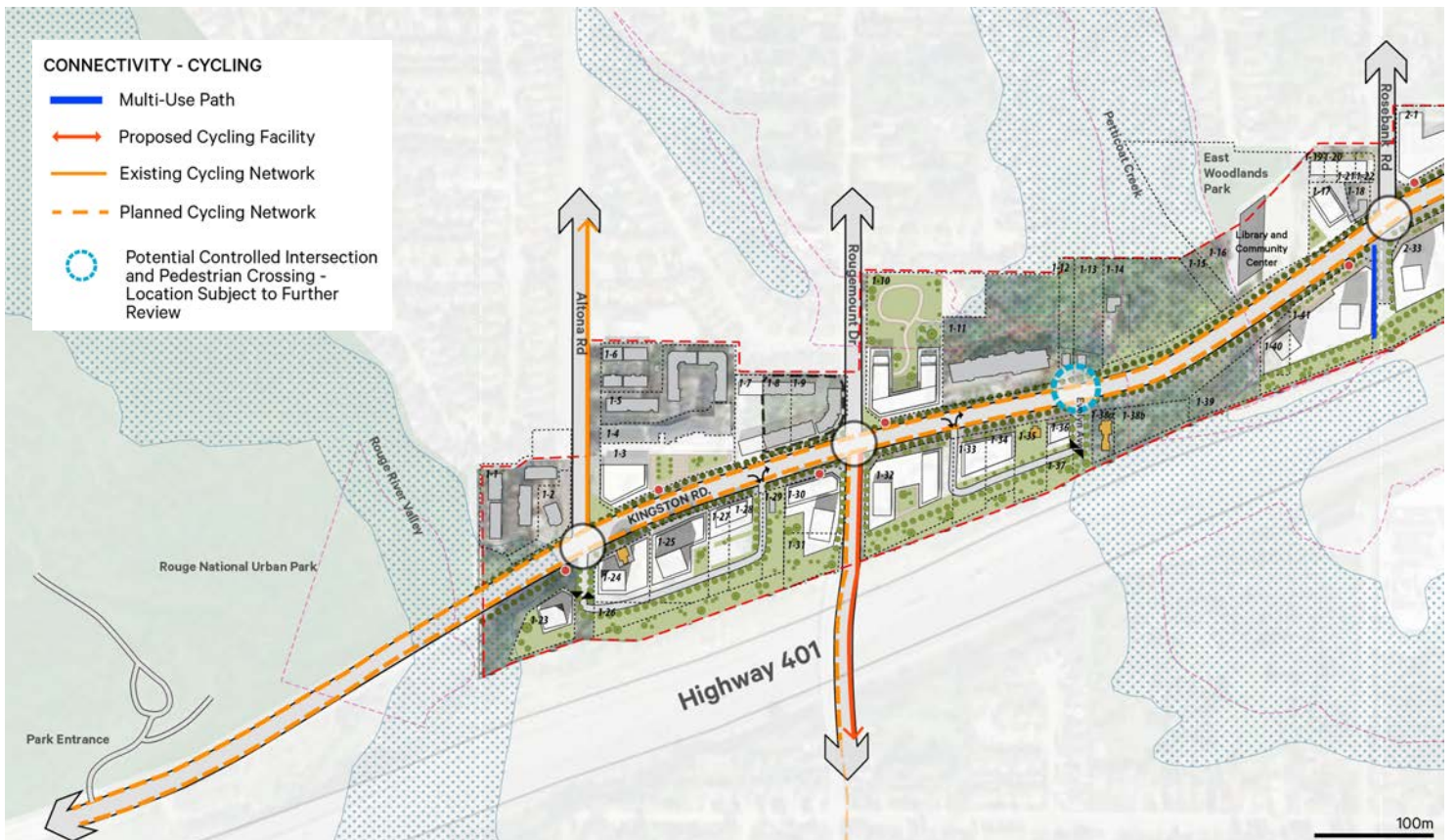


Figure 74. Rougemount Precinct Cycling Connectivity Plan

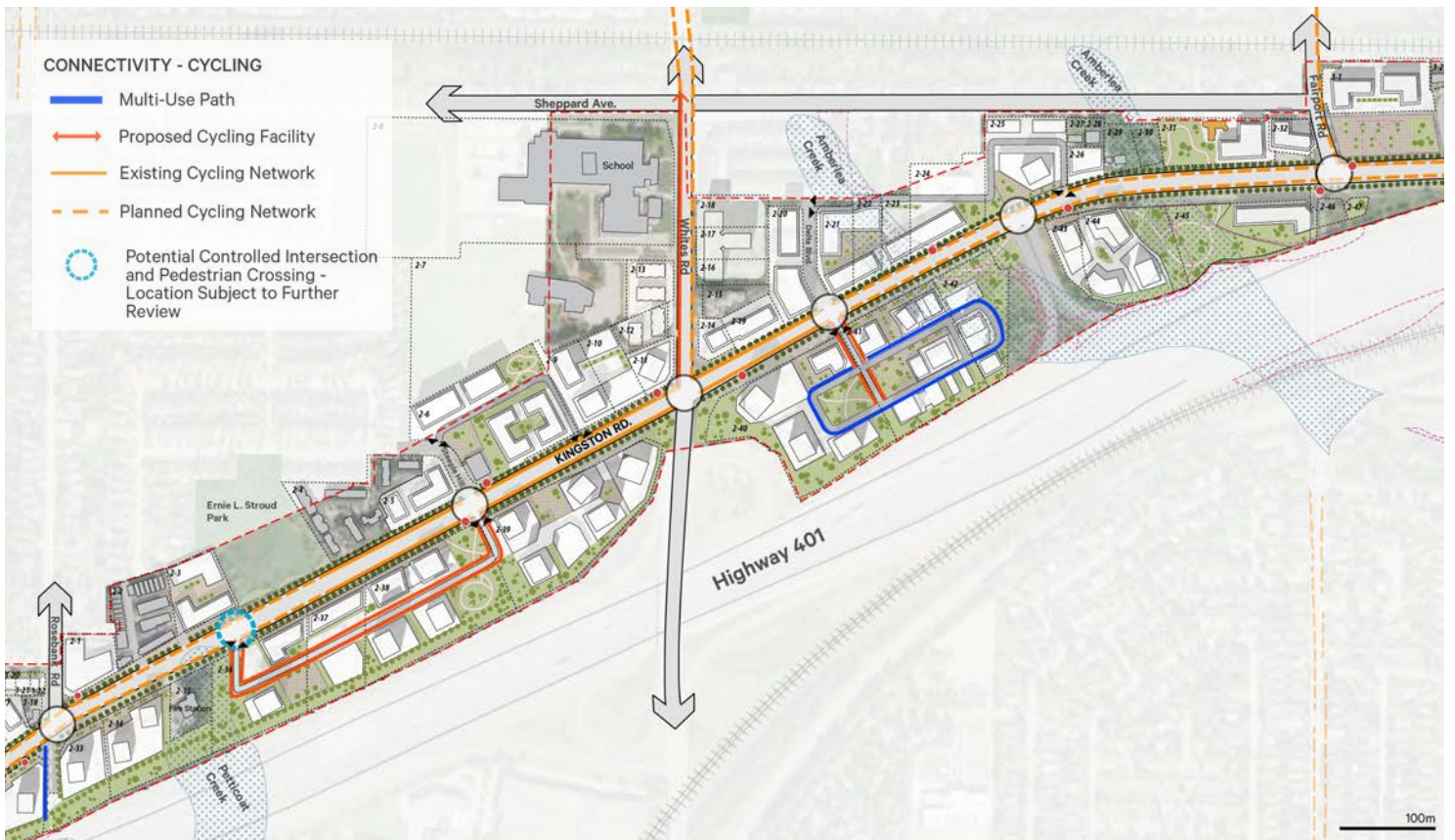


Figure 75. Whites Precinct Cycling Connectivity Plan



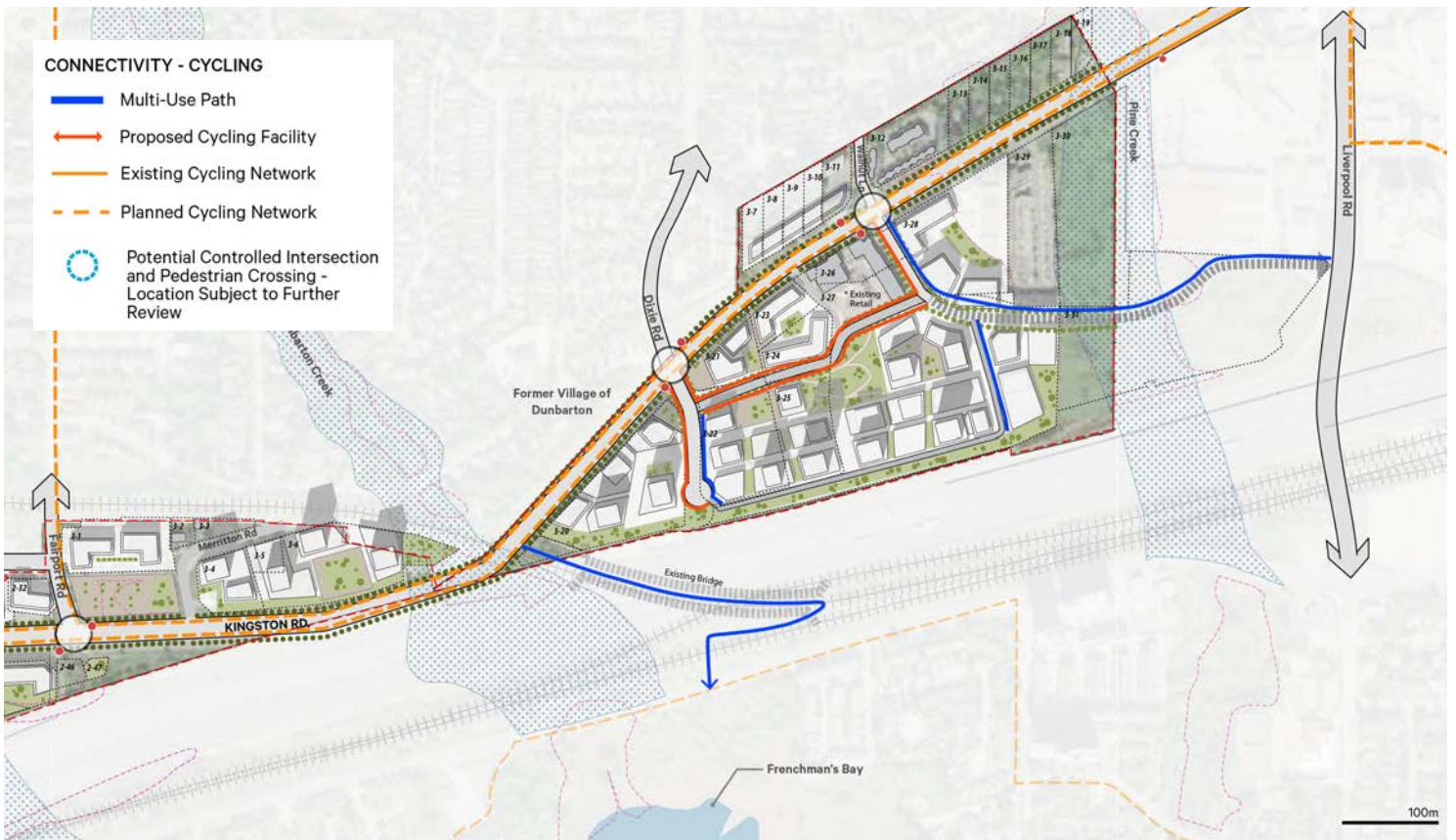


Figure 76. Dunbarton/Liverpool Precinct Cycling Connectivity Plan

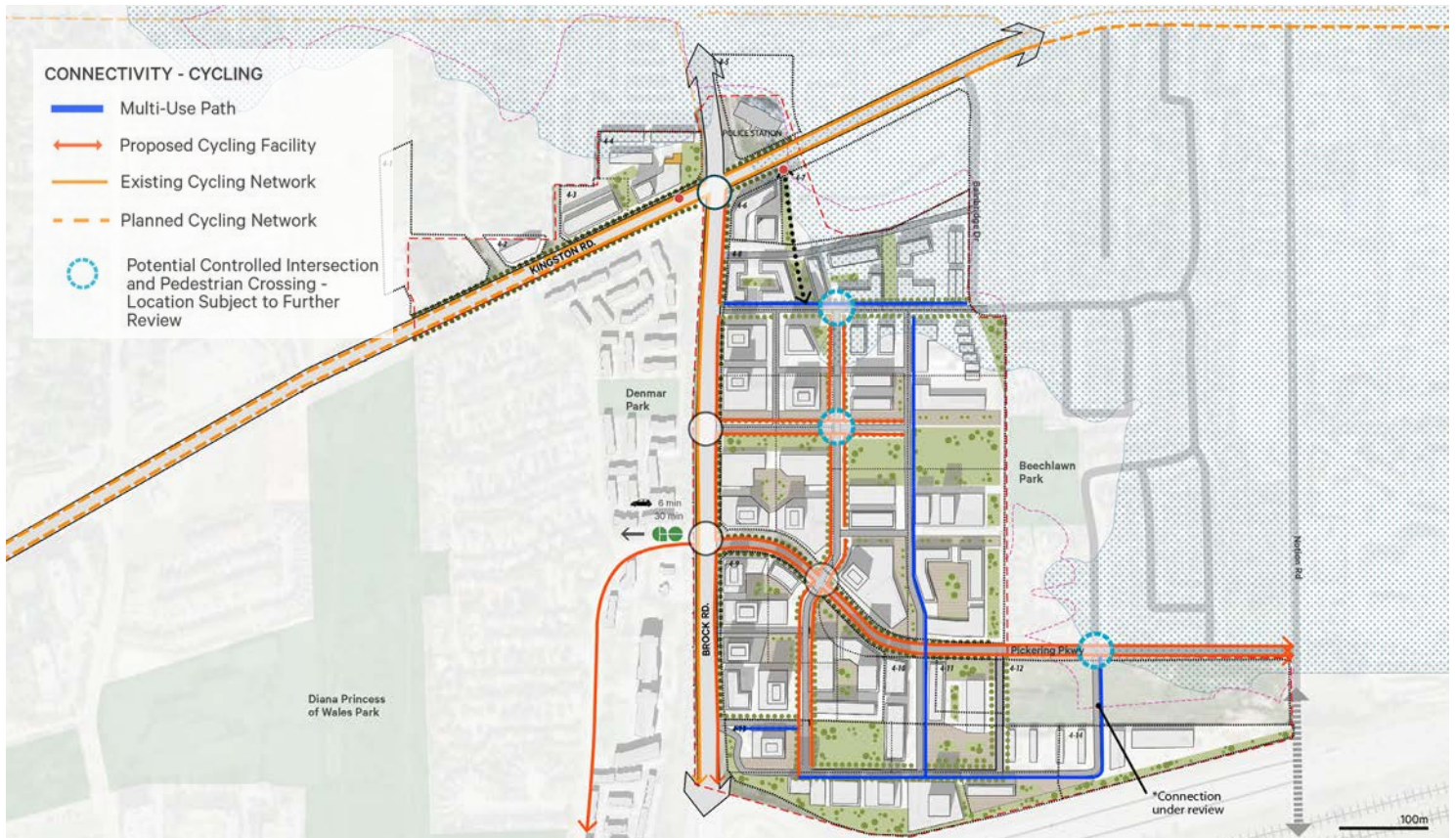


Figure 77. Brock Precinct Cycling Connectivity Plan



## 4.3.1 Multi-Use Paths

Multi-use paths (MUP) are off-road pathways shared by cyclists and pedestrians, separated from vehicle traffic and located within the boulevard.

### Design Guidelines

- i. MUPs are encouraged as connectors between neighbouring communities, transit corridors and nodes.
- ii. Where space or other considerations do not permit provision of desired separate facilities for cyclists from pedestrians, MUP can be used in areas that are less travelled by pedestrians and cyclists. They should be implemented on key connector streets with lower vehicle traffic volume (Fig. 78).
- iii. To ensure adequate space for all users, the minimum width of an in-boulevard MUP is 3 metres, with a desired width of 4 metres.
- iv. MUP should be separated from vehicle traffic and located within the boulevard, with a 1 metre wide splash strip.
- v. Within MUP, segregation of cyclists and pedestrians should be avoided where possible. Instead, a directional dividing line may be marked on the pathway.
- vi. When appropriate, multiple access points should be provided to all MUP, with connections to a variety of transportation options including public transit routes, other separate cycling facilities and MUP, sidewalks and parking areas.
- vii. MUP should include adequate amenities, such as seating, waste receptacles, lighting, signage, wayfinding features, and educational and historic information. These features should be located at accessible key points along path routes.
- viii. Roadside infrastructure should have a smooth surface and a minimum 0.6 metre lateral clearance from the MUP.



Figure 78. Requalification of Mermoz Avenue, Lyon (Image Credits: Gautier Conquet)



## 4.3.2 Bicycle Lanes and Cycle Tracks

Bicycle lanes and cycle tracks provide dedicated space for cyclists on the road. They are differentiated by their degree of separation from motor vehicles.

### Design Guidelines

- i. Cycle tracks are exclusive cycling facilities which are physically separated from vehicular traffic (Fig. 79). Cycle tracks should be designed with a minimum width of 2 metres. They should be raised or vertically separated from the street at an intermediate or sidewalk level to create a safety buffer between cyclists and other road users. Where appropriate, they may also incorporate barrier features.
- ii. Bicycle lanes are cycling facilities which are located at-grade, alongside vehicular traffic. Bicycle lanes should have a minimum width of 1.5 metres plus 0.5 metres of buffer, with a desired width of 1.8 metres plus 1.2 metres of buffer.
- iii. Cycle tracks are preferred over bicycle lanes due to the safety and security that they provide for cyclists.
- iv. Bicycle lanes and cycle tracks should include clear pavement markings. Signs should be placed at intersections and access points, and are required to be appropriately spaced.
- v. Cycle tracks should connect through bike boxes and crossrides to increase cyclist safety at intersections.
- vi. Bicycle lanes on streets with on-street parking are recommended to be located between the parking lane and adjacent live traffic lane and with sufficient space to mitigate conflicts between cyclist and opening car doors.
- vii. From a traffic safety standpoint, and as the introduction of two-way cycling facilities leads to greater conflict with turning motor vehicles at intersections and driveways, one-way facilities are generally preferred over two-way facilities.
- viii. Bicycle lanes should be designed with consideration of landscape and furniture zone buffers which separate cycling lanes from sidewalks.



Figure 79. Mermoz Avenue, Lyon, France (photo credits: Gautier Conquet)

### 4.3.3 Shared Facilities

Shared facilities provide opportunities for motorists and cyclists to share road space, and is an alternative to specialized segregated cycling infrastructure.

#### Design Guidelines

- i. Shared facilities include shared roadways and signed bicycle routes (i.e. shared facilities between cyclists and motorized vehicles). Shared facilities are typically implemented on low-volume traffic streets with lower speed limits, such as the smaller east-west streets abutting Brock Road in the Brock Precinct. Generally, shared facilities are well-suited for the Brock and Dunbarton/Liverpool Precincts due to the presence of internal streets and residential blocks in these areas.
- ii. The minimum width for a shared facility is 4 metres, with a desired width of 4.5 metres, to ensure adequate space for both motorists and cyclists. Implementation of the additional desired width shall offer a more comfortable riding experience for cyclists.
- iii. Clear lane markings will indicate to motorists and cyclists the appropriate line of travel for cyclists (Fig. 80).
- iv. Appropriate signage, including route markers, should be installed along designated shared facilities.



Figure 80. Shared Cycling Facility on Brighton Ave, Boston, USA (photo credits: Boston Globe)



## 4.4 Transit

Kingston Road is a vital transit corridor within the City of Pickering, with a number of existing and planned transit routes.

The Region of Durham and Durham Region Transit have identified preferred bus rapid stations along the Kingston Road corridor in the City of Pickering as part of Metrolinx's Preliminary Design Business Case and Transit Project Assessment Process for the Durham Scarborough Bus Rapid Transit project. Preferred stop locations were investigated based on future development and planning horizons, connectivity, ridership, right of way limitations, and stop proximity and placement.

- Altona Road
- Rosebank Road
- Whites Road
- Fairport Road
- Dixie Road
- Liverpool Road
- Glenanna Road
- Valley Farm Road
- Brock Road
- Notion Road

The preferred BRT transit stops are subject to change throughout the Metrolinx Design and TPAP EA process. Current stops not listed will be investigated further as they serve a significant purpose by providing access

to key destinations and services and support the local transit network.

Whites Road and Brock Road are identified as Regional Corridors and are both part of the High Frequency Network within the Durham Regional Official Plan. The High Frequency Network will consist of buses in planned High Occupancy Vehicle (HOV) lanes, or buses in mixed traffic, with transit signal priority at major intersections with peak period service headways between 5 and 10 minutes.

Additionally, these corridors are also targeted within Metrolinx's Regional Transportation Plan and are encouraged to have Bus Priority Measures (BPM) which include all door boarding, limited stops, reserved lanes, transit signal priority, queue jump lanes, queue jump signals, curb side alignment, and high-quality stops.

Therefore, stop locations along these corridors should be protected in terms of right of way requirements for spacing of high-quality transit stops and future BPM infrastructure, especially at Brock and Whites intersections where they will be intersecting with the Durham-Scarborough BRT.

This would greatly enhance the quality of the transit network by improving service integration, efficiency and providing a more seamless customer journey.

Transit must be well-integrated with the surrounding streetscape and wider mobility network to help enable greater uptake through access and convenience.

## Design Guidelines

- i. Transit stops should be clearly marked and highly visible.
- ii. Transit shelters which maximize user comfort and extreme weather protection should be provided where possible, prioritizing areas with higher transit ridership (Fig. 81). Transit shelters should include comfortable seating, pedestrian-scaled lighting, route information and directional signage.
- iii. Direct and barrier-free connections should be established between transit shelters and adjacent sidewalks. Sidewalks and boulevard multi-use paths should pass behind transit shelters.
- iv. Transit stops shall have safe access via appropriate street crossings, including controlled intersections where possible.
- v. Transit shelters should be located to avoid impeding pedestrian movement on adjacent sidewalks.
- vi. Where bicycle lanes and cycle tracks pass a transit stop, on-road interaction between cyclists and buses, as well as passengers boarding or waiting for transit, should be minimized to avoid conflict.
- vii. Secure bicycle parking and storage spaces should be provided at transit stops to increase multi-modal options and encourage active transportation.
- viii. The exploration of energy efficient technologies to provide light and heat at transit shelters is encouraged.
- ix. Transit stops can have a role in supporting overall placemaking objectives. Enhanced design and sensitive placement of transit stops should be used to provide key entrances to major destinations.
- x. Transit stop placement should be considered and implemented in coordination with roadway construction to streamline transit infrastructure inclusion.



Figure 81. Heated bus shelter, Fort McMurray, Canada (photo credits: National Post)



# 4.5 Street Types

A well-functioning street network is integral to ensuring the speedy and safe movement of people and goods through the corridor and node.

The proposed street network of the Kingston Road Corridor and Specialty Retailing Node provides for safe, accessible and convenient movement of pedestrians, cyclists and vehicles and transit users throughout the area. A number of new public and private streets are proposed, each with different functions and characteristics. Upgrades to existing public streets are also recommended.

The planned street network is comprised of three hierarchical categories: Primary Streets, Secondary Streets and Service Streets (laneways).

The Street Types Plan is illustrated in Figures 83 to 86. This is followed by design guidelines for each of the three categories, key streetscape cross-sections for public and private streets, and recommendations for upgrades to existing streets.



Figure 82. Multi-modal street in Brooklyn, New York City, USA (photo credits: New York City Department of Transportation)



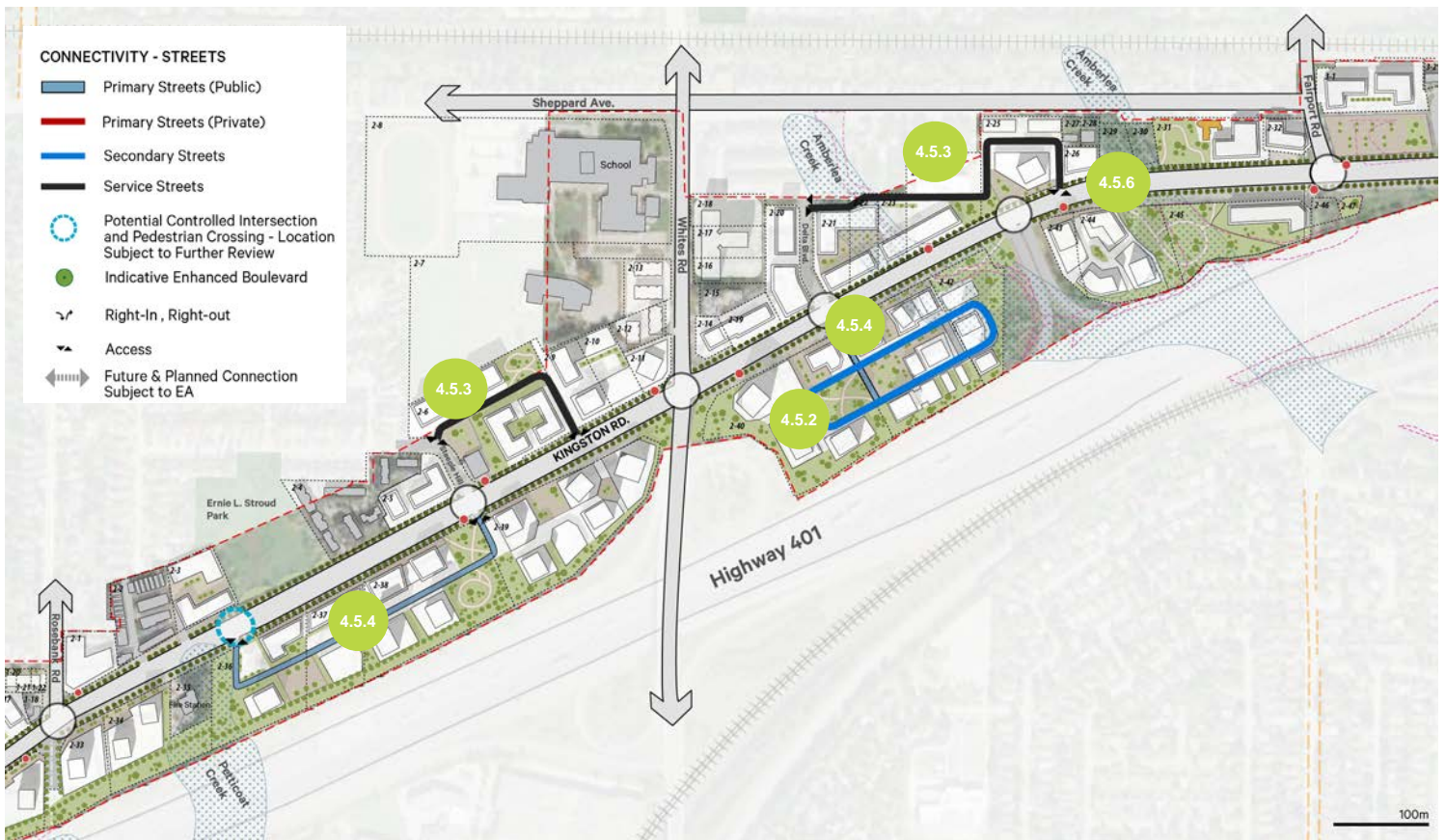
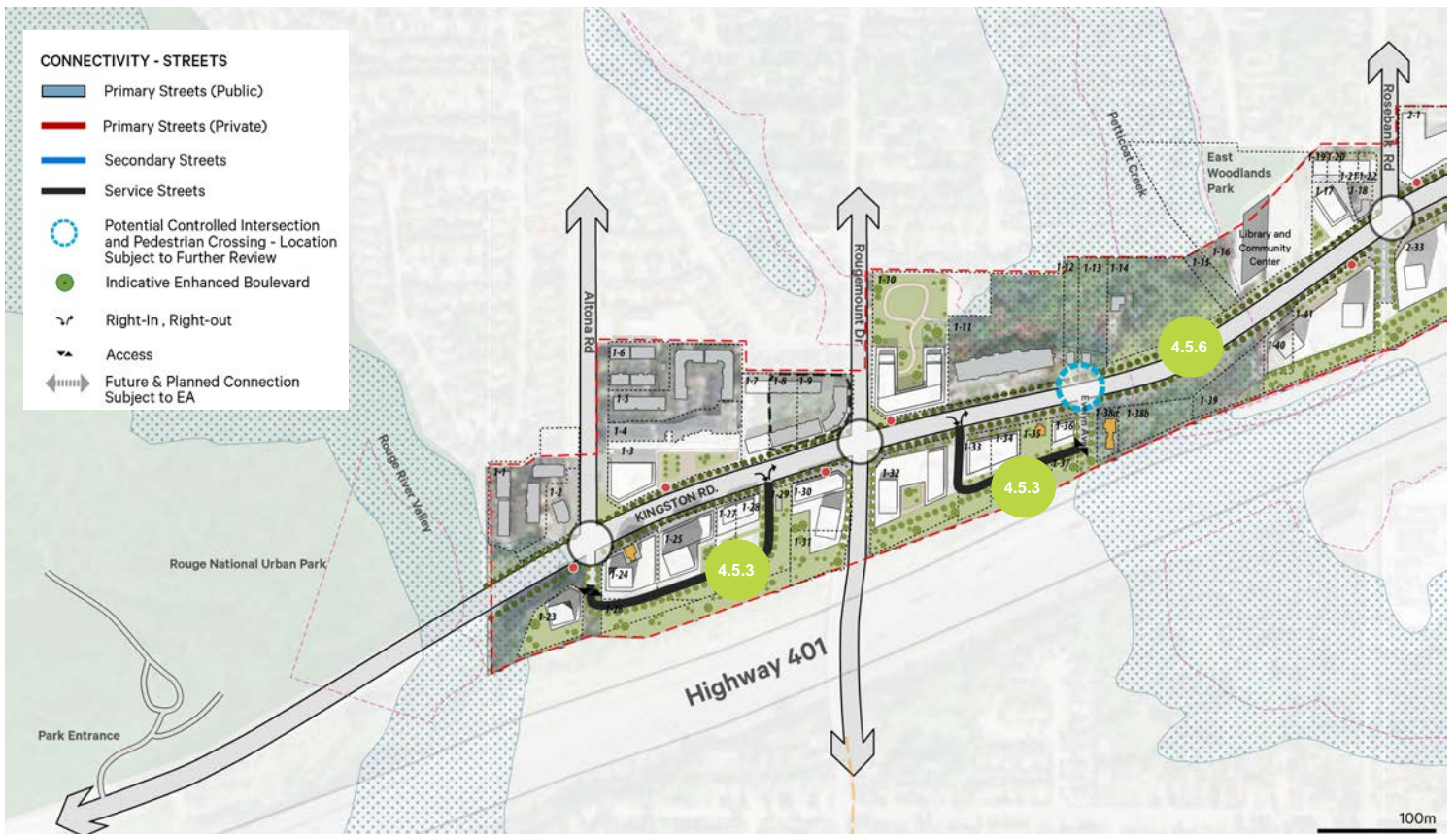






Figure 85. Dunbarton/Liverpool Precinct Street Types Plan



Figure 86. Brock Precinct Street Types Plan



## 4.5.1 Primary Streets

Primary streets are higher-order streets which help facilitate safe and efficient vehicular, cyclist, transit and pedestrian movement. Primary streets consist of primary streets that are proposed to be both publicly-owned and primary streets that are proposed to be privately owned.

### Design Guidelines

- i. Primary streets have a distinctively urban character, and should be designed as complete streets with consideration given to the needs, safety and comfort of pedestrians, cyclists, transit users and drivers (Fig. 87).
- ii. Travel lanes should be designed with a minimum width of 3.5 metres and should be provided in both directions of travel.
- iii. Primary streets should be designed to prioritize public transit facilities, such as stops, shelters and dedicated lanes.
- iv. Sidewalks should be provided on both sides of the road. They should be designed to accommodate all user groups and be a minimum width of 2 metres.
- v. Where appropriate, dedicated raised cycle tracks should be provided on primary streets.
- vi. Landscaping and street furniture zones should be provided on both sides of the street to provide a comfortable public realm. They should be wide enough to accommodate a continuous row of street trees, typically a width of 2 metres.
- vii. On-street lay-by parking lanes should be provided, where practical, having a minimum width of 2.5 metres. They may be provided on one or both sides of the road.
- viii. Individual access driveways to multiple properties should be discouraged in favour of shared driveways.
- ix. Where appropriate, road and right-of-way widths should be reduced in favour of providing active transportation connections, improved transit, and wider boulevards.



Figure 87. Requalification of Mermoz Avenue, Lyon, France (photo credits: Gautier Conquet)



## 4.5.2 Secondary Streets

Secondary streets help facilitate vehicular, cyclist and pedestrian movement in areas with lower traffic volumes, while ensuring a positive streetscape experience.

### Design Guidelines

- i. Secondary streets are medium or low-capacity roads that act as local connectors, taking on a more neighbourhood-oriented scale and character while creating links between local destinations and surrounding neighbourhood areas (Fig. 88).
- ii. Travel lanes should be designed with a minimum width of 3.5 metres and may be provided in one or both directions of travel.
- iii. Where appropriate, dedicated bicycle lanes or shared cycling facilities should be provided on secondary streets.
- iv. Where appropriate, landscaping and street furniture zones should be provided on secondary streets. They should be wide enough to accommodate a continuous row of street trees, typically a width of 2 metres.
- v. Sidewalks should be provided on both sides of the road on secondary streets. They should be designed to accommodate all user groups and be a minimum width of 2 metres.
- vi. On-street lay-by parking lanes should be provided on one side of the road, where practical, having a minimum width of 2.5 metres.
- vii. Traffic calming measures, including road width reductions and bump-outs, may be considered where appropriate.
- viii. Where appropriate, road and right-of-way widths should be reduced in favour of providing active transportation connections and wider boulevards.



Figure 88. Market Street, Toronto, Canada (photo credits: DTAH)

## 4.5.3 Service Streets and Laneways

### Design Guidelines

- i. Service streets and laneways should be considered in key areas where a street-oriented built form with continuous active frontages is desired, to allow for buildings to be placed closer to the street edge so that servicing functions can be allocated at the rear of properties.
- ii. Travel lanes should be designed with a minimum width of 3.5 metres and should be provided in one or both directions of travel.
- iii. A sidewalk should be provided on one side of a service street or laneway.
- iv. The use of permeable surface materials is encouraged within service streets and laneways.
- v. Service streets and laneways should be considered as pedestrian corridors, and should be designed with the pedestrian experience in mind. Where appropriate, the rear façade of buildings should be similar in quality (i.e. materials, articulation) to the front façade.
- vi. Where possible, soft landscaping should be incorporated into the design of service streets and laneways. Planters, shrubs and vegetation strips are encouraged (Fig. 89).



Figure 89. Lower River Street in the West Donlands, Toronto, Canada (photo credits: Google Maps)



## 4.5.4 New Public Streets

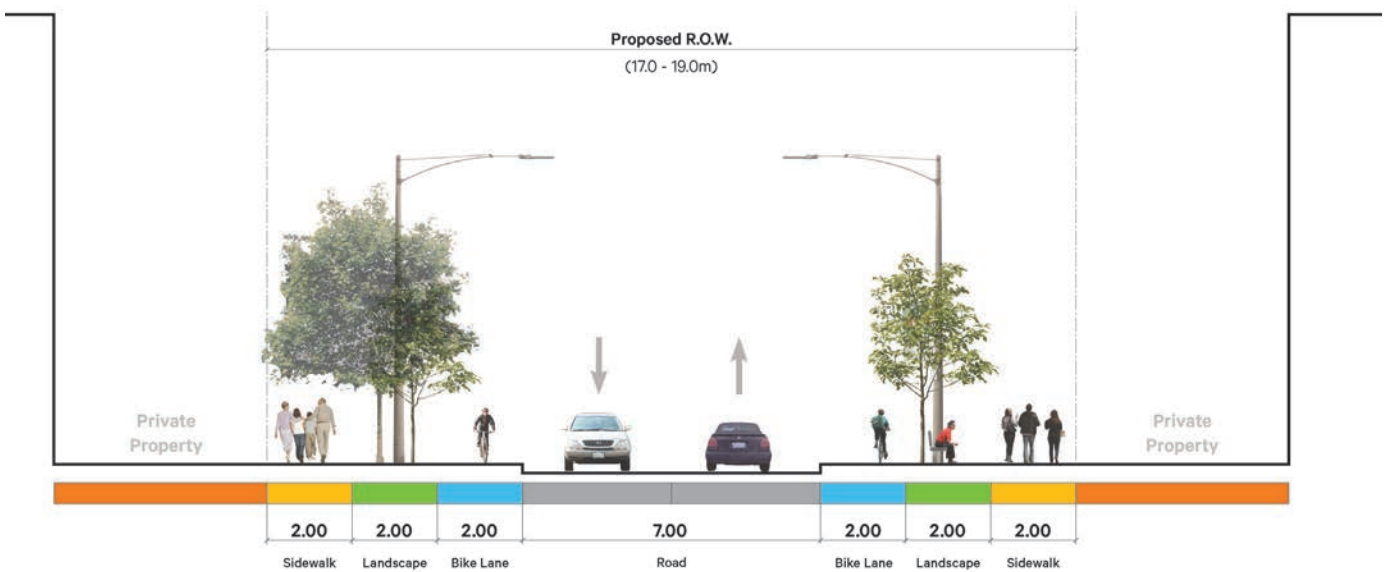
A number of new public streets are proposed within the Kingston Road Corridor and Specialty Retailing Node. All new proposed public streets are primary streets.

These will provide greater circulation throughout the precincts by developing new connections, forming new block patterns, consolidating access on Kingston Road, providing alternative access off Kingston Road, providing permeability within larger sites, and creating new development frontages.

Development sites will identify lands to be conveyed as public streets in identified locations as shown conceptually through the Intensification Plan. The location of new public streets is flexible provided the overall block pattern is achieved, the achievement of minimum and maximum block sizes on the development site and adjacent sites is not compromised, and appropriate intersection spacing is maintained.

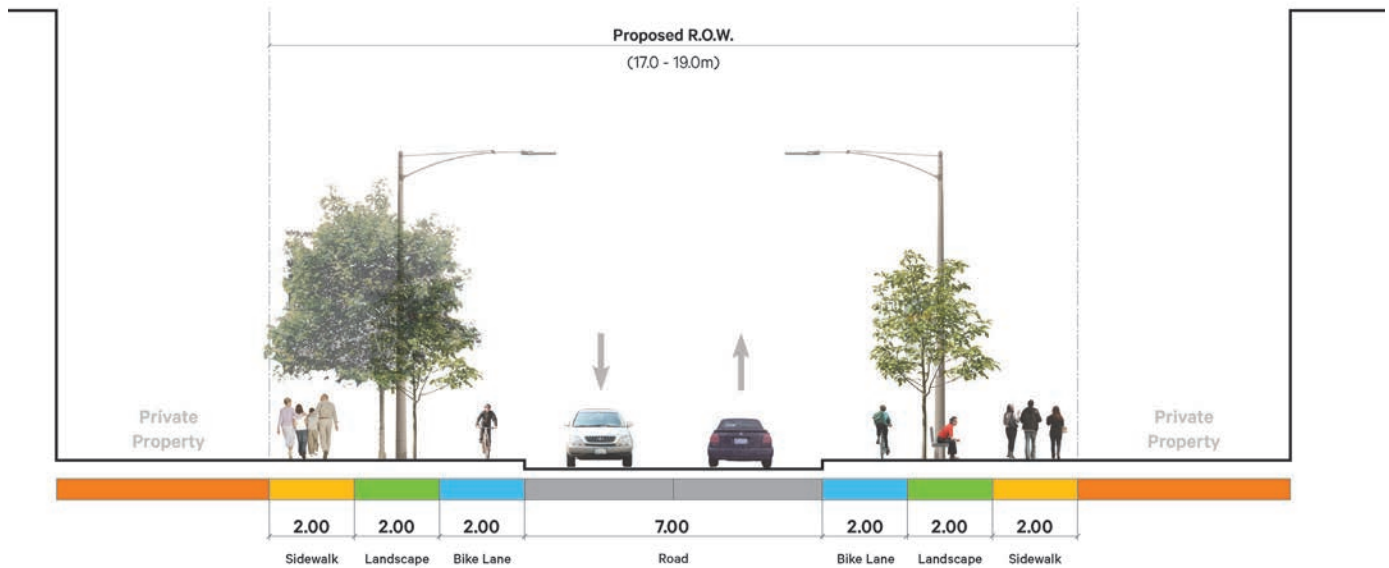
In line with existing public streets, these new streets should provide strong public amenities and opportunities for active transportation. This includes the provision of sidewalks, cycle paths or bicycle lanes, landscape and furniture zones, and enhanced boulevards.

The following illustrative diagrams (Figures 90-92) show streetscape cross-sections for new public streets in the Whites, Dunbarton/Liverpool and Brock Precincts.



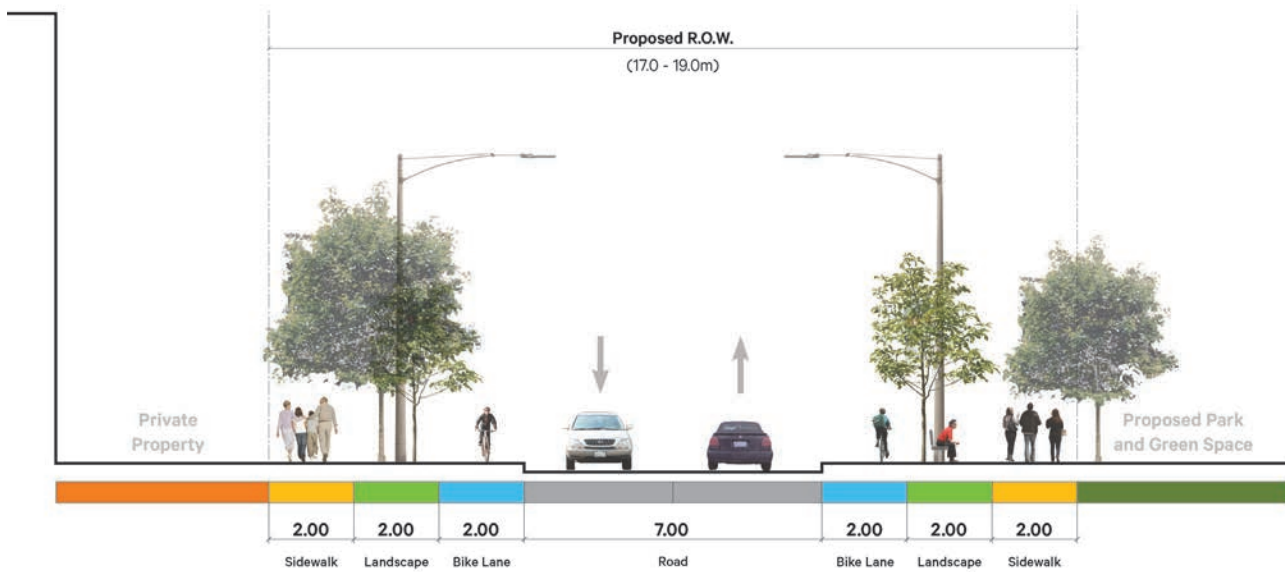
Note: The right-of-way configuration may be revised to provide lay-by parking.

Figure 90. Whites Precinct Streetscape Cross Section - New East-West Public Streets



Note: The right-of-way configuration may be revised to provide lay-by parking.

Figure 91. Dunbarton/Liverpool Precinct Streetscape Cross Section - New East-West Public Street



Note: The right-of-way configuration may be revised to provide lay-by parking.

Figure 92. Brock Precinct Streetscape Cross Section - New Public Street Linking the North and South Development Parcels



## 4.5.5 New Private Streets

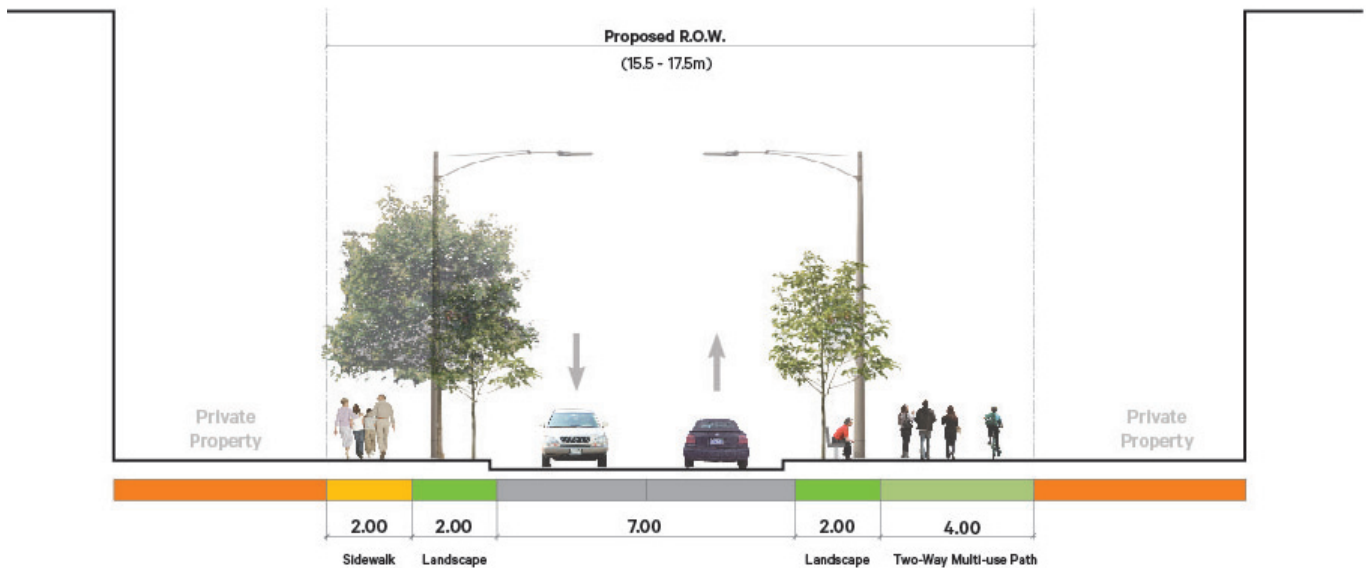
As with new public streets, the development of new private streets is key to enabling higher-density intensification and increasing multi-modal access for pedestrians, cyclists, transit users and drivers. New proposed private streets include both primary, secondary and service streets. They are identified on the Street Type Plans as 'Primary Streets (Private)', 'Secondary Streets', and 'Service Streets'.

Private streets are designed to similar municipal standards as public streets, but remain in private ownership. Private streets must provide the same high-quality public realm and streetscape experience as public streets, are expected to adopt similar treatments and aesthetics to ensure that a uniform streetscape character is maintained across the precinct. This includes soft landscaping, street furniture, active transportation infrastructure, and other public amenities.

Development sites will provide lands for the development of private roads. The location of these roads is flexible as the overall block pattern is achieved, the achievement of minimum and maximum block sizes on the development site and adjacent sites is not compromised, and appropriate intersection spacing is maintained.

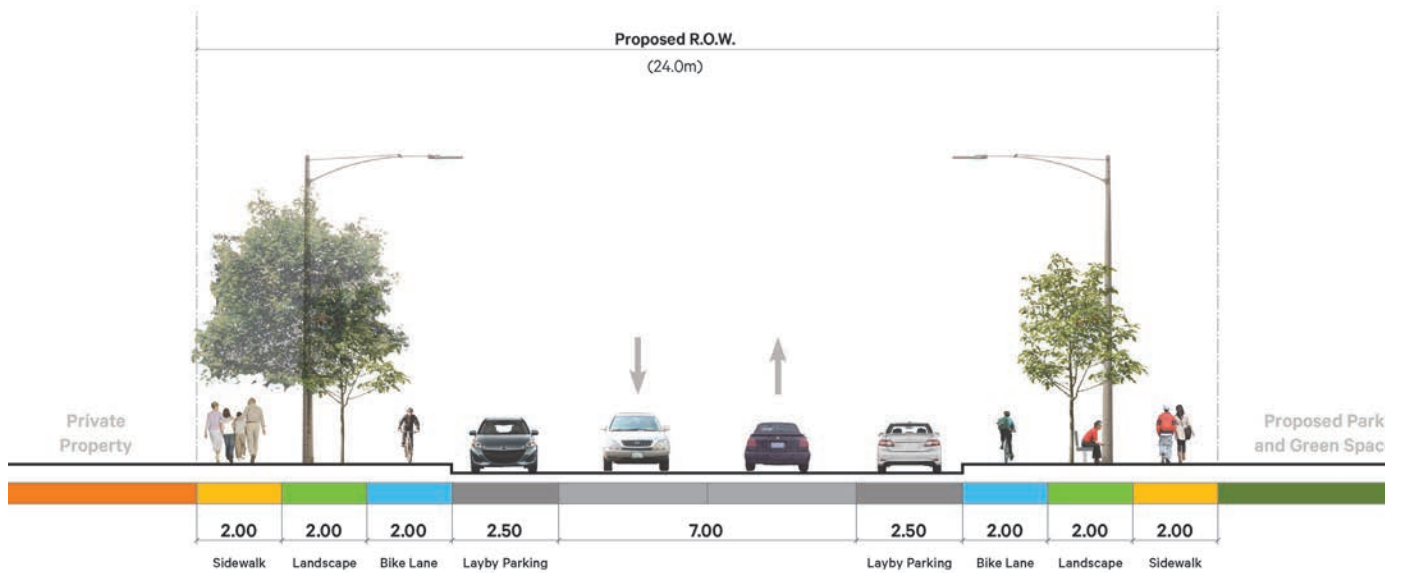
Private landowners shall be responsible for ongoing maintenance to ensure that publicly accessible spaces remain in a state of good repair.

The following illustrative diagrams (Figures 93-94) show streetscape cross-sections for new private streets throughout the Kingston Road Corridor and Specialty Retailing Node.



Note: The right-of-way configuration may be revised to provide lay-by parking.

Figure 93. Whites Precinct, Dunbarton/Liverpool Precinct and Brock Precinct Streetscape Cross Section - New Private Streets



Note: The right-of-way configuration may be revised to provide lay-by parking.

Figure 94. Brock Precinct Streetscape Cross Section - New Private Street from Brock Road to Beechlawn Park or other New Private Streets



## 4.5.6 Existing Streets

As the corridor intensifies, there are a number of planned or existing roadways that require alterations and/or additions to better reflect the vision of the corridor. These include: Kingston Road, Brock Road, Walnut Lane and Pickering Parkway.

### Kingston Road

To bolster its character as a distinct urban avenue and enhance connectivity for pedestrians and cyclists, Kingston Road is recommended to adopt enhanced landscaping treatments and introduce additional active transportation facilities. The street is currently part of a Metrolinx-led planning, design and engineering study in anticipation of a proposed BRT route running between Scarborough Town center and Downtown Oshawa.

The proposed streetscape cross-section for Kingston Road is shown in Figure 95. The cross-section features four travel lanes, one left-turn lane, and a 7-metre bi-directional transit way with 4.2 metre median platform. There are also cycling lanes, sidewalks and landscape zones on either side.

It is recommended that a 2m cycle track and treed and landscaped planting area be implemented on both

sides of Kingston Road through road widening via redevelopment. This landscaped area is recommended to include street trees, street furniture, and planting strips.

### Brock Road

Brock Road is a significant street which carries pedestrian, cyclist and vehicular traffic. The streetscape is recommended to be improved to create a more enjoyable experience for users travelling south from Kingston Road towards the Specialty Retailing Node. Additional street trees should be incorporated on the east side of Brock Road to provide shade and comfort for pedestrians. Figure 96 shows the current condition along Brock Road.

### Walnut Lane

Subject to an Environmental Assessment, it is recommended that Walnut Lane be expanded eastwards to connect to Liverpool Street. This will create an improved connection between Walnut Lane and the eastern portion of the precinct, taking advantage of a connection with the new internal public road.

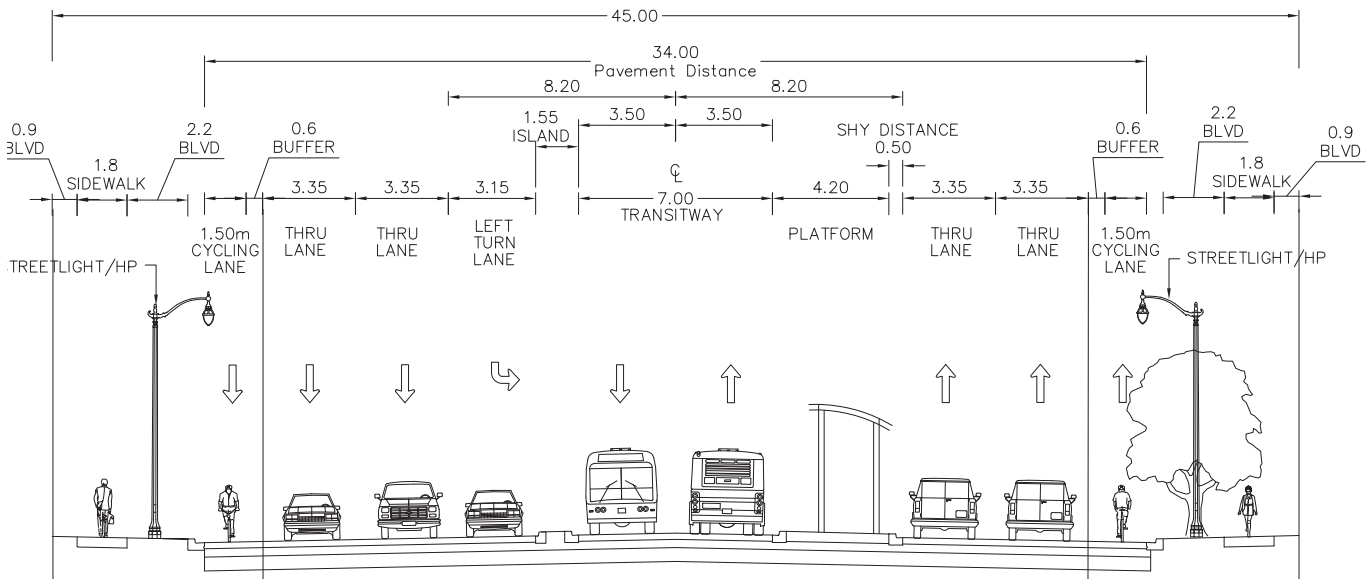


Figure 95. Kingston Road Cross Section - this is only an approximation, the cross-section will be determined through the Durham-Scarborough BRT TPAP study (photo credits: Region of Durham)



Figure 96. Existing Streetscape along Brock Road (photo credits: Google Maps)



Figure 97. Existing Streetscape along Walnut Lane (photo credits: Google Maps)

Furthermore, Walnut Lane should be improved as a key pedestrian and cyclist route. It is proposed to incorporate a multi-use path on one side of the road, with space for a generous landscaping zone to further improve the aesthetics of the street. Figure 97 shows the current condition along Walnut Lane.

### Pickering Parkway

Within the Brock Precinct, enhanced active transportation infrastructure is recommended for Pickering Parkway. This can be implemented through three proposed options. The first option is a raised cycle tracks and a landscape and furniture zone on both sides of the road, the second option is a single-lane MUP facility on both sides of the road, and the third option is a two-way MUP on one side. Figure 98 shows the current condition along Pickering Parkway. Figure 99 shows a cross-section of the planned reconfiguration of Pickering Parkway as part of the Notion Road / Highway 401 Overpass EA, which features streetscape enhancements similar to the first proposed option.



Figure 98. Existing Streetscape along Pickering Parkway (photo credits: Google Maps)

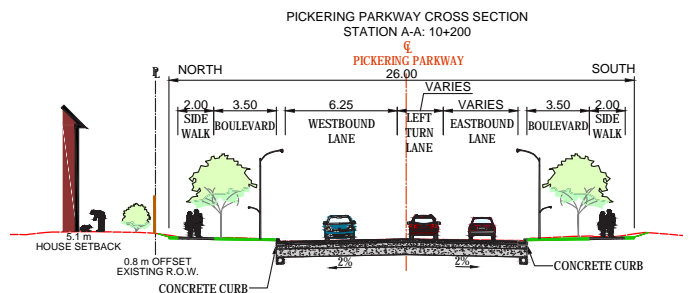


Figure 99. Notion Road / Highway 401 Overpass EA - eastern part of Pickering Parkway



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# 5.0 Illustrative Blocks

- 5.1 Introduction
- 5.2 Mid-Block Sites
- 5.3 Intersection Sites

# 5.1 Introduction

The Urban Design Guidelines aim to support the implementation of the Kingston Road Corridor and Specialty Retailing Node Intensification Plan by providing design recommendations to support the creation of successful neighbourhoods consistent with the Vision outlined in Section 1.3.











To support these recommendations and guide policymakers in the implementation process, demonstration plans have been developed showing illustrative diagrams for mid-block and intersection sites. These illustrative plans show how discrete design guidelines can be applied comprehensively to support the overall function of the block, and particularly the interface between private development and the public realm. It encourages a 'kit-of-parts' approach which allows for greater flexibility in certain elements of the built form, while ensuring quality design consistent with the objectives of the Intensification Plan.

The plan diagrams on the left-hand pages illustrate street and block configurations, as well as accesses and connections between sites. The massing diagrams on the right-hand pages demonstrate a built form scenario including the placement and orientation of a mix of building types. Both diagrams reference specific design principles outlined in Sections 2 to 4 in this document, which are referenced with colour-coded call-outs.

All block plans are illustrative in nature. These demonstrations should not be interpreted as the only feasible scenario for each block.



The following legend items are used in the demonstration plans in Figures 100 to 103.

-  Pedestrian Connection
-  Enhanced Existing Public Realm
-  Vehicular Access
-  POPS
-  Streetwall
-  Spill-out Spaces
-  Commercial Frontage Required (Primary Frontage)
-  Commercial Frontage Recommended (Secondary Frontage)
-  Preferred Location for Servicing
-  References to Sections 2.0 Built Form, 3.0 Place-Making and 4.0 Connectivity in this report

# 5.2 Mid-Block Sites

Mid-Block sites are found throughout the corridor along Kingston Road, Brock Road, Pickering Parkway and within larger lots on new proposed public streets. The following example is in the Whites Precinct, on the south side of Kingston Road and to the east of Whites Road.

- 2.13** Primary Frontage is encouraged along certain streetscapes (i.e. in this block, along the south side of Kingston Road). In these areas, a high proportion of retail uses with a strong street-related presence is desired.
- 3.8** POPS are encouraged between buildings to break up streetwall homogeneity and add variety and/or variation to the block. These POPS should incorporate a diverse range of active programming, and can include spill-out uses from adjacent developments. They should be highly accessible from pedestrian connections and usable by residents.
- 4.2** Pedestrian access is encouraged to be provided through mid-block sites via pedestrian walkways and POPS. These access routes facilitate connectivity from one end of the site to another (i.e. in this block, access is provided from the southern portion of the site near Highway 401 to Kingston Road and the open space in the northeast end of the site).
- 2.3** Landscaped setbacks may assist in creating more visible entrances to buildings and gathering spaces in areas where the pedestrian boulevard is limited.
- 3.2** Natural heritage features are encouraged to be buffered by open spaces with compatible uses that encourage a naturalized environment. These areas should incorporate significant landscaping.
- 2.5** On-street parking with landscaped treatments on the boulevards is encouraged. Large surface parking lots are discouraged, with main parking preferred below ground or in parking structures.
- 2.4** Access points off Kingston Road should be minimized, where possible, with consolidated rear accesses provided through private service streets.

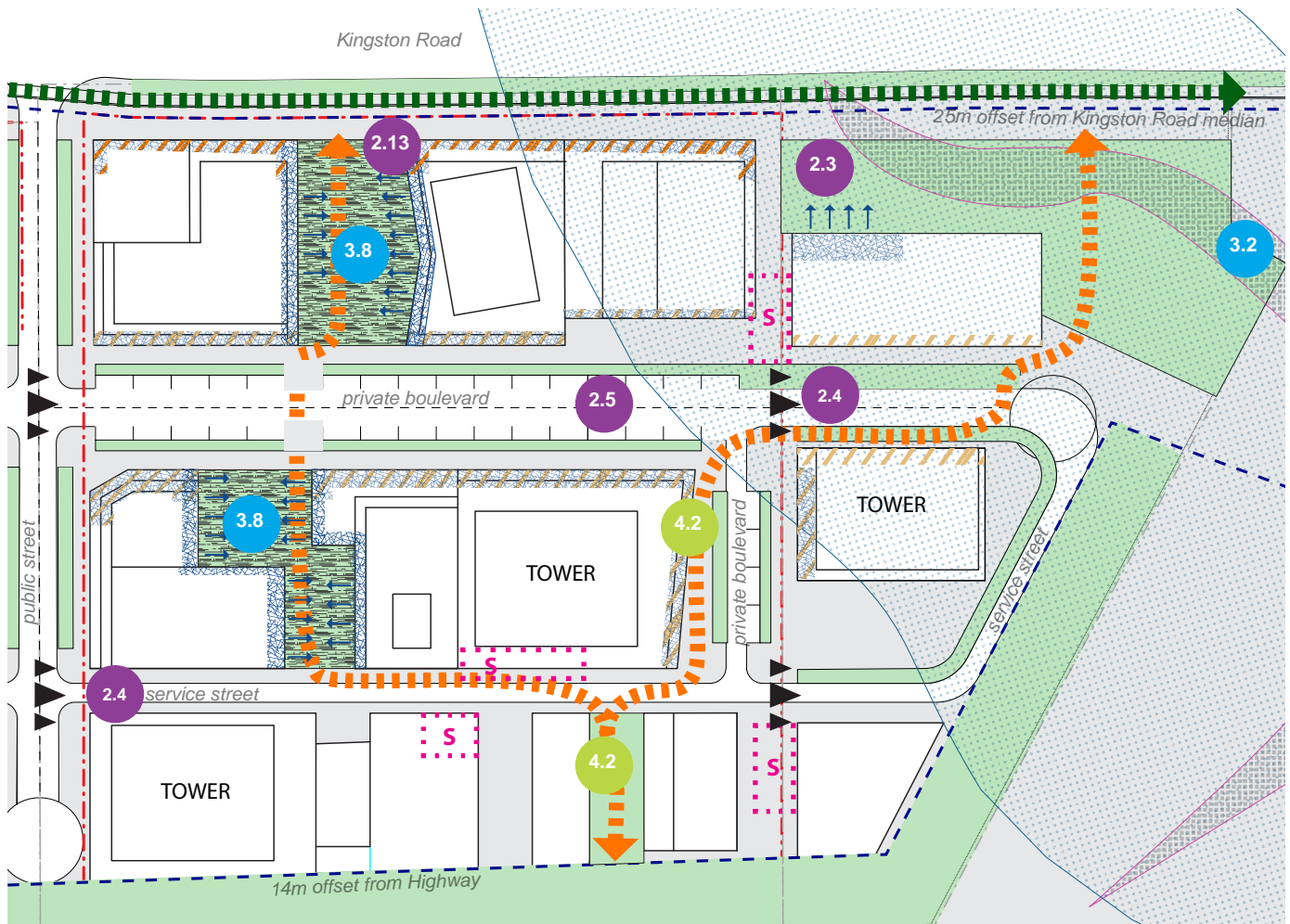


Figure 100. Plan diagram illustrating design principles at a mid-block site



## Site Objectives

Mid-Block Sites should maintain the streetwall of the neighbourhood by breaking up the facade in relation to the scale of the neighbourhood. For example, such breaks will be more frequent in Rougemount to maintain a small-town main street feel, whereas they will be less frequent in the Whites Precinct where the overall neighbourhood scale is much larger. In addition, within the Whites Precinct where the streetwall has considerable length, the buildings should be pulled apart to create POPS to serve as mid block connections and to add spill out spaces closely integrated with the public realm of Kingston Road.

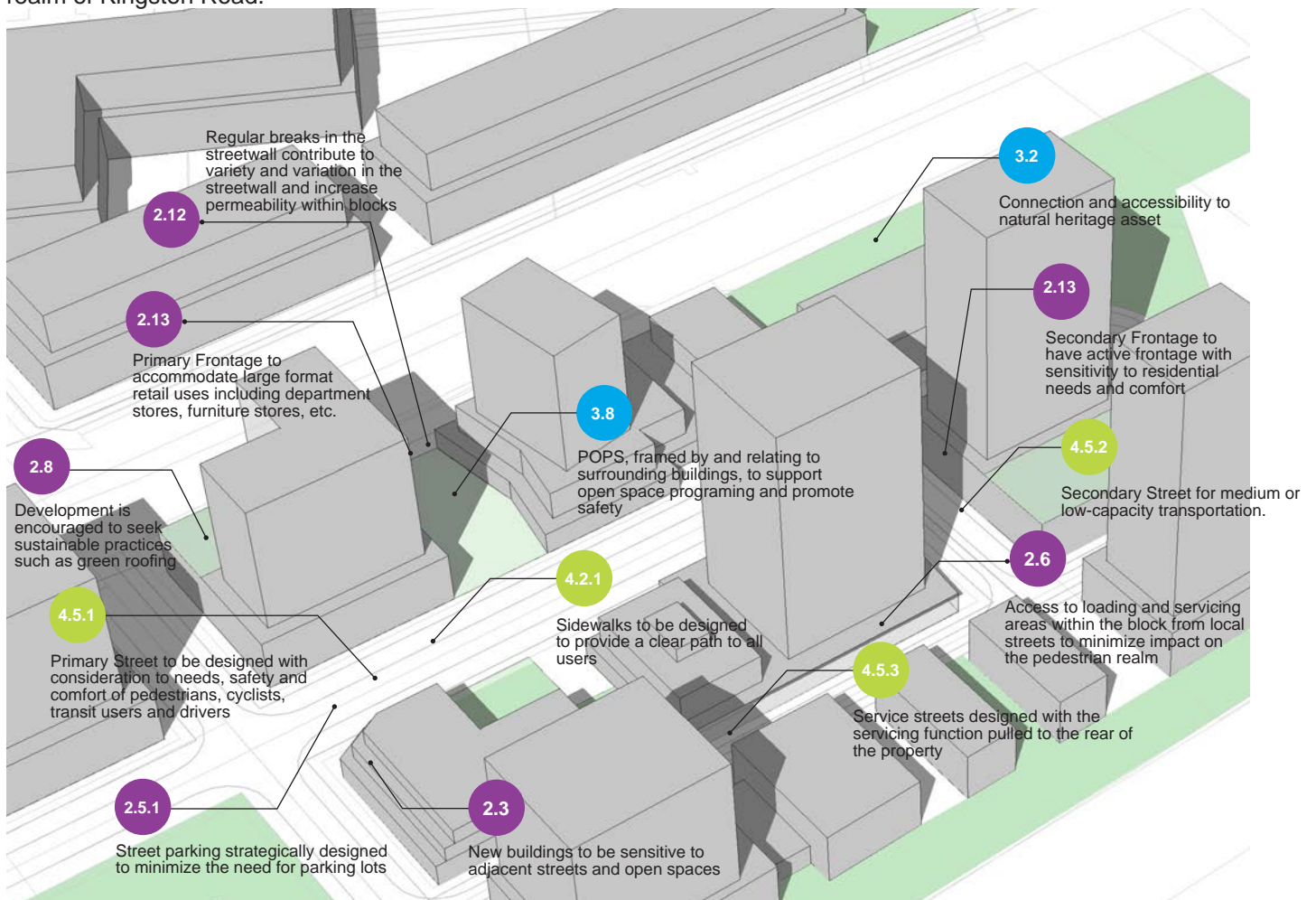
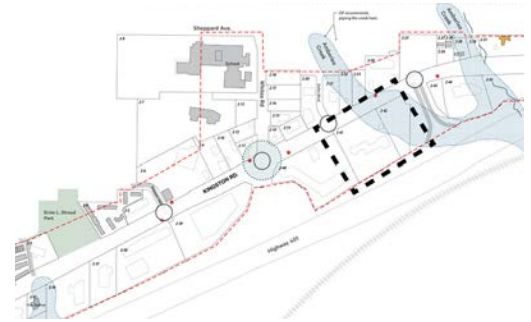


Figure 101. Massing diagram illustrating design principles at a mid-block site

# 5.3 Intersection Sites

Intersection sites are found throughout the Intensification Plan at the crossings of major roads, minor roads and new internal roads. The below example is located in the Brock Precinct. It is a large site that has been divided into multiple blocks and contains a variety of intersection sites, including one related to a gateway.

- 2.13** Primary Frontage is encouraged to provide a fine grain of active uses at grade, including retail and other public uses.
- 3.8** POPS, including parks and urban squares, are encouraged to provide valuable amenity space internally within development blocks. Dependent on location, they may be surrounded or enclosed by buildings on multiple sides.
- 2.6** Gateway plazas are located at key high-traffic intersections. Open space should be highly accessible from pedestrian connections.

- 4.2** Pedestrian access should be provided through pedestrian paths and sidewalks with enhanced boulevards with ample landscape and street furniture.
- 4.3** Planned cycling facilities should connect to existing cycling routes in order to increase multi-modal mobility choices for residents and visitors.
- 4.5.6** Additional trees are recommended to be incorporated within the existing streetscape to provide shaded access for pedestrians and users travelling to specialty retailing locations south of Pickering Parkway.
- 2.14** Tall buildings are recommended to be located at gateway locations. Gateways should incorporate enhanced site and building design to reinforce their prominent locations.
- 2.2** Block sizes should be designed to accommodate for permeability within the neighbourhood and increase ease of movement for pedestrians and cyclists.

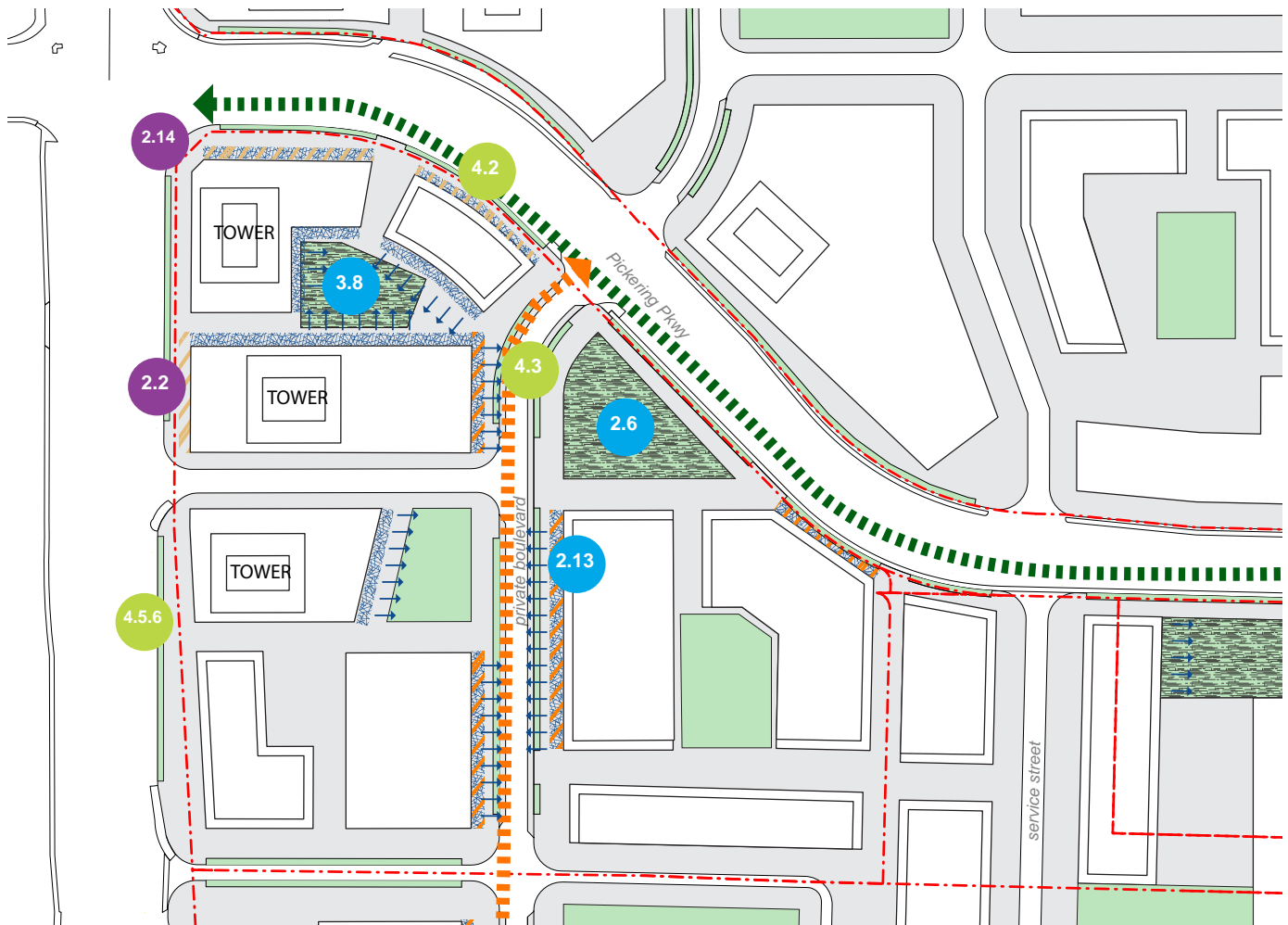


Figure 102. Plan diagram illustrating design principles at an intersection site



## Site Objectives

Intersection sites are prominent sites seen from multiple vantage points, and as such require enhanced design attention based on their location within the precinct. For example, if they are at a main intersection identified as a gateway, the building articulation should create a sense of arrival into the neighbourhood with more refined bases and towers that guide your eye up, or artwork and landscapes that can be seen from a distance. At more internal locations, the built form of the towers can be more subtle and modest and artwork should be more geared towards the pedestrian experience due to less of a need to be prominent from a distance.

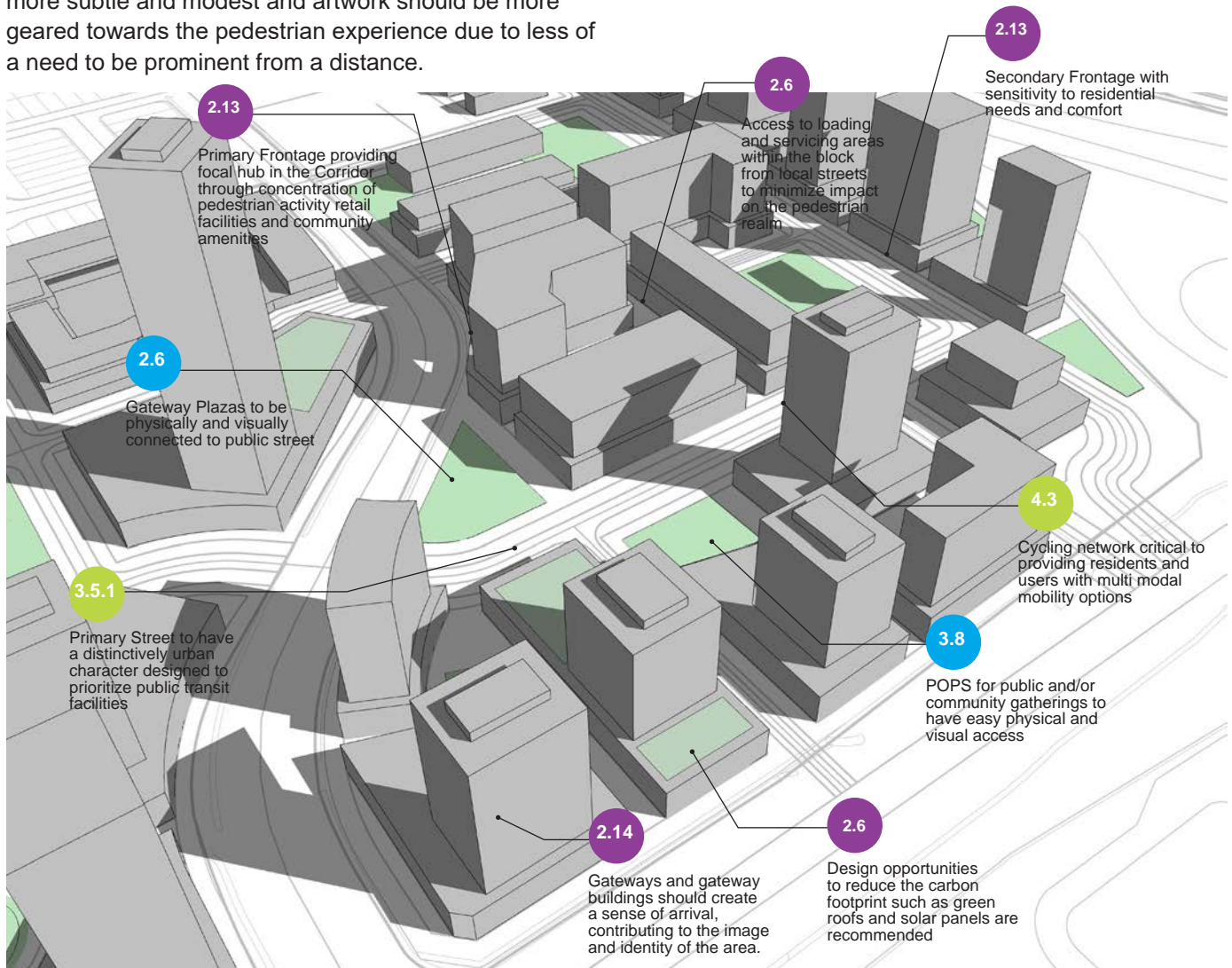


Figure 103. Massing diagram illustrating design principles at an intersection site