

Little Mountain Design Guidelines



Submitted to The City of Vancouver

By Holborn Properties Ltd.

July, 2018

Prepared by:

IBI Group Architects – Master Planning / Urban Design

PFS Studio – Landscape Architecture

Table of Contents

1.	Introduction	1
	1.1 Application & Intent	2
	1.2 Site Context	3
	1.3 Site Plan	4
2.	Public & Private Realm	5
	2.1 Introduction – Public Realm	6
	2.2 Parks and Public Open Spaces	11
	2.3 Streetscape Concepts	18
	2.4 Landscape Components	35
	2.5 Introduction – Private Realm	41
	2.6 Private Realm Components	42
	2.7 Lighting	50
3.	Urban Design	51
	3.1 Introduction – Urban Design	52
	3.2 Quadrants	53
	3.3 Site Planning	61
4.	Building Massing	67
	4.1 Introduction – Building Massing	68
	4.2 Height	69
	4.3 Building Width & Separation	72
	4.4 Setbacks	73
	4.5 Projections	75

Table of Contents

5.	Building Design	77
5.1	Introduction – Building Design	78
5.2	Sustainable Buildings	79
5.3	Base Activation	81
5.4	Main Entrances	87
5.5	Corners and Focal Points	89
5.6	Roofs	92
5.7	Private Outdoor Spaces	94
5.8	Overhangs, Canopies, and Sun Shading Devices	96
5.9	Parking and Loading	98
5.10	Materials and Colours	100
5.11	Building Lighting	103
	Appendix	107
	Land Use Plan	108
	Phasing Plan	109
	Open Space Network	110
	Retained and New Trees	111
	Vehicular	112
	Rooftop Gardens	113

1. Introduction



1.1 Application & Intent

These design guidelines build upon the vision for the neighbourhood set forth in the Little Mountain Rezoning Application booklet, dated May 9, 2016. The master plan in that application envisioned a development that completed the neighbourhood lying between Main Street and Queen Elizabeth Park between 33rd and 37th avenues. As shown in the Site Plan on the following pages, a rich variety of public realm spaces, building uses, typologies and scales was envisioned.

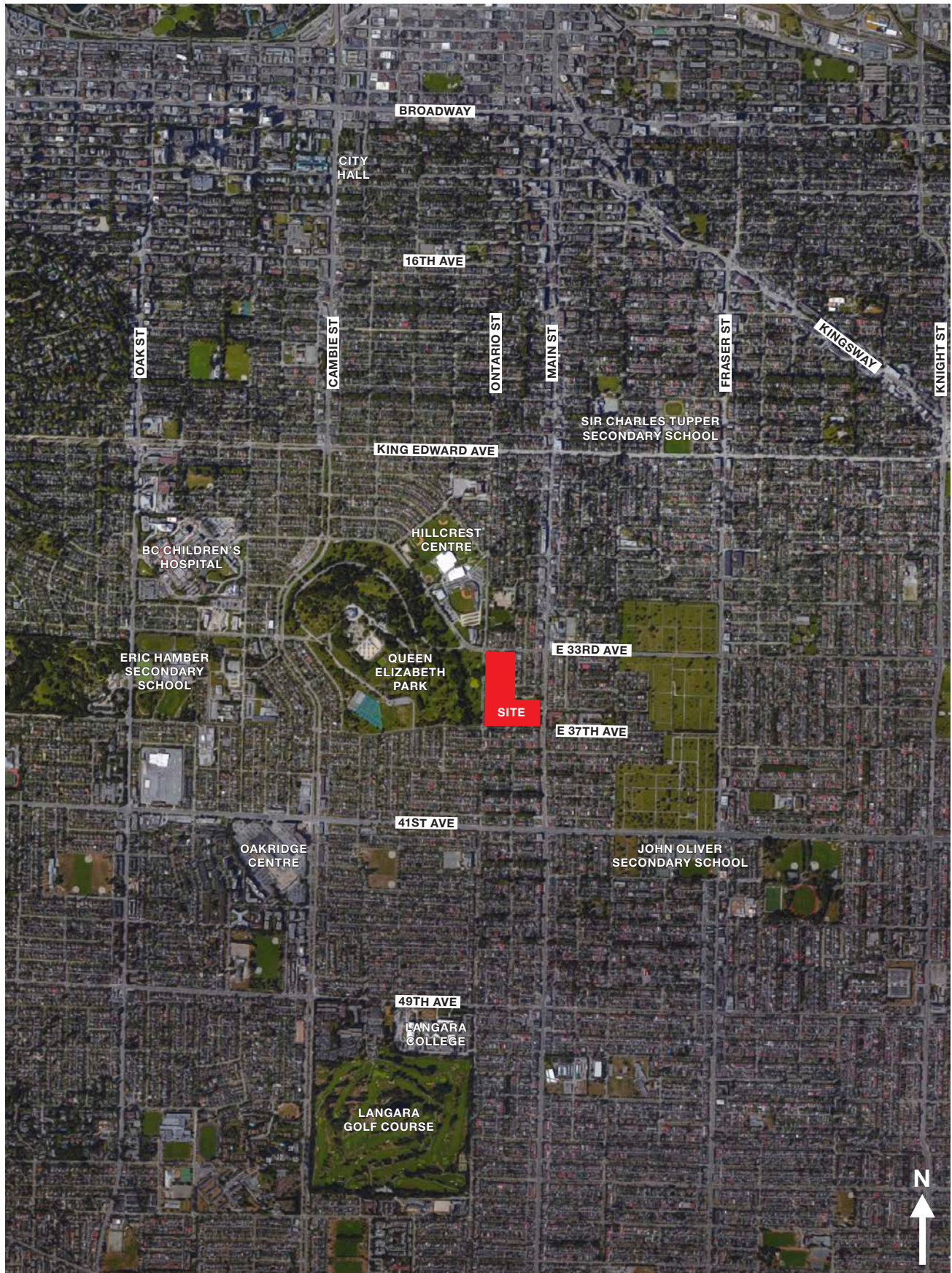
The guidelines should be used in conjunction with:

- a. CD-1 by-law
- b. Housing Design and Technical Guidelines
- c. High-density Housing for Families with Children Guidelines

Reference should also be made to the Little Mountain Policy Statement adopted by City Council in June 2012. As well as assisting the development permit applicant, the guidelines will be used by City staff in the evaluation of proposed developments.

The guidelines apply to the overall site, which is bounded by 33rd Avenue to the north, 37th Avenue to the south, Main Street to the east and Ontario Street to the west, as shown in the Site Context map, next page.

1.2 Site Context



1.3 Site Plan



2. Public & Private Realm



2.1 Introduction – Public Realm

Design guidelines for the public realm address parks and public open spaces and streetscapes within the Little Mountain Housing CD zoning by-law area. The guidelines for these spaces respond to the Little Mountain Policy Statement. These components of the public realm will be designed and built concurrently with adjacent private developments and dedicated to the City on completion.

The Board of Parks and Recreation will review designs for public spaces that will be dedicated as parks upon completion. City Engineering will review designs for streetscapes with reference to City street standards and the Policy Statement.

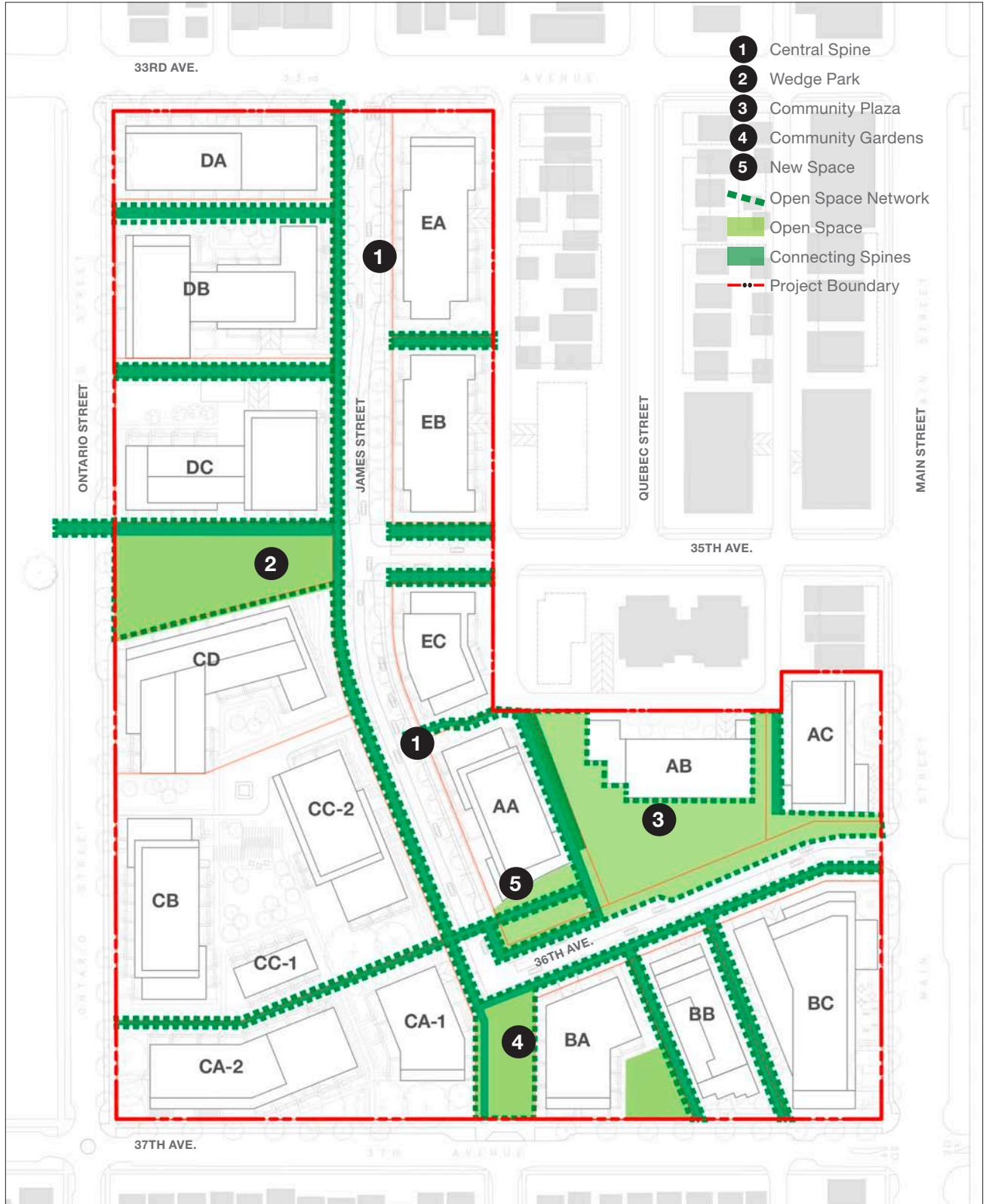
Principles

Parks, public open spaces and streetscapes in Little Mountain should be designed to achieve the following principles:

- Create a highly-public open space system that forms the key organizing element and focus of the site.
- Create public spaces that are truly public, active, safe, and welcoming through the design of these spaces and the relationship of buildings and activities to them.
- Attract people and give them reason to stay including places to sit and gather, to enjoy nature, shade and shelter, sunny spots, water, a variety of places to play, urban agriculture, and mature trees.
- Create a comfortable relationship between public and private outdoor space through changes in elevation, urban setbacks and water elements to define spaces and transitions.
- Line the public square at the community hub with shop and café windows and entries, outdoor seating and displays, entries and windows to the neighbourhood house and the daycare.
- Create public open spaces that build a complete and sustainable community by meeting the needs of different ages and abilities, and supporting Greenest City objectives through rainwater management, sustainable food systems and urban agriculture, green mobility and access to nature / habitat consideration.
- Design new streets to prioritize pedestrians and cyclists over motorized vehicles and to traffic-calm so that movement of vehicles across the site will be discouraged except those with a purpose in being there (e.g. access to homes, shops, services and deliveries) not simply short-cutting across the site.
- Ensure an open space system that is well connected to the surrounding neighbourhood.

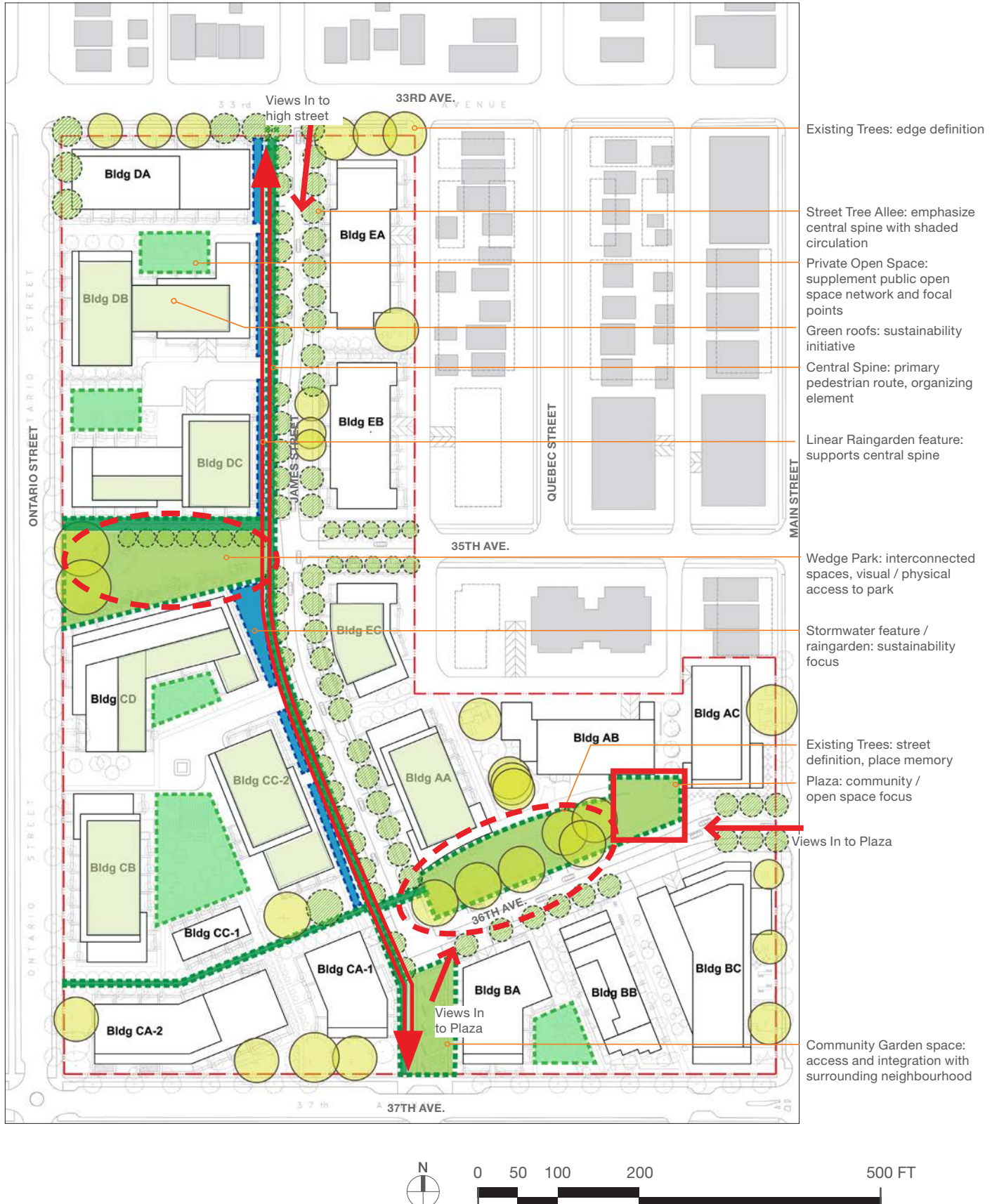
2.1 Introduction – Public Realm

2.1.1 Open Space Plan



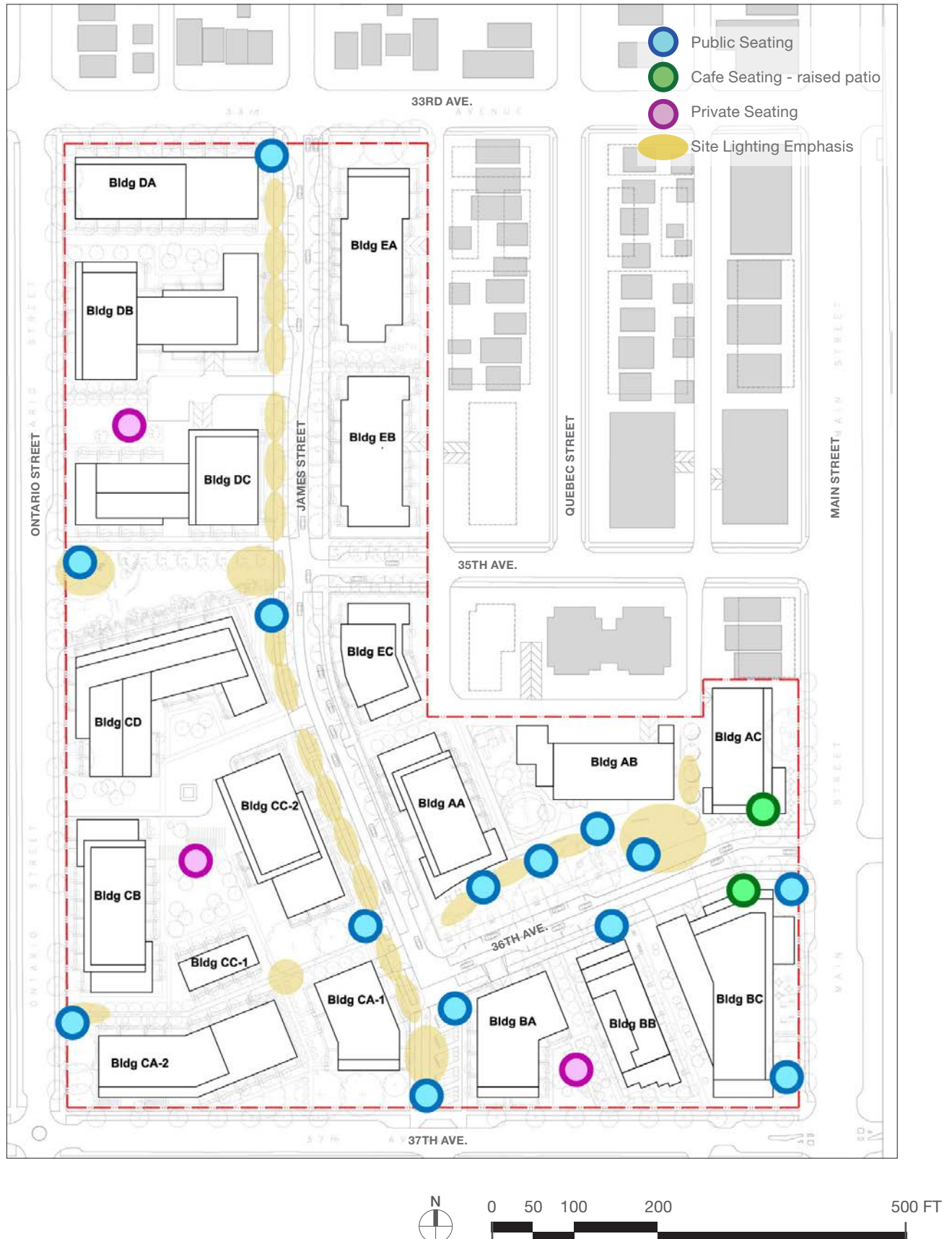
2.1 Introduction – Public Realm

2.1.2 Open Space Design Strategies - ‘Big Moves’



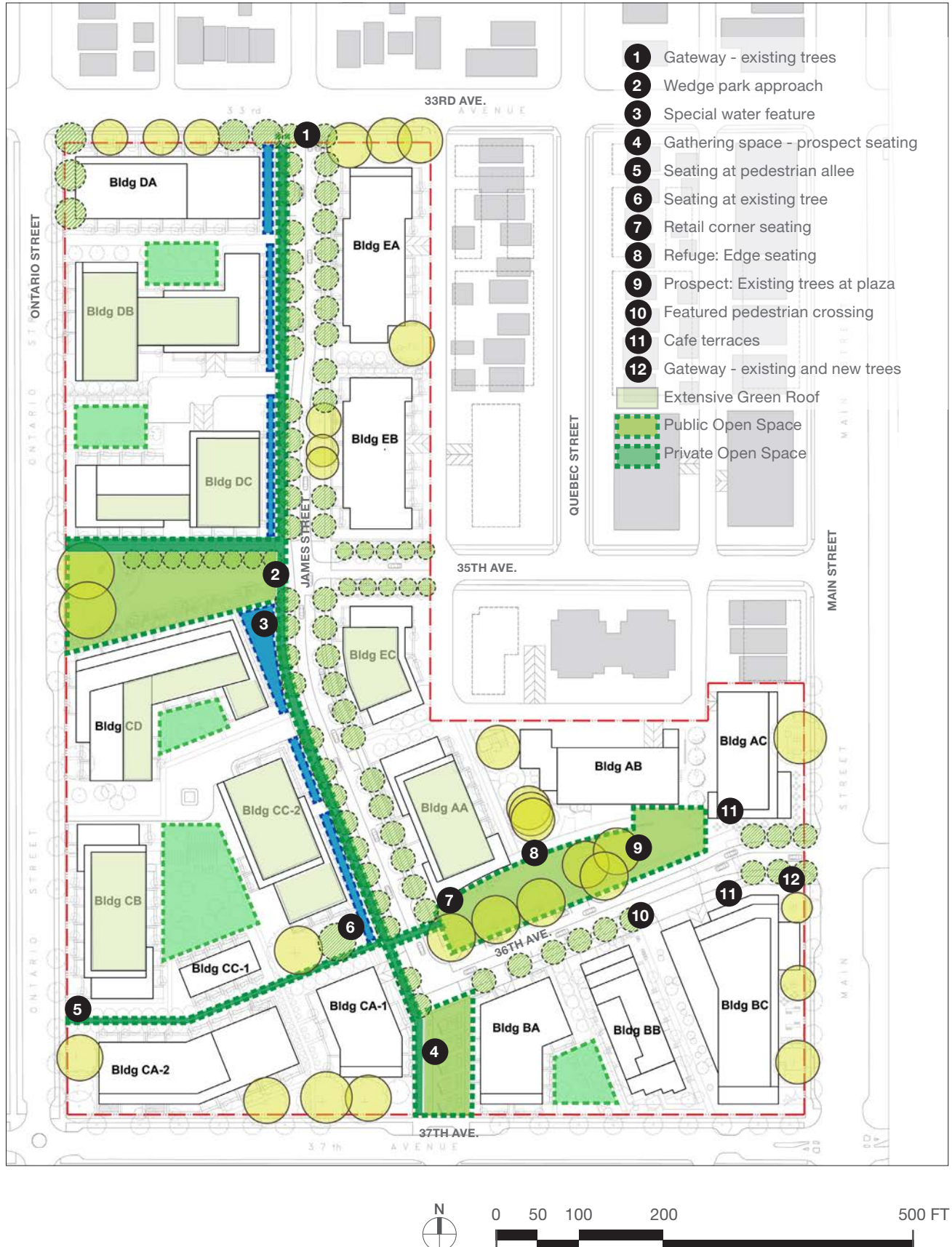
2.1 Introduction – Public Realm

2.1.3 Seating and Associated Site Lighting Plan



2.1 Introduction – Public Realm

2.1.4 Opportunities for Landscape Moments Plan



2.2 Parks and Public Open Spaces

2.2.1 Community Plaza

Intent

The Community Plaza / Hub will be the most active social public space. It will be organized around significant retained trees and will be the focus of activities related to the neighbourhood house, daycare, and local shop and services. The community plaza must be large enough to comfortably accommodate the functions of an active social public open space and to provide appropriate buffers around existing mature trees.

The Community Plaza is intended to read as a coherent, unified space around buildings on four properties: on the west, south, and east sides of Building AC, on the south and east sides of AB where the Little Mountain Neighbourhood House and daycare will be located, on the west and south sides of Building AA where outdoor commercial use is planned, and on the north side of Building BC. A tabled crossing between the plaza areas on both sides of 36th Avenue is intended to be at the same grade and paved in the same material as the plaza to connect and unify the spaces across the street.

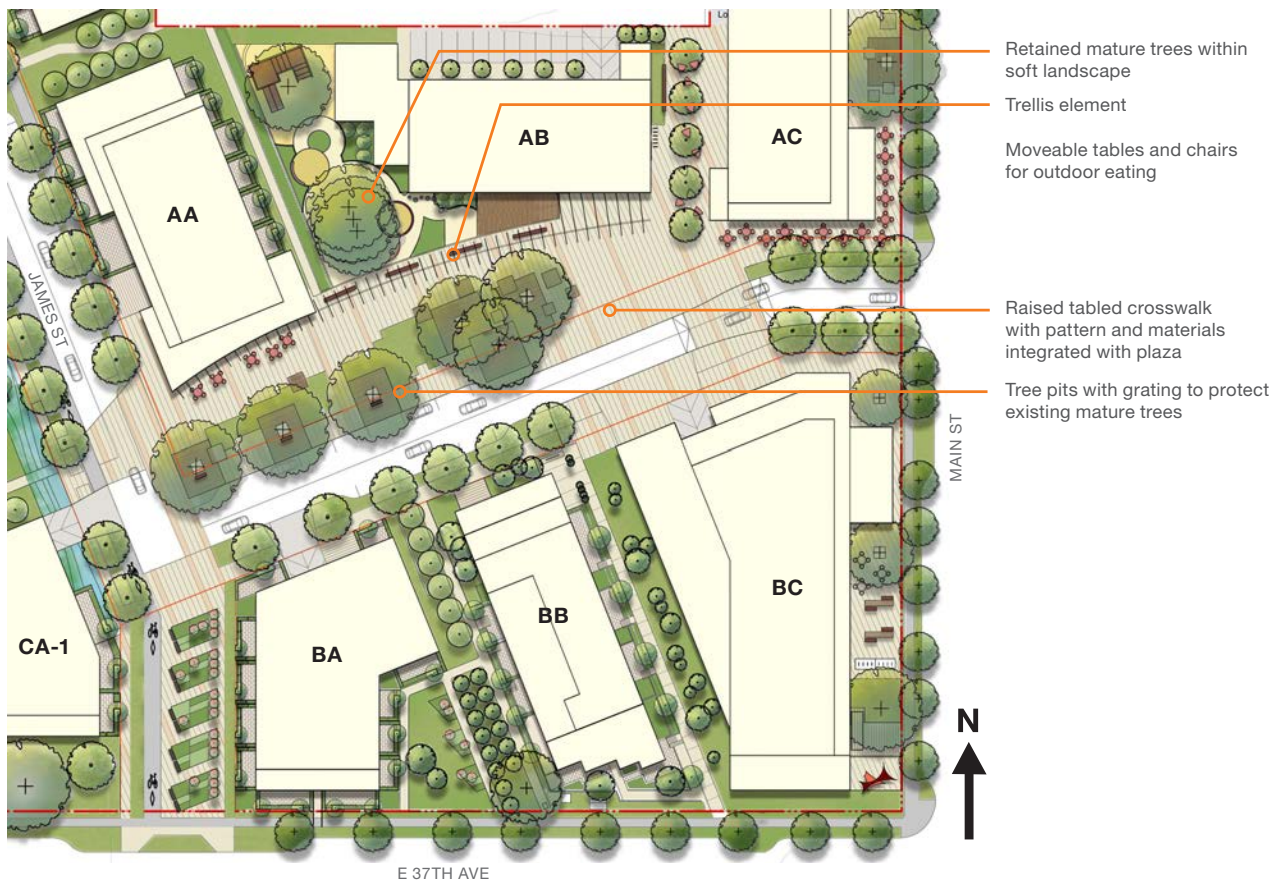
Guidelines

- .1 Existing mature tree retention.** Retention of the existing trees on the plaza site will require special tree protection measures to ensure their ongoing health and viability. The finished grade of the plaza is designed to be above existing grades at the base of these trees. Large areas of decking are envisioned as a means to bridge over the recessed tree pits while allowing access to rainwater and air circulation for the trees. Adjacent areas of soft landscape should be incorporated to support rainwater permeability to tree roots.
- .2 Plaza programming.** The plaza will be programmed and managed by the Little Mountain Neighbourhood House for a range of events related to their courses and classes and to engage the local community. The focus for programming should be on the plaza areas on the City-owned property of the Neighbourhood House site with opportunities for spilling into adjacent properties with agreements on special event days. Provision for programming should include: outdoor water bibs and adequate electrical supply in centrally located, locked receptacles; lighting designed to be adjusted in intensity, and possibly in colour, to support evening activities; and well located vertical elements designed to provide temporary support for temporary programming elements such as lights, speakers, banners, sunshades, etc. The plaza also represents a high-profile Public Art opportunity.
- .3 Pedestrian circulation.** The primary pedestrian route across the plaza will be north of the group of retained trees in a curving route from Main Street to James Street. An unobstructed arc for pedestrian movement of a minimum width of 4.5 metres should be available to accommodate pedestrians. On programmed event days, temporary event infrastructure may constrain the primary route with the north side sidewalk on 36th Avenue providing for pedestrian movement on those occasions (refer to section 2.2.2). A public right of passage agreement with Building AA should provide for this primary pedestrian route across the plaza.
- .4 Outdoor playspace for daycare and childcare facilities.** The area to the south and west of Building AB should be the location for the outdoor playspaces for day and childminding associated with the Little Mountain Neighbourhood House. The playspaces should be designed around the existing trees identified for retention in this area, including consideration of tree health through the treatment of the ground plane around the trees.

2.2 Parks and Public Open Spaces

2.2.1 Community Plaza Cont'd

- .5 Seating opportunities.** A variety of seating opportunities should be available in the plaza including both fixed furnishings and provisions for moveable tables and chairs, especially in the immediate vicinities of retail / outdoor eating at grade in Buildings AA and AC.
- .6 Integration with adjacent plazas on private property.** The plaza should be designed to appear integrated and continuous across the south frontages of Buildings AA, AB, and AC with an integrated paving pattern, similar detailing and furnishings, and a continuous surface with no steps or other interruptions.
- .7 Paving materials.** An integrated paving scheme should be used across the plaza and the raised tabled crosswalk including materials, patterns, and other detailing.
- .8 Overhead trellis element.** An overhead trellis should be integrated into the design of the south side of the Neighbourhood House that reinforces the arc of the primary pedestrian route and continues the curve set up by the façade of Building AA. This trellis element should be integrated with the fence of the daycare and childcare services and may also integrate seating, lighting, and vertical supports for temporary programming infrastructure.



2.2 Parks and Public Open Spaces

2.2.1 Community Plaza Cont'd



Encouraged: Outdoor eating with moveable tables and chairs.



Encouraged: Patterning of plaza pavement using two colours of concrete and/or pre-cast pavers.



Encouraged: Plaza with infrastructure that anticipates temporary setups for programming and events.



Encouraged: Use of decking to protect root systems of retained mature trees.

2.2 Parks and Public Open Spaces

2.2.2 Green Wedge Park

Intent

Green Wedge Park is intended to read as an extension of Queen Elizabeth Park into the Little Mountain site. Its location permits the retention of two large existing trees near the Ontario streetscape. The program should be primarily oriented to residents of the Little Mountain community including open lawn, natural play features, and informal gathering and seating spaces.

Guidelines

- .1 Existing mature tree retention.** Retention and health of the two mature trees in the park should be a priority for the park design including maintenance of existing grade over the root system. The design should feature the trees as framing views outward into Queen Elizabeth Park and inward into the open lawn area viewed from the Ontario streetscape.
- .2 Park programming.** The park should be designed for primarily passive use with opportunities for sitting, sunning, and informal play on a well-drained open lawn and on seating elements within a paved area under the two mature trees. Opportunities for informal children's play with natural play, including both hard and soft landscape elements, should be provided with nearby seating for supervising adults.
- .3 Bicycle route.** A link in the bicycle route network should connect between the cycle route on the west side of James Street and the Ontario Greenway along the north edge of Green Wedge Park, immediately south of the east - west pedestrian route along the south side of Building DD. This cycling path should be 3.0m in width and continuous with the bike route along James Street in elevation, materials, and wayfinding markings.
- .4 Pedestrian circulation.** Two hard surfaced pedestrian routes should be provided connecting east – west across Green Wedge Park. On the north side, a paved route with a minimum width of 2.0m should be sited immediately within the north property line of the park and flush with the pedestrian route along the south façade of Building DD that provides access to the fronting townhouses. On the south side, a paved pedestrian path with an informal character should traverse the open lawn area from the sidewalk on James Street and paved patio space under the two mature trees near the west side of the park.
- .5 Borrowed landscape of water feature.** The water feature on the east side of Building CD should be open to view from the pedestrian path along the south side of Green Wedge Park so that it can be enjoyed as a borrowed landscape from the park, as well as from the streetscape of James Street.
- .6 Landscape character.** The landscape character of Green Wedge Park should reference the informality of Queen Elizabeth Park with its open lawns, mature trees, and varied mix of understory plant species, including spring flowering trees and large shrubs.
- .7 Extended boulevard on Ontario Street.** The streetscape guidelines for Ontario Street (refer to section 3.2.5) identify a widened boulevard strip along the park frontage in place of on-street parking. This boulevard should be planted in lawn as a complement to Queen Elizabeth Park across the street and should provide increased soil volumes to improve the health of the street trees in this section.

2.2 Parks and Public Open Spaces

2.2.2 Green Wedge Park Cont'd



Encouraged: Nature play for children in the park.



Encouraged: Borrowed views from the park into the adjacent linear rain garden.

2.2 Parks and Public Open Spaces

2.2.3 Community Gardens

Intent

The Community Gardens are included in a public space that links James Street southward from its intersection with 36th Avenue to 37th Avenue. While only emergency vehicles are accommodated in this open space, continuity of the cycling and pedestrian routes along James Street are intended to be seamless and uninterrupted. The remainder of the space not required for cyclist and pedestrian circulation is intended to be designed and used for urban agriculture, including raised community gardens and supporting infrastructure.

Guidelines

- .1 Bicycle route.** A continuation of the bike path on the west side of James Street should be provided southward to 37th Avenue using the same dimensions, surface material, and wayfinding markings. A widening of the boulevard achieved through the removal of on-street parking at the intersection of 37th Avenue and Quebec Street.
- .2 Pedestrian route.** A continuation of the west side sidewalk along James Street should be provided using the same design details, dimensions, and surface material to connect to the sidewalk on the north side of 37th Avenue.
- .3 Sunlight penetration.** Landscape and, especially trees, should be located to ensure that they do not substantially shade the community garden beds.
- .4 Community gardens.** A functional community garden should be designed into this open space including raised beds and supporting infrastructure (water, composting area, tool storage). The City of Vancouver guidelines for urban agriculture including: the Urban Agriculture Garden Guide Manual for Starting and Designing Urban Agriculture Projects and the Park Board Urban Agriculture Policy.
- .5 Edible landscape.** Other opportunities for inclusion of edible landscape in the Community Gardens area should be sought including fruit bearing trees and shrubs.
- .6 Interface with adjacent patios.** The east ends of the community garden raised beds are encouraged to include trees and shrubs, both free standing and trellised, that support the edible landscape. This location both limits shadowing of the main bed and as a buffer to the adjacent private patios.



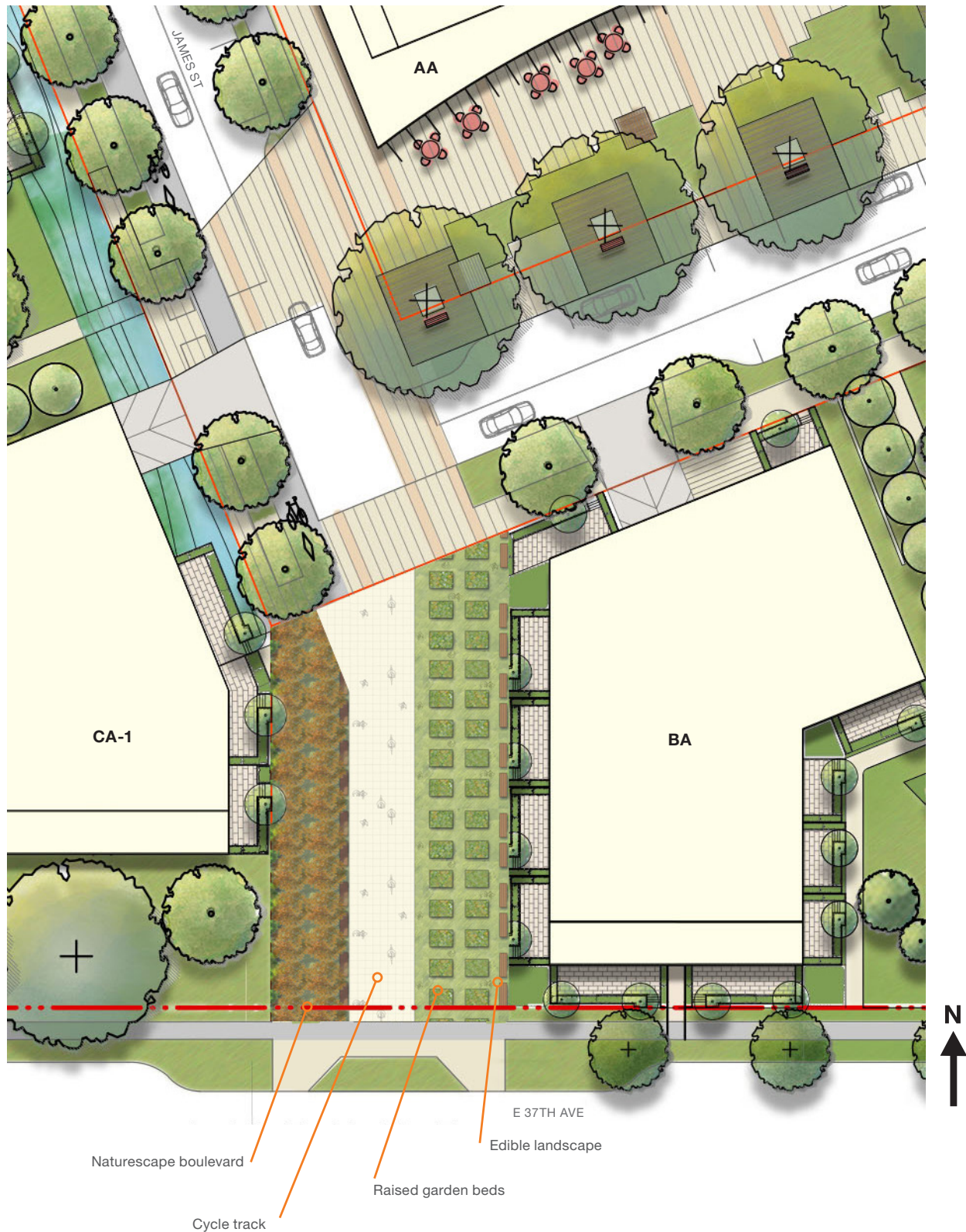
Encouraged: Raised planting beds for community gardening.



Encouraged: Edible fruit bearing plants supported on trellises and walls.

2.2 Parks and Public Open Spaces

2.2.3 Community Gardens Cont'd



2.3 Streetscape Concepts

2.3.1 James Street (Green Spine)

Intent

A primary idea that structures the Little Mountain site plan is a green spine between Ontario and Main Streets to serve local traffic, known as James Street. It is discontinuous for vehicles but linked for pedestrians and cyclists between 33rd and 37th Avenues to discourage short-cutting through the neighbourhood. A linear water feature, located adjacent to the public streetscape, provides a borrowed landscape element supported by street tree planting in boulevards with informal landscape / edible plantings to create a green spine at the heart of Little Mountain.

James Street incorporates a designated bike route on its west side connecting Ontario Street, through Wedge Park, south to 37th Avenue. The bike route provides an important and safe linkage for local residents while also inviting the greater community into the new neighbourhood. Designed with a 3m width, the bike path is separated from James Street sidewalk by a planted boulevard and continues as a separated path as it connects through Wedge Park. This route contributes to the public realm experience by offering increased access to nature and safe, comfortable, and legible movement for pedestrians and cyclists.

Guidelines

- .1 Vehicular circulation.** One lane of vehicular movement in both directions is accommodated with 3 metre wide lanes. On-street parking (2.5 metres in width) is provided in the streetscape on both sides of the street north of Green Wedge Park and on the east side south of the park, except at pedestrian crossings where sidewalk bulges should be provided in place of on-street parking to facilitate crossing by shortening the distance for pedestrians.
- .2 Bicycle route.** A cycle track should be provided on the west side of James Street from Green Wedge Park southward to 37th Avenue adjacent to the curb at 3 metres in width, using the same asphalt surface material and wayfinding markings as its sections within Green Wedge Park and the Community Gardens. North of Green Wedge Park cyclists who have not taken the cycle track to the Ontario Greenway should share the vehicular lane to move northward to 33rd Avenue.
- .3 Pedestrian routes.** Standard City concrete sidewalks should be provided on both sides of James Street. North of Green Wedge Park the streetscape should be asymmetrical with a wider sidewalk (2.0m in width) on the west side where it benefits from adjacency to the linear water feature on private property and a standard sidewalk (1.8 metres) on the east side.
- .4 Pedestrian crossings.** Standard marked pedestrian crossings should be provided at locations where east-west pedestrian routes cross James Street: the sidewalk on the south side of 33rd Avenue, the path between Buildings EA and EB and DB and DC, and 35th Avenue at Green Wedge Park. Markings of the pedestrian crossings at both sides of 36th Avenue are encouraged with an extension of the design patterning of the Community Plaza to provide visual emphasis of the importance of this central place in the neighbourhood. The sidewalks immediately west of the Community Plaza and adjacent to the crosswalks are also encouraged to extend the patterning of the community plaza into the streetscape. Scored concrete pedestrian crossings may be considered. Further exploration is required.

2.3 Streetscape Concepts

2.3.1 James Street (Green Spine) Cont'd



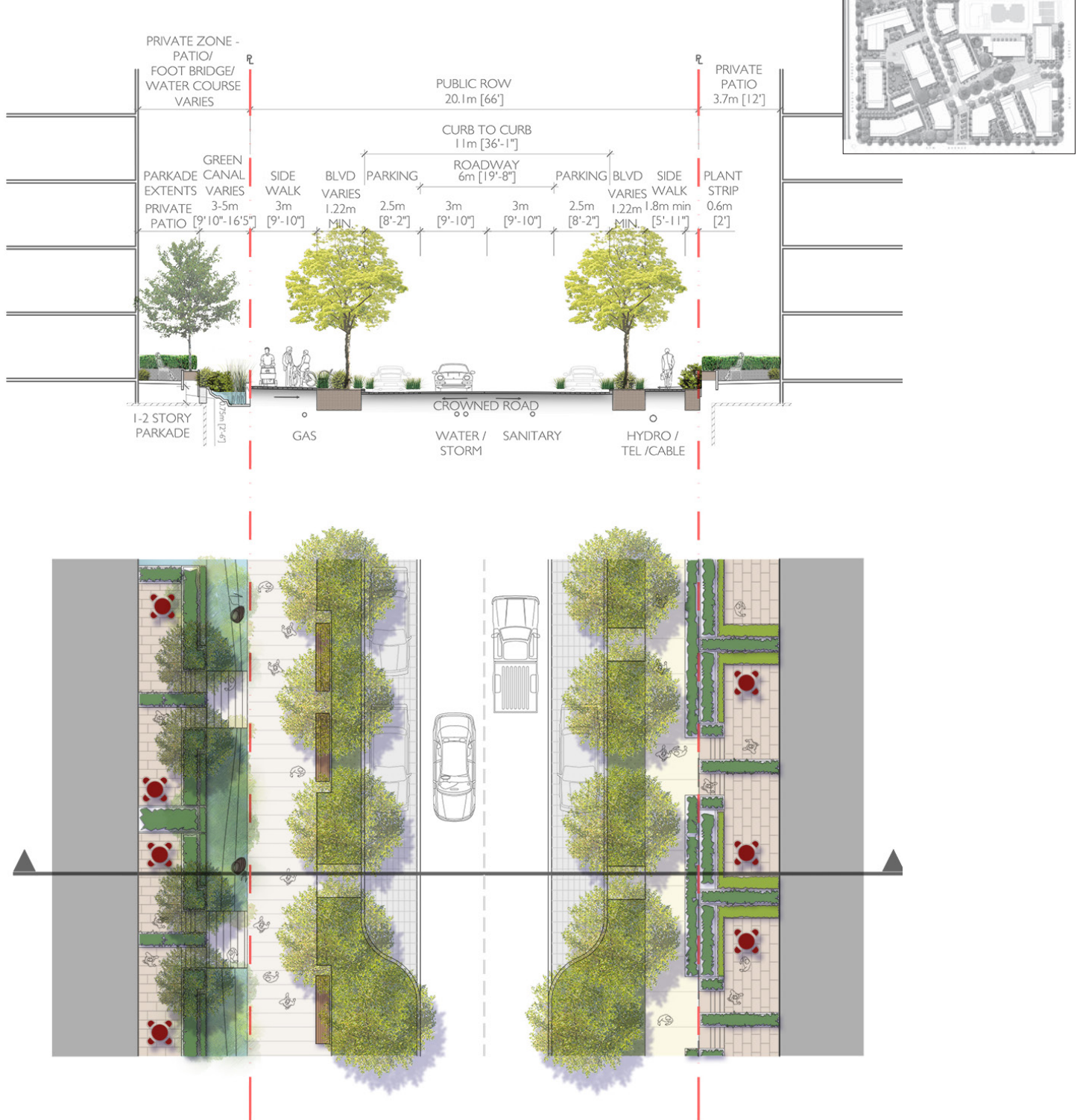
Encouraged: Path from James Street into public space such as Green Wedge Park to appear to bridge over linear rain garden.



Encouraged: Boulevard planting with informal, naturalized character.

2.3 Streetscape Concepts

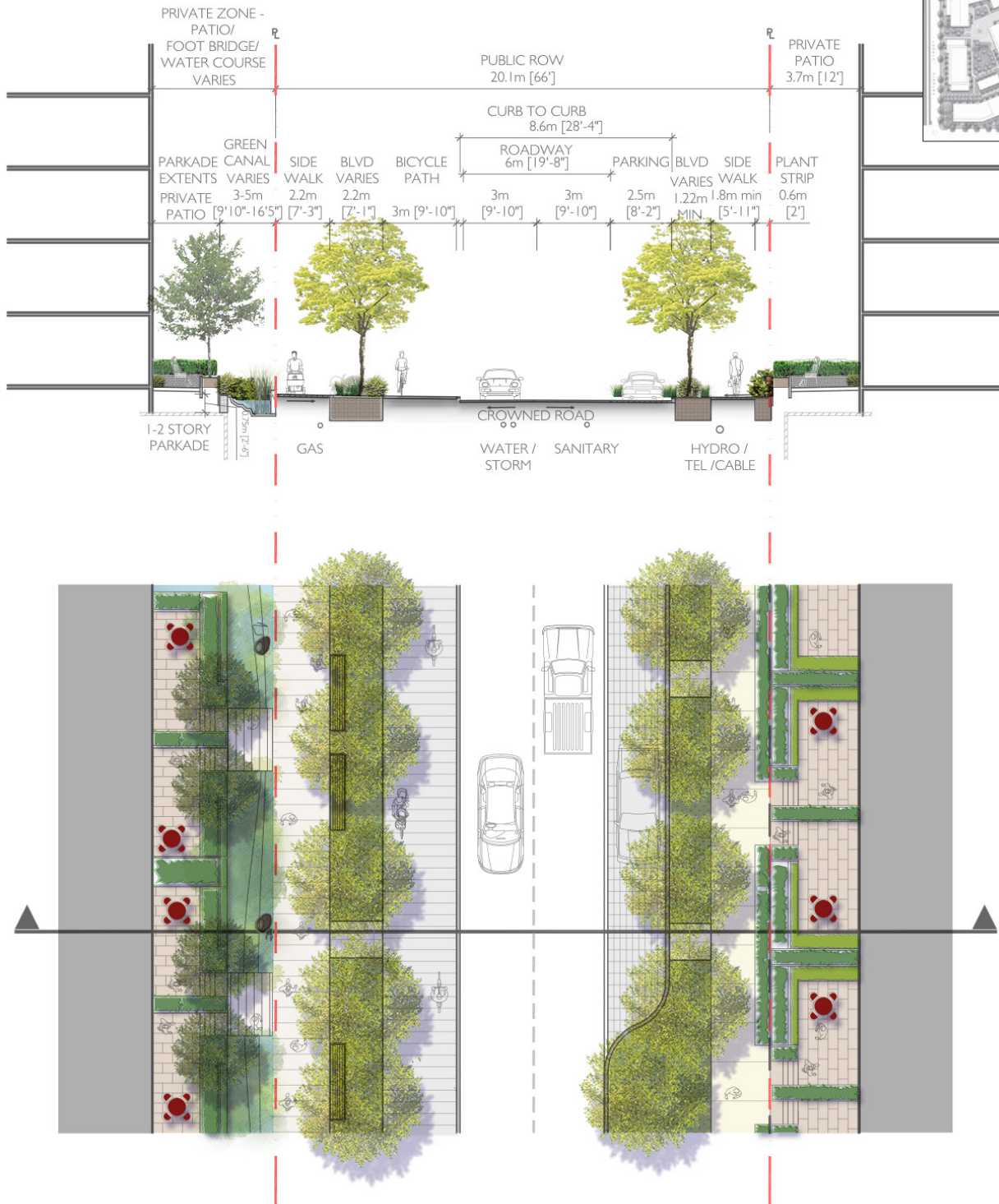
2.3.1 James Street (Green Spine) Cont'd



Typical cross-section and plan view of James Street north of Green Wedge Park

2.3 Streetscape Concepts

2.3.1 James Street (Green Spine) Cont'd



Typical cross-section and plan view of James Street south of Green Wedge Park

2.3 Streetscape Concepts

2.3.2 35th Avenue

Intent

A half block of 35th Avenue is located on the Little Mountain site leading to Green Wedge Park. It is intended to be a continuation of the streetscape to the east connecting to Main Street. The north side provides direct continuity of pedestrian access through the site to Ontario Street through Green Wedge Park.

Guidelines

- .1 Street dimensions and functions.** The dimensions of the streetscape (20.1m (66') right-of-way) should continue those immediately to the east with bicycles sharing the lane with vehicles. On-street parking should be accommodated on both sides of the street. Street trees in a grass boulevard should be provided with the species selection matching or coordinating with the street trees on the adjacent half-block.
- .2 Sidewalk bulges.** Sidewalk bulges should be provided at the intersection of 35th Avenue and James Street, replacing the parking lane in order to shorten crossing distances for pedestrians at the intersection.

2.3.3 36th Avenue

Intent

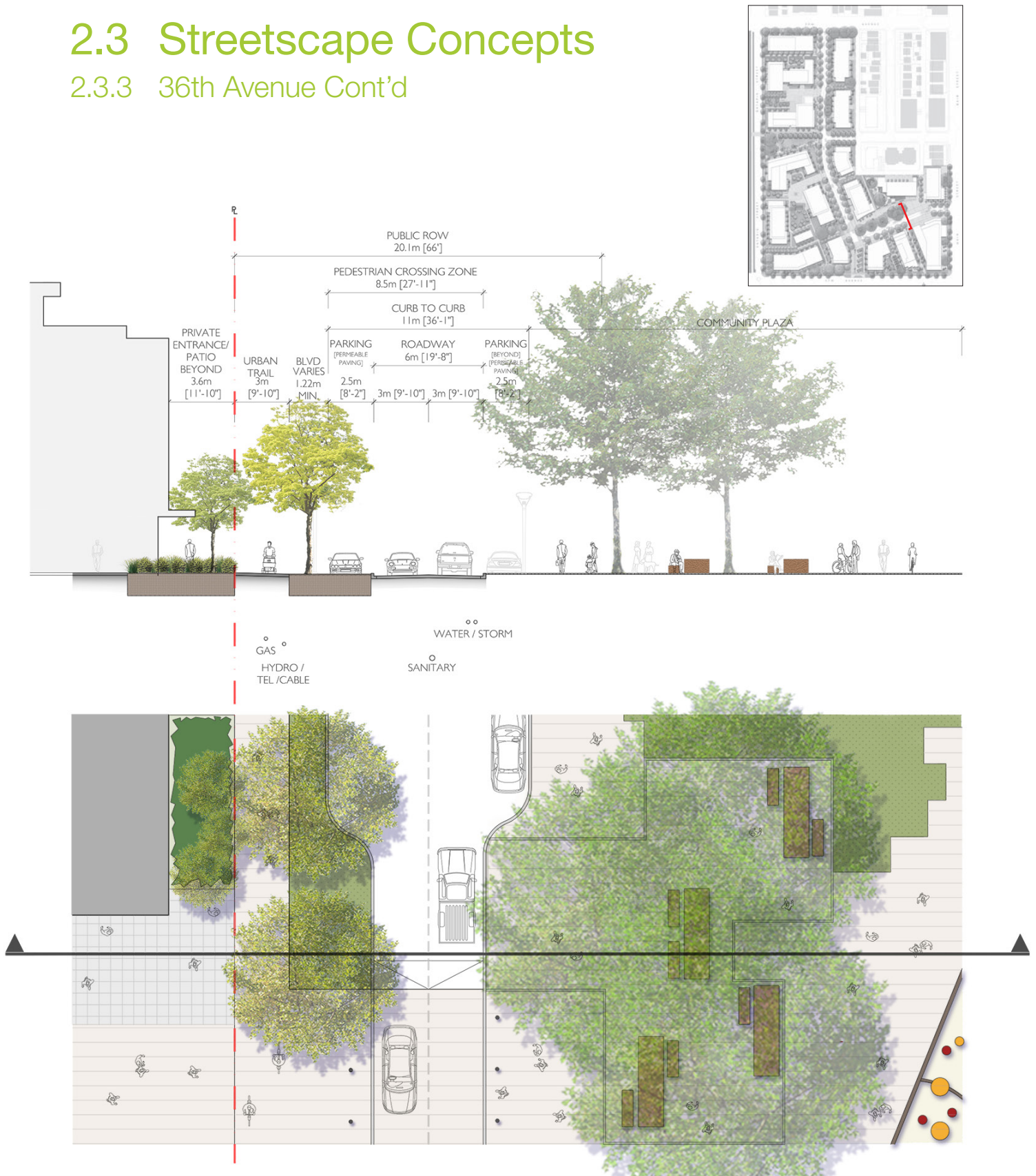
East 36th Avenue is a public City street within a typical 20.1m (66') right-of-way and serves as a primary access point from Main Street into the site. It is the main entry into the social heart of the Little Mountain community and is designed to emphasize this area as a community focal point. Along the north side of 36th Avenue, a series of significant existing trees are identified

Guidelines

- .1 Vehicular circulation.** One lane of vehicular movement in both directions is accommodated with 3 metre wide lanes. On-street parking (2.5 metres in width) is provided in the streetscape on both sides of the street west of the cluster of three retained mature trees. East of the cluster of three mature trees sidewalk bulges should be provided in place of on-street parking to expand the extent of the Community Plaza and to facilitate crossing by shortening the distance for pedestrians at the raised tabled crosswalk.
- .2 Bicycle route.** The street design on this section is planned to create a slow-moving pedestrian-scale environment that would be a comfortable experience for cyclists to share or alternatively they can use 37th Avenue which is a City bike route.
- .3 Pedestrian routes.** A standard City concrete sidewalk should be provided on the south side of 36th Avenue between the walkway between Buildings BB and BC and the crosswalk at the intersection of 36th Avenue and James Street. On the north side of 36th Avenue the pedestrian route should be integral with the design of the Community Plaza.
- .4 Pedestrian crossings.** Markings of the pedestrian crossings at both sides of 36th Avenue are encouraged as an extension of the design patterning of the Community Plaza to provide visual emphasis of the importance of this central place in the neighbourhood. The sidewalks immediately west of the Community Plaza and adjacent to the crosswalks are also encouraged to extend the patterning of the community plaza into the streetscape. Scored concrete pedestrian crossings may be considered. Further exploration is required.

2.3 Streetscape Concepts

2.3.3 36th Avenue Cont'd



Typical cross-section and plan view of East 36th Avenue

2.3 Streetscape Concepts

2.3.4 37th Avenue

Intent

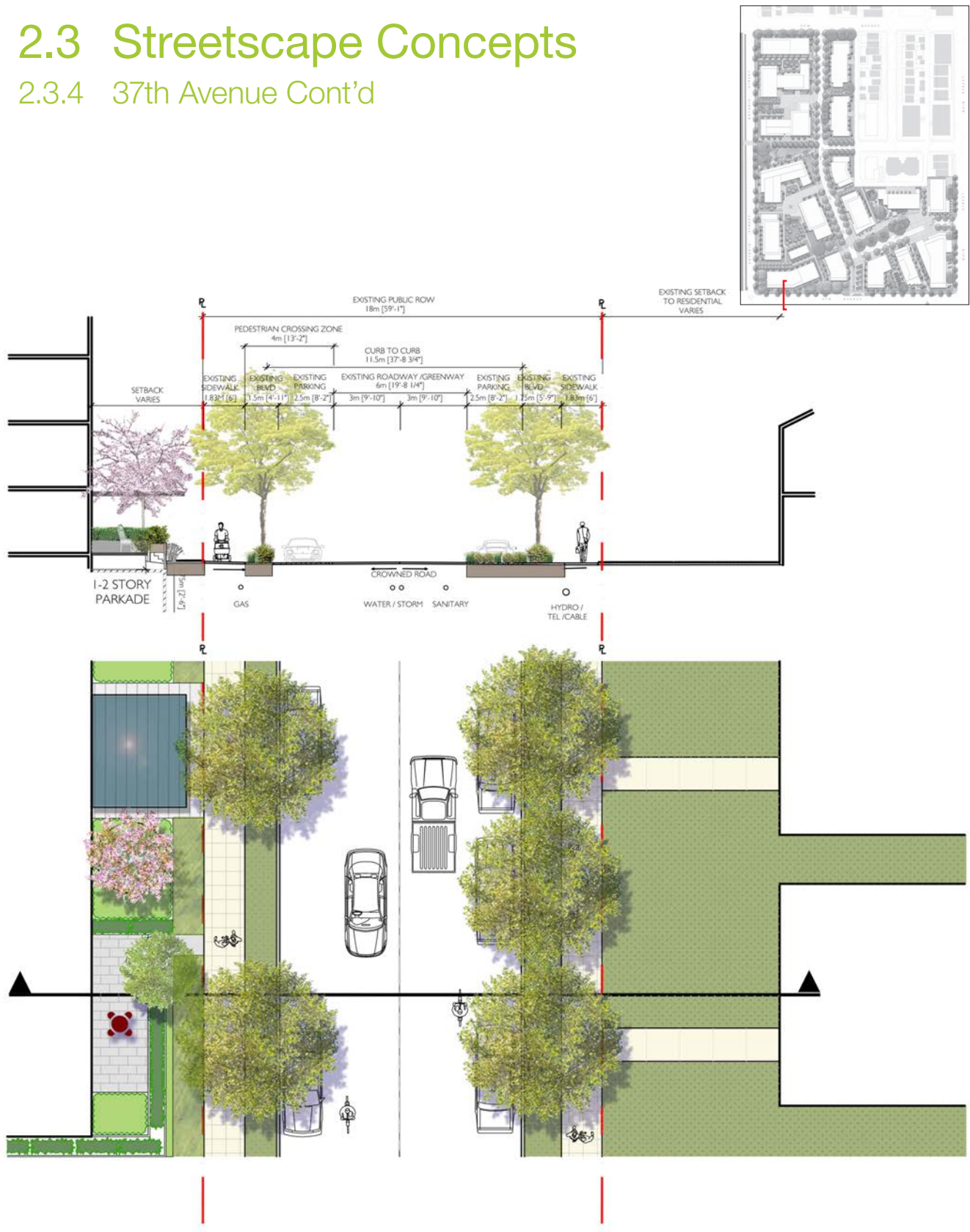
37th Avenue is a local street and City-wide Greenway (The Ridgeway). Vehicular access into Little Mountain is not provided along this section of the greenway to avoid vehicular / cyclist conflicts. On-street parking is provided with a break at the Community Gardens where a bumpout for pedestrian and cyclist crossings between the south end of James Street and Quebec Street may be considered; further design exploration is necessary.

Guidelines

- .1 Street dimensions and functions.** The dimensions of the streetscape (20.1m (66') right-of-way) should continue those immediately to the east with bicycles sharing the lane with vehicles. On-street parking may be accommodated on both sides of the street; further design exploration is necessary. Street trees in a grass boulevard should be retained. Traffic calming and bicycle priority elements are already in place to support the Ridgeway at both Main and Ontario Streets.
- .2 Sidewalk bulges.** Sidewalk bulges should be provided on the north side of 37th Avenue at the intersections of Main, Quebec, and Ontario Streets in order to shorten crossing distances for pedestrians at these intersections.

2.3 Streetscape Concepts

2.3.4 37th Avenue Cont'd



Typical cross-section and plan view of 37th Avenue

2.3 Streetscape Concepts

2.3.5 Ontario Street

Intent

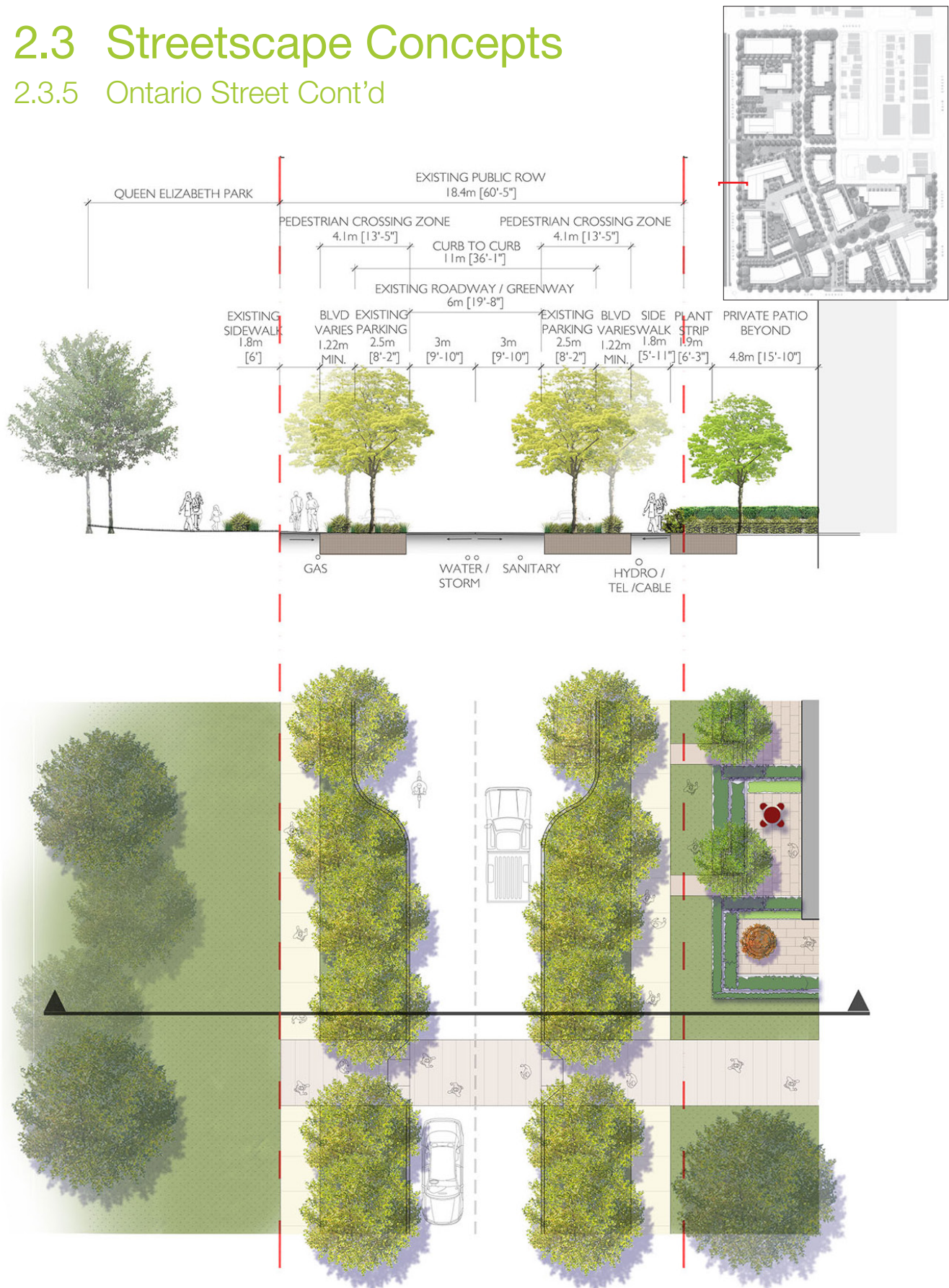
Ontario Street is an existing City Greenway running adjacent to the western side of Little Mountain. To mitigate potential vehicle impacts to the greenway, no vehicular access is provided from Ontario Street into the Little Mountain Site. Two east-west pedestrian / bike corridors provide direct connections to and from the greenway and residences fronting the greenway have direct access from building entrances to Ontario Street. An enhanced pedestrian connection with refuges and a demarcated crosswalk provides a safe and legible east-west connection across Ontario Street between Wedge Park and Queen Elizabeth Park.

Guidelines

- .1 Street dimensions and functions.** Further design exploration is necessary to provide 2.5m unidirectional protected bike lanes on both sides of Ontario Street.
- .2 Sidewalk bulge.** A new sidewalk bulge should be provided along the frontage of Green Wedge Park on Ontario Street, replacing the parking lane in order to shorten crossing distances for pedestrians to Queen Elizabeth Park.

2.3 Streetscape Concepts

2.3.5 Ontario Street Cont'd



Typical cross-section and plan view of Ontario Street

2.3 Streetscape Concepts

2.3.6 33rd Avenue

Intent

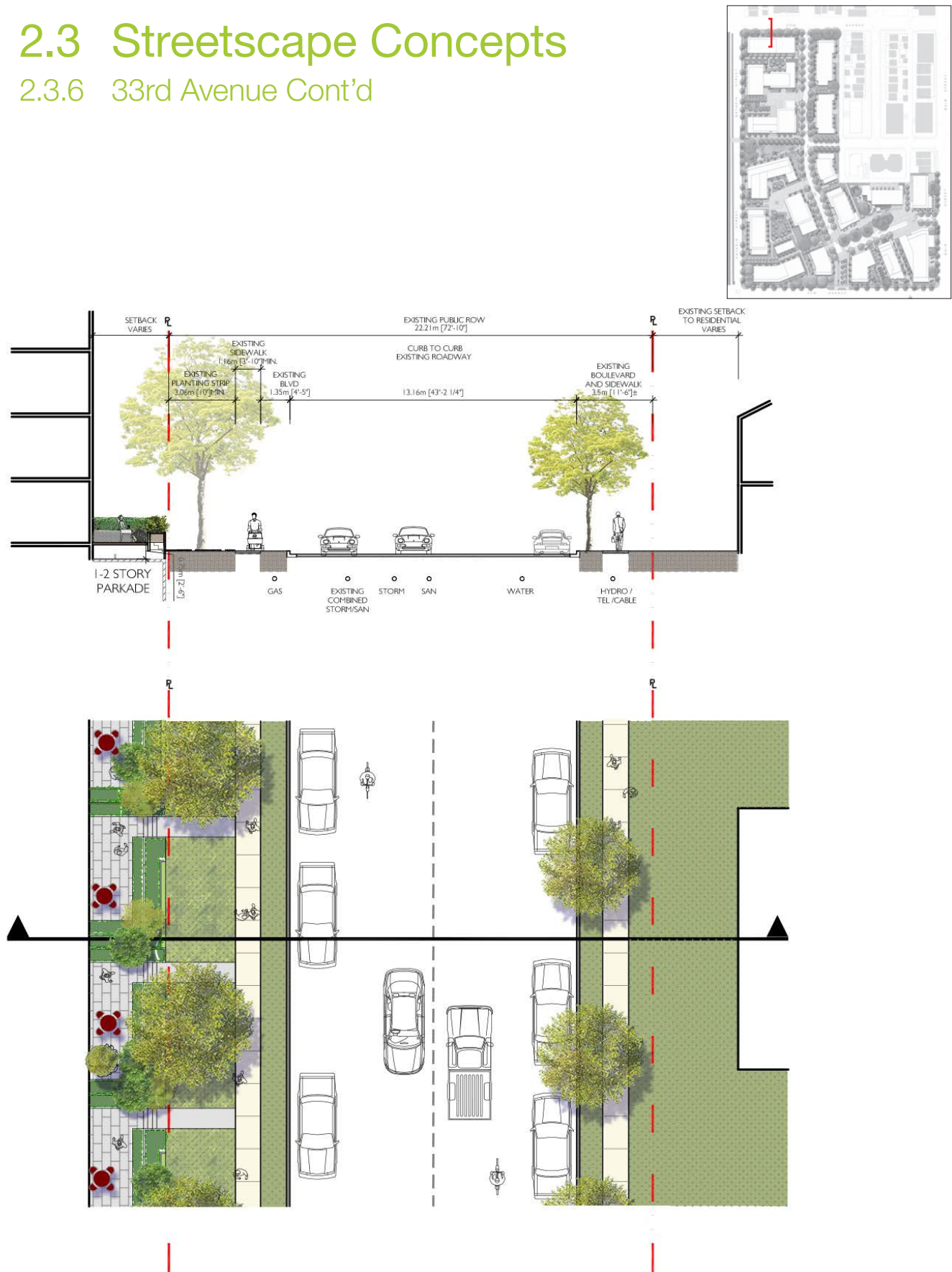
33rd Avenue is an existing City street running adjacent to the northern side of Little Mountain. Northern access to the site is from 33rd Avenue opposite existing James Street. This access is defined by existing trees on both sides of the access that integrate the site with the street. Residences fronting 33rd Avenue have direct access to the 33rd Avenue sidewalk.

Guidelines

- .1 Street dimensions and functions.** The dimensions of the streetscape (20.1m (66') right of way) re wider than those immediately to the east. Sidewalk alignment should continue in alignment with that to the east. Existing and new street trees are in a grass boulevard behind the sidewalk. Infill planting of street trees shall continue the tree canopy and street definition, using species selected to match or coordinate.

2.3 Streetscape Concepts

2.3.6 33rd Avenue Cont'd



Typical cross-section and plan view of 33rd Avenue

2.3 Streetscape Concepts

2.3.7 Quebec Street Extension

Intent

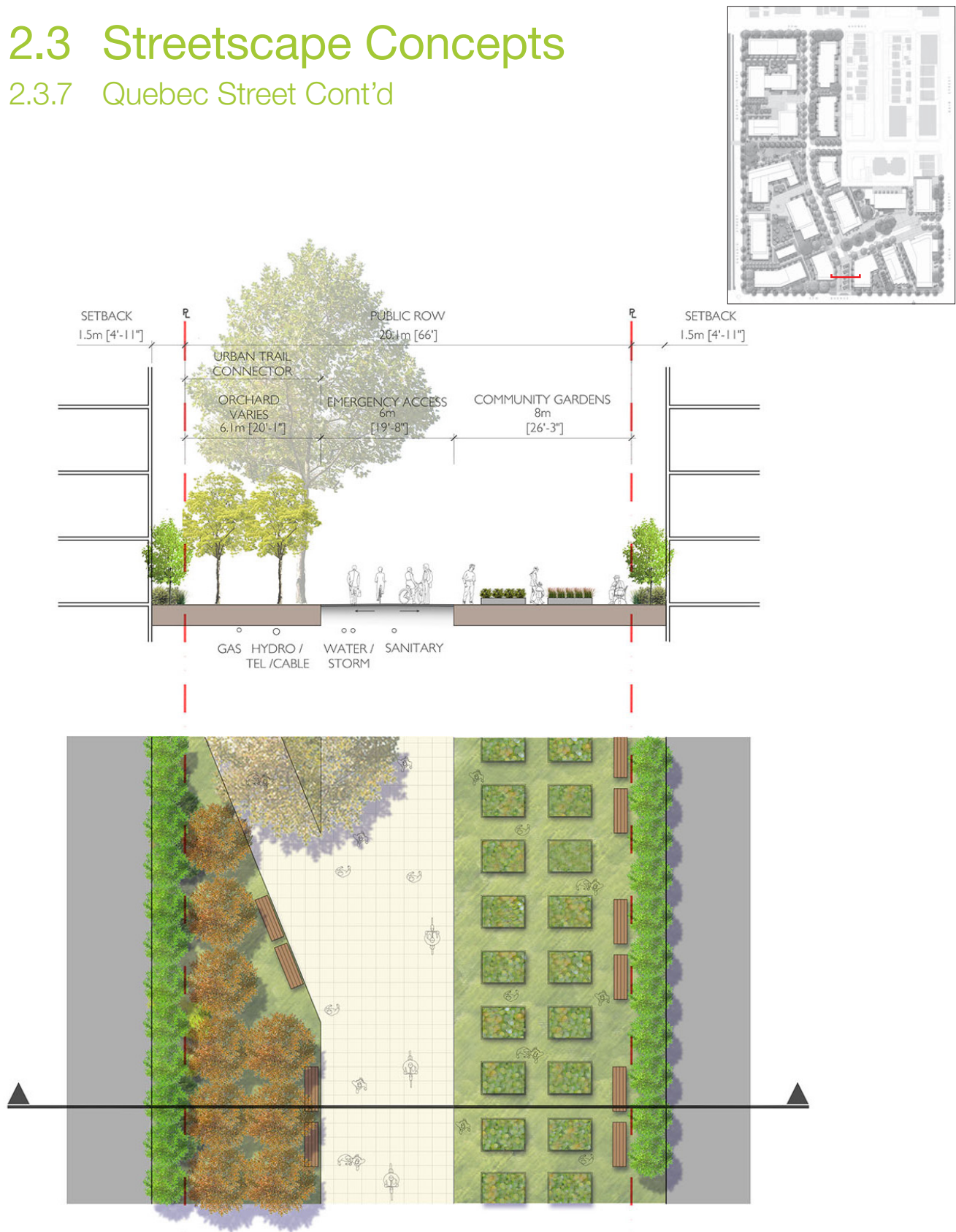
The Quebec Street Extension is both a movement corridor and a public amenity. Designed as a 20.1m (66') right-of-way, the extension supports a pedestrian and cyclist connection to the 37th Avenue Greenway within a 6-metre wide corridor. This corridor reads as a pedestrian corridor while also providing access for emergency and service vehicles. Adjacent to the movement corridor is a linear public space accommodating community gardens and potential opportunities for a demonstration orchard and demonstration composting facility for waste generated from the gardens.

Guidelines

- .1 Emergency access function.** Provide 7 metre width emergency access route to connect 37th Avenue with James Street. Surfacing can be asphalt, concrete, unit pavers, or a porous flexible pavement with irrigated lawn.
- .2 Bicycle route.** A continuation of the bike path on the west side sidewalk along James Street should be provided southward to 37th Avenue using the same dimensions, surface material, and wayfinding markings.
- .3 Pedestrian route.** A continuation of the west side sidewalk along James Street should be provided using the same dimensions, surface material, and design details to connect to the sidewalk on the north side of 37th Avenue.
- .4 Community gardens.** Refer to Section 2.1.3 for Guidelines.

2.3 Streetscape Concepts

2.3.7 Quebec Street Cont'd



Typical cross-section and plan view of Quebec Street

2.3 Streetscape Concepts

2.3.8 Main Street

Intent

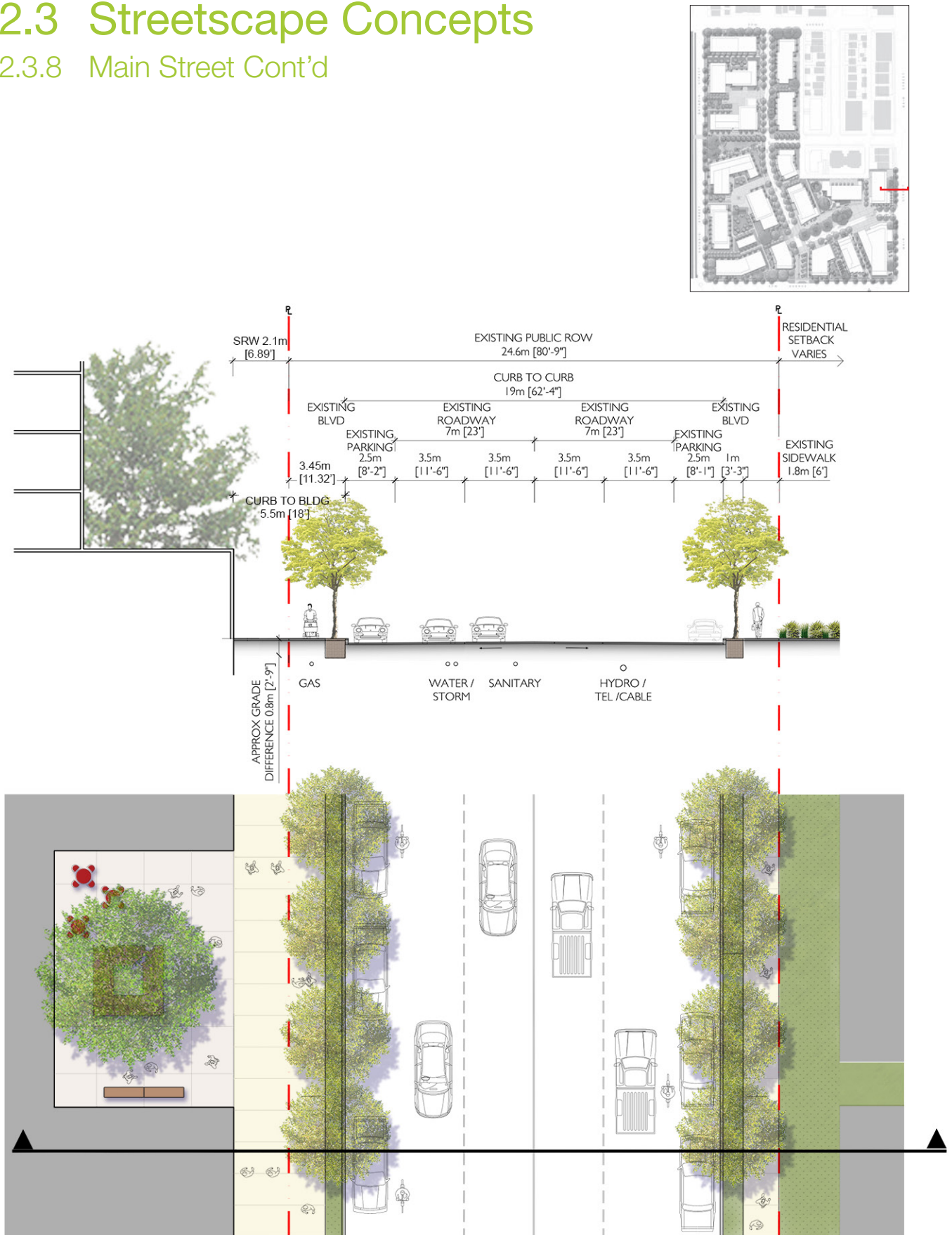
Main Street is a major arterial adjacent to the eastern side of the site and serves as the primary vehicular access point into Little Mountain at 36th Avenue. Retail and commercial frontages are oriented towards Main Street and wrap the corner to draw pedestrian activity into the site at the Community Plaza. Where commercial buildings front Main Street, sidewalks are widened to provide more opportunities to animate this edge through features such as outdoor seating or space for sidewalk retail. Where trees are identified for preservation, special detailing and architectural setbacks helps to achieve both tree preservation, continuous frontage on Main Street, and usable outdoor space for retail.

Guidelines

- .1 Street dimensions and functions.** The dimensions and functions of the streetscape should remain unchanged with the exception of the improvements to the intersection at 36th Avenue (refer to sections 2.4.1 and 3.2.3).
- .2 Existing tree retention.** Decking, grating or other suitable design solutions may be required around existing trees to allow them to be retained with existing grades around them and to protect access to air and rainwater for the root system.

2.3 Streetscape Concepts

2.3.8 Main Street Cont'd



Typical cross-section and plan view of Main Street

2.3 Streetscape Concepts

2.3.9 Street Tree Planting Concept

Intent

All streetscapes feature street trees planted within grass boulevards. Existing street trees are retained on all external streetscapes (Ontario and Main Streets and 37th, 35th, and 33rd Avenues). New street trees will be integrated into the new streetscapes of the central street and 36th Avenue.

Guidelines

- .1 Street tree selection.** The species of street trees planted should be approved by the City of Vancouver from the list of acceptable street trees. Where gaps in the row of existing street trees are considered for filling with a new tree, it is encouraged to use the same or similar tree species.
- .2 Street tree planting.** Street trees should be planted according to City of Vancouver standards to ensure tree health through adequate soil volumes and specifications.

2.4 Landscape Components

2.4.1 Hard Landscape Components, Materials and Character Intent

Hard landscape in the public realm will meet City of Vancouver standards.

Guidelines

- .1 Vehicular lanes.** Vehicular lanes on all streets will be surfaced in asphalt. Further exploration is required to determine if crosswalks can be surfaced with concrete.
- .2 Cycle tracks and dedicated cycle paths.** All surfaces on paths or cycle tracks intended to be used for cycling should be surfaced in asphalt.
- .3 Sidewalks and pedestrian paths within public open spaces.** All pedestrian sidewalks and paths within public open space should be surfaced in concrete. All City sidewalks with the exception of 36th Avenue shall be broom-finished and scored concrete to City standards. The sidewalks along 36th Avenue will be designed to integrate with the overall concrete patterning of the Community Plaza to achieve an overall continuous surface and pattern that reads as one space encompassing the south sides of Buildings AA, AB, AC, the north side of Building BC, the hardscape within the Community Gardens, the crosswalks of James Street at 36th Avenue, and the raised table crosswalk of 36th Avenue at the Community Plaza. A second exception may be considered for pedestrian paths within Green Wedge Park to respond to the design concept for the park. Further exploration is required for the raised table crosswalk at 36th Avenue and the Community Plaza
- .4 Community Plaza and associated plaza and crosswalk areas.** Special paving should be considered for the Community Plaza and adjacent related areas that are intended to read as an integrated, unified space. Hardscape surfaces should be either saw-cut cast in place concrete or pre-cast pavers with cast concrete edges and details. If scored / saw-cut concrete is selected as the hardscape material, two contrasting finishes should be used to permit an overall pattern to be expressed.

2.4 Landscape Components

2.4.2 Tree Retention, Planting and Management

Intent

Tree retention is a key objective for the Little Mountain site. A significant number of existing trees are targeted for retention on site, including many street trees. Building footprints are intentionally sited to provide space for the root systems of existing trees to be protected for the ongoing health of these trees. In support of the City's urban forestry canopy objectives, a variety of large and medium trees throughout the site will benefit heat island effect reduction, habitat creation, food production, etc.

Guidelines

- .1 Street and park trees.** The health and longevity of existing street trees should be protected by ensuring that trees are protected during construction and provided with sufficient soil volumes to continue to thrive after construction. New trees should be provided with quality soils and adequate soil volumes to support tree health. Underground parking garages adjacent to the public realm should be setback and/or chamfered at the upper edge to provide adequate soil volumes to meet City of Vancouver standards.
- .2 Mature trees in Community Plaza.** The six retained mature trees in Community Plaza should be retained with the existing surrounding grade unchanged for an adequate area over the root system. A certified arborist should be engaged to determine the details and extent of these provisions and may include areas of decking or grating with openings for air and rainwater access and areas of suspended slab to achieve, or another design solution that protect their viability.
- .3 Mature trees in the Little Mountain Neighbourhood House daycare outdoor space.** The four mature trees located within the area planned for the daycare outdoor open space should be retained at their existing grade within an extent of undisturbed soil area as determined by a certified arborist.
- .4 Arborist Report and Recommendations.** Detailed tree protection plans are to be submitted as needed for each development phase by a certified arborist.



Encouraged: Integration of mature trees into the outdoor play space of the Little Mountain Neighbourhood House daycare.

2.4 Landscape Components

2.4.3 Native and Urban Adaptive Planting

Intent

Native landscape plants, or related species adapted to urban conditions, are intended to be a component of the landscape in Green Wedge Park. Use of these plants, especially berry and fruit bearing species, are intended to provide upland habitat to support and complement the native wetland species in the stormwater channel along James Street as a source of food and safe refuge for birds and butterflies.

Guidelines

- .1 Plant species.** Plant species to support upland bird and butterfly habitat should be selected from approved Vancouver Park Board lists of native species or related urban adaptive plants that suit a park location. Examples of appropriate species may include: Bearberry (*Arctostaphylos uva-ursi*), Salal (*Gaultheria shallon*), Witchhazel (*Hamamelis virginiana*), and Oregon Grape (*Mahonia aquifolium*).
- .2 Plant locations.** Native and urban adaptive plants should be located in an area where some plants can be planted in close groupings to provide refuge for small birds. The southern edge of Green Wedge Park may be a suitable location where the planting may also provide a buffer to adjacent private patios to the south.
- .3 Naturescape references.** A number of references to naturescaping are available and should be consulted including: <http://www.plantnative.org> and <http://thenatureschool.net>. In addition, consult City policies: Urban Forestry Plan, Biodiversity Plan, Rewilding Plan and Bird Strategy.

2.4 Landscape Components

2.4.4 Urban Agriculture

Intent

Inclusion of opportunities for urban agriculture and edible landscapes should be a priority in the design and plant selection for all areas within Little Mountain. The Community Gardens will be the primary public realm location for urban agriculture (refer to section 2.1.3). The City of Vancouver guideline documents for urban agriculture should be referenced.

Guidelines

- .1 Plant species.** Plant species to support urban agriculture and edible landscapes should be integrated into the public realm when possible. Nut bearing trees are a group of plant species that may suit application in the public realm as are berry bearing shrubs. Examples of potential nut trees may include: European filbert (*Corylus avellana*), Persian walnut (*Juglans regia*), and Almond (*Prunus dulcis* var. *dulcis*). Examples of edible berry and related plants include: evergreen huckleberry, raspberry, salmonberry, gooseberry, rosemary, thyme, rhubarb, grape, fig, kiwi, etc.
- .2 Plant locations.** Edible landscape should be integrated into the landscape design as small to medium size trees and as shrubs as a priority where locations are suitable.

2.4 Landscape Components

2.4.5 Lighting

Intent

Lighting for safety and security in evenings and nights should be provided throughout the public realm. The primary lighting will be from City standard lighting in all streetscapes. Parks and public open spaces should have pedestrian-scale lighting in areas not illuminated by streetscape lighting.

Guidelines

- .1 Lighting types.** Pedestrian-scale lighting should be provided in Green Wedge Park, the Community Plaza, and along the pedestrian and cyclist routes in the Community Gardens. Lighting may be mounted on poles that are space between 3.5 and 5.5 metres apart. Lights may be combined on poles and other vertical elements in the public realm including supports for overhead weather protection elements or provided as supports for programming infrastructure. Lights mounted on seating elements or trees may also be considered for ambient lighting.
- .2 Night sky.** Lighting should avoid overspilling upward in order to minimize light interfering with the night sky.



Encouraged: Creativity in the design and location of pedestrian lighting in the public realm including within site furnishings.



Encouraged: Innovative ways to include pedestrian-scale lighting in public open spaces.

2.4 Landscape Components

2.4.6 Public Art

Intent

A public art plan will be developed for Little Mountain. It is intended to recognize the Musqueam people, on whose traditional territory the site sits, and to draw upon the memory of Little Mountain and the people and places that form part of its history.

The understanding with the Musqueam is that the Parties will work with each other to ensure that the Musqueam have input into the construction of the Public Art that will form part of the redevelopment of the Property. Therefore, 'Option A' of the City's Public Art Policy will be applied.



Encouraged: Public art in the Coast Salish traditions.



Encouraged: Public art that recognizes the history of the Little Mountain site.

2.5 Introduction – Private Realm

The private realm of Little Mountain comprises a variety of landscaped spaces including: paths, mews and arrival courts that are publicly accessible and, in many cases, have public rights-of-passage registered on them; semi-public courtyards intended for the use of the residents of adjacent buildings; private patios serving ground floor units; and roof decks serving the residents of individual buildings.

Private realm landscapes often provide a borrowed landscape that enhances the experience of the public realm. In particular, James Street will enjoy open views into the linear rain gardens along the west side of its streetscape between 33rd and 36th Avenues. Green roofs are also part of the private realm landscape.



2.6 Private Realm Components

2.6.1 Rainwater Management

Intent

The private realm offers the opportunity to explore innovative and diverse stormwater management strategies in order to meet rainwater management targets set out by the City Rezoning Policy for Sustainable Large Developments.

The intent is to reduce storm water discharge, overall runoff, and to treat any surface runoff to reduce contaminants prior to discharge to the City storm system. Rainwater harvesting, infiltration trenches, green roofs, and pervious paving all allow rainwater to naturally infiltrate back into native soil, thereby reducing the flows off of the site into the City stormwater system. Where possible, the proponent should use rainwater harvesting to offset potable water being used for irrigation through the use of cisterns. Amended soils, rain gardens, rooftop gardens and infiltration trenches also can be used to temporarily store a portion of the flows into the ground reducing on-site drainage and lessening the impact on City sewers. Detention tanks, with a flow control system, ensure that the City storm drainage system has the capacity to accept these flows without requiring upgrades.

Before leaving the site and entering the City's infrastructure, all storm water should pass through a stormwater treatment manhole.

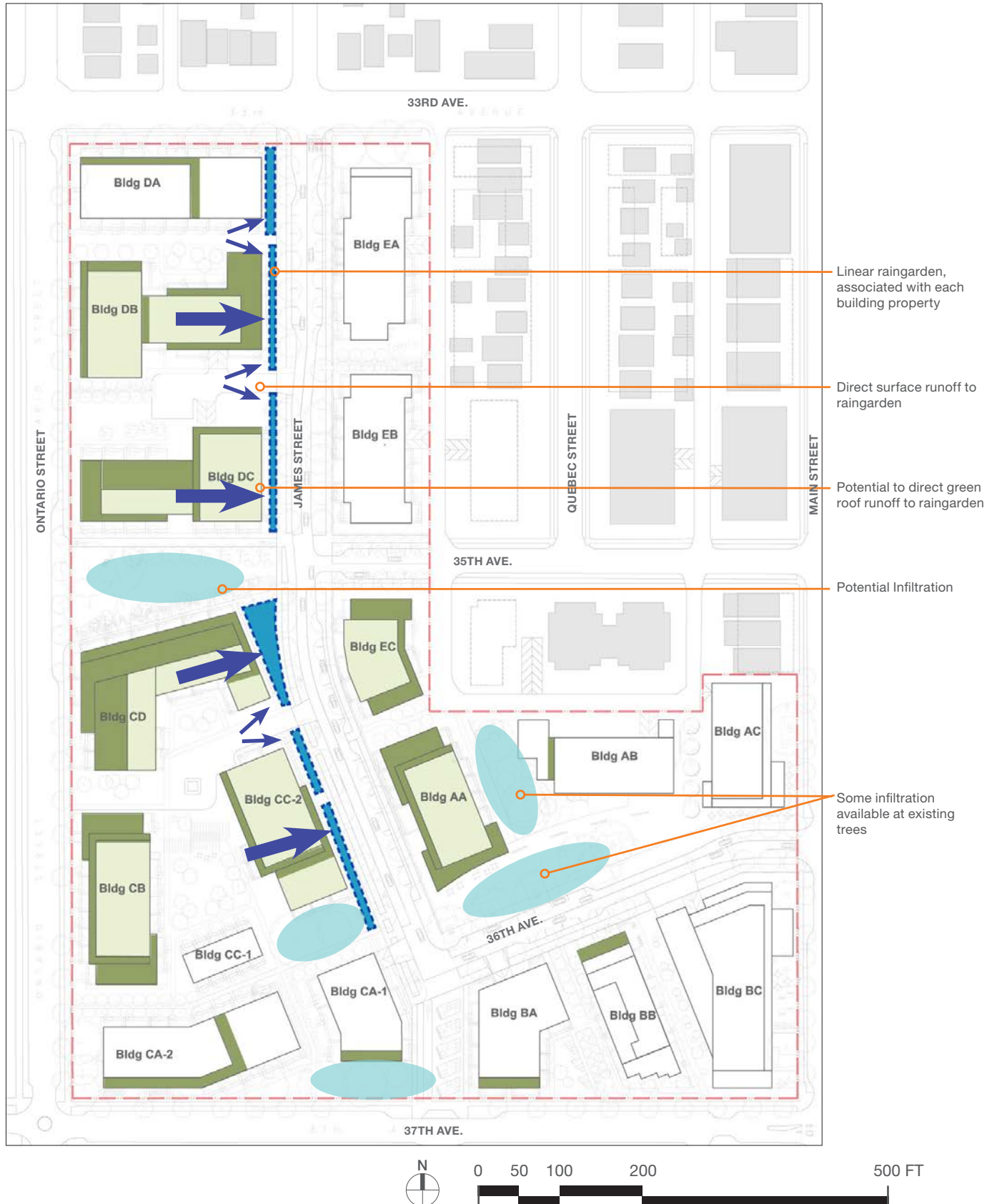
Guidelines

Strategies should be explored to best meet the targets of the Rezoning document. These strategies include:

- .1 Rainwater harvesting for use in the rooftop gardens, community garden plots, and site landscaping;
- .2 Green roofs;
- .3 Rooftop gardens;
- .4 Infiltration trenches and rain gardens at grade level in areas where there is native ground;
- .5 Pervious paving;
- .6 Pervious cover being maximized where possible;
- .7 Detention in trenches or mechanical tanks (if required to meet objectives);
- .8 Mechanical filtration systems (if required to meet quality objectives.)

2.6 Private Realm Components

2.6.2 Rainwater Features Plan



2.6 Private Realm Components

2.6.3 Linear Rain Garden

Intent

A linear rain garden element should extend between 33rd and 36th Avenues on private property immediately at the property line along the west side of James Street. It is intended to detain and bioremediate rain water collected from the roofs and hardscape surfaces of the adjacent buildings. The James Street location takes advantage of site grades, which slope towards the centre spine of the site; up to 2 metres of slope from the west, and up to 0.5 metres of slope from the east. Due to relatively shallow slopes along James Street, each building rooftop or hard surfacing will drain surficially or through feeder piping to its adjacent swale. At each of these swales, water should slowly infiltrate into the ground en route to a low point, allowing time for bioremediation. Plantings will be wetland plants with a naturalized appearance, selected to tolerate both wet and dry conditions.

Guidelines

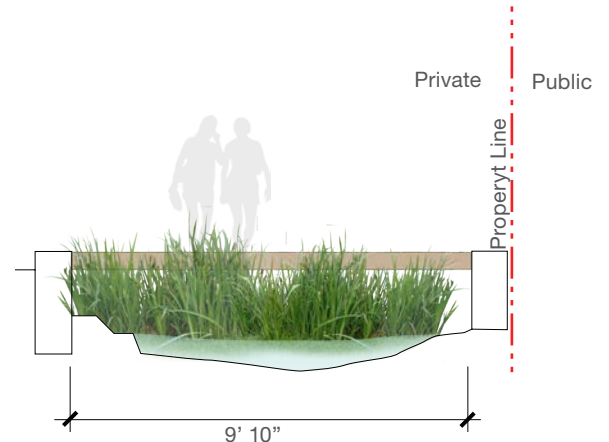
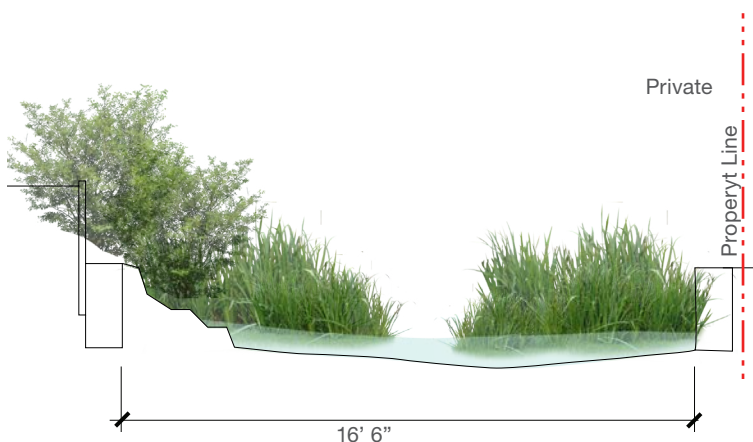
- .1 Streetscape edge design.** A consistent edge design detail should be used adjacent to the public sidewalk for the length of the linear rain garden. A 25cm wide concrete wall should abut the City sidewalk at the property line with a vertical surface to a depth of no more than 0.6 metres. The bottom of the rain garden should slope up gently to the concrete wall to meet it at a maximum depth of 0.6 metres. The maximum wall height over the bottom and the gently slope should meet code requirements so that a barrier at the sidewalk edge is not required.
- .2 Access to lobbies and townhouses.** Access routes to lobbies and individual townhouse entries should be expressed as a family of bridges. Bridges to lobbies should be wider than those to individual townhouse patios. Bridge materials should be distinct from the adjacent concrete City sidewalk; wood or metal decking and metal grating should be considered as materials for these bridges.
- .3 Vehicular driveways.** Driveways to access underground parking and/or arrival courts will cross the linear rain garden at three locations. These crossings should be constructed on a typical base and surfaced in concrete. They should be designed to appear as bridging over the linear water feature with a vertical concrete wall and curb at the edges.
- .4 Public pathways.** Public pathways are anticipated to cross the linear rain garden in several locations. Generally these public pathways should be located adjacent to other breaks in the linear rain garden, either at Green Wedge Park or immediately adjacent to vehicular driveways. For any other public paths that cross the linear rain garden, consideration should be given to expressing them as a bridge over a continuous rain garden extending beneath them; wood decking and metal grating should be considered as materials for these bridges.
- .5 Green Wedge Park.** Green Wedge Park should be a break in the linear rain garden including its adjacent paths and cycle track
- .6 Linear garden function and plant materials.** The linear garden should function to slow and filter rainwater and allow stormwater to infiltrate slowly into the ground. A variety of predominantly native species with deep root systems should be planted that thrive of conditions of changing water depths and potential periods of dryness during the late summer. The appearance and function of the planting should be of a naturalized wetland condition.

2.6 Private Realm Components

2.6.3 Linear Rain Garden Cont'd



Encouraged: Access to entries to residences along the linear rain garden expressed as bridges in wood and metal.



Typical sections at linear raingarden

2.6 Private Realm Components

2.6.4 Residential Frontage Landscapes

Intent

Throughout Little Mountain, there are areas of landscaping that front or abut residential buildings. These are semi-private areas distinct from the private patios of ground floor units that frequently abut the residential buildings (refer to section 2.4.3).

Guidelines

- .1 Landscape character and function.** Semi-private landscape areas should be landscaped to suit their specific location and function. Areas adjacent to exterior streetscapes should generally be lawn with individual trees and shrubs to complement the grass boulevard and the typical single family neighbourhood or park landscape on the opposite side of the exterior fronting streets. Interior areas should be considered for more varied and naturalized plantings. These landscape areas are often adjacent to private patios and should be landscaped to consider buffering patios from public and semi-public pathways.
- .2 Plant materials.** Plants should be selected with consideration of ease of maintenance and tolerance of dry conditions. These areas are ideal locations for edible landscape trees and shrubs where more intensive maintenance is available (refer to section 2.4.4).

2.6 Private Realm Components

2.6.5 Private Residential Patios

Intent

Private patios are at-grade or slightly above grade outdoor spaces associated with individual residential units (refer to section 5.5 for detailed design guidelines).

Guidelines

- .1 Plant materials.** Plants for private patios should be trees and shrubs suited to thriving in planters.
- .2 Edible landscape.** Provision of planters or raised beds for herbs and vegetable gardening is encouraged as part of the overall edible landscape strategy.
- .3 Trees.** Trees should be provided for shading and as part of a privacy buffer between public and private landscaped areas.

2.6 Private Realm Components

2.6.6 Common Garden Courts

Intent

Common garden courts are intended to serve residents of a group of surrounding buildings with outdoor amenity space. Common garden courts will serve Buildings BA and BB, Buildings CB, CC-1, CC-2 and CD, Building DA and DB, and Buildings DB and DC.

Guidelines

- .1 Plant materials.** Plants for private patios should be trees and shrubs suited to thriving in planters.
- .2 Edible landscape.** Provision of planters or raised beds for herbs and vegetable gardening is encouraged as part of the overall edible landscape strategy.

2.6 Private Realm Components

2.6.7 Arrival Courts

Intent

Arrival courts are intended to serve groupings of buildings with an at-grade drop-off and pick-up zone and for access to underground parking. These arrival courts are intended to be paved in attractive, textured materials that complement the architecture of adjacent buildings and that suggest that pedestrians are invited to use the space and that vehicles should travel at slow speeds due to the shared use by pedestrians.

Guidelines

- .1 Hardscape materials.** Paving in the arrival courts should have a finer textured patterning than the adjacent sidewalks and driveways to suggest a distinct place with a clear design relationship to the architecture of adjacent buildings and that invites use by pedestrians and cyclists enroute to building entries. Pre-cast concrete pavers and stone are encouraged to be used; scored concrete with a fine-textured pattern, or a combination of both, may also be used.
- .2 Edge condition.** Edges of arrival courts should have concrete rollover curbs except at driveway entries to underground parking. These will facilitate use of adjacent short-term loading areas (refer to section 5.7). These curbs will edge either concrete paths or areas of soft landscape (refer to section 2.4.2).

2.6 Private Realm Components

2.6.8 Mews and Walkways

Intent

A high level of pedestrian permeability is a key policy intention for Little Mountain. Mews and walkways supplement and add choices of routes in addition to the routes in public open spaces and along the streetscapes.

Guidelines

- .1 Hardscape materials.** Pedestrian paths will generally be paved in broom-finished, scored concrete. Pre-cast pavers may be considered as an alternate, especially in low traffic places.
- .2 Path width.** Path widths should vary depending on the anticipated level of pedestrian use. Important links with public right-of-passage, such as the route between the Community Plaza and Ontario Street should be a minimum of 1.8 metres in width. Minor pathways may be as narrow as 1.4 metres wide. Variation in path width should be considered as a means to communicate a hierarchy of paths as clues to wayfinding.



Encouraged: Hierarchy of paths buffered from views into residential units.

2.6 Private Realm Components

2.6.9 Roof Gardens

Intent

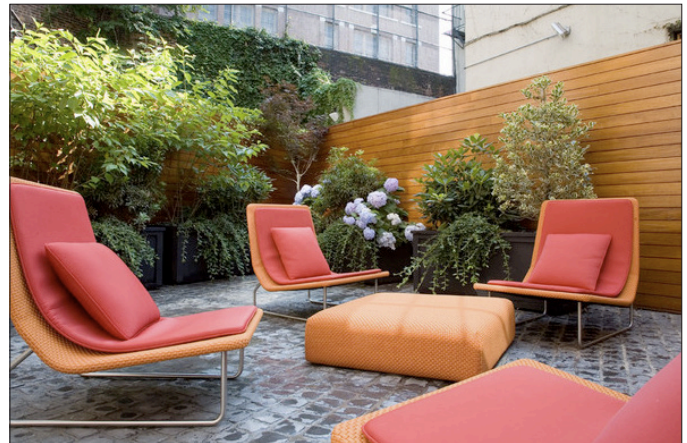
Roof gardens are intended to serve residents of the buildings on which they are located. Usable roof spaces may be on roofs at the top of buildings or on intermediate stepbacks and podiums. Roof gardens include both accessible amenity deck spaces and private patios.

Guidelines

- .1 Plant materials.** Plants for roof gardens should be trees and shrubs suited to thriving in planters or shallow soil conditions.
- .2 Amenity decks.** Areas for the use of residents should have integrated green roofs with associated hardscape areas for functional spaces.
- .3 Private patios.** Provision should be made for permanent trees in larger planters with above average contiguous soil volumes; larger cast-in-place planters may be requested in some cases.
- .4 Edible landscape.** Provision of planters or raised beds for herbs and vegetable gardening is encouraged as part of the overall edible landscape strategy. If urban agriculture is part of the landscape design for a roof area, it should be supported with appropriate infrastructure such as storage, a small greenhouse, water, composting area, potting table, etc. (Refer to the City of Vancouver urban agriculture guideline documents).



Encouraged: Roof gardens with edible plants on trellises.



Encouraged: Roof patios with landscape in planters.

2.6 Private Realm Components

2.6.10 Loading Areas

Intent

Short term parking spaces for loading purposes should be located adjacent to arrival courts for the convenience of residents loading large items into vehicles.

Guidelines

- .1 Hardscape materials.** Paving of the loading areas should be selected to match or coordinate with the adjacent arrival court. Permeable paving may be considered for use in loading areas that are sited within areas of soft landscape.
- .2 Rollover curbs.** Rollover curbs should be used to edge loading areas in preference to standard curbs. Curbstops may be desirable to prevent vehicles from encroaching on soft landscape areas.

2.7 Lighting

Intent

Lighting of all pedestrian routes within the private realm is desirable for the safety and security of residents and visitors. A variety of lighting forms may be used to achieve low level lighting in areas not illuminated by street lights or other lighting in the public realm.

Guidelines

- .1 Avoiding illumination of the night sky.** All lighting should be directed downward and not allow light to illuminate upward in order to avoid light pollution of the night sky.
- .2 Lighting types.** Types of lighting that should be considered for use in the private realm include: lights mounted on vertical surfaces such as building walls, retaining walls and stairs; in ground lights; bollard lights; down lighting of trees; and lights on pedestrian-scale standards.

3. Urban Design



3.1 Introduction – Urban Design

The urban design for Little Mountain is envisioned as a highly integrated fabric of public realm and buildings that creates a unique neighbourhood character and serves to link the natural character of Queen Elizabeth Park with the lively feel of Main Street.

To achieve the urban design, the guidelines are structuring in a sequence moving from the broadest principles to the most specific guidelines. Thus, the first section describes principles within the neighbourhood's three quadrants. These are following by specific site planning principles that will define key areas within the quadrants.

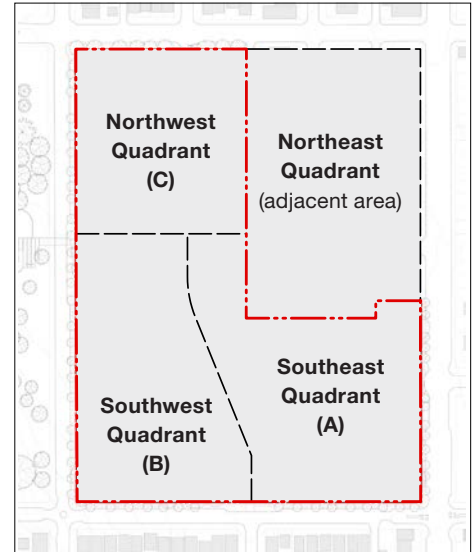
The urban design is driven by these principles:

- To create a neighbourhood that provides a linkage between the natural character of Queen Elizabeth Park and the lively character of Main Street.
- To create a series of neighbourhood outdoor spaces, each with their own character.
- To link the outdoor spaces to each other and to Queen Elizabeth Park, Main Street, East 37th Ave and East 33rd Ave with paths framed by active building edges.
- To create a variety of building typologies and characters that reinforce the public realm.
- To design a varied and compelling family of buildings that provides an interesting sequence of experience at the street level and a unique and pleasing skyline at the neighbourhood level.
- To facilitate alternative modes of transportation with accessible walkways and bicycle paths.

3.2 Quadrants

3.2.1 Introduction

The Little Mountain neighbourhood has three quadrants (the fourth, Northeast Quadrant, is not part of this site), each intended to have a distinct character, while at the same time forming a cohesive community, largely through the common public realm of streets, parks and open spaces. The character of the quadrants is defined by the scale and character of their individual open spaces, building typologies and building uses. Each quadrant is described in the following pages.



3.2 Quadrants

3.2.2 Density

Density should balance with and complement the public realm and other urban design objectives described on the following pages. The maximum floor area attainable for each quadrant is set out in the following table provided a high quality urban design performance is achieved. Each lot within a given quadrant will share this density based on general target areas set out in the bottom table.

QUADRANT	MAXIMUM PERMITTED FLOOR AREA (M ²)
Southeast (A)	43,481
Southwest (B)	57,777
Northwest (C)	53,356

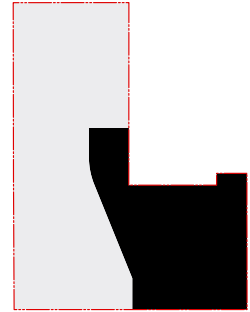
QUADRANT	LOT	BUILDING	GENERAL TARGET (M ²)
Southeast (A)	1	BC	11,808
	2	AC	6,932
	3	BB	3,942
	4	AC	5,441
	5	BA	5,727
	6	AA, EC	15,567
Southwest (B)	9	CA	11,988
	10	CB,CC,CD	39,853
	11	City Park	0
Northwest (C)	7	EB	6,802
	8	EA	7,454
	12	DA, DB, DC	39,100
Total			154,614

3.2 Quadrants

3.2.3 Southeast

Intent

The Southeast Quadrant, located between Main Street and James Street, is intended to have the most active and urban character of the three quadrants. The lively feel of Main Street's shops and services is drawn into the quadrant through an inviting portal at 36th Avenue and the Community Plaza. This plaza is a large, sunny space framed on its north side by community uses including local-serving shops and services, the Neighbourhood House, and a daycare. The south side is framed by lower residential buildings with front doors and patios looking out to the plaza. Spaces between buildings are intended to facilitate options for movement to other quadrants and adjoining neighbourhoods (see Southeast Quadrant diagram on page 56). Specific guidance is provided below.



Guidelines

- .1 Legibility.** The buildings should play an important role in helping to define and make legible this quadrant. Therefore, ensure that there is: a) a landmark building at the northwest corner of the Community Plaza to anchor and support the plaza's identity; b) a gateway at the Main Street / 36th Avenue entrance to the community by way of buildings that frame this space; and, c) active Community Plaza Uses. In order for the plaza to achieve its intended function as the heart of the community, active uses should inhabit the edges of the space. The uses should be important community functions such as neighbourhood serving shops and services, the Neighbourhood House and a daycare. The uses should have generous glazing and doorways facing the plaza so that there is a strong interaction between the indoor and outdoor uses.
- .2 Community Plaza Solar Performance.** The plaza should receive good solar exposure for most of the day through of carefully placed buildings whose height is carefully planned. In particular, good mid and late afternoon solar performance should be achieved, since this is the most actively used time of day.
- .3 Transitional Uses.** The Southeast Quadrant forms the transition between the urban-feeling Main Street and the quieter, greener Queen Elizabeth Park. To reinforce this transition, the at-grade uses should transition from a commercial to a residential orientation from east to west.
- .4 Transitional Forms.** The height and bulk of buildings should transition down where adjacent forms are shorter and/or more finely scaled, in particular at the 37th Avenue edge and at the laneway on the north side of the quadrant.
- .5 Pedestrian Corridors.** Spaces between the buildings should have pathways to make walking connections between the various public realms such as from the plaza to 37th Avenue.
- .6 Tree Retention.** Buildings should respect existing tree root zones by holding back foundations and underground parking levels. Particular care should be taken to preserve the large trees on Main Street and in the Community Plaza.
- .7 Parking / Loading Access.** The northern lane should be used to access the buildings in the north portion of this quadrant; consideration should be given to making the lane one-way travel where parking / drop off occurs. For the south portion of this quadrant 36th Ave must be used for access; in this instance, care should be taken to conceal these access points due to their visibility from the plaza.

3.2 Quadrants

3.2.2 Southeast Cont'd



Southeast Quadrant

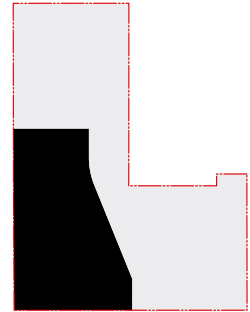
- 1A 1B 1C Legibility
- 2 Community Plaza Solar Performance
- 3 Transitional Uses
- 4 Transitional Forms
- 5 Pedestrian Corridors
- 6 Tree Retention
- 7 Parking / Loading Access

3.2 Quadrants

3.2.4 Southwest

Intent

The Southwest Quadrant is intended to form a transition between the expansive green spaces of Queen Elizabeth Park and the concentrated activity at James Street. A strong connection between these spaces is desired by way of two pedestrian pathways. The buildings within the parcel should frame and animate the surrounding public realm with particular focus on the Wedge Park edge and the James Street edge (see Southwest Quadrant diagram on page 58). Specific guidance is provided below.

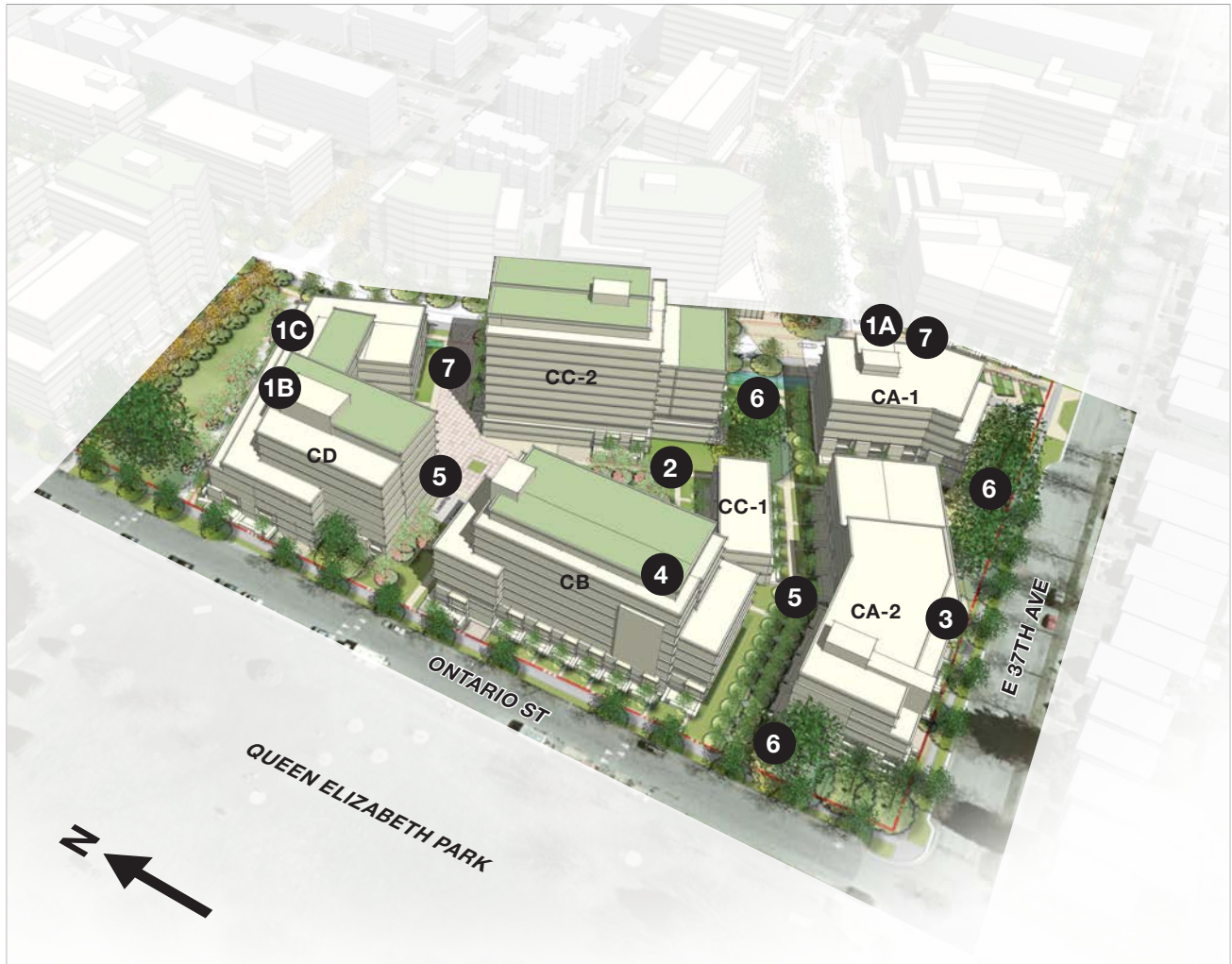


Guidelines

- .1 Legibility.** The buildings should play an important role in helping to define and make legible this quadrant. Therefore, there should be: a) a landmark element on the building near the southeast corner of the quadrant to anchor the visual axis looking southwest from Main Street and the Community Plaza; b) an activated street wall on the Wedge Park's southern edge with ample residential front doors and generous windows; and, c) a relatively low and/or stepped building massing at the Wedge Park's south boundary that ensures the park receives ample solar access during the period between spring and fall equinox.
- .2 Open Space Solar Performance.** The internal open space at the centre of this quadrant should receive good mid-day solar exposure.
- .3 Transitional Forms.** The height and bulk of buildings should transition down where adjacent forms are shorter and/or more finely scaled, in particular at the 37th Avenue edge.
- .4 Varied Forms.** Variety of building form and open spaces is sought. In particular, the Ontario Street edge should have a variety of buildings masses and spatial arrangements to provide shafts of morning sunlight on Ontario Street and views through to James Street.
- .5 Pedestrian Corridors.** There should be two pathways between James Street and Queen Elizabeth Park. The buildings should frame these corridors to animate them and reinforce wayfinding.
- .6 Tree Retention.** Buildings should respect existing tree root zones by holding back foundations and underground parking levels. Specifically, the large trees along 37th and Ontario should be preserved, and a large tree on the western side of James Street at the east end of the southern pathway connection.
- .7 Parking / Loading Access.** Access points should be taken from James Street; however, care must be taken to reduce the visual impact of access point visible from the Community Plaza.

3.2 Quadrants

3.2.3 Southwest Cont'd



Southwest Quadrant

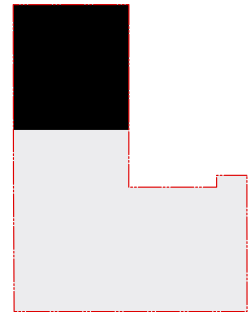
- 1B 1C 1D Legibility
- 2 Open Space Solar Performance
- 3 Transitional Forms
- 4 Varied Forms
- 5 Pedestrian Corridors
- 6 Tree Retention
- 7 Parking / Loading Access

3.2 Quadrants

3.2.5 Northwest

Intent

The Northwest Quadrant is intended to form a transition between the green spaces of Queen Elizabeth Park and the concentrated activity of James Street. A strong connection between these spaces will be achieved by the provision of two pedestrian pathways. Building in this area should frame and animate the public realm with emphasis on the Wedge Park and James Street as outlined below (see Northwest Quadrant diagram on page 60):

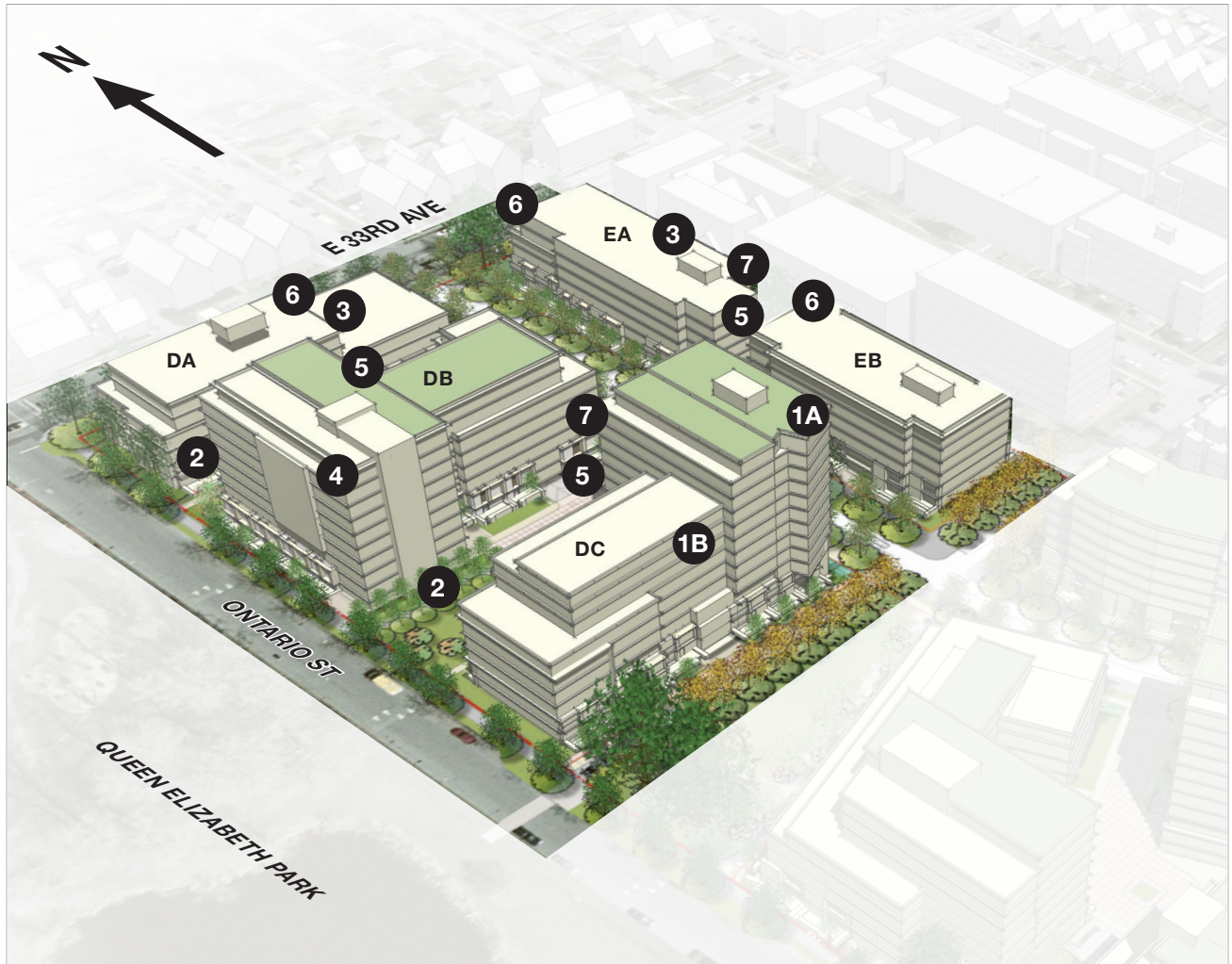


Guidelines

- .1 Legibility.** The buildings should play an important role in helping to define and make legible this quadrant. Therefore, there should be: a) a landmark building on the northeast corner of the Wedge Park to anchor the park and offer a visual terminus to the view looking north on James Street; and, b) an activated street wall on the Wedge Park's northern edge with ample residential front doors and generous windows.
- .2 Open Space Solar Performance.** The internal open spaces in this quadrant should be oriented to Queen Elizabeth Park in order to permit park views and receive good afternoon and late-day solar exposure.
- .3 Transitional Forms.** The height and bulk of buildings should transition down where adjacent forms are shorter and/or more finely scaled, specifically at the 33th Avenue edge and the laneway on the eastern edge.
- .4 Varied Forms.** Variety of building form and open spaces is sought. In particular, the Ontario Street edge should have a variety of buildings masses and spatial arrangements to provide shafts of morning sunlight on Ontario Street and views through to James Street.
- .5 Pedestrian Corridors.** There should be two pathways between James Street and Queen Elizabeth Park; the southern pathway should connect on the east side of James Street with the planned pathway through the Northwest Quadrant. The buildings should frame these corridors to animate them and reinforce wayfinding.
- .6 Tree Retention.** Buildings should respect existing tree root zones by holding back foundations and underground parking levels. Specifically, the large trees along 33rd and Ontario and a large tree on the eastern side of James Street at the east end of the southern pathway connection should be preserved.
- .7 Parking / Loading Access.** Access points for the buildings on the west side should be taken from James Street and for the buildings on the east side from the laneway.

3.2 Quadrants

3.2.4 Northwest Cont'd



Northwest Quadrant

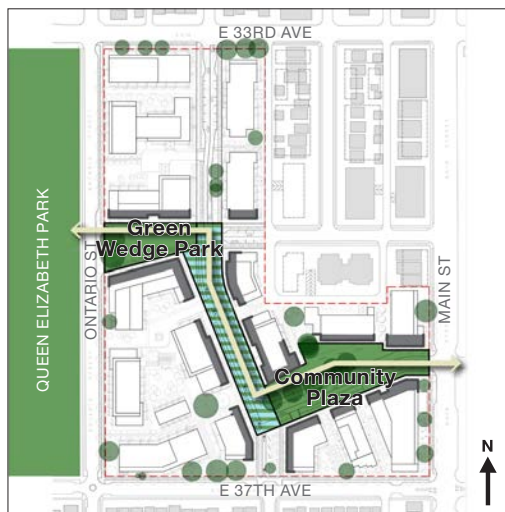
- 1A 1B Legibility
- 2 Open Space Solar Performance
- 3 Transitional Forms
- 4 Varied Forms
- 5 Pedestrian Corridors
- 6 Tree Retention
- 7 Parking / Loading Access

3.3 Site Planning

3.3.1 Introduction

Intent

The quadrants are integrated by way of the public realm. The public realm design creates a pedestrian corridor comprised of three key elements – a) a community plaza, b) a central spine, and c) a wedge park (see maps below), to support connections between the development and Queen Elizabeth. Tertiary corridors augment this pedestrian network to further strengthen connection to the park and to enliven public open spaces on the site. In support of this intention, a hierarchy of buildings will be developed to reinforce various urban design roles that certain buildings play within the community.



Primary Public Realm Corridor



Secondary Public Realm Corridor

Guidelines

- .1 **Consistency of Scale** – Buildings establish the edges of the public realm and open space. Therefore, the scale of the building base should provide a consistent height in the range of two floors, or in the case of retail space an equivalent to two residential floors.
- .2 **Contrast** – Contrast is an important tool in supporting legibility. At key locations like the Plaza, Park, and site entries buildings should be more dramatic. This can be achieved by a change in scale, shorter depth, taller height, or a change in form or character expression. The spaces between buildings should also vary – in some cases to contain a public space and in other cases to open up views from the public space.
- .3 **Height** – Building height is prescribed in the CD1 By-law. Building height on the site should be consistent with the Little Mountain Policy Statement.
- .4 **Transitions** – Buildings should provide appropriate transitions to neighbouring uses and spaces. Buildings at the site edges should step down in height, particularly on the north and south edges, where development is to single family homes.
- .5 **Liveability** – Buildings should respect the needs of nearby buildings for privacy, light and solar access. Height, orientation and separation play a key role in achieving this objective.
- .6 **Urban Design Role** – Five building types are envisioned across the site, each playing a key urban design role in defining the legibility of the site. On the following pages these building types are described: 1. landmark buildings, 2. other key buildings, 3. gateways, 4. primary street walls, and 5. secondary street walls.

3.3 Site Planning

3.3.2 Landmark Buildings

Intent

Landmark buildings should be memorable so that they contribute to the legibility of the site by highlighting the Community Plaza and the Wedge Park. The buildings should be designed to reinforce their important role, and respond to their visibility at the terminus of key sight lines, their specific corner locations, and to minimize shadowing.

Guidelines

.1 Building #1

- Landmark location at the view terminus on Main St. looking west and Quebec St. looking north.
- Southeast corner should acknowledge the view termini and contribute to plaza's character.
- Base at plaza should be active use.

.2 Building #2

- Landmark location opposite Wedge Park and view terminus of James Street.
- South and east façades should enhance these views.
- Axis should be oriented north-south to mitigate shadowing.

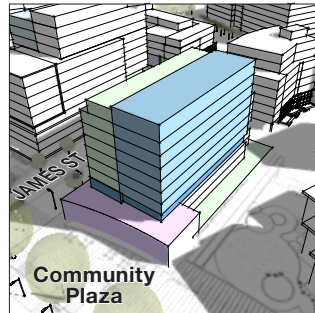


3.3 Site Planning

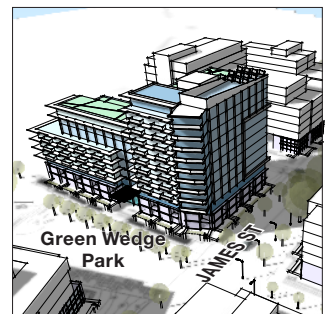
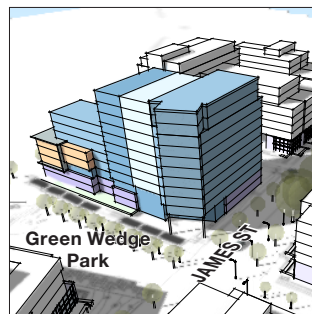
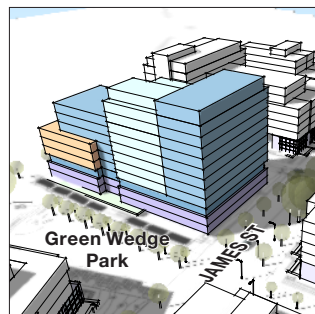
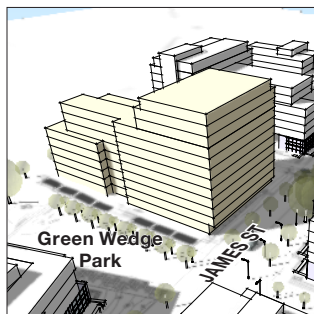
3.3.2 Landmark Buildings Cont'd

Example

The examples below illustrate possible ways that a landmark buildings might be articulated to achieve the guidelines objectives. The examples demonstrate design evolution from the basic massing stage to the schematic design stage.



Design Evolution of Primary Landmark Building at Community Plaza



Design Evolution of Primary Landmark Building at Wedge Park

3.3 Site Planning

3.3.3 Other Key Buildings

Intent

There are other key buildings that enhance and define the public realm by reinforcing important view sightlines where the grid changes direction.

Guidelines

.1 Building #1

- North corner of building should acknowledge its importance to the view corridor looking south down James Street; main frontage should acknowledge the oblique view down James Street and its contribution to enhancing the street wall.

.2 Building #2

- Northwest corner of building should acknowledge its importance to the view corridor looking south down James Street.

.3 Building #3

- East façade of building should acknowledge its importance as viewed from Main St and 36th Ave.



3.3 Site Planning

3.3.4 Threshold and Anchor Buildings

Intent

The threshold buildings should contribute to a sense of entry into the community by providing compression at important site entrances, as illustrated below, or anchoring important corners along Ontario Street.

Guidelines

.1 Building #1

- Buildings should create a sense of entry and transition to the community at these key locations.
- Oblique views
- Enhance street wall

.2 Building #2

- Buildings at these corners should be punctuated to acknowledge the park edge.



3.3 Site Planning

3.3.5 Streetwall Buildings

Intent

Streetwall buildings are intended to frame the primary public open spaces – the Community Plaza and the Wedge Park. Their design response should be unique to reinforce the character of these special places in the community. Care should be taken in expressing ‘eyes on the street’ by way of regular front doors and ample glazing, establishing a legible base at a pedestrian scale, and a regular rhythm of modulation to define individual units.

Guidelines

.1 Building #1

- South / façade of building should contribute to the plaza's character.
- Base should have active uses.
- Should be well integrated and support plaza functions.
- Should exhibit public space and Neighbourhood House and Childcare

.2 Building #2

- Façade against Wedge Park should frame and animate park.
- Modulate façade to achieve a scale proportionate to park scale.



4. Building Massing

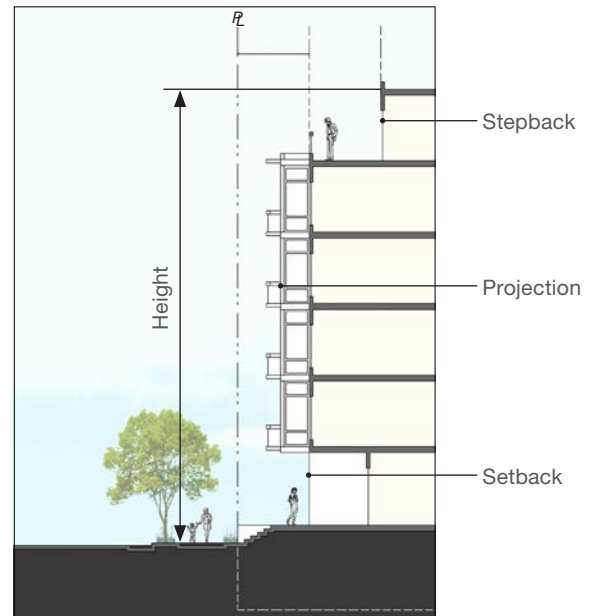


4.1 Introduction – Building Massing

These design guidelines are intended to inform the design development of buildings to ensure that they exhibit the intents of the *Little Mountain Policy Statement*.

Building massing guidelines include:

- Height, including upper floor Stepbacks
- Building Width
- Building Separation
- Ground Floor Setbacks
- Projections
- Building Depth



Maximum building heights are defined within the Little Mountain CD zoning bylaw. Within the maximum heights, considerable sculpting is expected, with guidance provided herein, and in the preliminary form of development. Building width and separation guidelines are provided to ensure building massing is fine grained, while ensuring livability for residential units. Setback, projection and stepback guidelines apply to one of the vertical building segments, which include:

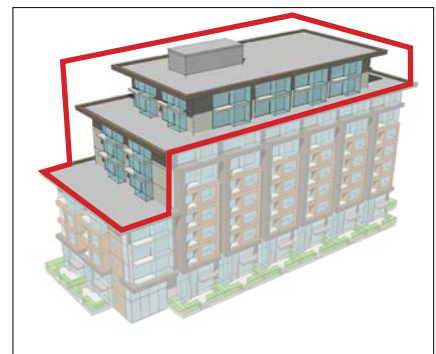
- **Base:** The bottom two floors of residential buildings and bottom floor of buildings with non-residential uses at grade. Setback guidelines apply to the base of a building.
- **Middle:** The floors above the base that make up the primary building façade. Projection guidelines apply to the middle portion of a building.
- **Top:** The upper floor of shorter buildings or the upper floors of taller buildings. Stepback guidelines apply to the upper portion of a building.



Building Base



Building Middle



Building Top

4.2 Height

Intent

Building height is defined for each parcel in the CD Zoning Bylaw; however, additional aspects of building massing are addressed in accordance with the Policy Statement. Guidelines regarding height are intended to:

- Protect views from Queen Elizabeth Park towards Mount Baker,
- Preserve solar access on the Wedge Park and Community Plaza, and
- Ensure taller buildings transition towards adjacent residential areas.

Building upper floors are stepped back to provide a transition between the development and adjacent residential neighbourhoods; to minimize shadowing on the Wedge Park and Community Plaza; to reduce apparent building height; and, to transition between taller and shorter buildings within the development.

These strategies are embedded in the height plan. Proposed building heights should generally follow the guidance provided in this plan.

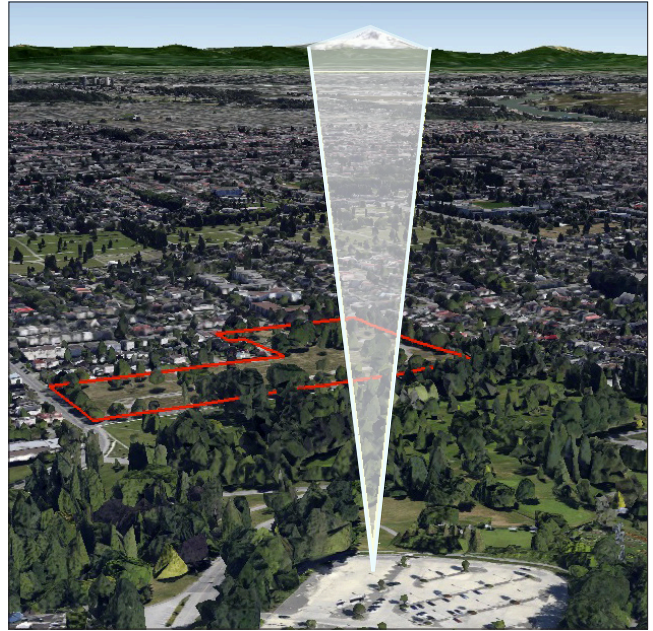
Maximum building height attainable is set out in the CD-1 provided a high urban design performance is achieved.



4.2 Height

Guidelines

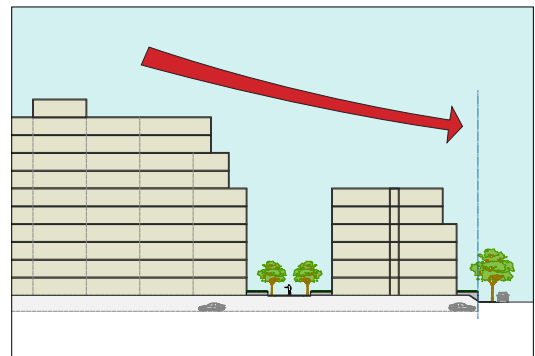
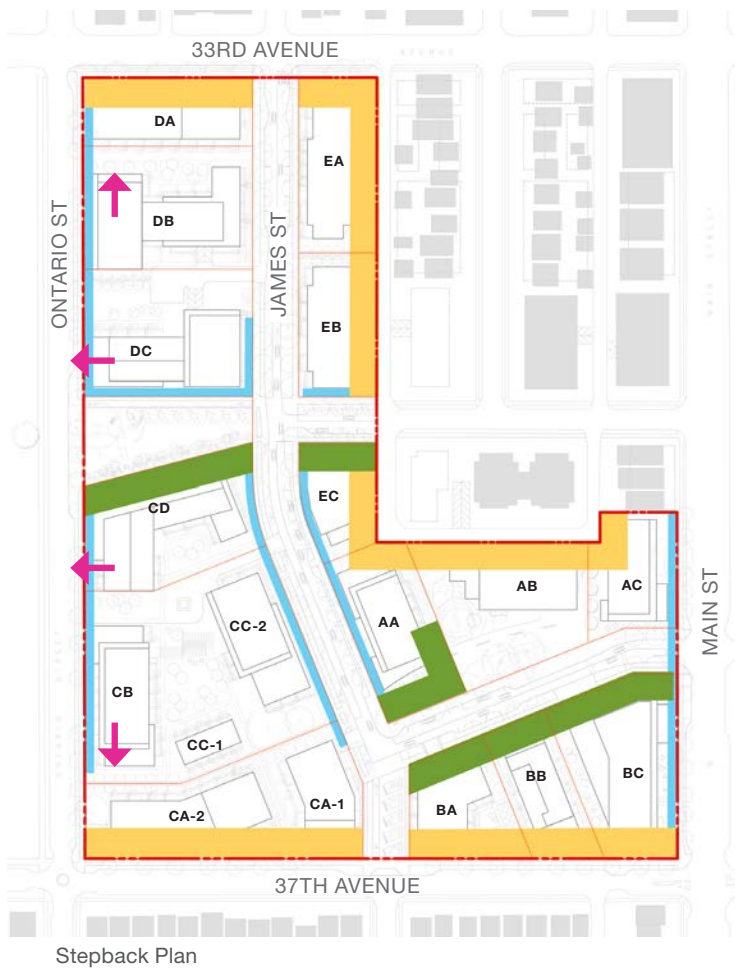
- .1 **Mount Baker View** – Building heights in the southern portion of the site must be well below the horizon and the view of Mt. Baker from the top of Queen Elizabeth Park.
- .2 **Solar Access** – Buildings should be designed to maximize solar exposure, taking into consideration building placement and planting design while also considering their effect on adjacent public spaces and neighbouring sites. Hours and times of sun exposure should be carefully studied in terms of the effect on adjacent public open spaces.
- .3 **Stepbacks** – required on the building sides indicated on the Stepback Plan below.
- .4 **Stepback Distance** – Upper floor stepbacks from the primary building façade should be determined according to impact that is being mitigated (eg. park shadowing mitigation may result in greater stepbacks than those intended to reduce apparent building height).



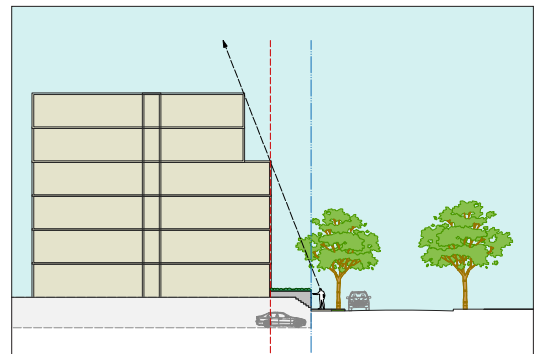
Mount Baker View

4.2 Height

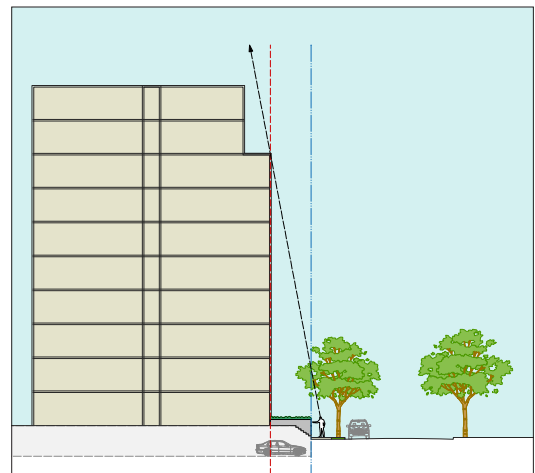
- Stepback to provide transition to adjacent neighbourhood
- Stepback to minimize shadowing impact
- Stepback to reduce visual impact of taller buildings
- Stepback provides transition of taller buildings.



Building Height Transition.



Stepbacks Transition To Adjacent Neighbourhood.



Stepbacks Reduce Apparent Height.

4.3 Building Width & Separation

Intent

Building width is defined to increase visual porosity throughout the site, and control building bulk. Separation between buildings is established to define at-grade spaces and to ensure residential units maintain adequate separation for solar access and privacy of adjacent units.

Guidelines

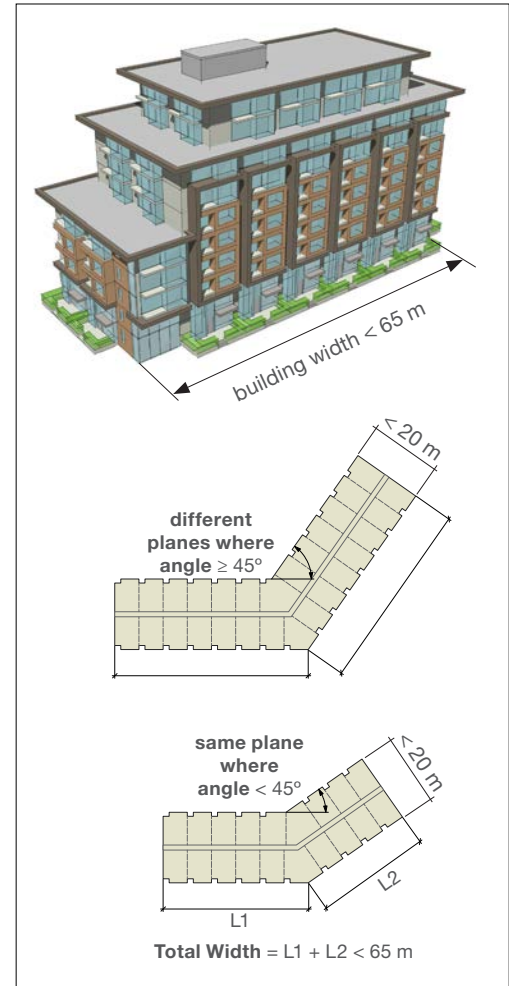
- .1 Building Width** – Building program should balance street-oriented uses with pedestrian permeability when considering maximum building widths. Building facades that change at an angle less than 45° are considered to be on the same plane, whereby the maximum building width is the total width of both facades; facades that change at an angle greater than 45° are considered to be on different planes, and should be considered individually when determining maximum building widths.

Buildings must not exceed 65m in width, as measured along a public street or public open space, with the exception of buildings fronting Main Street (between 37th Avenue and 36th Avenue) which may be built to the full width of the block.

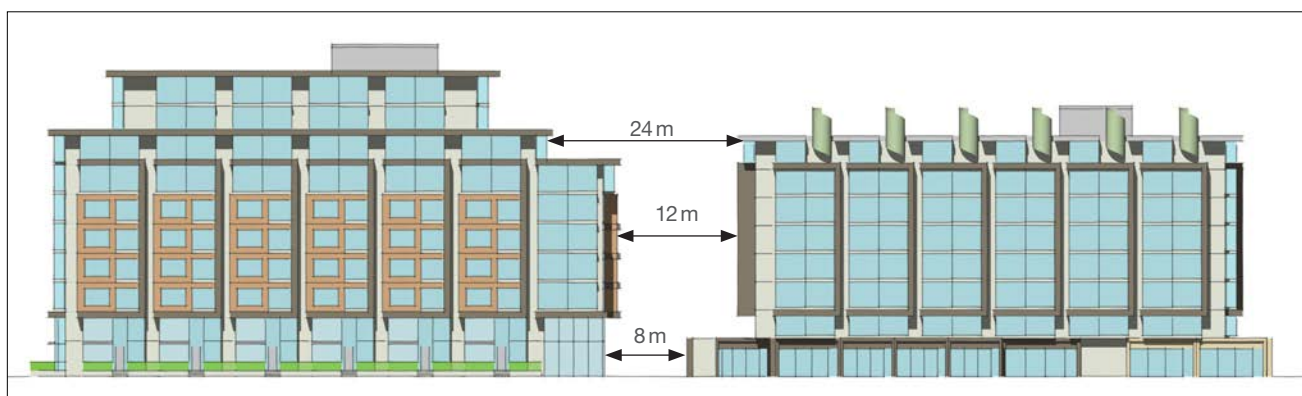
- .2 Building Separation** – The following minimum separations serve as a guideline:

- 3 stories or less: minimum separation of 8m (26ft)
- 4 - 7 stories: minimum separation of 12m (40ft)
- 8 stories and higher: 24m (80ft)

- .3 Building Depth** – Residential portions of buildings should have a maximum depth of 20m to optimize natural light penetration and reinforce high livability goals.



Building width, depth



Building Separation

4.4 Setbacks

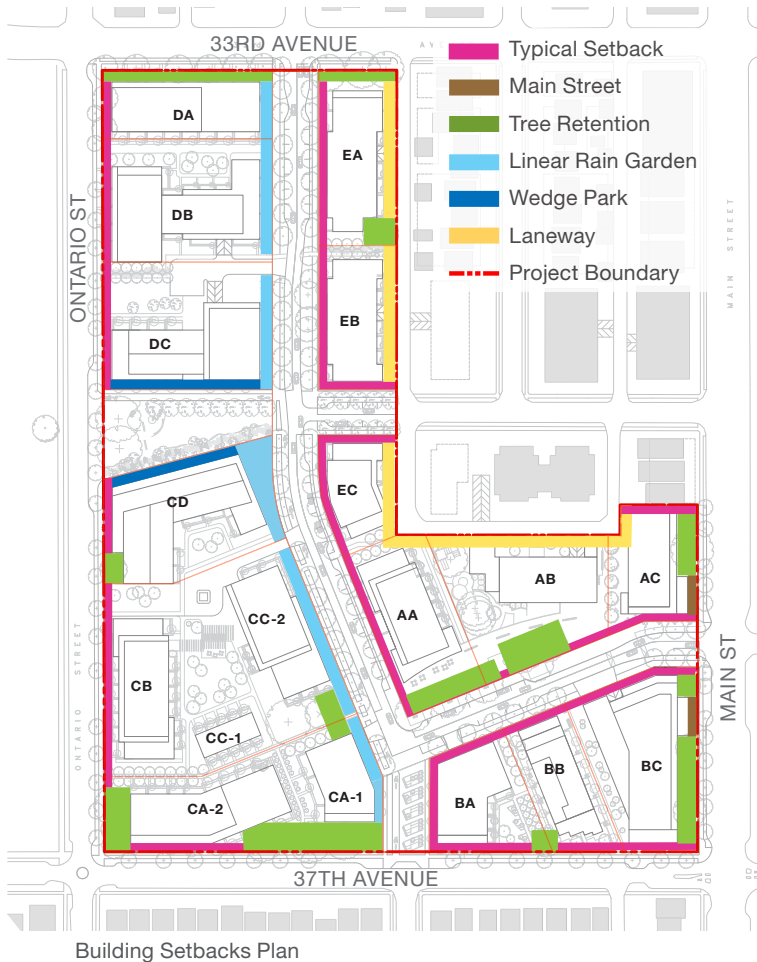
Intent

Building setbacks are in place to provide an appropriate transition between the private and public realm, to allow for outdoor living opportunities, to protect existing trees, and to allow for the linear rain garden along James Street.



Guidelines

- .1 Building Setbacks** – Building setbacks to property lines should follow the Building Setbacks Plan. Setbacks between buildings in the same parcel should follow the building separation guideline on the previous page. Where parcels are not separated by a public street or park (CA and CC; AA and EC) two adjacent buildings must each achieve 50% of the building separation requirement within their parcel.
- .2 Typical Setback** – A minimum setback of 3.7m (12ft) should be provided to allow for at grade patios and afford privacy to residential units.
- .3 Main Street** – A minimum setback of 5.5m from curb to building face is required to facilitate pedestrian movement and transportation objectives on this shopping street. Additional, further setbacks may be sought to accommodate entries or other architectural features.
- .4 Tree Retention** – Site planning and building placement for Little Mountain has been carefully crafted to ensure the retention and celebration of existing trees. Ensuring that buildings and underground parking structures are designed to ensure that retained trees continue to thrive is a key condition of rezoning. As each individual building, street, and park design proceeds, appropriate measures for the safe retention of trees must be identified and documented. This may warrant additional setbacks beyond those contemplated at time of rezoning.
- .5 Linear Rain Garden** – Setbacks along the rain garden should be a minimum of 5.5m (18 ft), and increased as appropriate to create opportunities for seating areas, platforms and other design elements to provide unique and inviting places for the public to sit, enjoy and experience the integrated rainwater management feature and associated landscape. In general, the setbacks should comply with the approved preliminary form of development.

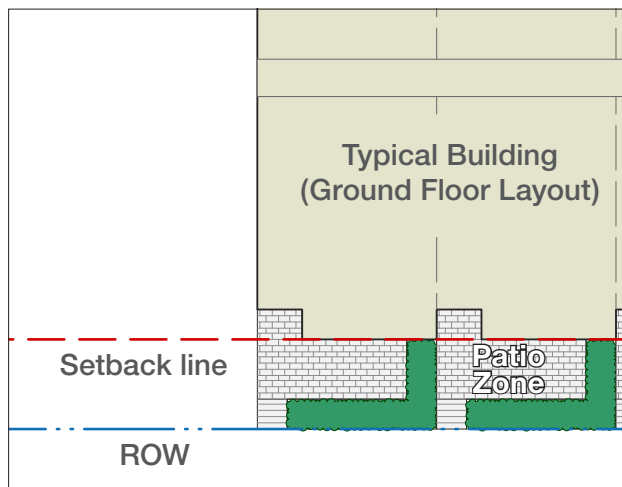


Building Setbacks Plan

4.4 Setbacks



Precedent – Linear Rain Garden



Typical Ground Floor Setback

- .6 **Wedge Park** – A minimum setback of 4.25m (14ft) should be provided to permit at grade patios and a private pathway connecting the patios.
- .7 **Laneway** – A minimum of 3.65m (12') should be provided on lower levels at laneways. Upper floors may require further setbacks.
- .8 **Community Plaza** – In general, building setbacks in the Community Plaza area should comply with those provided in the approved preliminary form of development. Statutory rights-of-way may not apply to the entire setback area to facilitate outdoor seating areas and other activities that contribute to the public life of the space.

4.5 Projections

Intent

To allow for varied and visually interesting building façades, some elements of a building may extend beyond the ground floor setback.



Guidelines

- .1 Architectural Features** – Projections may extend half way between the required setback and the property line.
- .2 Floor Area** – Projecting habitable floor area features such as bay windows and corner elements, provided they are not at the ground level, will be considered at time of development permit and will be assessed on contribution to the architectural concept, focal points and wayfinding, spatial quality, livability, and tree retention as appropriate.



Precedents: Projections enhance façade articulation and visual interest.

5. Building Design



5.1 Introduction – Building Design

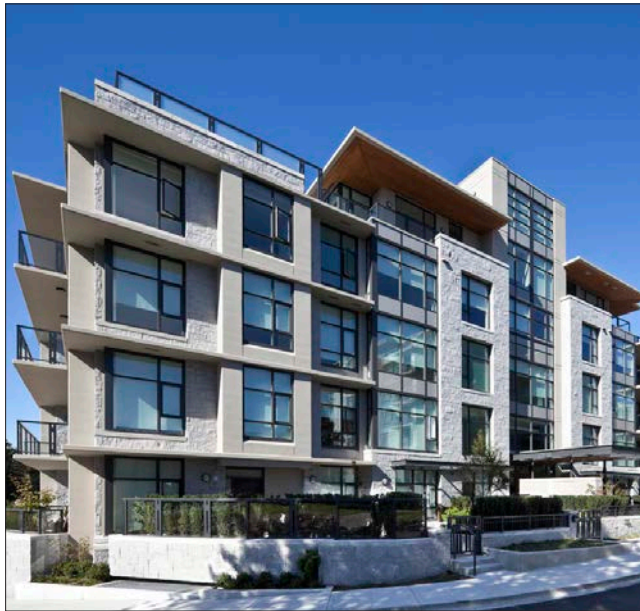
The design of each building at Little Mountain should be based on a clear conceptual idea that is rooted in the building's physical and cultural context. That idea should inform design decisions for all elements of the building so that it achieves design excellence through a clarity of purpose and a unified expression. Some examples of this process are shown below, and guidelines for specific elements of the buildings are set forth in the following pages.



Townhomes at Street Level



Main Building Entrance



Horizontal Expression



Vertical Expression

5.2 Sustainable Buildings

Intent

Sustainable buildings reduce the use of energy and the emission of greenhouse gases into the atmosphere. Buildings in Little Mountain shall meet the objectives as set forth in the Greenest City Action Plan.

Guidelines

- .1 Solar Shading.** Provide effective solar shading on south, east and west façades to reduce solar heat gain.
- .2 Green Rooftop.** Where appropriate, provide rooftop gardens and green roof systems to reduce heat island effect and moderate storm flows. Refer to Rooftop Gardens plan in Appendix, and if green roofs are not delivered where shown, compensation should be provided elsewhere on site.
- .3 Solar Panels.** Architecturally integrated solar panels are encouraged where roofs receive ample solar exposure.
- .4 Roof Insulation Values.** R-value for roof to be $\geq R30$.
- .5 Building Envelope.** Building envelope to use durable materials; Cladding with continuous insulation.
- .6 Window to Wall Ratio.** Maintain $\pm 50\%$ window to wall area ratio for a passive approach to building envelope design.
- .7 Window Insulation Values.** All windows double glazing with low e coating; concrete buildings with metal framing systems, $u-0.35$; wood building with PVC windows, $u-0.26$.
- .8 Landscaped Patios.** Provide landscaped patios to reduce heat island effect and moderate storm flows. May incorporate edible landscaping.
- .9 Floor Insulation Values.** R-values for suspended floor to be $\geq R20$.
- .10 Underground Parking Footprint.** Underground parking encouraged to be held back in some locations to improve storm infiltration and preserve existing trees.



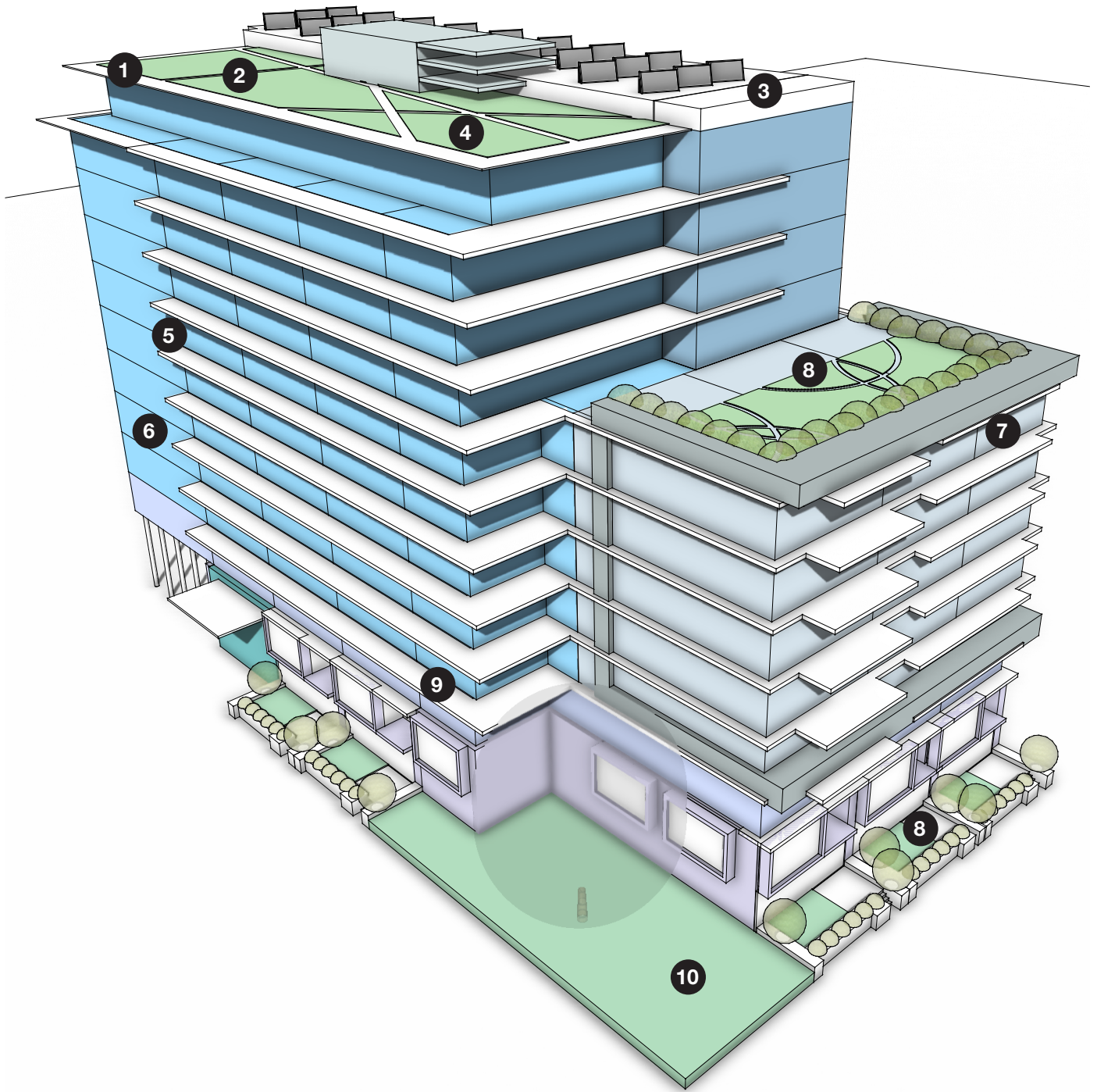
Solar Shading



Green Rooftop



Window to Wall Ratio



5.3 Base Activation

5.3.1 Residential Buildings

Intent

Residential building base activation is crucial to the visual and functional interface between the public realm and to a sense of neighbourliness, safety, and security.

Guidelines



Illustrative Precedent: Residential building base activation.

- .1 Active ground floor uses.** Ground floors of residential buildings should contain active uses including residential units, live-work arrangements, home offices, building amenities, and lobbies.

Storage, mechanical, building maintenance, and parking-related uses are discouraged.

- .2 Transparency.** The ground floor should engage the street through windows oriented towards the public space; the added transparency increases the perception of neighbourliness and safety. For common areas such as lobbies and function rooms, a high degree of transparency is encouraged, especially in the human activity band ranging from the floor level to the building's main entrance door height. For residential units, the proportion of transparency may be reduced somewhat to account for privacy and safety concerns.

Blank walls are discouraged and should not extend for more than the length of a typical interior residential unit room.

- .3 First floor level.** The level of the first floor of a residential building should be at or above sidewalk level, but below street eyesight level, to ensure a functional and visual connection between the two realms.

5.3 Base Activation

5.3.1 Residential Buildings Cont'd

The ground floor level should broadly follow the sidewalk level, especially if ground floor units abut the public realm. Where substantial grade differences make this practice difficult to attain, variations are acceptable, provided that the main-entrance-side of the building maintains this connection to the public realm along most of its façade.

- .4 Transitional spaces.** It is encouraged that the setback between the property line and the building façade is designed as a semi-private transitional space between the public and the private realm. For individual units, spaces such as patios, stoops, and verandas create a sense of territoriality and increase the perception of safety while remaining visually accessible from the street. For main building entrances, transitional spaces may be more subtle, for example through paving material changes, landscape elements, or vertical definition such as awnings and marquees.



Encouraged: Slight grade separation and landscaping that allow for a visual connection between interior and exterior.



Encouraged: Multiple entrances of individual units directly facing the street that strengthen the functional ties between residents and the public realm.



Encouraged: Landscape elements that help transition from the public to the private realm, providing semi-private open spaces.

5.3 Base Activation

5.3.1 Residential Buildings Cont'd

- .5 Multiple entrances.** Buildings should have multiple entrances at the ground floor level, directly connecting to the street or public realm – ideally through transitional spaces to encourage interaction of residents with visitors, neighbours, and other citizens. It is encouraged that all ground floor residential units have a direct and individual entrances to the public realm in order to maximize the perception of neighbourliness, safety, and security.



Encouraged: Creativity in the design of transitional spaces – in this case a small stoop with doors facing sideways.



Encouraged: Patio levels that follow the sidewalk levels to keep visual connection between the unit and the street.



Encouraged: Residential building main entrance with subtle elements that mark the transition from public to private property.

5.3 Base Activation

5.3.2 Non-residential Mixed-use Buildings

Intent

Non-residential building base activation is essential to encourage interaction between building occupants, customers, and passersby, to contribute to the liveliness and activity of the street, and to ensure commercial vitality for the stores.



Illustrative Precedent: Non-residential base activation.

Guidelines

- 1 Street-engaging ground floor uses.** Ground floors of non-residential buildings should contain active, street-engaging uses, especially at corners and in areas where high pedestrian traffic is expected. Shops, customer service areas, cafés and restaurants, artist spaces, displays, lobbies, as well as the community-accessible spaces of the Neighbourhood House and the Daycare are good examples of these uses.

Storage, mechanical, building maintenance, and parking-related uses are discouraged along the building face as they do not activate the ground floor realm.

5.3 Base Activation

5.3.2 Non-residential Buildings Cont'd

- .2 Transparency.** The ground floor should engage the street through ample glazing oriented towards the public space to allow for inside-out visibility. Most of the first floor façade in the human activity band ranging from the floor level to the building's main entrance door height should be completely transparent. If non-residential spaces follow in the floors above, it is recommended that they have a similar transparency rate as the ground floor façade.

Non-transparent surfaces should be broken down along the façade; blank walls are discouraged and should not be more than a small fraction of the ground floor building face.

- .3 Modularity and multiple entrances.** Non-residential buildings should be conceived as a series of small-scale commercial unit modules. It is encouraged that each module have its own transparent shop front display and an individual entrance to the public realm in order to increase inside-out permeability and flexibility of use.

Nonetheless, larger retailers such as a grocery store may consolidate the entrance point at one location, provided that some level of façade modulation reflecting the upper floors' vertical articulation is maintained.



Encouraged: Storefront bays articulated at regular intervals, each with its own direct street-level entrance.



Encouraged: Transparent retail modules that minimize non-transparent surfaces and breaks them into smaller-scaled pieces.



Encouraged: Commercial first floor level that matches and follows sidewalk level.



Encouraged: Building uses that open up to the street – particularly at corners.

5.3 Base Activation

5.3.2 Non-residential Buildings Cont'd

- .4 First floor level.** The level of the first floor of a non-residential building should ideally be at grade in respect to the adjacent sidewalk to ensure both a functional and a visual connection between the two realms. Where grade differences exist, it is encouraged that the interior ground floor level of the building follows the elevation of the abutting sidewalk.
- .5 Active-use setbacks and sidewalks.** Setbacks and sidewalks are encouraged to contain temporal active uses such as seating, tables, produce and flower stands, etc., that foster interaction between the ground floor uses of the building and the users of the public open space. Access to the building face should always be possible for passersby; separation of the building face from the sidewalk through walls, landscaping elements, or obstructive grade changes is discouraged.



Encouraged: Activation of the façade through the extension of interior building activity towards the public realm.



Encouraged: Land uses on the ground floor that activate the public realm; in this case café seating on the setback area.



Encouraged: High glazing transparency that extends above the door height.

5.4 Main Entrances

Intent

Good pedestrian entrance design is important to intuitively guide visitor to the main entry of the building and to activate the immediate public realm through pedestrian circulations.



Lobby area opens up to similar-scaled entrances: one to the street, on to the shared open space.

Main entrance oriented directly to the street.

Architectural prominence makes main entrance easily identifiable; here it is achieved through scale, the recess, and the overhang.

The use of the building is transmitted intuitively to passersby; in this case, more domestic-scaled artwork, water feature and signage tell that this is a residential entrance.

Illustrative Precedent: Residential building main entrance.

Guidelines

- .1 Orientation to street.** Main entrances should always be oriented to the street they face. If a building faces two or more streets, it is advisable that the main entrance be located at the corner or on the street with more visibility and/or more expected pedestrian traffic.

In cases where buildings face a street on one side and an open space on the adjacent or opposing side, it is encouraged that the lobby area opens to both of these outdoor areas, generating an entrance to the open space of analogous characteristics than the one fronting the street.

- .2 Prominence.** Main entrances should be prominent, clearly identifiable, and scaled appropriately to their importance in respect to secondary street-level entrances, for example ground-floor residential units or individual retail bays. In all cases, pedestrian entrances should be far more conspicuous and visible than vehicular entrances.

5.4 Main Entrances

It is recommended that this prominence be expressed by façade modulation, recessed doorways, taller building volumes, canopies, lighting, public art, water features, entrance plazas, special materials, landscaping and other similar strategies.

- .3 Differentiation by use.** The building's use should be self-evident by the design of its main entrance and its immediate setback area, especially if a building has different entrances serving different uses. If this is the case, it is advisable that the entrance to the non-residential portion of a building be located on the street with most pedestrian / vehicle activity, while the residential entrance be placed around the corner facing a calmer environment.

Strategies for differentiation by use may include different transparency into the lobby area, interior design that responds to the upper-floor use, use-specific elements in the setback zone, differentiated separation from the street, and distinct signage types. Non-residential entries typically should have more prominent entrances than their counterpart residential buildings.



Encouraged: Clear distinction of retail-use entrance through scale, signage, and product displays on the setback zone.



Encouraged: Emphasis of a building's entrance – in this case through use of a recess and a overhanging canopy.



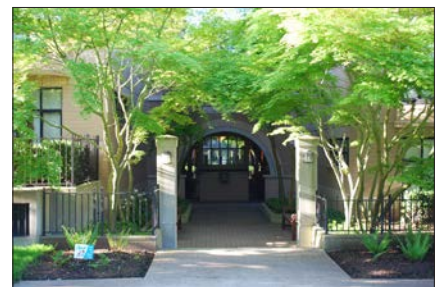
Encouraged: Architectural emphasis of building's main entrances – in this case through the use of special massing, distinct materials, and increased transparency.



Encouraged: Scale of entrance proportional to the use it serves – in this case a large grocery store that requires a wide entryway.



Encouraged: Entrances that signal the use of the building it serves; here, the trellis, the recess, and the lush landscaping convey the residential use.



Encouraged: Use of the entrance setback zone to transition between the public realm and the particular use of the building.

5.5 Corners and Focal Points

Intent

Corners and focal point treatments are key to strengthen the identity and character of Little Mountain, to punctuate gateways and intersections, to spatially define streets and blocks, and to contribute to intuitive wayfinding and orientation.



Corner is architecturally emphasized — in this case through a rounded, set-back façade and increased glazing.

Wrap around features — here the rounded glazing pane and the canopy — help connect both building façades.

Active uses at the corner located at the intersection of pedestrian paths.

Entrance at the corner reinforces this high-visibility portion of the building.

Encouraged: Articulated corner design that is activated by entrances and emphasized by wrap-around features.

Guidelines

- 1 Architectural emphasis.** Buildings at intersection locations and at key focal points of street sightlines should be given special attention to reinforce their role as urban markers and/or gateways. This may be achieved through differentiations in the architectural expression of corners and key façade areas. Examples include changes in massing, vertical articulation, contrasting façade finishes and materials, increased transparency, and façade enhancing elements such as masts, screens, and projections.

These design actions may warrant small variations in terms of setbacks, stepbacks, and heights, provided the intent of this guideline is met.

5.5 Corners and Focal Points

- .2 Wrap-around features.** It is encouraged that, when buildings or elements of buildings turn the corner, both faces are designed with a compatible architectural design.

Elements such as corner windows and wraparound awnings may contribute to tie-in both faces for façades that are treated differently on each side because of functional, orientation, or other justified reasons.

The plan on the next page shows major sightlines, focal points from public rights-of-way, important intersections and potential neighbourhood gateways — all of which would benefit from strong architectural treatments.

- .3 Main entrance at corners.** Pedestrian main entrances for the non-residential uses of a building are encouraged to be located at the corner, where pedestrian circulations concentrate and where they would add to the architectural punctuation of the corner. When this is not feasible or practical, an entrance to the corner ground floor retail, commercial, or community use – if existing – should be considered instead.



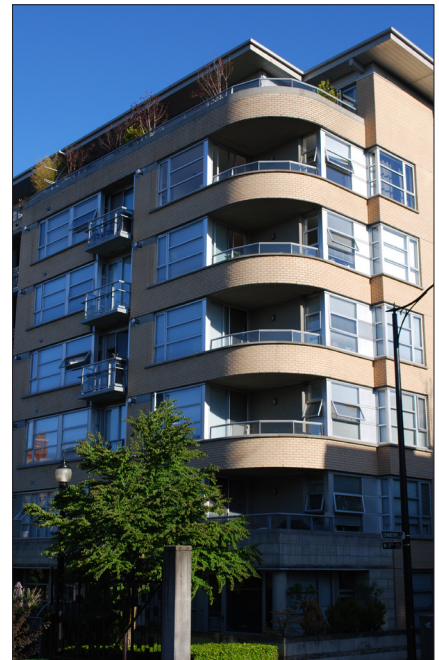
Encouraged: Architectural emphasis at corner through different massing, height, materials, and setbacks.



Encouraged: Building corner that defines the street, the intersection, and the block.

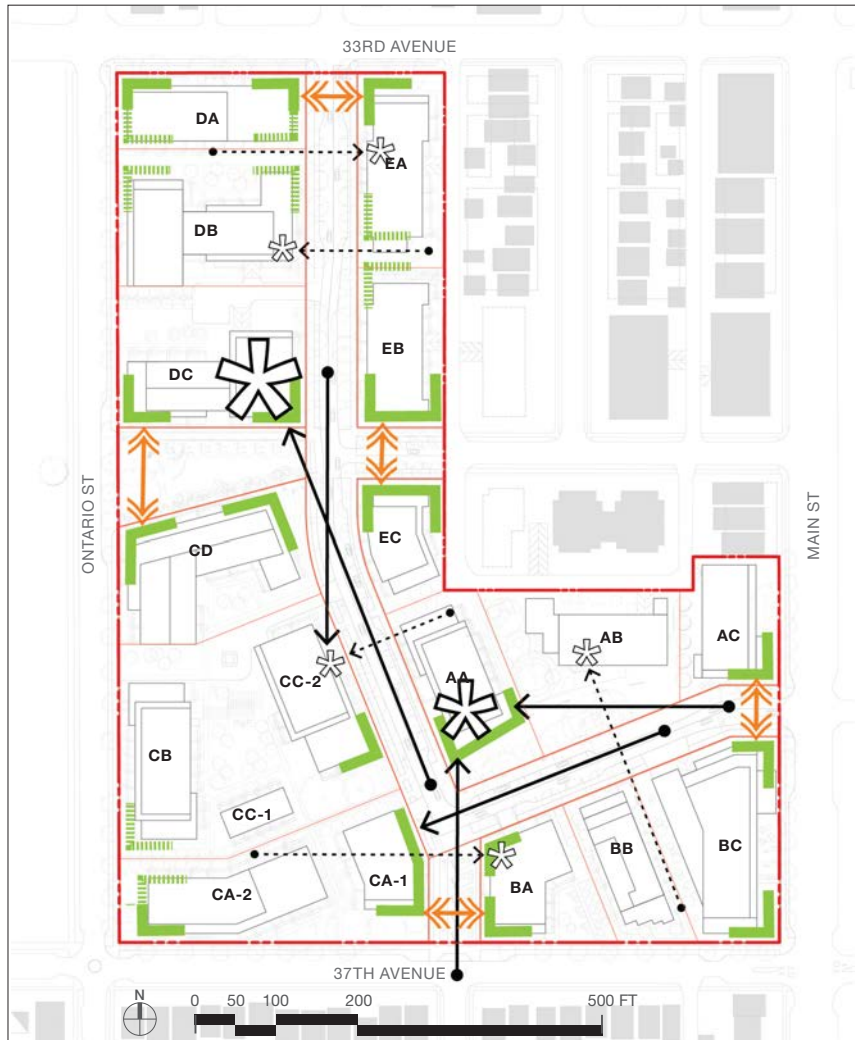


Encouraged: Architectural punctuation at corner that creates urban markers or neighbourhood gateways.



Encouraged: Connection between façades at corners through wrap-around features – in this case a rounded-off balcony.

5.5 Corner and Focal Points



- Major neighbourhood focal point
- Secondary neighbourhood focal point
- Primary corner treatment encouraged
- Secondary corner treatment encouraged
- Gateway treatment encouraged

Encouraged: Corner and gateway treatment locations.



Encouraged: Building design that acknowledges, frames, and enhances existing focal points.



Encouraged: Alignment of building access with street and path sightlines.



Encouraged: Distinct wrap-around window element that connects two building façades.

5.6 Roofs

Intent

Good roof design contributes to a distinctive, coherent, and integrated building and neighbourhood design, to resident livability, and to advance sustainable practices.

Guidelines



Illustrative Precedent: Roof designs.

- .1 Integrated design.** It is encouraged that the roofline is emphasized in building design to reinforce its role as the top of the building. Roofs present an opportunity for architectural expression and emphasis, but also need to formally integrate with the neighbouring buildings.

Articulation may be achieved through a distinctive roof element that differentiates itself from the rest of the building or by modulation of the upper floors' massing and detailing. Elevator / stair cores should be part of the integral roof space design.

- .2 Fifth façade.** Roofs should be designed as 'fifth façades' to provide an attractive view from above. Rooftop mechanical equipment should be screened from view of neighbouring units. Screening materials should enhance and be compatible with the overall building material and colour palette. Wherever possible, roof mechanical exhaust vent and equipment should be clustered and set back from the edge of buildings that are visible from the street or the open spaces below.

5.6 Roofs

- .3 Usable roof space.** Usable terraces on building roofs, stepbacks, and podiums are encouraged whenever possible. These spaces may be enhanced by open structures such as trellises and pergolas that should be designed as part of the overall roof / building concept.
- .4 Sustainable design on roofs.** It is encouraged that the roof space is extensively utilized for sustainability purposes wherever feasible, including green roofs, edible landscapes, rainwater retention and/or collection, and solar / wind energy production. Roofs should be designed to be thermally efficient and to reduce the heat island effect. Refer to “Green Rooftop” in section 5.1 Sustainable Buildings.



Encouraged: Use of roof elements as an important façade articulation and modulation tool.



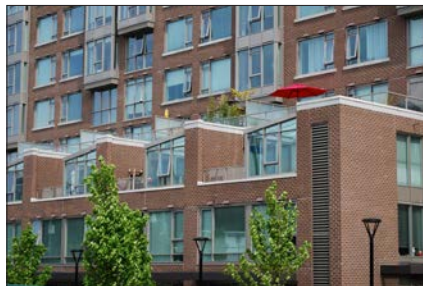
Encouraged: Sculptural design of building rooflines through vertical elements that shield mechanical equipment.



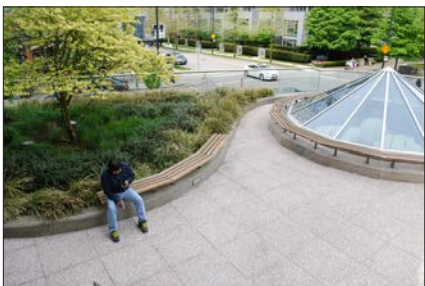
Encouraged: Emphasis of building volumes through roof overhangs.



Encouraged: Stepback roofspace destined for private outdoor patios.



Encouraged: Usable roof terraces atop building podiums.



Encouraged: Accessible green roofs and rainwater management.



Encouraged: Edible landscaping and urban agriculture on rooftops.



Encouraged: Active use of roofs for energy production.

5.7 Private Outdoor Spaces

Intent

Private outdoor spaces such as patios and balconies are important building components to modulate and articulate the building's façade, to increase the livability for residents, and to allow for casual neighbourhood encounters while ensuring a privacy buffer.



Illustrative Precedent: Residential outdoor spaces.

Guidelines

- 1 Usability.** Private outdoor spaces should have proportions and dimensions for comfortable use by residents, usually determined by the ability to adequately fit two chairs and a small table into the space, at minimum.

It is encouraged that the outdoor spaces are designed in such a way that they can easily become an extension of the living area within the unit.

- 2 Appropriate orientation.** Private open spaces should be designed to maximize solar access, views, and privacy, all of which increases the attractiveness for residents to use the space.
- 3 Defensible design for residential units.** Transitional spaces should clearly define them as belonging to the residents of an individual unit, while at the same time encouraging neighbourly interaction. The following means may be utilized:
 - Grade separation.** As one of the most effective means of balancing privacy with inside-out interaction, it is encouraged that patios, stoops, and verandas should be elevated slightly above the street level. If this is not viable, landscape treatments (see below) can signal the transition to the semi-private realm. Lower-than-street-level spaces are discouraged, as they impact negatively on resident privacy.

5.7 Private Outdoor Spaces

- **Landscape treatments.** Gates, railings, low walls, and landscaping can provide a buffer from the public realm and create a clear distinction between public and private property. These elements should not be higher than eyesight height from the sidewalk.

- .4 Integration and Façade sculpting.** Patios, balconies, terraces and other similar private outdoor spaces are encouraged to be used as major façade sculpting tools that strongly contribute to building massing, modulation, and articulation.

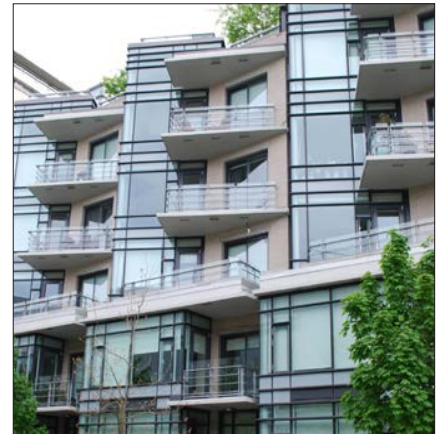
Add-on private open spaces or continuous balcony rows that are not integrally conceived with the building design and do not engage the building volumes to their sides and back are discouraged.



Encouraged: Design of balconies and patios that, are usable and allow for resident personalization.



Encouraged: Defensible design through landscaping that increases privacy of private patios.



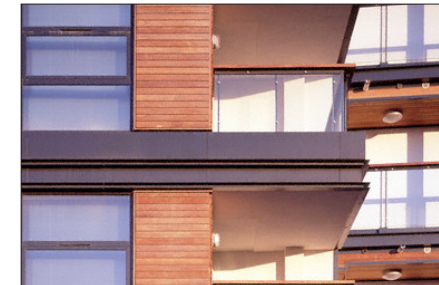
Encouraged: Balcony and patio design as a tool for façade modulation and articulation.



Encouraged: Different types of private open spaces functionally and aesthetically integrated to the building.



Encouraged: Ability to extend the living area to the private outdoor area.

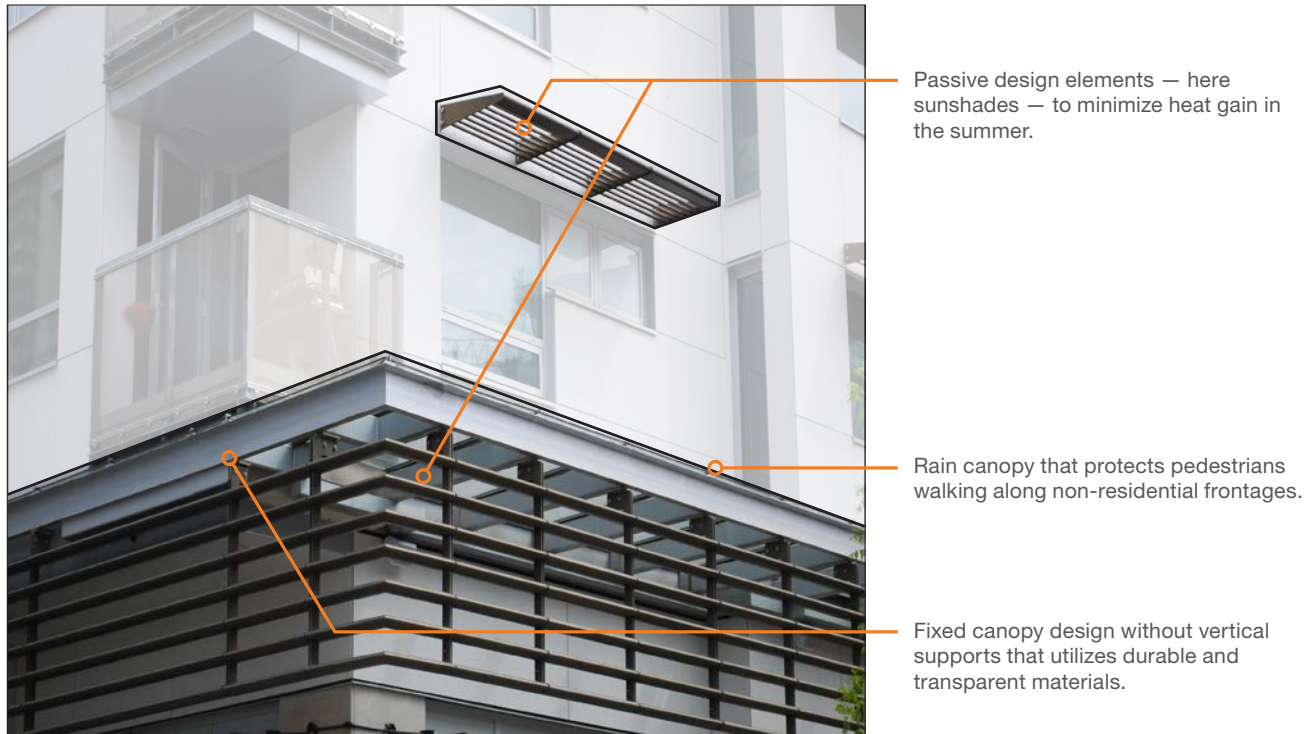


Encouraged: Balconies that maximize solar access, views, and privacy.

5.8 Overhangs, Canopies, and Sun Shading Devices

Intent

Overhanging elements such as awnings, canopies, marquees, and sunshades are important to provide protection and shelter from the elements and to contribute to the character and identity of buildings and stores.



Illustrative Precedent: Overhangs on first and upper floors.

Guidelines

- .1 Ground floor overhangs.** Awnings and canopies that protect pedestrians from rain, sun, and wind should be located over main entrances of residential buildings and along non-residential ground floor facing sidewalks. In non-residential buildings, awnings and canopies should provide a continuous sheltered environment for pedestrians along major circulation routes.
- .2 Use for passive design.** Sunshades are encouraged to be used on all floors over windows and open private spaces as passive design elements, especially on south and west façades.
- .3 Functionality and design.** Overhanging elements should add to the overall appearance of the building. Awnings and canopies should provide ample height for circulation and allow space for sidewalk trees to grow. Vertical supports or lateral closures in the public spaces or setback areas are not acceptable.

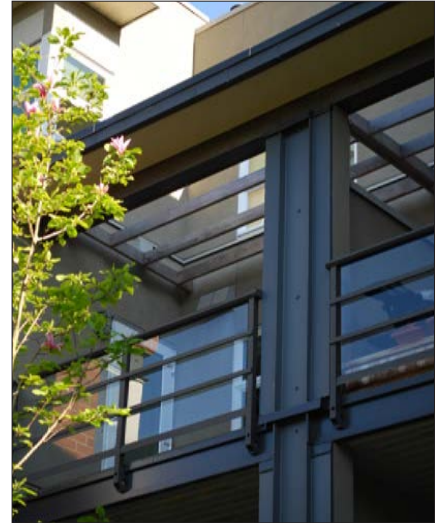
5.8 Overhangs, Canopies, and Sun Shading Devices



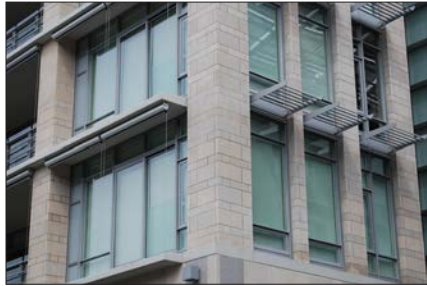
Encouraged: Continuity of canopies for rain protection along the whole building façade.



Encouraged: Permanent structures with durable materials – in this case a steel and glass canopy.



Encouraged: Trellises and sunshades over rooftop balconies and patios.



Encouraged: Screens of different types for building passive design.



Encouraged: Weather protection for individual residential entrances.



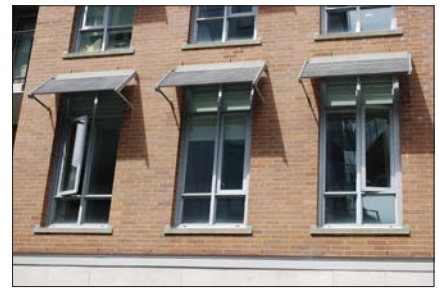
Encouraged: Canopies at main entrances of residential buildings.



Encouraged: Canopies for sun and rain protection on non-residential ground floor frontages.



Encouraged: Canopies over bicycle parking areas.

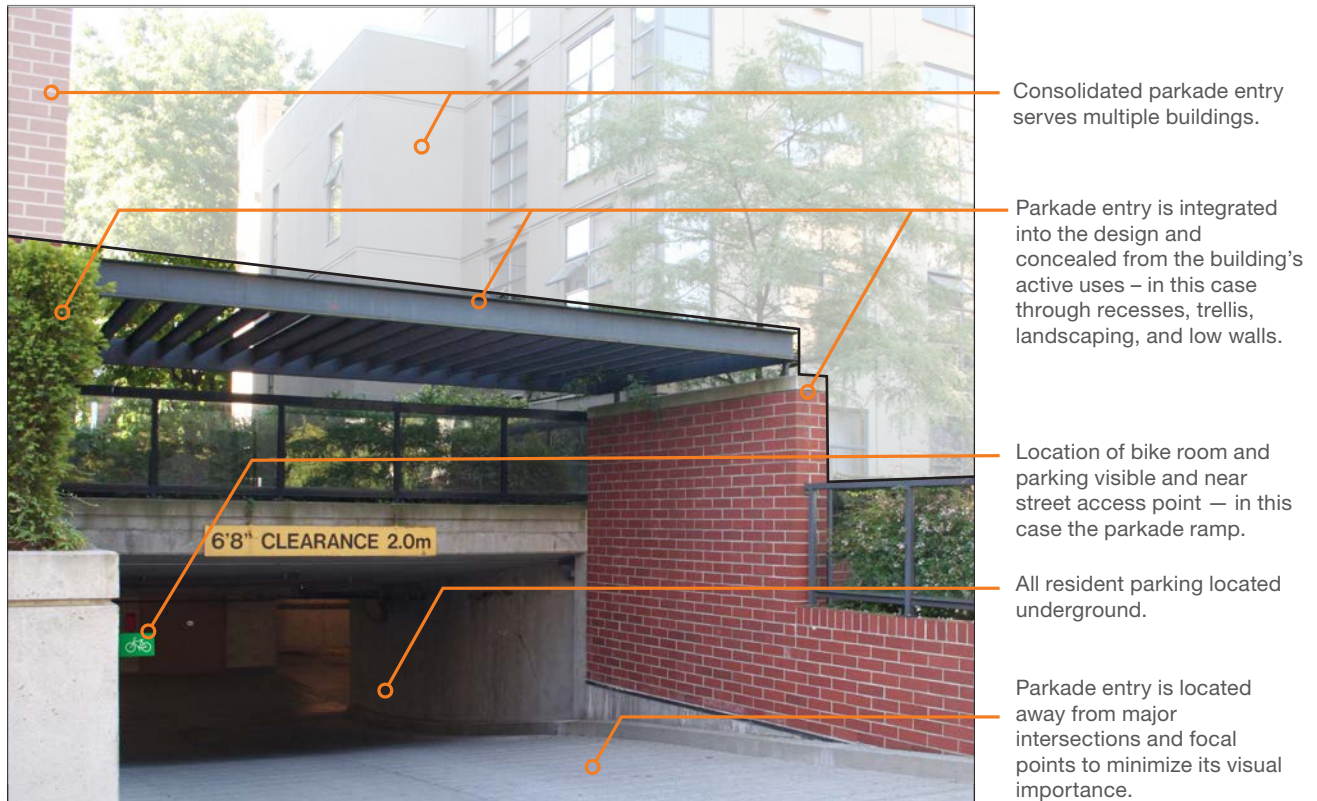


Encouraged: Sunshades for south and west façades.

5.9 Parking and Loading

Intent

Careful design of parking and loading facilities are key to provide an active and safe pedestrian environment and to minimize their negative impact on the streetscape and other public spaces.



Illustrative Precedent: Consolidated and recessed residential parking entrance partially concealed by canopy and landscaping and located away from main street sightlines.

Guidelines

- 1 Consolidation of parkade entries.** It is encouraged that parkades serve multiple buildings so that parkade accesses can be consolidated into a single entry / exit location. Parkade entries should not be wider than strictly necessary and should not have more than two lanes – one for entry, and one for exit.
- 2 Placement of parkade and loading entries.** Parkade and loading entries should not be located on a building face that fronts a public park or a public open space; they are also not allowed along Ontario Street and 33rd and 37th Avenues.

It is recommended that parkade entries be located away from focal points and direct sightlines and away from intersections or areas with increased pedestrian or vehicular traffic. Depending on parcel size, form, and location, parkade entry may be directly into the building or through an internal drive court.

5.9 Parking and Loading

- .3 Concealment and integration.** Building and public realm design, particularly at street level, should always be prioritized over parkade access. Parkade entrances should not dominate a building façade; measures such as recessing the parkade entrance or locating it on the back of the building are encouraged.

Measures to minimize ramp visibility, vehicular noise, and headlight glare, such as canopies, landscaping, adequate orientation, and visual screens, are encouraged.

- .4 Above-grade parking.** Above grade parking is generally discouraged, but if required for a specific building function, for example for Daycare drop-off, it should be behind buildings, not fronting the street, and screened by appropriate landscaping.
- .5 Bicycle parking.** It is encouraged that resident bicycle parking be located on the first parking level near the parkade ramp for easy access for residents. To the extent possible, bicycle parking should be complemented by facilities for bicyclists, such as a workshop, washing station, lockers for helmets and rain gear, and dedicated storage space for children's tricycles and bike tow trailers. If access to bicycle parking is through a stairway, it is recommended that they are fitted with bicycle stairway ramps. Visitor bicycle parking should be located in racks at street level near the main building entrance.
- .6 Loading.** In a building of more than 100 units where on-site loading is required, this space should be concealed from view of the public realm to the degree possible.



Encouraged: Concealment of parking entrance through landscaping and canopy coverage.



Encouraged: Parking areas or accesses not immediately visible from the public realm and located on secondary streets.



Encouraged: Tucked-away loading areas that are not immediately visible from the street or the active uses of the building.



Encouraged: Parking entrance secondary to pedestrian entrance – in this case achieved through reduced scale, recessed location, lower level, and prominent artwork placement.



Encouraged: Pedestrian-scaled, active uses near parkade entrance that reduce the former's importance.

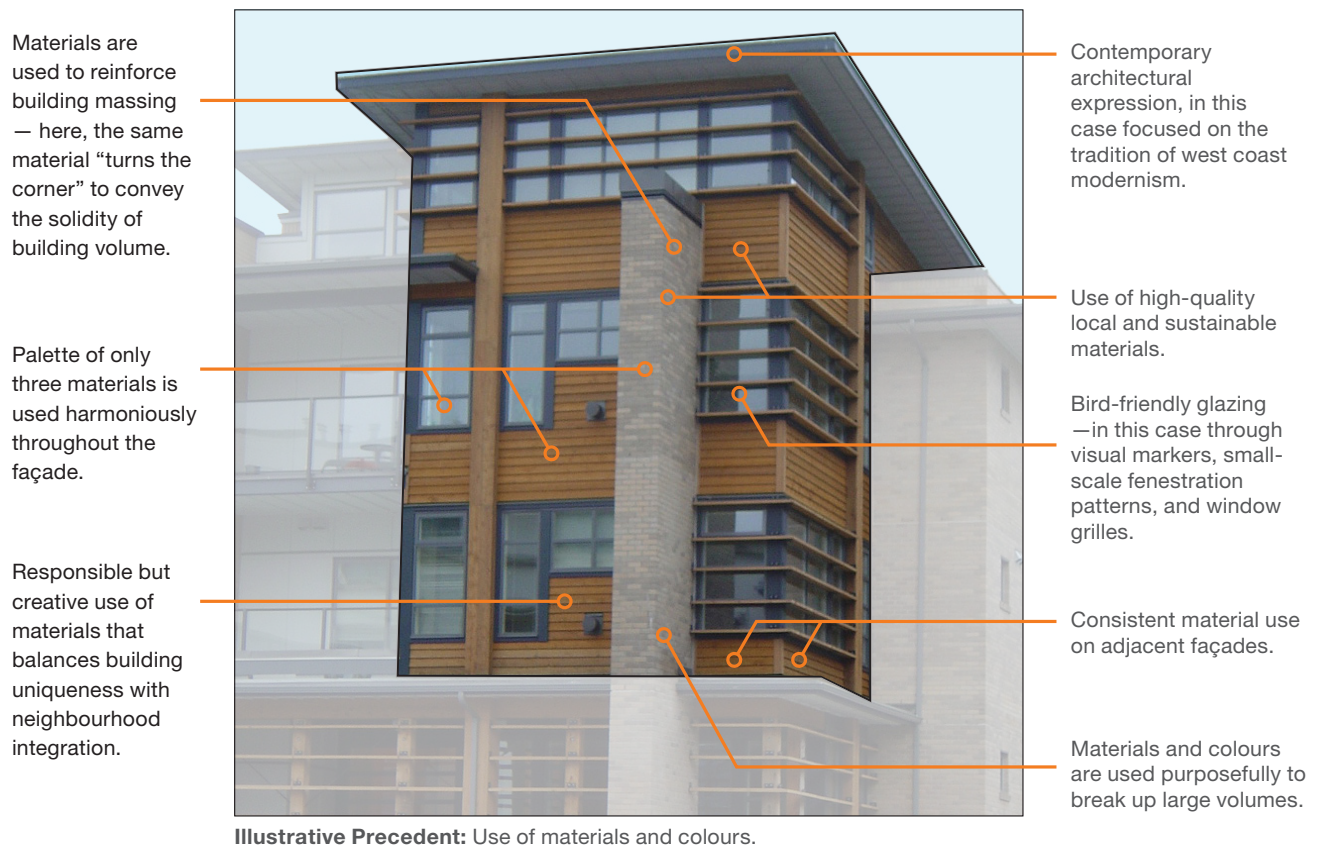


Encouraged: Easy access to bicycle parking areas – here through a bicycle stairway ramp.

5.10 Materials and Colours

Intent

Materiality and colour are important to accentuate individual buildings and portions of buildings, to break up the façade of a building, to contribute in a thoughtful manner to the overall fabric of the neighbourhood, and to provide a feel of quality to the public realm.



Guidelines

- .1 Responsible and conscientious use.** A balance between variation and unity and between singularity and integration should be sought in the use of materials, colours, and patterns on buildings. The use of more than one but less than four distinct materials and colours are encouraged to achieve this balance.

Different materials and colour palettes should be harmonious, but may also contrast in some instances to highlight unique / important building elements, such as corners, entrances, or common amenity spaces. Materials, colours, and patterns are ideal tools to break up larger contiguous building faces.

The use of glossy materials and overly busy / complex material patterns is, in general, not encouraged unless it aligns with this guideline’s intent.

- .2 Massing-reinforcing use of materials.** The use of materials, colours, and patterns should be integrated and reinforce the building’s massing design. Usually, each building volume should be treated

5.10 Materials and Colours

with the same finish throughout, also on its sides, if visible from the outside. Building materials should turn the corner, both at the larger volume scale and at the more detailed face edge level.

Ideally, front and side façades of a corner building should address both streets with a continuous and consistent material and colour palette. In those cases where a change of materials / colours from one façade to the next is advisable, for example because of streets with different character, the transition should be thoughtfully developed as an integral part of the design theme for the building.

- .3 High-quality, local, and sustainable materials.** Materials should be durable, of high quality and respond to the site's climate demands. Solid, natural materials without thin surface layering are encouraged.

To the extent possible, locally sourced materials should be used to help establish a material palette that works with climate, light, history, and culture. Sustainable and recycled materials are highly encouraged.



Encouraged: Use of colour to enliven a neutral, monochromatic façade – in this case colour sunshades.



Encouraged: Durable materials – locally sourced, if viable.



Encouraged: Sustainable materials and components, including green walls.



Encouraged: Coordinated colour scheme that breaks up the façade, in this case distinguishing different floor levels.



Encouraged: Use of durable, solid materials.



Encouraged: Change in material pattern to emphasize building elements, in this case windows and entrances.



Encouraged: Variety of materials – here, metal panel with wood accents.



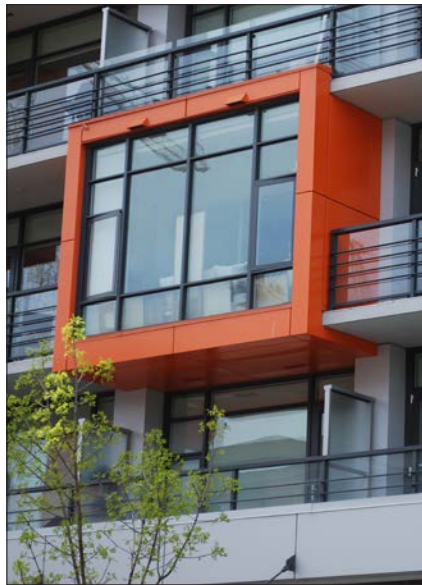
Encouraged: Contrasting materials – here, wood and steel.

5.10 Materials and Colours

- .4 Bird-friendly glazing.** Building glazing design should consider bird collision reduction strategies, such as visual markers / patterning for easy bird recognition, reduction of window reflection, recessed windows and volumes, balanced wall-to window ratios, small-scale fenestration patterns, and use of exterior nettings, screens, grilles, or shutters. It is highly recommended that these strategies be integrated to the overall building design rather than conceived as stand-alone features. For further information refer to Vancouver's Bird Strategy and Bird Friendly Building Design Guidelines.
- .5 Contemporary architectural expression.** Materials, colours, and patterns should be used to express architectural forms and practices of its time, ideally rooted in the west-coast, modernist tradition of Vancouver architecture. Recreations and imitations of architecture styles of the past, especially if they are merely add-on façade elements, are not encouraged.



Encouraged: Materials that emphasize the building's segments, in this case the base and middle portions.



Encouraged: Selective use of high-contrast colours to highlight specific building portions.

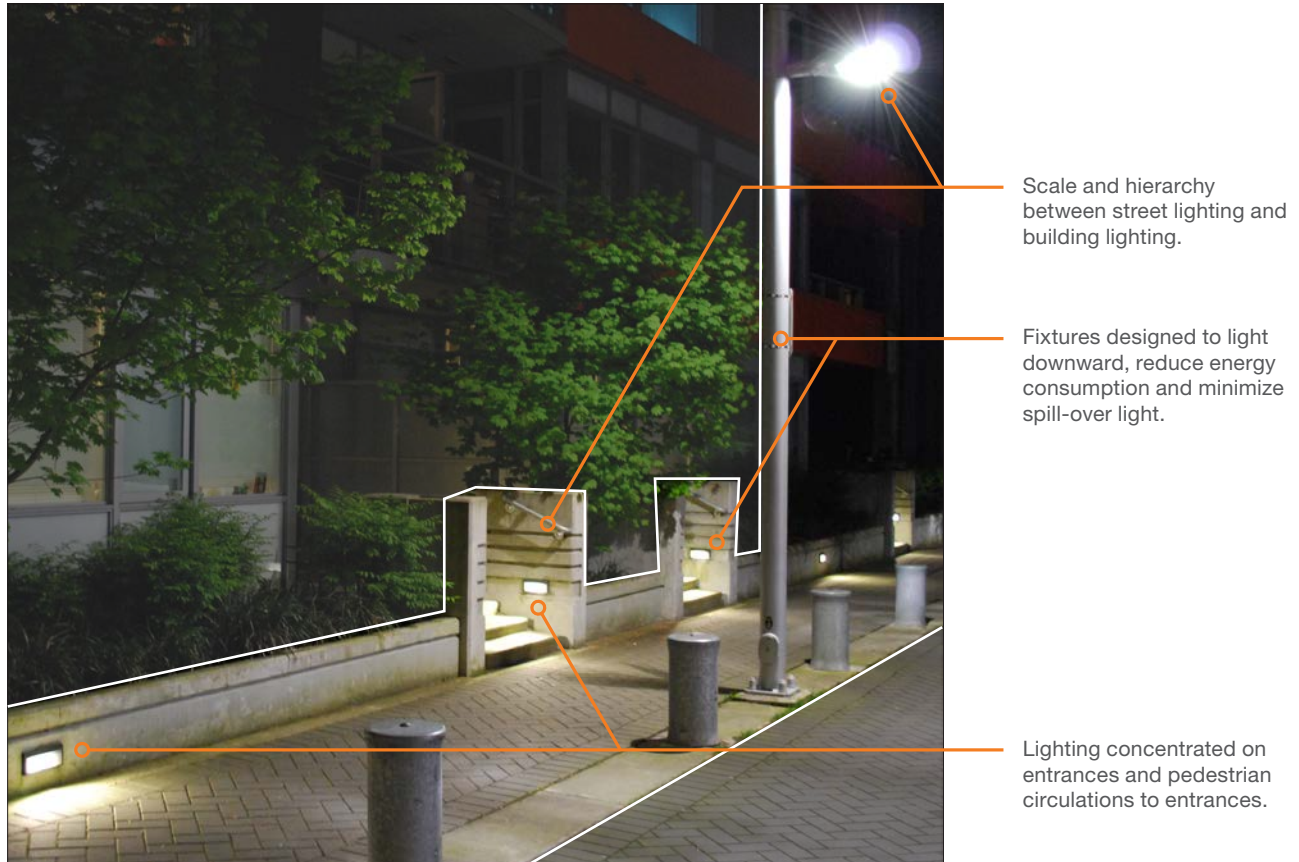


Encouraged: Building materials – here bricks – that turn the corner and convey three-dimensional solidity.

5.11 Building Lighting

Intent

Appropriate building lighting design is important to improve security and safety conditions, to reduce urban light pollution, and to reduce the negative beacon / urban glow effect for birds.



Illustrative Precedent: Building lighting.

Guidelines

- .1 Fixtures and light orientation.** It is encouraged that lighting is integrated into the architectural design of the building, both to ensure adequate illumination and highlight key building elements. All light fixtures should avoid light being directed upwards and be purposefully designed to limit glare, to minimize spill-over light, and to eliminate light trespass into adjacent residential units.

Façade lighting only recommended for the non-residential portions of a building. In this case, building features should be lit downwards, not upwards.

5.11 Building Lighting

- .2 Entrance lighting.** It is advisable that all primary and secondary building entrances and entrance circulations are lit by night. Building entrance lighting and streetscape lighting should be coordinated so that lighting levels and design of fixtures are compatible and proportional to the area they are designed to illuminate.
- .3 Reduced energy consumption.** Whenever possible, low energy consumption lighting and/or sensor or timer-based shut-off controls should be used for residential, pedestrian, and parking areas.



Encouraged: Spot-lighting of commercial signage that reduces light spill-over effects.



Encouraged: Downward facing lighting that eliminates light trespass into residential units.



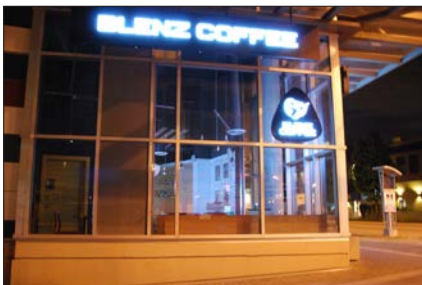
Encouraged: Downward-oriented lighting fixtures.



Encouraged: Spot-lighting of garage entrances that minimizes spill light to the adjacent residences.



Encouraged: Low-intensity backlit commercial signage.



Encouraged: Lighting shut-off when retail use is closed.



Encouraged: Indirect lighting at residential entrances – in this case with illuminated house numbers for easy wayfinding.

5.11 Building Lighting



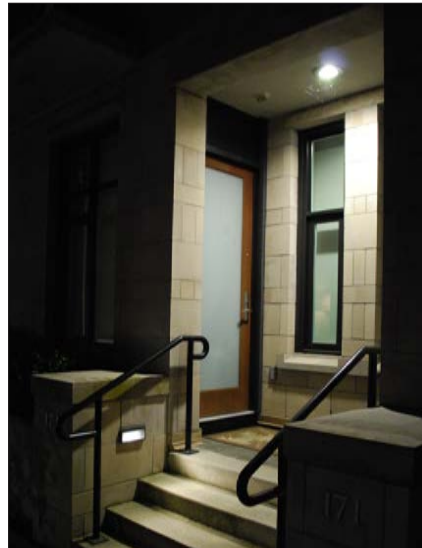
Encouraged: Downward-oriented, indirect entry stairway lighting integrated into a patio's design



Encouraged: Downward-oriented façade lighting – but only for non-residential portions of buildings.



Encouraged: Coordinated lighting strategy that provides transition illumination between the building and the street.

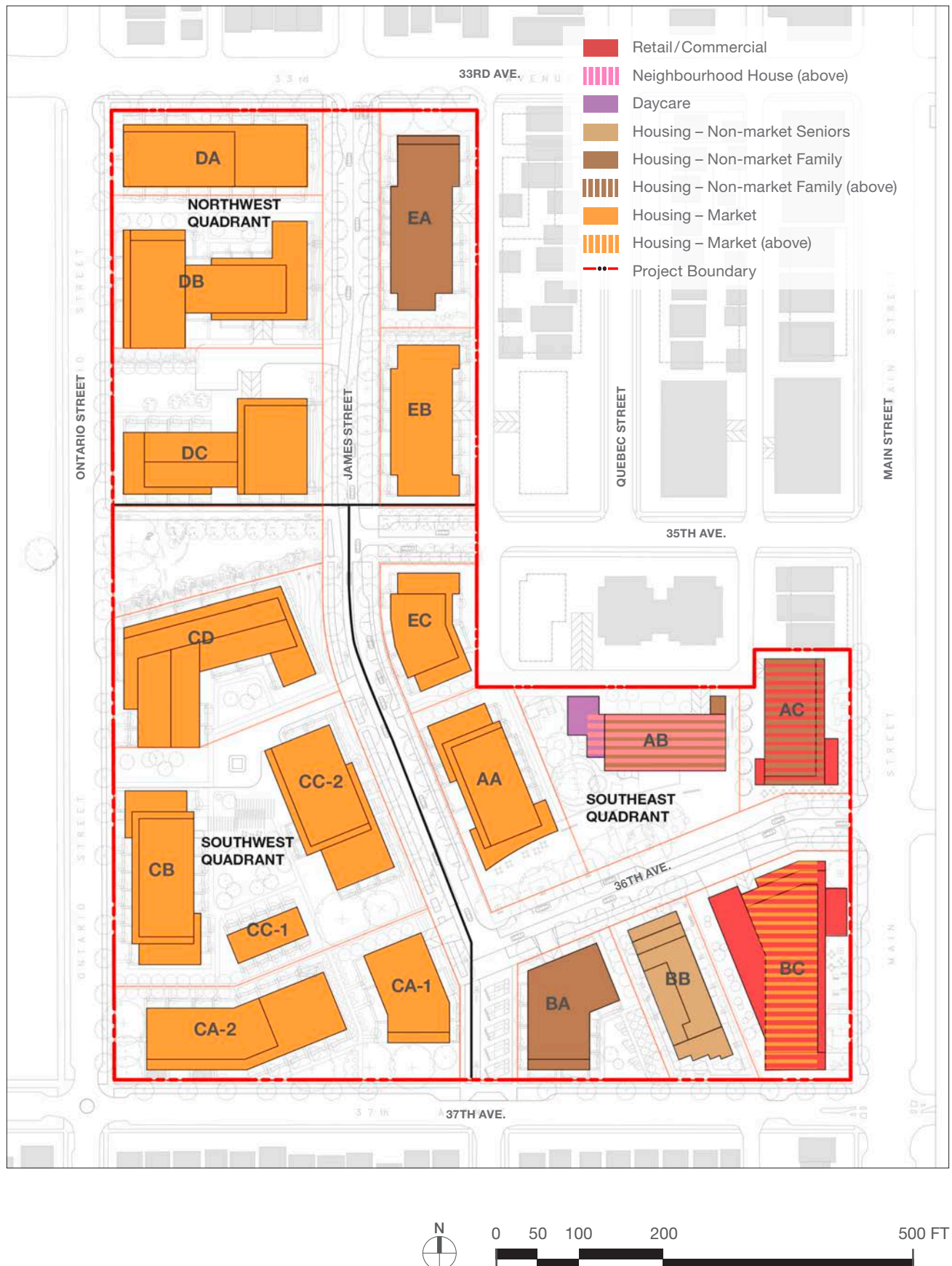


Encouraged: Strategic lighting of residential entrances.

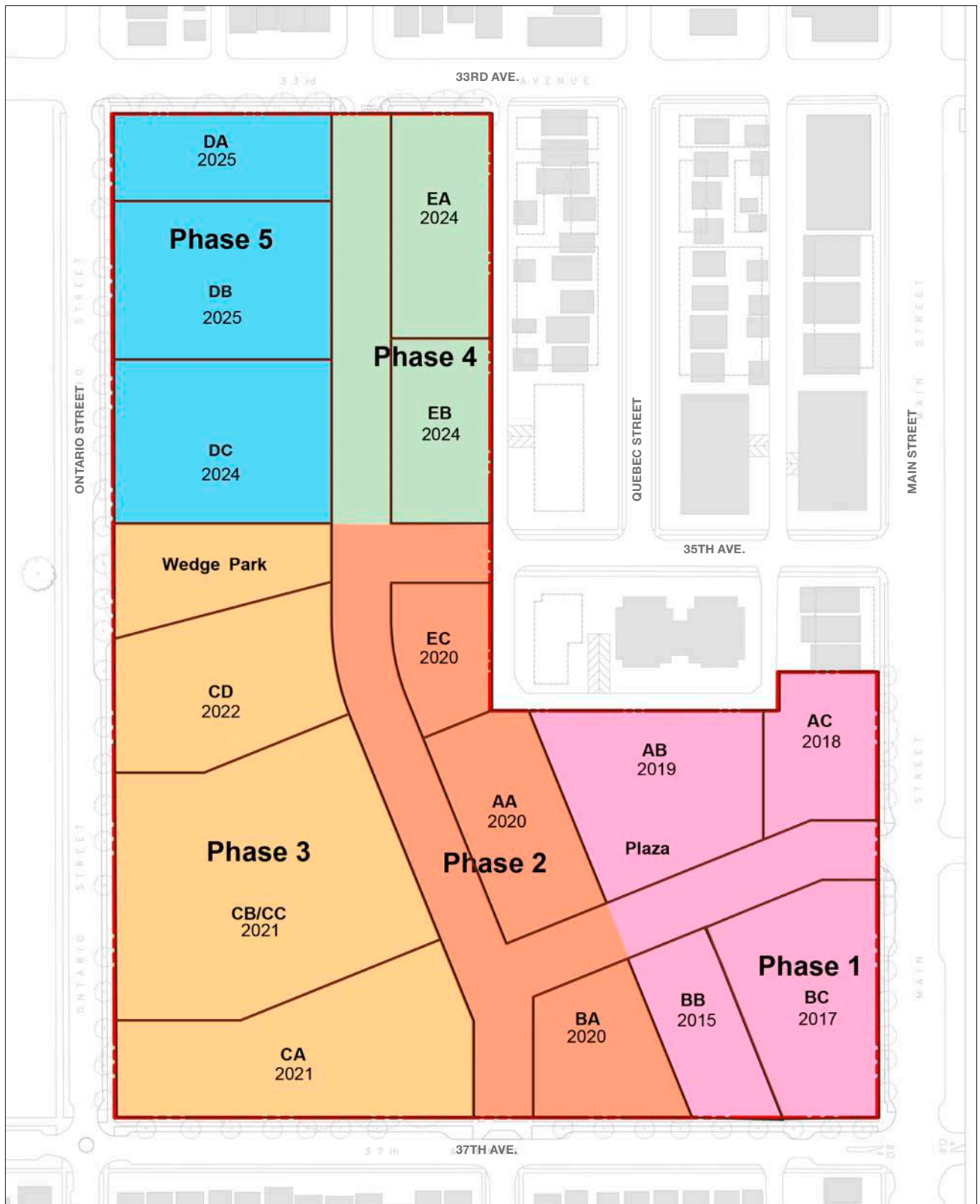
Appendix



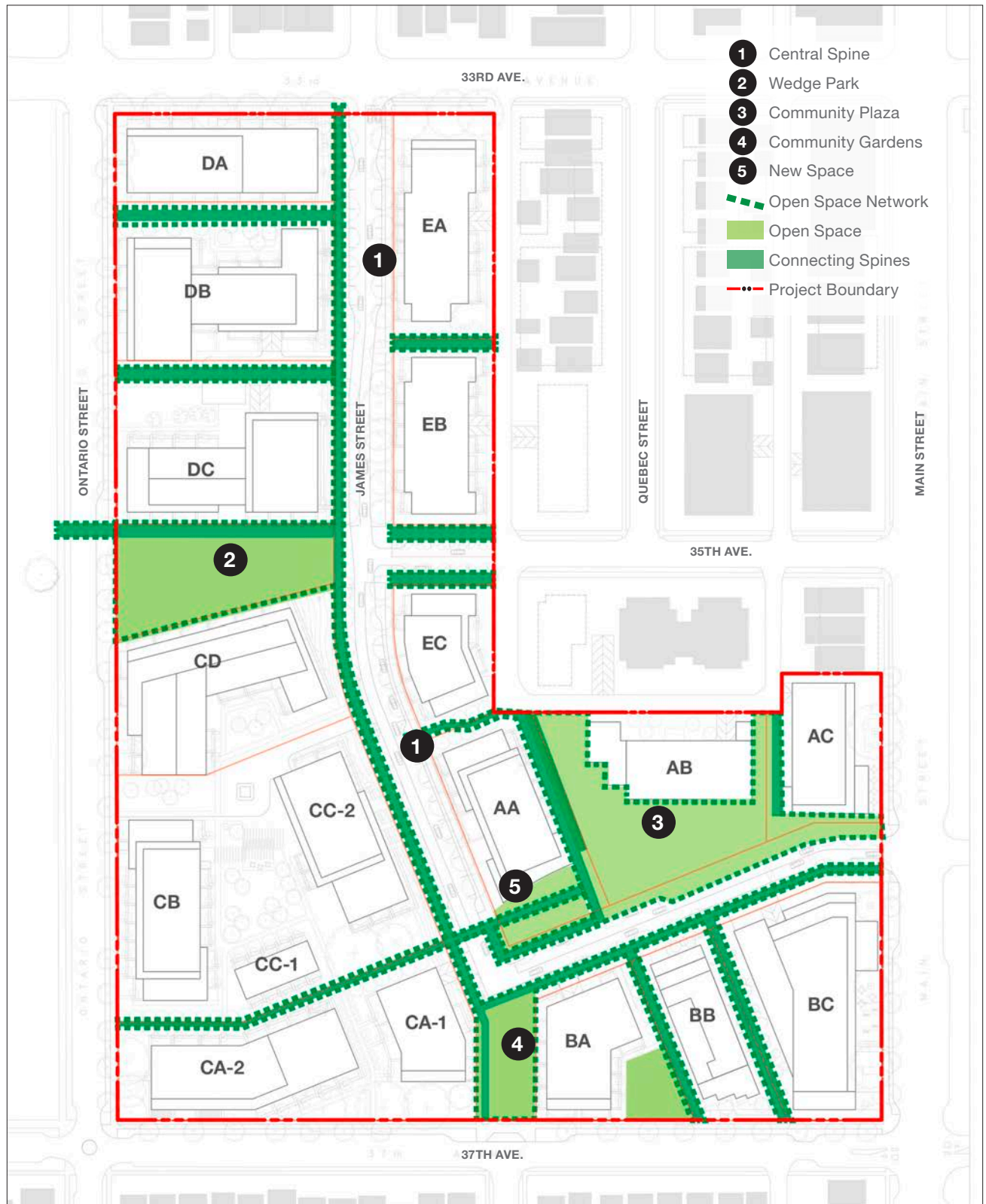
Land Use Plan



Phasing Plan



Open Space Network



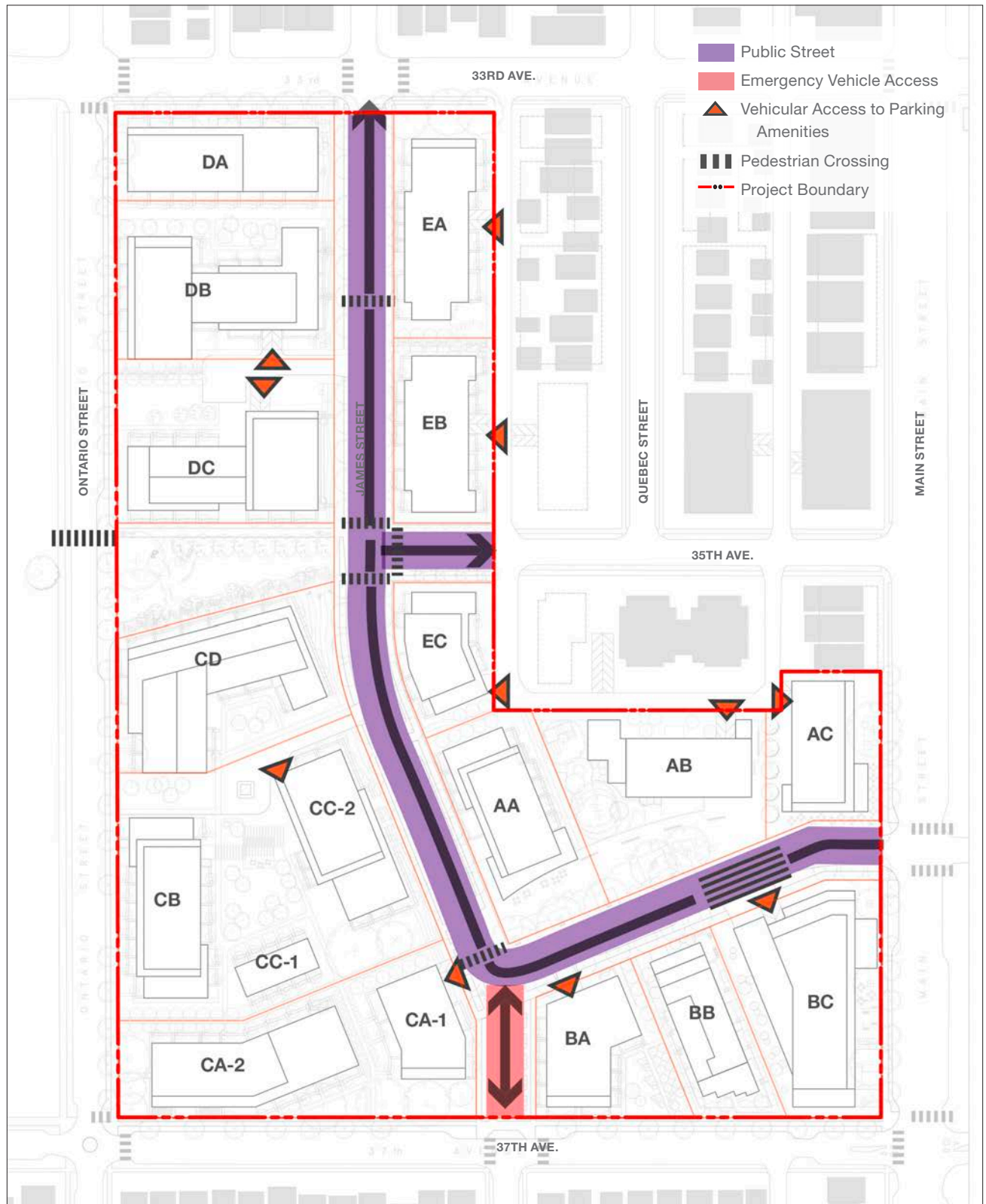
0 50 100 200

500 FT

Retained and New Trees



Vehicular



Rooftop Gardens



