



BOWERS

◆ D I S T R I C T ◆

MASTER PLAN

NOVEMBER 2021



Prepared for:



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On behalf of:

WILHELMINA GROUP LIMITED PARTNERSHIP



Project Overview

The Bowers District Master Plan is focused on creating a compact urban village with a focus on high-quality open spaces and pedestrian-friendly design. The plan creates a natural land use transition between the low-rise residential areas to the east and the high density commercial areas to the west.

- 1 Low- to mid-rise, pedestrian-friendly village with central plaza and mixed use 'main street'
- 2 Large multi-functional park and gathering space at the heart of an extensive trail and open space network
- 3 Green, pedestrian-friendly street network with wide sidewalks, on-street parking, street trees, landscaping, and rain gardens
- 4 Preserved and expanded tree stands at key gateways
- 5 Improved Uplands Drive (sidewalks, cycle tracks, street trees) and sensitive interface to adjacent neighbourhoods
- 6 Higher-density northern and western precincts (future phases) contextual to Hammond Bay Road and Woodgrove node
- 7 High quality built environment with focus on people-centric and green design principles, including courtyards and green open spaces





1. Introduction

1.1 OVERVIEW

Bowers District (formerly “Green Thumb Nursery”) provides a significant opportunity for the creation of a comprehensive, progressive, and complementary neighbourhood in the north of Nanaimo – one that enhances the urban design, environmental, and social performance of development in the area.

The vision for the property offers a complementary and appropriate transition from the adjacent low- to mid-rise Neighbourhood and Corridor land use designations to the east and the higher-density Woodgrove Urban Node lands to the west.



1.2 PLAN AREA MAP

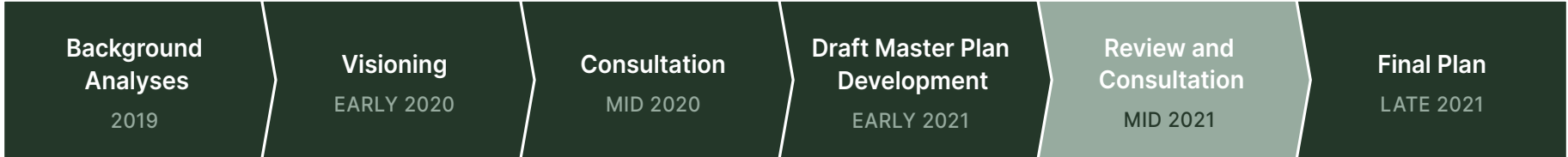
This plan applies to the area shown in the Plan Area Map, currently home to the Green Thumb Garden Centre. The 17.76-hectare site is bounded by Hammond Bay Road, Uplands Drive, and the Island Highway; and is ideally suited for a comprehensive village development.

1.3 PLAN PURPOSE

The proposed Bowers District Master Plan (BDMP) will form part of the City of Nanaimo Official Community Plan (OCP) and provide detailed policies and directions to guide future development and change on the site over the next 20+ years. The plan provides a roadmap for future land use and urban

design, transportation, open spaces, infrastructure, and sustainability measures that support the community’s vision for the future. It also sets a framework for more detailed planning steps that will include rezoning, subdivision, and development permit process to guide growth in this area.

1.4 PLAN PROCESS



BACKGROUND ANALYSES – 2019

The Project Team conducted an in-depth analysis of the site and the surrounding conditions in order to inform visioning and future site planning.

VISIONING – EARLY 2020

A high-level development vision was developed, based on background analyses and high-level City policies.

CONSULTATION – MID 2020

Community input was sought on the initial development vision via in-person and online engagements.

MASTER PLAN DEVELOPMENT – EARLY 2020

A draft Master Plan was developed, based on the preceding steps.

APPLICATION REVIEW AND CONSULTATION – MID 2021

The Master Plan will be reviewed by City staff and referral agencies, and additional community input will be sought.

MASTER PLAN APPROVAL – LATE 2021

Iterative review and updates will lead to the development of the final Master Plan.



2. Context

2.1 HISTORICAL CONTEXT

The City of Nanaimo and its partners would like to acknowledge that this site is located on the unceded traditional territory of the Coast Salish peoples, specifically the Snuneymuxw First Nation and Snaw-naw-as (Nanoose) Nation.

The recent history of the site is that of the Gerke family and development of the Green Thumb Nursery. The following section provides a more detailed look at the “early days” and the establishment of the nursery by the Gerke family.

HISTORY OF THE GREEN THUMB SITE

In 1959, when they arrived at the property, Gerhard and Gertrud Gerke and their two young children (with another on the way) found acres of forest and a three-walled shack (the fourth wall went up in time for the first snow). Their sturdy blue two-seater VW van carried the family all the way from Montreal and was soon to be put to work as the one and only farm vehicle.

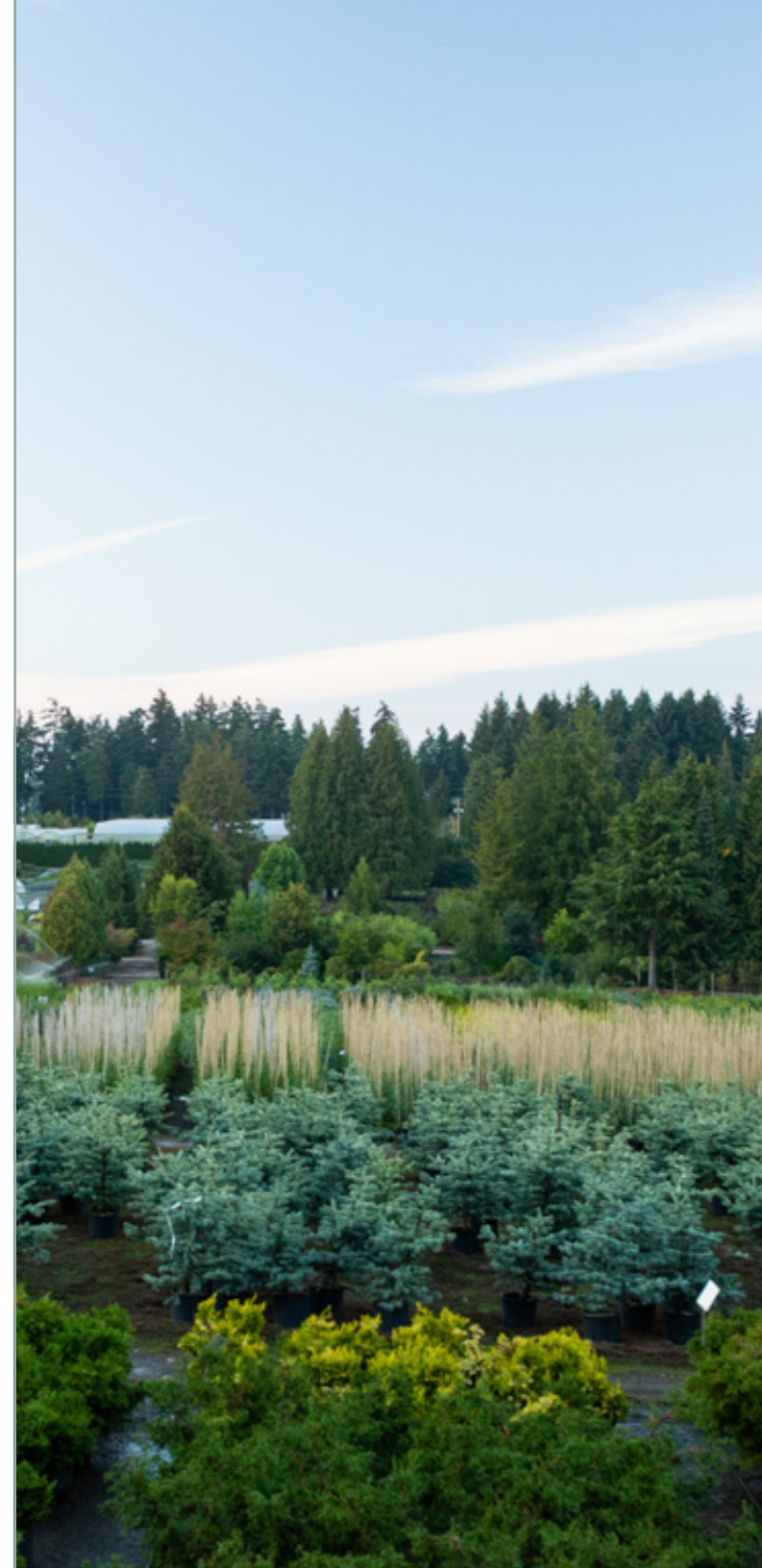
In the early years, the property was a place to buy eggs or raspberries and strawberries picked by the Gerke children. But, people could soon purchase small plants at the Gerke farm stand, as Gerhard and Gertrud wasted no time in starting up their small nursery operation around a newly-built one-room home.

In summer, the trusty van made an almost-daily trek to Long Lake for the family to fill barrels with water for their growing plants and for the family's needs – with dry wells in the summer and no City water. The van was also used as a delivery vehicle, getting filled with plant material for Gerhard's local landscaping jobs.

Farm neighbours helped clear areas of land for planting, and, by the early 1970s, much of the land had been transformed into the nursery operation that exists today. The garden centre moved from a table under a tree in the Gerke's yard to its present location off Hammond Bay Road.

Today, the family often overhears people reminiscing about their days working on the property as a summer student, and about how their parents also got their first jobs here. The property has been a part of many people's lives since the 1960s.

Gerhard's vision for the property was founded on a desire to contribute to his community and help people find joy in their surroundings. This desire drives today's vision for the future of the site: Bowers District is envisioned as a continuation of the work Gerhard and Gertrud Gerke began so long ago – bringing community together, honouring the land around us, and providing a place where people feel at home.

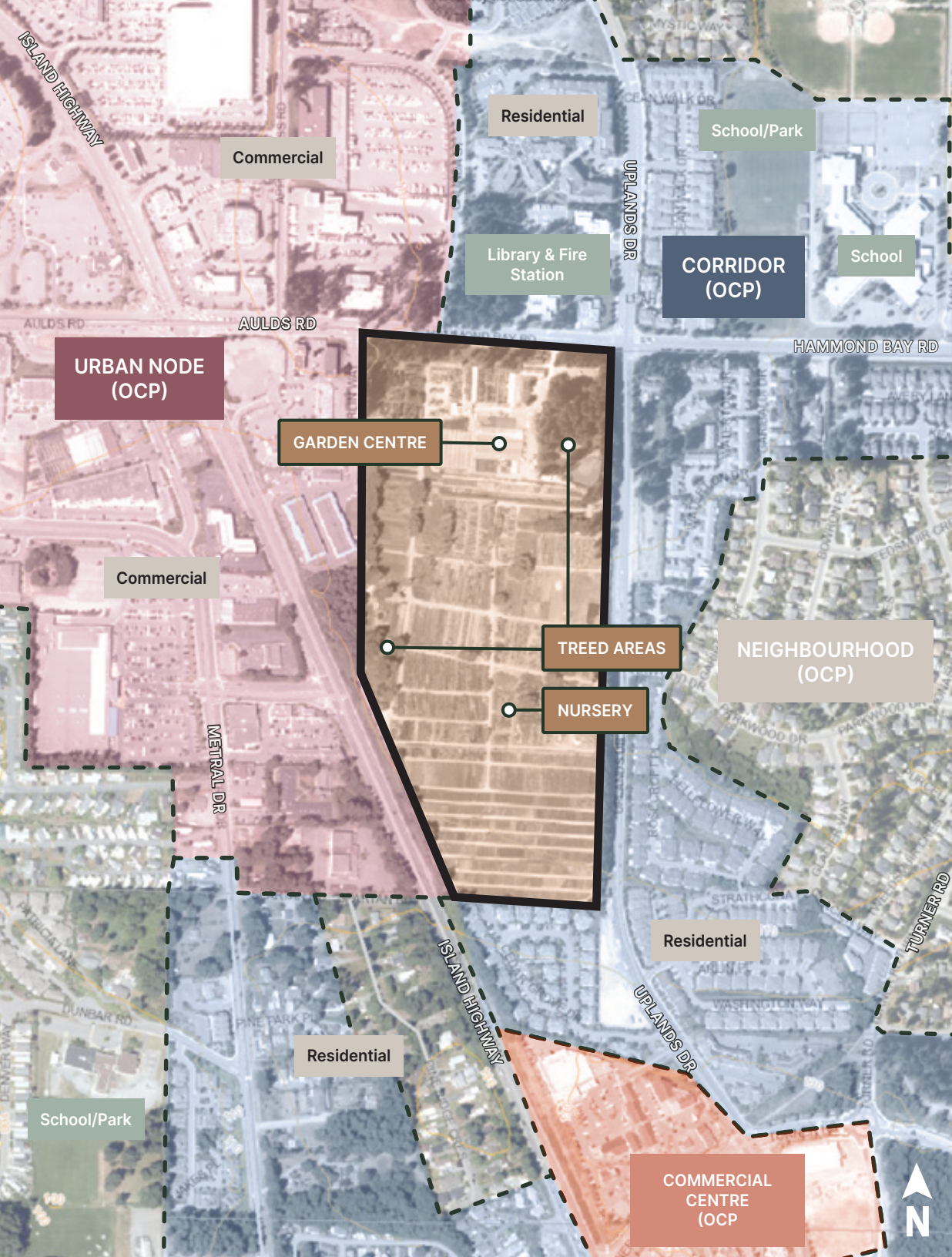


(1963) GERTRUD GERKE WORKING IN THE PROPAGATION GREENHOUSE. THIS IS WHERE THE PLANTS WERE STARTED AS CUTTINGS AND GROWN TO A SIZE SUITABLE FOR PLANTING INTO THE FIELDS



(1966) GERHARD GERKE AND ONE OF HIS EARLY VOLKSWAGEN VANS THAT WERE USED FOR LANDSCAPING AND DELIVERIES. THE VANS WERE ALSO USED FOR TRANSPORTING WATER FROM LONG LAKE FOR DOMESTIC AND NURSERY USE. THE BOX ON TOP STORED TOOLS AND PLANTS THAT WOULDN'T FIT INSIDE.





2.2 PLAN CONTEXT

LOCATION CONTEXT

The Bowers District site is currently used as a busy nursery (southern 2/3) and garden centre (northern 1/3) with few natural features, with the exception of two areas of mature trees (see map).

The development context is primarily characterized by [a] immediate adjacency to Woodgrove Centre Urban Node and its anticipated high-density redevelopment; [b] approximately 300m of frontage on Hammond Bay Road and 650m of frontage on Uplands Drive; and [c] abundant amenities within easy walking/cycling distance (1 KM) – including schools (elementary and secondary), library, fire station, community centre, shopping, services, and numerous parks. Additionally, the site is bounded by commercial development and the Island Highway to the west; multi-family housing to the south (Cedar Grove) and east (Parkwood); and a mix of institutional, commercial, and multi-family residential to the north.

LAND USE CONTEXT

The Bowers District Master Plan creates a natural land use transition from the adjacent mid-rise Neighbourhood and Corridor land use designations to the east and the higher-density, mixed-use Woodgrove Urban Node lands to the west.

(1963) IN THE EARLY YEARS, BEFORE PLASTIC NURSERY POTS WERE AVAILABLE, PLANTS WERE GROWN IN THE GROUND AND DUG UP FOR SALE. IN THE BACKGROUND, GERHARD GERKE CAN BE SEEN TILLING THE FIELDS WITH THE ISLAND HIGHWAY BEYOND.



(1974) THESE NURSERY PLANTS ARE BEING GROWN IN OLD JAM CANS WITH HOLES PUNCHED IN THEM.

ON THE LEFT IS THE ORIGINAL GREEN THUMB BUILDING, WHICH IS NOW HOME TO THE GREEN THUMB OFFICE, LUNCHROOM, AND SHOP. ON THE RIGHT IS THE SITE'S FIRST GREENHOUSE BUILDING, WHICH IS STILL IN USE TODAY.



2.3 SITE CONTEXT



VIEW OF EASTERN BOUNDARY OF SITE ALONG UPLANDS DR., LOOKING NORTH



VIEW ALONG HAMMOND BAY RD
LOOKING EAST



VIEW AT ISLAND HWY & ENTERPRISE WAY
LOOKING EAST



AERIAL VIEW OF SITE, LOOKING NORTHEAST

2.4 POLICY CONTEXT

STRATEGIC PLAN UPDATE 2019-2022

Key priorities in the City's Strategic Plan Update include Economic Health, Environmental Responsibility, and Livability. This Master Plan speaks directly to a number of key strategic directions, including:

- Ensuring community and transportation planning are multi-modal designed to encourage active and public transportation;
- Supporting affordable and accessible housing;
- Creating a safe places to live, work, and play; and,
- Creating improved opportunities for active transportation in order to encourage a healthy, connected and environmentally responsible community.



OFFICIAL COMMUNITY PLAN, 2008

The City's Official Community Plan (OCP) includes a number of Goals, Objectives, and Policies that the Master Plan speaks directly to, including:

- Meeting the core objectives of the Urban Node designation, such as [a] supporting focused urban growth; [b] creating unique characteristics for the area; [c] increasing the mix and intensity of land uses; [d] providing public places and spaces; [e] encouraging sustainability in active modes of transportation; and [f] protecting and enhancing the environment.
- Creating a new public park and other public open spaces on site.
- Seeking to exceed the City's Energy and Emissions Management objectives.
- Supporting the preservation and enhancement of the urban forest on site, as well as the creation of a greenways network throughout the site.
- Focusing on designing to support walking, cycling, and active modes of transportation.



TRANSPORTATION MASTER PLAN (2014)

The Nanaimo Transportation Master Plan provides a number of directions and policies that inform and are supported by this Master Plan.

The plan includes a number of Long Term Directions that the Bowers District Master Plan directly supports, such as:

- Making walking and cycling a more comfortable way to move for all ages and abilities.
- Creating streets that are comfortable for all road users while seeking to reduce our use of cars.
- Parking management strategies that support the development of quality urban environments with less but better utilized parking in denser mixed use areas.
- Reducing the negative impacts of vehicle traffic in neighbourhood transportation.



COMMUNITY SUSTAINABILITY ACTION PLAN (2012)

The City's Community Sustainability Action Plan sets out strategies for increasing climate and sustainability action in the City.

The Master Plan directly aligns with the Action Plan in the following ways:

- Providing a compact, complete community vision.
- Creating a sustainable development model appropriate for higher densities.
- Strongly supporting active and alternative transportation through enhanced pedestrian- and cycle-friendly design and transit-supportive housing.
- Seeking and requiring higher standards of sustainable and high performance buildings.

CLIMATE CHANGE RESILIENCY STRATEGY (2020)

The City's Climate Change Resiliency Strategy provides themes, objectives, and strategies for improving resiliency in the City.

The Master Plan directly aligns with the Action Plan in the following ways:

- Enhancing the urban forest and planting climate-resilient tree species.
- Heavily utilizing green infrastructure and integrated stormwater management strategies, such as bioswales, rain gardens, and bioponds.
- Incorporate low carbon, resilient building strategies, such as passive design and high performance building modalities.

BC ENERGY STEP CODE REZONING POLICY (2021)

The City's BC Energy Step Code Rezoning Policy details the process for securing a minimum building energy efficiency standard to be secured at the time of rezoning that would apply to future development on the site. The policy includes commitments to low carbon energy systems and the BC Energy Step Code.



AFFORDABLE HOUSING STRATEGY (2018)

The City's Affordable Housing Strategy lays out objectives and strategies for creating more attainable, affordable, and diverse housing in the City.

This Master Plan addresses a number of key objectives and actions in the strategy – and will continue to work toward them with subsequent development applications. Relevant objectives achieved in the Master Plan are:

- Diversifying housing through the provision of a mix of housing types and encouraging family-friendly and larger units, as well as fee-simple townhomes.
- Supporting increase in affordability through reduced parking requirements.
- Seeking partnerships to provide non-market and supportive housing.



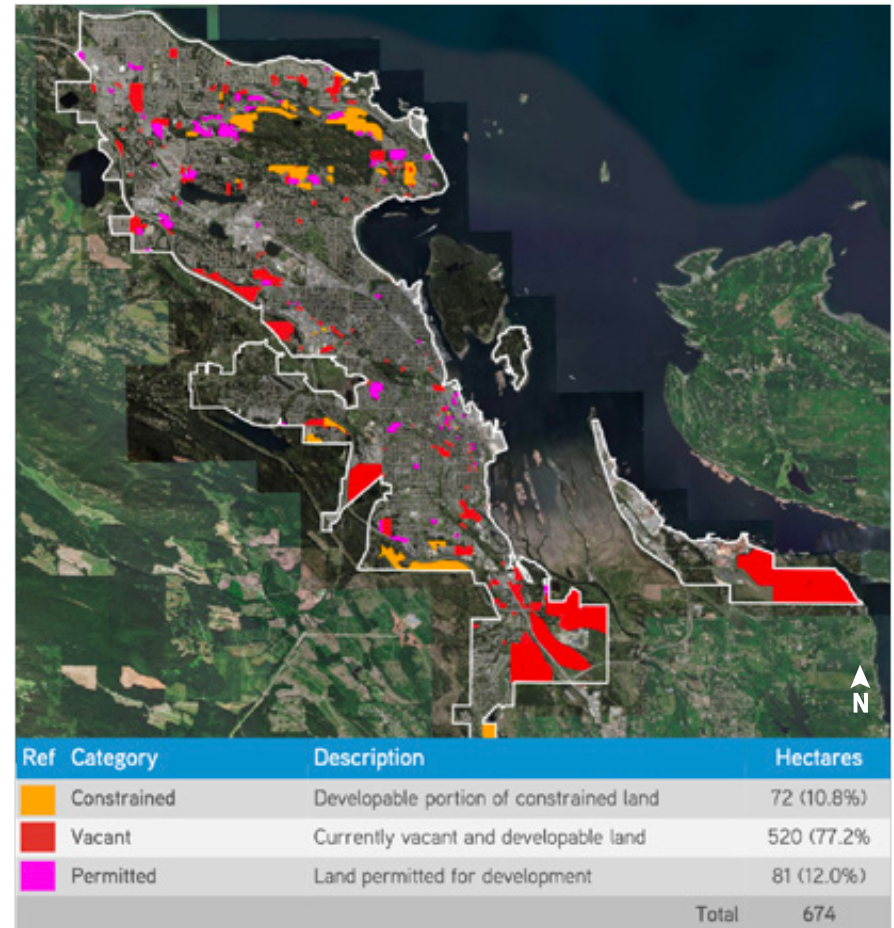
2.5 OTHER CONTEXT

LAND INVENTORY AND CAPACITY ANALYSIS (2020)

In 2020, Colliers International Consulting undertook a Land Inventory and Capacity Analysis to support a comprehensive update to the City's Official Community Plan. The focus of the study was on growth trends in land use patterns, the demand for developable land, and the capacity for developable land to meet this demand.

The following summary findings are relevant to and supportive of the envisioned redevelopment of the Bowers District site.

- By 2046, it is estimated that the City is likely to experience demand for an additional 2,782 to 4,050 single family houses, 4,041 to 4,926 ground oriented units, and 8,148 to 12,011 apartments.
- Based on this analysis, these projections are expected to result in demand for an additional 253 to 607 hectares of residential land by 2046.
- Growing demand is immediately evident among townhomes and 4-6 storey wood frame apartments due to consumer preferences along with the feasibility of wood frame rather than high rise development.
- The City should also consider allowing for greater maximum building heights so that variances do not have to be sought out.
- Although retail sales growth has slowed due to COVID-19, Colliers estimates a demand for an additional 56,670 to 72,460 square meters of retail floorspace, 11,800 to 14,850 square meters of service commercial floorspace, and 102,000 to 130,000 square meters of traditional office floorspace.



POPULATION, HOUSING AND EMPLOYMENT PROJECTIONS (2020)

In 2020, Vann Struth Consulting Group developed population, housing, and employment projections for the City for the next 25-30 years.

The following summary findings are relevant to and supportive of the envisioned redevelopment of the Bowers District site.

- Apartments will be the fastest growing unit type, likely doubling (at least) in number. Other ground-oriented units (such as townhomes) will also exhibit strong growth, while the number of single-family homes will grow less than half as fast as population.
- Total population by 2046 in the range of 126,000 to 141,300.
- The age 75+ demographic will be the fastest growing in percentage terms, and the population under age 35 will grow the least.
- The number of occupied dwelling units will grow at a slightly faster rate than population, due largely to population aging that leads to lower average household sizes. Total occupied units are projected in the range of 53,900 to 60,000.





3. Vision Framework

3.1 OVERVIEW

This chapter provides a guiding framework that informs all other directions and policies of this plan. Future planning, design, and decision-making in Bowers District should be informed by the vision, goals, and principles of this chapter. Moreover, the Conceptual Plan, Illustrations, and other imagery visually communicate the intended vision for future development in the plan area.

3.2 VISION

TODAY

The Gerek family's vision is to see the spirit of Green Thumb live on in the Bowers District. This means a place that [a] brings community together; [b] honours and celebrates the land; and [c] provides a place where people feel at home.

TOMORROW

Bowers District is both a vibrant, walkable village and a distinct refuge from the wider city. Residents and visitors alike are drawn to the strong sense of place established by high standards for architecture, rich landscaping and abundant tree canopy, and network of greenways, pathways, and parks. In the south, a large linear park is bordered by a mix of townhomes, low- to mid-rise apartments, and a small-scale mixed-use "main street". Whereas, in the north, a higher-density mixed-use precinct has evolved to meet changing needs of the area and City over time.

3.3 GOALS

The plan goals are the desired outcomes to be achieved in order to realize the area vision.

Live, Work, & Play
A district where people of all ages can live, work, and play within a 5-minute walking radius.



Exemplary Design
A human scale development with high quality streetscapes, distinct architecture, and rich green landscaping.



Green, not Gray
A network of green spaces and green streets that supports a healthy community and healthy ecosystems.



3.4 PLANNING PRINCIPLES

The plan principles are the guiding rules to follow in order to achieve the project goals and vision.

	<p>Streets for People</p> <p>Create streets that are comfortable and safe for all users with a focus on pedestrians, cyclists, and other non-motorized users.</p>	
	<p>Sustainable Growth</p> <p>Facilitate compact development that creates vibrant, walkable places that provide for long-term community growth, while avoiding urban sprawl and worsening impacts on the natural environment.</p>	
	<p>Housing Choices</p> <p>Provide a range of housing types and tenures to serve local residents through all stages of life, such as townhomes, apartments, and live-work units.</p>	
	<p>Green Infrastructure & Landscaping</p> <p>Develop streets, open spaces, and infrastructure that use landscape solutions to manage stormwater, provide urban habitat, and create healthier environments.</p>	
	<p>Sustainable Design & Low-carbon Buildings</p> <p>Ensure buildings utilize the latest design strategies for energy efficiency, greenhouse gas reduction, renewable energy generation, and sustainable building materials.</p>	

3.5 URBAN DESIGN PRINCIPLES

In addition to the general principles in 3.4, these additional urban design principles represent the guiding rules to follow to achieve the urban design and architectural aspirations of Bowers District.



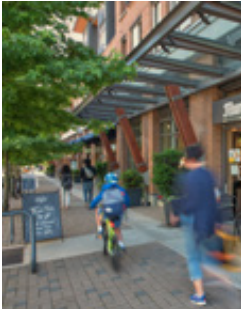
Human Scale

The massing of buildings and height of the streetwall are limited or articulated to reduce the visual and experiential impacts on pedestrians.



Connectivity and Active Mobility

The site is planned with small block sizes, walking/cycling linkages, and walkable streets to maximize connectivity and active mobility while calming vehicular traffic.



Active Frontages

The ground floor of buildings is activated through retail frontages with abundant glazing, ground-oriented residential units, or public (e.g., plazas) and semi-private (e.g., yards) spaces.



Placemaking & Neighbourhood Character

The design of buildings, landscaping (on public and private land), and other elements create a unified and distinct aesthetic and sense of place for Bowers District.



Designing for Sunlight and Views

The site is planned to enjoy and maintain view corridors (e.g., from taller buildings, from public spaces) and to maximize sunlight penetration into usable public (e.g., parks, streets) and private spaces (e.g., patios).



Places to Gather, Rest & Recreate

Public parks and trails, semi-public plazas and mews, and private courtyards and gardens are integrated throughout the District and offer many options for passive and active forms of recreation and respite.



3.6 CONCEPTUAL PLAN

PLAN OVERVIEW

The conceptual plan shows the 4 precincts of Bowers District. The precinct boundaries are illustrative and approximate (see Chapter 4 Land Use).

VILLAGE MIXED USE

The heart of the neighbourhood and a central gathering place. A low- to mid-rise (2-6 storeys) mixed use area with a focus on boutique commercial use with residential above and high quality public open spaces, including a village main street, large central park, and vibrant village plaza.

VILLAGE RESIDENTIAL

The primary residential precinct with a distinct sense of place. A mix of low- to mid-rise housing (2 to 6 storeys) along tree-lined streets and greenways, with sensitive height transitions to Uplands Dr.

URBAN MIXED USE

An adaptable future phase and higher density precinct. A mix of low- to mid-rise (3-6 storeys) and high-rise (6+) residential and mixed use/commercial – adaptable to future conditions, while remaining consistent with the site's vision.

URBAN RESIDENTIAL

A flexible and diverse residential precinct. A mix of low- to mid-rise (3-6 storeys) with limited high-rise (6+) residential buildings, with careful attention to creating and maintaining view corridors and sunlit open spaces.



CONCEPTUAL PLAN ELEMENTS

The conceptual plan illustrates the future of Bowers District, as envisioned in the Master Plan. Key elements are highlighted on this page. The subsequent chapters of this plan detail the future Transportation (Chapter 4) and Open Space (Chapter 5) networks through specific policies and directions.

CONCEPT ILLUSTRATION OF THE VILLAGE MAIN STREET WITH ACTIVE RETAIL FRONTAGES, RESIDENTIAL ABOVE, AND PEDESTRIAN-FRIENDLY AND GREEN STREETS.



PERSPECTIVE ILLUSTRATION LOOKING NORTH ACROSS THE SITE. ALL BUILDINGS DETAILS (E.G., HEIGHT, LOCATION, AESTHETIC) ARE CONCEPTUAL AND FOR VISUALIZATION PURPOSES ONLY.

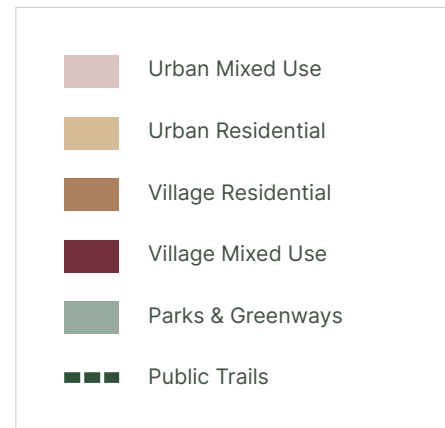




3.7 SITE PLAN

PLAN OVERVIEW

This illustrative site plan shows the structure of the Bowers District, including street and trail network and basic block structure. The boundaries are illustrative and approximate.



3.8 VISUALIZING THE CONCEPT

To better visualize the concept plan, this gallery provides a set of precedent images taken from other successful neighbourhoods and represents the key elements that could be expected in each Bowers District precinct.

VILLAGE MIXED USE

Pedestrian-oriented village with mixed use main street and village plaza



Low- to mid-rise mixed use buildings with active frontages.



Permeable ground floor uses and quality street design.



Pedestrian street/plaza with retail frontages



Quality design at the interface between private and public realms.

VILLAGE RESIDENTIAL

Low- to mid-rise residential neighbourhood with townhomes and apartments lining pedestrian-friendly streets



Four-storey residential with ground-oriented units.



Residential framing the street and contributing to village vitality.



Emphasis on green landscaping throughout.



A variety of unit types designed with a coherent, contemporary aesthetic.

URBAN MIXED USE

A higher-density area with residential and mixed use/commercial buildings adjacent to Hammond Bay Road, responsive to future conditions



Mid- to high-rise commercial buildings that complement the local context.



Pedestrian-oriented streets with active frontages.



Quality interface of the private and public realms.



Pedestrian-only street with retail frontages

URBAN RESIDENTIAL

A higher-density mix of low-, mid-, and potentially high-rise residential buildings, responsive to future conditions in the area



High-rise residential with focus on ground-oriented units.



Human scaled residential with network of greenways.



Focus on quality open spaces and landscaping and cohesive design



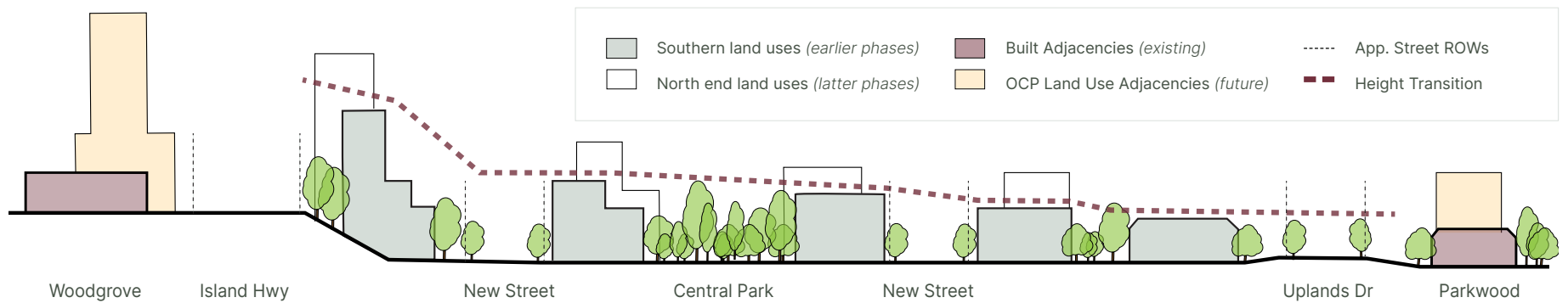
Incorporating design strategies for reducing bulk and massing.

3.9 THE CONCEPT PLAN IN CONTEXT

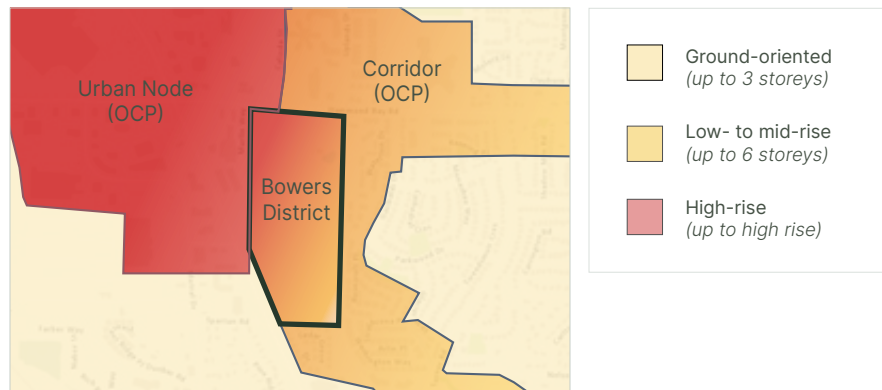
The diagrams in this section visually communicate how the Concept Plan (and Land Use Plan in Section 4.2) are informed by and fit into

the surrounding built environment and land use policy context. These images are intended to be diagrammatic and for illustrative purposes only.

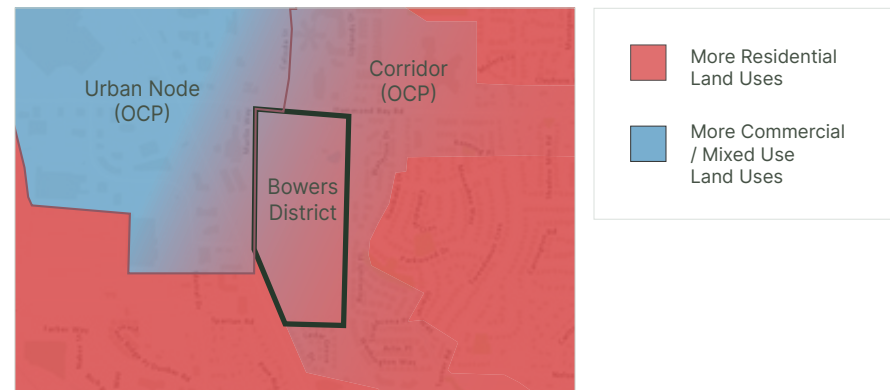
HEIGHT TRANSITION – WEST TO EAST (WOODGROVE TO PARKWOOD)



HEIGHT TRANSITION – POLICY



TYPICAL LAND USE TRANSITION





4. Land Use & Urban Design

4.1 OVERVIEW

This chapter provides land use and urban design directions and policies that serve to guide future decision-making about development in Bowers District. The use of land and the quality of design in new developments will be critical components in moving towards the future vision for the District.

Rather than high-level directions for the entire site, the policies of this chapter seek to create a sensitive and contextual transition between the surrounding Corridor and Urban Node land uses, as well as existing and anticipated future conditions. This is achieved by creating two smaller-scale, more-defined land use designations (Village Residential and Village Mixed Use), which represent the earlier phases of development, and two higher-density areas, responsive to future conditions (Urban Residential and Urban Mixed Use), which represent the latter phases of development.

The policies and directions of this chapter are guided by the directions, goals, and principles found in Chapter 3. Additionally, the policies and directions of this chapter should be read in context of the subsequent chapters – including Chapter 7 Sustainability & Low-Impact Development, which directly informs the implementation of the land use policies.

4.2 LAND USE PLAN

This Land Use Plan shows the land use designations for the Bowers District, including [a] fine-grained land uses specific to this plan and [b] high-level OCP land uses (i.e., Node and Corridor).

The table in Section 4.3 provides a summary of each land use designation, and Sections 4.4 to 4.8 provide policy directions for each land use. Sections 4.10 to 4.12 provide more detailed design direction and guidelines for all land uses.






LAND USE DESIGNATION & RATIONALE

As illustrated in Section 3.10, these Land Use designations create a natural land use transition between the adjacent Corridor areas and Woodgrove Urban Node, as identified in the City's Official Community Plan. The land uses in the plan area will:

- a. Allow the development of a contextual urban residential neighbourhood and mixed use village that complements the existing Woodgrove Centre, while providing a distinct residential and retail offering; and,
- b. Provide a viable development model that supports a more appropriate, responsive, and sustainable vision for this critical redevelopment site.



4.3 LAND USE SUMMARY TABLE

LAND USE	TYPOLOGY SUMMARY	KEY CHARACTERISTICS	PRECEDENT IMAGE
<p><i>Village Residential (V-R)</i></p>	<p>Townhomes and low- to mid-rise multifamily</p>	<ul style="list-style-type: none"> • 2-6 storeys • Mix of housing and unit types • High quality open spaces (e.g., trails, greenways, parks) 	
<p><i>Village Mixed Use (V-MU)</i></p>	<p>Low- to mid-rise mixed use with active ground floor uses and primarily residential on the upper storeys</p>	<ul style="list-style-type: none"> • 3-6 storeys • High quality open spaces (e.g., parks, plazas, greenways) • Active retail frontages on main streets and key public spaces 	
<p><i>Urban Residential (U-R)</i></p>	<p>A mix of ground-oriented, low-rise, mid-rise, and limited high-rise residential</p>	<ul style="list-style-type: none"> • A mix of low- to mid- (3-6 storeys) and high-rise (6+ storeys) buildings • Mix of housing and unit types • High quality open spaces 	
<p><i>Urban Mixed Use (U-MU)</i></p>	<p>A mix of low-rise, mid-rise, and limited high-rise residential and mixed use/commercial buildings with active ground floor uses</p>	<ul style="list-style-type: none"> • A mix of low- to mid- (3-6 storeys) and high-rise (6+ storeys) buildings • High quality open spaces • Active ground floor uses 	
<p><i>Parks & Open Space (P)</i></p>	<p>Parks and open spaces with a mix of active and passive recreational opportunities</p>	<ul style="list-style-type: none"> • Creation of central gathering places • Active and passive recreation opportunities and amenities 	

4.4 VILLAGE RESIDENTIAL

4.4.1 VILLAGE RESIDENTIAL LAND USE POLICIES

1. Support the creation of a compact, low- to mid-rise mix of housing types that [a] support a vibrant village and [b] create a sensitive transition to existing residential neighbourhoods.
2. Support primarily residential land uses, including:
 - » Ground-oriented and multifamily residential
 - » Community services
 - » Seniors congregate care
 - » Public open space (e.g., parks) and other amenities
3. Buildings will be sited to provide a consistent streetwall and ground-oriented units with some variation for visual interest and publicly-accessible parks and plazas.
4. Support building heights from 2 to 6 storeys.
 - » South of Parkwood Drive and adjacent to Uplands Drive, the upper storeys of buildings taller than 4 storeys will be “stepped back”.
5. Development in Bowers District will meet the policies and guidelines of Sections 7.3, 7.4, and 7.5, which detail the sustainability directions for the area regarding Urban Forest, Stormwater Management, and Sustainable Design.



A MID-RISE RESIDENTIAL BUILDING WITH GROUND-ORIENTED UNITS

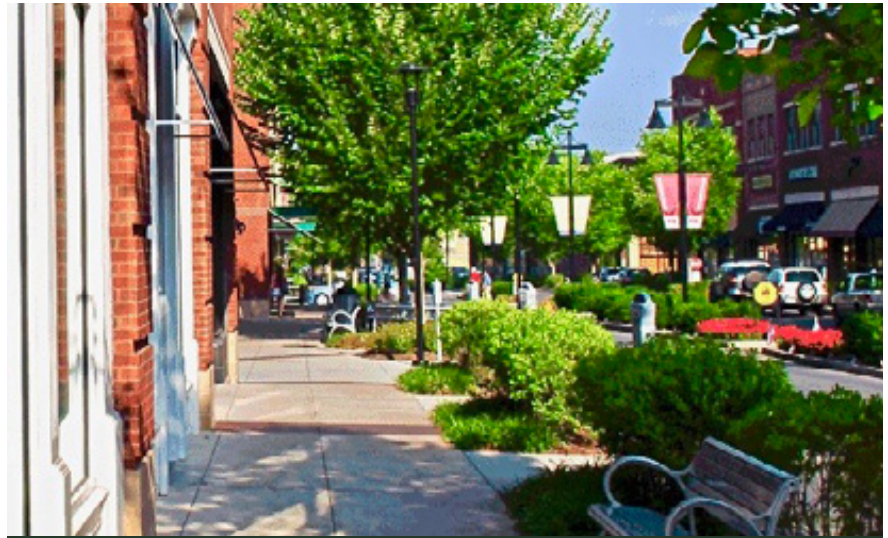


HIGH QUALITY TOWNHOUSE DESIGN

4.5 VILLAGE MIXED USE

4.5.1 VILLAGE MIXED USE LAND USE POLICIES

1. Support a compact, mixed use, and vibrant village core with a focus on high quality public spaces and small-scale retail spaces (not large-format).
2. Support a mix of land uses, including:
 - » Civic, community service, institutional
 - » Commercial, retail, office, services
 - » Multifamily residential (above the first floor of primary frontage) and live-work
 - » Public open space (e.g.,plazas, parks) and other amenities
3. Building will be sited to provide a consistent streetwall and active frontages with some variation for visual interest and publicly-accessible parks and plazas.
4. Support building heights from 3 to 6 storeys.
5. Development in Bowers District will meet the policies and guidelines of Sections 7.3, 7.4, and 7.5, which detail the sustainability directions for the area regarding Urban Forest, Stormwater Management, and Sustainable Design.



A MAIN STREET WITH PEDESTRIAN-FRIENDLY STREET AND ACTIVE FRONTAGES



AN ACTIVE USE WITH INCREASED SETBACK FOR PATIO

4.6 URBAN RESIDENTIAL

4.6.1 URBAN RESIDENTIAL LAND USE POLICIES

1. Support the creation of a diverse mix of compact, multifamily housing types that are designed with consideration for adjacent land uses.
2. Support primarily residential land uses, including:
 - » Ground-oriented and multifamily residential
 - » Community services, seniors congregate care
 - » Public open space (e.g., parks) and other amenities
3. Buildings will be sited to provide a consistent streetwall and ground-oriented units with variation for visual interest and parks and plazas.
4. Additional and substantial (e.g., 3m+) upper storey setbacks will be incorporated to reduce the massing of high-rise buildings.
5. Supported building heights are from low- to high-rise (6+ storeys).
 - » A height transition will be created from the north and west sides of the site (complementary to the Woodgrove Urban Node) down to the east and south sides of the site (complementary to the adjacent Village designations).
6. Development in Bowers District will meet the policies and guidelines of Sections 7.3, 7.4, and 7.5, which detail the sustainability directions for the area regarding Urban Forest, Stormwater Management, and Sustainable Design.



A HIGH-RISE RESIDENTIAL WITH A HIGH QUALITY STREET INTERFACE



MID-RISE RESIDENTIAL WITH GROUND-ORIENTED UNITS

4.7 URBAN MIXED USE

4.7.1 URBAN MIXED USE LAND USE POLICIES

1. Support the creation of a compact, mixed use corridor that integrates with the Woodgrove Urban Node and responds to future conditions.
2. Support a mix of land uses, including:
 - » Commercial, retail, office, services
 - » Multifamily residential and live-work
 - » Civic, community service, institutional
 - » Public open space (e.g., plazas, parks)
3. Buildings will be sited to provide a consistent streetwall and active frontage with variation for visual interest and parks and plazas.
4. Additional and substantial (e.g., 3m+) upper storey setbacks will be incorporated to reduce the massing of high-rise buildings.
5. Supported building heights are from low- to high-rise (6+ storeys).
 - » A height transition will be created from the north and west sides of the site (complementary to the Woodgrove Urban Node) down to the east and south sides of the site (complementary to the adjacent Village designations).
6. Development in Bowers District will meet the policies and guidelines of Sections 7.3, 7.4, and 7.5, which detail the sustainability directions for the area regarding Urban Forest, Stormwater Management, and Sustainable Design.



A RETAIL/COMMERCIAL BUILDING WITH ACTIVE STREET FRONTAGE



COMMERCIAL BUILDING WITH HIGH QUALITY PUBLIC REALM

4.8 PARKS & OPEN SPACE

4.8.1 PARKS & OPEN SPACE LAND USE POLICIES

1. Support the creation of a mix of multi-functional parks and public open spaces (e.g., greenways, plazas) throughout Bowers District to provide active and passive recreational and social opportunities to residents and visitors of all ages and abilities.

See Chapter 6 for more Parks and Open Space policies.



A LARGE LINEAR PARK WITH NATURE-BASED PLAY AREA



A MULTIFUNCTIONAL PARK ELEMENTS – ART, SEATING, PLAY

4.11 HOUSING

The following policies provide direction for the development of a diverse and attainable housing stock in Bowers District.

4.11.1 HOUSING POLICY

1. New residential units will be meet current accessibility standards, and the inclusion of universally accessible units will be encouraged.
2. The inclusion of adaptable units in all new construction is strongly supported to support changing needs and demographics over time.
3. A mix of housing types and tenures will be provided in order to accommodate a social mix, residents of all ages and abilities, changing demographics over time, and a range of income levels. This includes strong support for future development that include one or more of the following:
 - » Rental units;
 - » Strata and fee simple ownership (e.g., row house);
 - » Lock-off suites and flexible units;
 - » Ground-oriented units;
 - » A range of unit sizes; and,
 - » Inclusion of family-sized units (3+ bedroom).
4. Partnerships with non-market housing providers will be supported to facilitate the creation of affordable housing.
5. Opportunities for seniors housing and seniors supportive housing will be supported throughout the site.



A seniors housing building with accessible design standards.



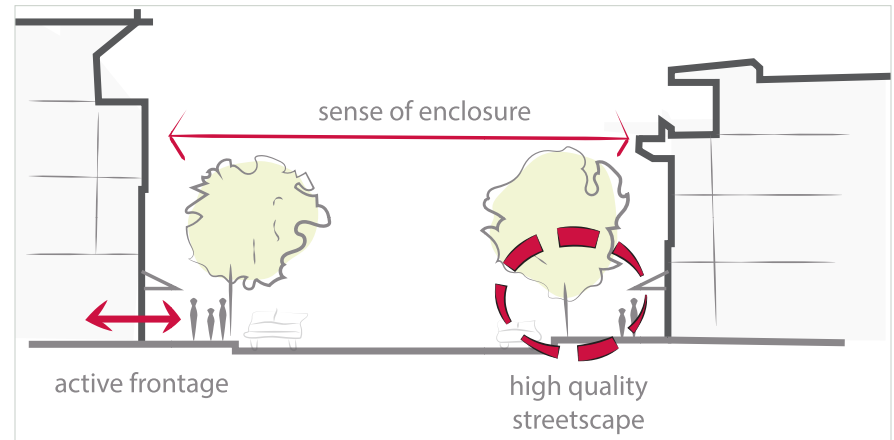
A non-market residential building with family-sized units and large common spaces.

4.11 URBAN DESIGN GUIDELINES

The following guidelines are meant to reinforce and be complementary to the City's development permit design guidelines. These guidelines apply to all land use areas and building typologies, except where noted. See Section 3.5 for the Urban Design Principles.

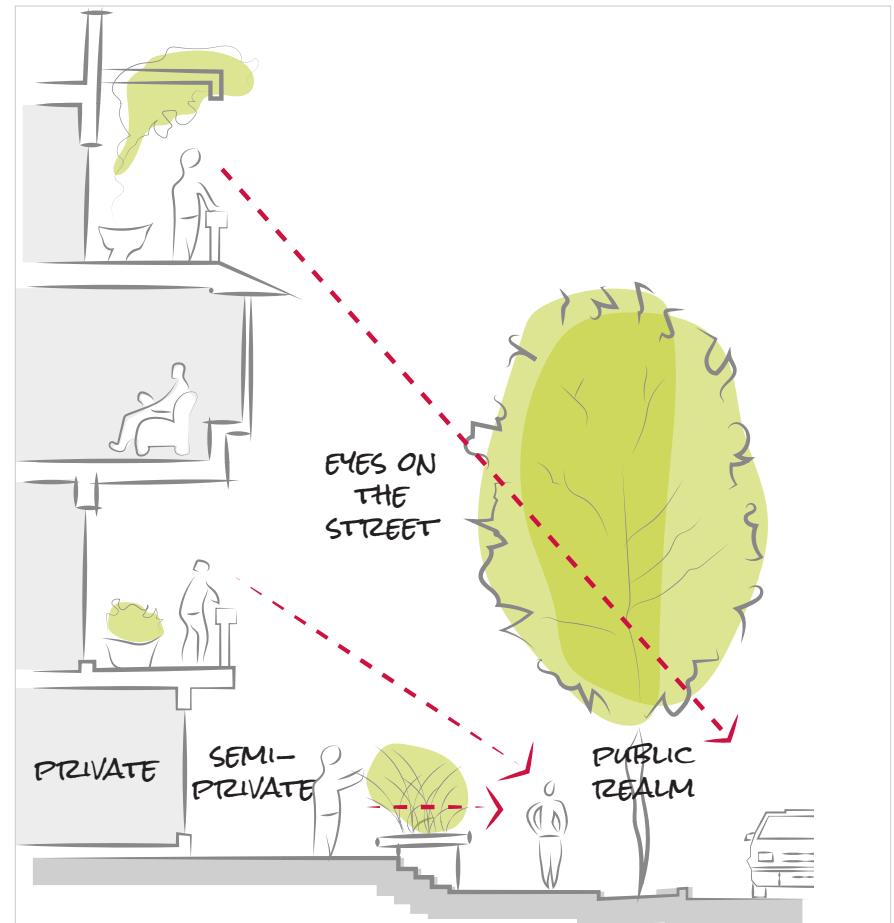
4.11.1 RELATIONSHIP TO STREET

1. Minimize the distance between the building and the sidewalk to create street definition and a sense of enclosure, supported by high quality streetscape design.
2. Orient primary building facades and entries to the fronting street(s) or open space to create street edge definition and activity.



Three foundational principles of good urban design for the village

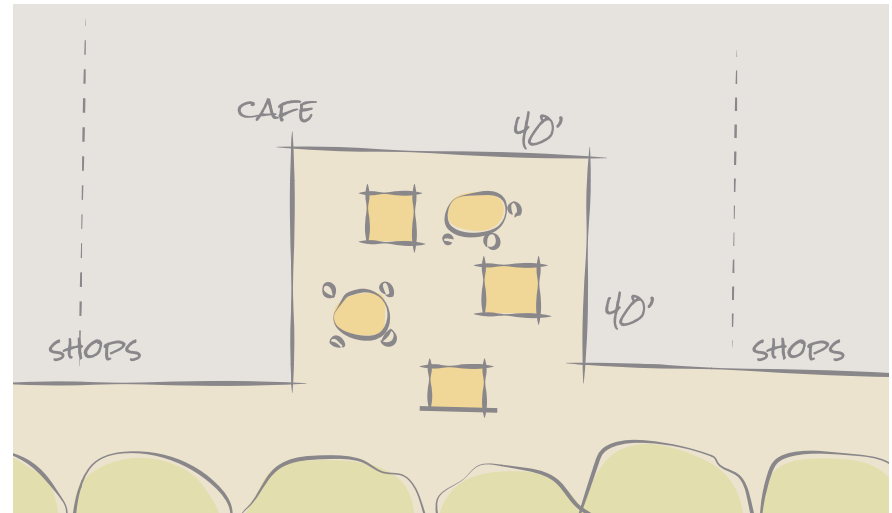
3. Use architectural and landscape features to create well-defined, clearly visible, and universally accessible primary building entrances.
4. Design all buildings to have transparent frontages to promote “eyes on the street”, using strategies such as:
 - » Having continuous commercial and retail uses with windows and primary entrances facing the street;
 - » Having ground-oriented residential units with windows and primary entrances facing the street; and,
 - » Locating and designing windows, balconies, and primary building facades to promote activity and natural surveillance of the street.
5. On commercial frontages, incorporate frequent entrances (e.g., every 15m) to create punctuation and rhythm along the street, visual interest, and support pedestrian activity.
6. On retail frontage, site and set back buildings to create a minimum 3m sidewalk and permit opportunities for patio space and small plazas
7. On residential frontages, incorporate ground-oriented unit entrances whenever possible, accessible from the fronting street or public open spaces.
8. On frontages with ground-oriented residential units, site and set back buildings between 3-5m from the property line to create a semi-private entry or transition zone to individual units and to allow for an elevated front entryway or raised patio.
9. Avoid blank walls at grade wherever possible.



Windows, balconies, and street-level uses providing eyes on the street.

4.11.2 SCALE AND MASSING

1. Provide a transition in building height from taller to shorter buildings both within and adjacent to the site with strong consideration for future land use direction.
 - » In general, building heights will create a transition across the site from the north and west to the south and east, with the tallest buildings at the interfaces to the Woodgrove Urban Node (i.e., along Hammond Bay Road and adjacent to the western site boundary).
2. In general, set back the upper levels of buildings taller than four storeys to reduce massing and provide a street wall that contributes to creating a human scaled streetscape.
 - » Upper storey setbacks are encouraged to be a minimum of 3m.
3. Minimize shadowing on residential floors of adjacent buildings as well as public and common open spaces such as sidewalks, plazas, and courtyards.
4. Ensure that adjacent residential properties have sufficient visual privacy, as well as protection from site illumination and noise.
5. Allow for sunlight onto the outdoor spaces of the majority of ground floor units during the winter solstice.
6. Ensure large development sites facilitate pedestrian connectivity and site permeability with, for example, mid-block pathways or mews.

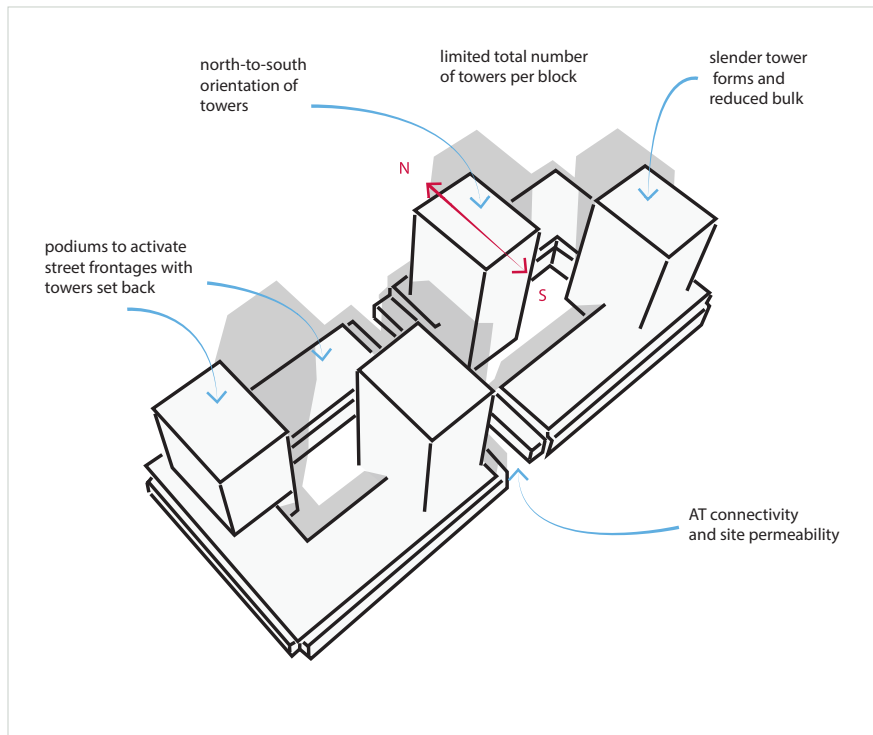


A courtyard can be used to break up the visual mass of large buildings



A building with a significant upper storey setback utilized as private balcony spaces

7. Design high-rise buildings to have a cohesive architectural look as well as a distinctly articulated podium, tower, and top.
8. In high-rise buildings, break up the podium mass by providing simple vertical and horizontal articulation of facades; e.g., stepping back or projecting forward a portion of the facade, using color and texture.
9. Locate and design towers consistent with the illustrative guidelines, below.



Summary of scale and massing guidelines for podium and tower typologies.



A high-rise building with a clearly-articulated podium, tower, and top.



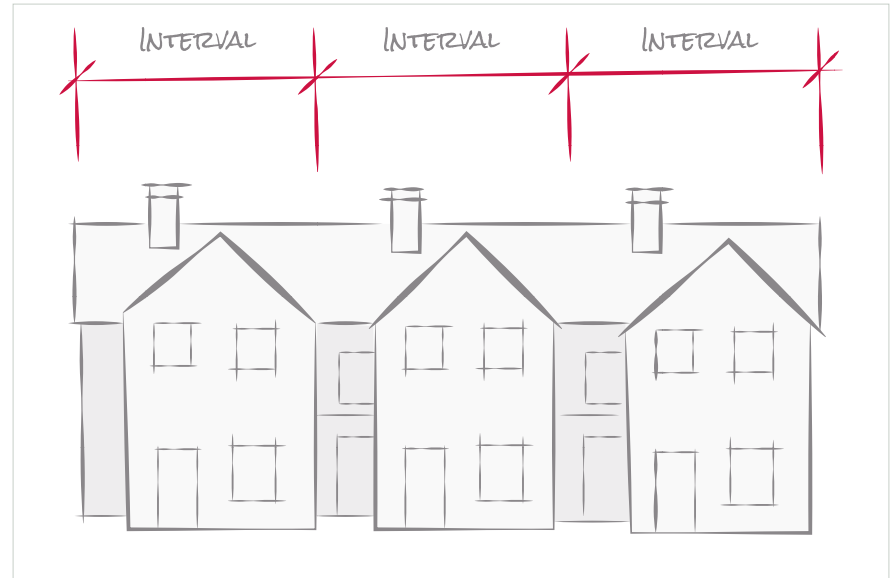
A high-rise building with a well-defined podium and an active retail frontage

4.11.3 BUILDING ARTICULATION & MATERIALS

1. All buildings and multi-building developments will express a strong, unified contemporary architectural concept that:
 - » Integrates a range of architectural features and design details into building facades to create visual interest, particularly at the street-level.
 - » Articulates building footprints to reduce massing and to promote architectural definition.
 - » Introduces variety and creativity between buildings.
 - » Uses authentic, substantial, and high quality materials (e.g., wood, stone, masonry, metal) and avoids a 'thin veneer' look and feel.
 - » Avoids thematic architectural styles associated with chain businesses.
 - » Avoids overly complex massing or articulation.
2. On residential frontages with ground-oriented units, design facades to articulate the individual units as architectural intervals, using strategies such as recessing or projecting facades or using entrance or roofline features).

4.11.4 SITE CONTEXT

1. At key intersections, buildings may incorporate landmark or emblematic design features, such as prominent vertical elements, significant corner treatments, and entry plazas or large extensions of the public realm.



Breaking up a building's facade into a series of intervals creates a more pleasing human scale expression.



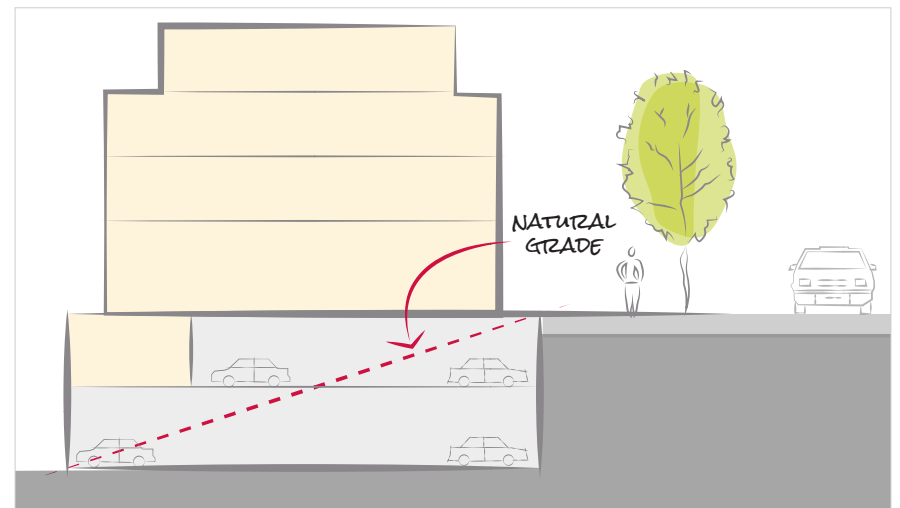
A residential building utilizing high quality and authentic building materials

4.11.5 PARKING

1. Minimize the use of on-site surface parking throughout the plan area and strictly prohibit drive-thru businesses.
2. Minimize negative impacts of parking ramps and entrances through treatments such as enclosure, screening, high quality finishes, sensitive lighting, and landscaping.
3. Avoid locating off-street parking between the front facade of a building and the fronting public street.
4. In general, accommodate off-street parking or loading spaces in one of the following ways, in order of preference:
 - » Underground;
 - » Parking in half-storey (where it is able to be accommodated without negatively impacting the street frontage);
 - » Garages or at-grade parking integrated into the building (located at the rear of the building); and
 - » Surface parking in the rear, with access from the lane or secondary street.
5. Consolidate driveway and laneway access points to minimize curb cuts and impacts on the pedestrian realm or common open spaces.
6. Where possible, utilize site grading to minimize the impacts of parking and vehicular access.



Parking accessed at the rear of the building and off the secondary street



Utilizing the natural site grade to minimize the impacts of parking

4.11.6 HIGH PERFORMANCE DESIGN

See Chapter 7 for in-depth sustainability policies and directions for Bowers District.

1. Buildings will be required to meet or exceed the City's BC Energy Step Code requirements and are strongly encouraged to integrate low carbon energy systems. See 7.5.1 for details.
2. For larger buildings, target a window-to-wall ratio (WWR) of 40% to reduce heat gain and loss through the envelope by increasing the area of insulated wall (see adjacent images).
 - » Note that WWR ratios can and should be higher at grade to promote at-grade transparency while accommodating the 40% WWR in the building overall.
3. Incorporate passive heating, cooling, and lighting design principles in landscape and building design, including:
 - » Orienting for maximum solar-gain potential from the south to reduce heating demand in colder months;
 - » Utilizing trees for seasonal natural shading needs and to reduce overheating in warmer months; and
 - » Using appropriately designed exterior shading devices to block unwanted solar gains and keep indoor temperatures comfortable in warmer months.



Building with higher at-grade transparency and lower WWR above



A lower WWR can significantly reduce energy demand and be accommodated while retaining active frontages

4. Design residential units and buildings to receive daylight and natural ventilation from at least two sides of a building, or from one side and a roof.
5. Integrate the use of insulating materials or thermally broken building products to mitigate or reduce building heat loss from thermal bridges such as concrete balconies and beams that run from the building's interior to exterior.
6. Where possible, include operable windows to provide natural ventilation and help reduce mechanical heating and cooling requirements.



Exterior shading devices can be integrated into a building's southern elevation to block unwanted solar gains and keep indoor temperatures comfortable in warmer months.



5. Transportation & Mobility

5.1 OVERVIEW

This chapter provides transportation network directions and policies that serve to guide future decision-making about streetscape design and transportation network acquisition and improvements in Bowers District. The design of streetscapes, layout of roads, and linkages between places and spaces will strongly influence the experiences, choices, and mobility of residents and visitors in Bowers District.

The BDMP is informed by and builds upon the targets, goals, and policies of the City's Transportation Master Plan. At a high level, the BDMP seeks to realize the City's targets of [a] shifting towards more active and sustainable transportation modes (e.g., walking, cycling, transit) and reducing the daily distance driven by residents..

The policies of this chapter seek to create a highly walkable and active mobility-friendly transportation network that focuses on pedestrian and cyclist comfort, safety, and connectivity. This is achieved by mitigating short-cutting through the site, designing traffic calmed streets, and integrating a fine-grain street network with a network of trails and greenways.

Additionally, the creation of green streets is a core principle that informs the directions and policies of this chapter. Green Streets use natural systems approach to reduce stormwater flow, improve water quality, reduce urban heating, enhance pedestrian safety, reduce carbon footprints, and beautify neighborhoods – prioritizing elements such as street trees, functional landscaping, and integrated stormwater management (e.g., rain gardens).

The policies and directions of this chapter are guided by the directions, goals, and principles found in Chapter 3. Additionally, the policies and directions of this chapter should be read in context of Chapter 7 Sustainability & Low-Impact Development, which directly informs the implementation of the transportation policies.

5.2 TRANSPORTATION APPROACH & PRINCIPLES

5.2.1 STREETScape APPROACH

The approach to developing streetscape designs for Bowers District was based on three key principles:



DESIGN FOR ACTIVE TRANSPORTATION

- Wide sidewalks with landscape 'buffers' to vehicular traffic
- Dedicated cycle tracks, greenways, and multi-use paths
- Pedestrian-oriented intersection design with shorter crossings
- Mid-block crossings and mid-block pathway connections
- Shifting travel to active modes and shortening trip distances



DESIGN FOR ALL AGES AND ABILITIES

- Minimum pedestrian through-zones to accommodate easier passing and "rolling" (e.g., wheelchairs, strollers)
- Shorter crossing distances and crossing times at intersections
- Curb drops and ramps at all crossings
- Cycle tracks and sidewalks for safety and comfort for all ages
- Increasing safety for all modes



DESIGN TO CREATE GREEN STREETS

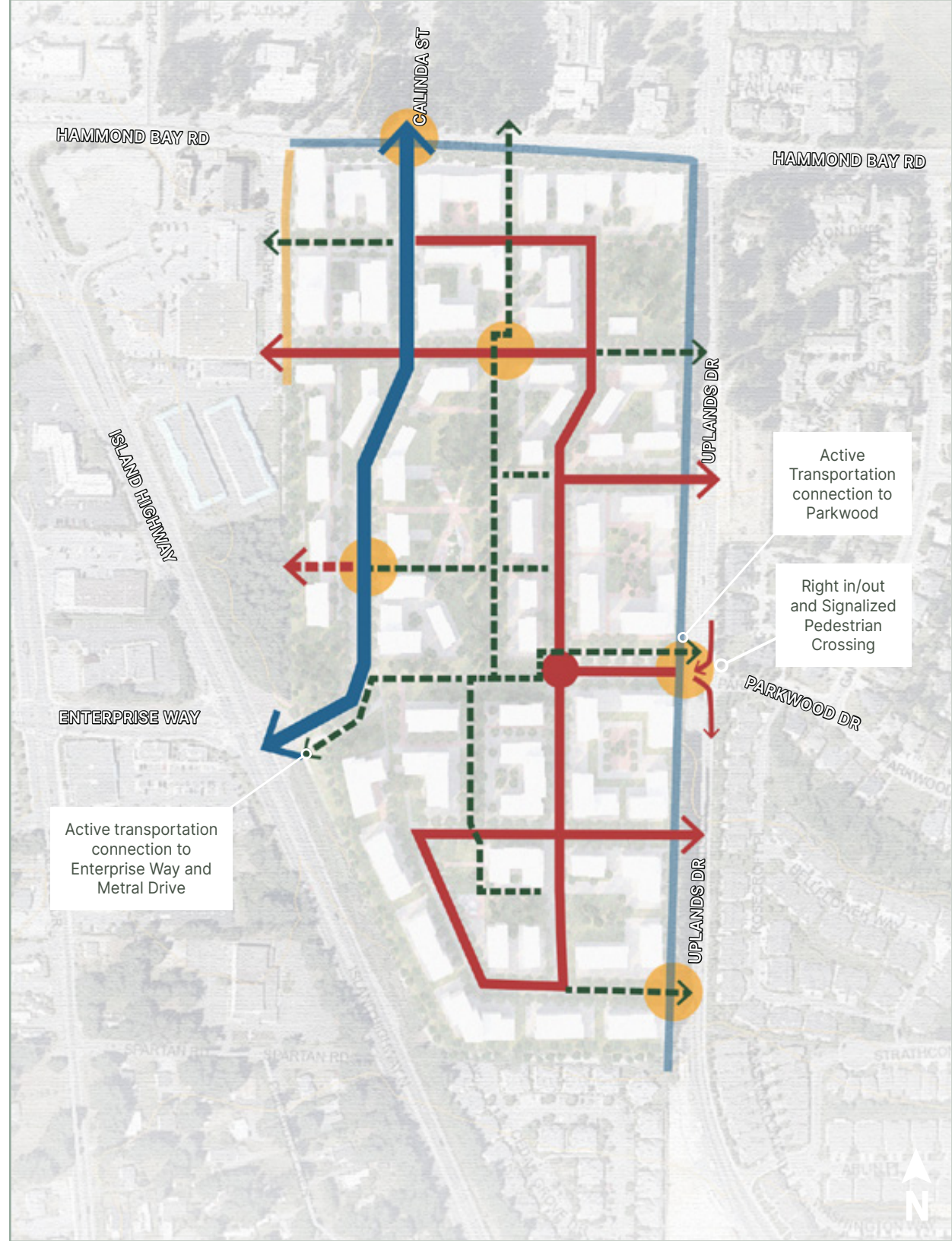
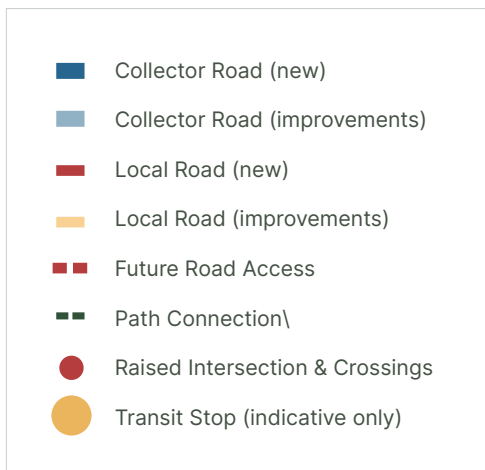
- Wide landscape buffers/boulevards wherever possible
- Landscaped curb extensions at intersections and mid-block crossings
- Rain gardens integrated throughout the streetscape
- Accommodating large canopy trees throughout the streetscape

5.3 TRANSPORTATION NETWORK PLAN

The Transportation Network Plan shows the conceptual transportation network for Bowers District, including the location of roads and key path connections with the existing transportation network.

Future detailed designs of streets and intersections will be informed by City Standards and future phases of development.

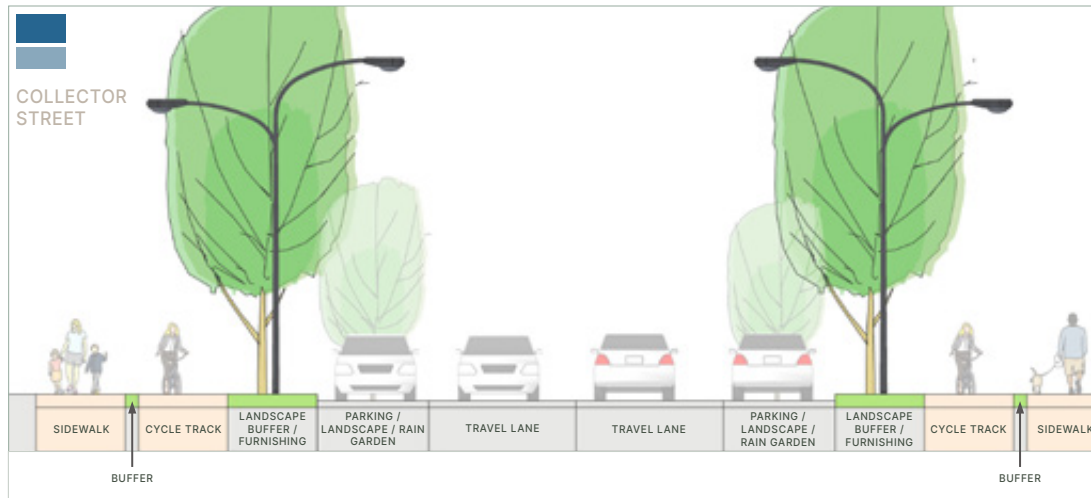
The site is on the periphery of a Mobility Hub, making it an strategic location to facilitate non-vehicular transportation through walking, cycling routes, and public transportation.



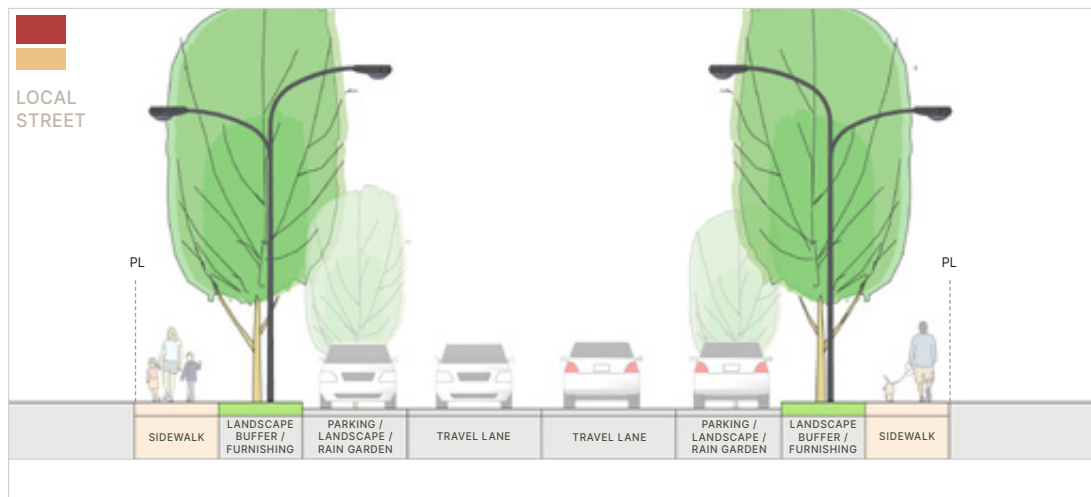
5.4 STREET SECTIONS

The adjacent street sections are indicative designs of proposed new internal and fronting streets. These are for illustrative purposes, only, and will be designed in greater detail in collaboration with the City at the time of rezoning and subdivision. Future road designs will be consistent with the City's MOESS and Complete Street Guidelines.

See Chapter 6 for design directions of public trails and greenways.



The Collector street typology includes sidewalks, landscape buffer areas, separated cycle tracks, and on-street parking interspersed with landscaped bulb outs (e.g., rain gardens).



The Local street typology includes sidewalks, landscape buffer areas, and on-street parking interspersed with landscaped bulb outs (e.g., rain gardens).

5.5 TRANSPORTATION AND MOBILITY POLICIES

5.5.1 TRANSPORTATION NETWORK ACQUISITION

1. Desired street network locations and street sections are shown in sections 5.3 and 5.4 and will be developed in accordance with the policies of this plan and consistent with the City's MOESS and Complete Street Guidelines.
2. All street improvements in the plan area will be consistent with policies and directions of this plan and City's MOESS and Complete Street Guidelines.
3. Detailed designs of streets and intersections will be informed by the Traffic Impact Assessment) undertaken by Amendment application.
4. Greenways, paths/trails, and laneways will be constructed in general accordance with 5.3 Network Plan and the directions and policies of this plan.
5. Public pathways and laneways will be dedicated or secured as public rights-of-way and acquired in accordance with 5.3 Network Plan.
6. Pedestrian mid-block crossings will be constructed where identified in 5.3 Network Plan, and the City may identify and require additional mid-block crossing locations as the network is developed.



Pedestrian-friendly village main street with sidewalks, landscaping, and seating.



Intersection accommodating separated cycle tracks.

5.5.2 STREETScape DESIGN

General

1. Provide an efficient and extensive system of walkable and bike-friendly routes along paths and streets throughout the area.
2. Locate and align new streets to be consistent with 5.3 Network Plan and to extend the city street grid network, creating similar sized blocks within the site area that anticipate future land development as envisioned in 3.6 Conceptual Plan.
3. Establish a pedestrian-friendly streetscape along all streets by installing vegetative buffers, street trees, street furniture, and open spaces suitable for resting, gathering, or socializing.
4. Incorporate space and amenities for all modes of transportation, including transit, cycling, and pedestrians, and additional space for respite areas, transit shelters, wayfinding, and end-of-trip facilities for bikes.
5. Provide continuous sidewalks within the site and connected to adjoining areas, separated from the street by a landscaped buffer and/or on street parking.
6. Provide physically-separated cycle tracks along major streets and, where practical, through public open spaces.



Urban streetscape with wide sidewalks and physically-separated cycle tracks.



Residential streetscape with wide sidewalks and abundant green landscaping.

7. Consider additional crosswalks with flashing signals along major roads with particular focus near transit services and at key connections to adjacent areas.
8. Seek to reduce vehicular speeds throughout the plan area by using traffic calming measures and lowering the design speed of area streets.
 - » Potential traffic calming measures include narrow vehicular travel lanes, on-street parking, curb extensions, chicanes, raised pedestrian crossings, street trees, and raised crosswalks and intersections.
9. The number and width of driveway accesses on primary roads within the plan area will be minimized wherever possible. Side street and lane access are strongly preferred, as well as consolidated driveways where appropriate.



Example of creating a seating area in the furniture zone of a mixed use streetscape.

Sidewalks

10. The pedestrian realm will be maximized to support a human scale environment, including wide sidewalks and landscaping areas.
11. Frontage zones (extensions of the sidewalk on private property) will be incorporated, with widths up to 3m, in areas where high volumes of pedestrian activity are anticipated or where patio or plaza areas are planned.
12. Where possible, integrate public art and location identifiers into surface treatments at street corners to add visual interest and aid in wayfinding.



An example of public art integrated into the sidewalk and streetscape design.

Street Furniture and Lighting

13. Streetscape design will incorporate a cohesive design palette of street furniture and lighting, including benches and chairs, waste and recycling receptacles, bollards, and luminaires.
14. Hard surfaces within the furnishing zone (between the sidewalk and the curb) will be decorative permeable pavers.
15. Seating (e.g., benches) and waste receptacles will be provided at regular intervals along streets within the village, with increased frequency adjacent to higher density land use areas.
16. Benches positioned along the curb will orient users toward the sidewalk and open spaces, except on local roads where street-oriented benches may be appropriate.
 - » Benches may will also be strategically located to optimize sun exposure and view corridors (e.g., Mt. Benson).
17. Bicycle parking will be incorporated at strategic locations, within the furnishing zone and at the interface between the street and public open spaces (e.g., paths, plazas).
18. Decorative luminaires will be used throughout the plan.
19. Public art may be integrated into the design of the furnishing zone, within green landscape or hardscape areas, while not interfering with the pedestrian through zone.



An example of contemporary streetscape furniture.



An example of contemporary dark sky-friendly luminaires in a public space.

Landscaping and Street Trees

20. Rain gardens and stormwater swales will be a preferred alternative to conventional turf strips and planters and as a method to meet the City's stormwater requirements.
21. Shrubs, grasses, and ground cover plantings will be native or adaptive non-native species that mimic endemic flora.
22. New tree plantings will be selected to provide high canopy over the street, while remaining predominantly above commercial displays and signage (at maturity).
23. Large full canopy tree species will be installed along the boulevard within curb extensions where sufficient soil volumes and tree canopies can be accommodated.
24. Columnar and small ornamental trees will be installed within narrow boulevards where soil volumes are insufficient for full canopy trees.
25. A variety of street trees will be planted; tree species will be selected to establish the landscape character for a given street and be consistent with the City's Climate Resilience Strategy goals. See 7.3 for Urban Forest policies.



Sidewalk with integrated rain garden, street trees, and permeable paving



Main street with abundant and appropriately-sized trees.

On-Street Parking

26. On-street parallel parking will be incorporated to meet the needs of the area and provide a physical barrier between vehicular traffic and the sidewalk.
27. On-street parking stalls will be interspersed with landscaped curb extensions.
 - » Where infiltration techniques are feasible, stormwater swales (or rain gardens) will be incorporated into the above curb extensions.



A mixed use street with on-street parking.

5.5.3 ACTIVE TRANSPORTATION

1. Surfacing materials, clear through zones, curb drops and ramps, and other design considerations will be used to ensure safety and comfort for all sidewalk users, including wheelchairs, walkers, and strollers.
2. Cycling infrastructure will be comfortable and safe for all ages and abilities by:
 - » Developing bicycle facilities with separation (to reduce user conflicts) from vehicle traffic, such as protected cycle tracks and multi-use paths, as identified in sections 5.3 and 5.4 and through future detailed design processes.
 - » Adopting bicycle route signage to provide clear identification for all roadway users of where higher concentrations of cyclists are welcomed and expected.
 - » Applying intersection treatments – such as signalization with bicycle detection and pavement markings – to raise awareness of potential conflicts with vehicles and to maximize cyclist comfort and safety.
3. Work with BC Transit to increase transit service to/from and within the area in response to increasing residential density and commercial activity in Bowers District



A street integrating transit and a physically-separated cycle tracks

5.5.4 OFF-STREET PARKING

1. The Urban Node area of Bowers District may be considered as a Cash-in-Lieu Parking Area in the Off-Street Parking Regulations Bylaw at the time of rezoning, which would allow up to 10% of the required parking spaces be substituted as cash-in-lieu.
2. The following transportation demand management (TDM) measures are strongly encouraged in all new development in order to reduce traffic impacts and the need for off-street vehicular parking:
 - » Provision of a car share vehicle and/or memberships;
 - » Provision of subsidized transit passes; and,
 - » End of trip cycling facilities.
3. Electric Vehicle charging will meet or exceed the requirements of the Off-Street Parking Regulations Bylaw.



Car share integrated into a new mixed use development



Electric vehicle charging stations



6. Parks, Trails & Open Spaces

6.1 OVERVIEW

This chapter provides open space network directions and policies that serve to guide future decision-making about park and trail design, acquisition, and improvements in Bowers District. The amount, location, and design of parks and open spaces will directly inform opportunities for active and passive recreation, access to nature and places of refuge, and the creation of urban habitat and forest.

The policies of this chapter seek to create a multi-functional open space network that not only provides active (e.g., sport courts, playgrounds) and passive (e.g., seating areas, natural areas, walking trails) forms of recreation but also provides ecological functions through urban habitat areas, tree canopy coverage, and landscape-based stormwater management. The open space network also seeks to speak to the horticultural history of the site, as well as the vision of the site as a bowers, an arbour, and an arboretum – essentially, a place of refuge set amongst a green landscape.

Additionally, the open space network was designed to support the transportation network and provide safe and comfortable off-street routes for walking and cycling throughout Bowers District.

The policies and directions of this chapter are guided by the goals and principles found in Chapter 3. Additionally, the policies and directions of this chapter should be read in context of Chapter 7 Sustainability & Low-Impact Development, which directly informs the implementation of the parks and open space policies.

6.2 OPEN SPACE APPROACH & PRINCIPLES

6.2.1 OVERVIEW

The approach to developing an Open Space network for Bowers District was based on three key principles:



FUN FOR ALL AGES

Create an open space network that is fun for all ages through:

- Dynamic parks with a mix of amenities for all ages (e.g., playgrounds, trails, rest areas)
- Multi-functional amenities that can be enjoyed by multiple age groups (e.g., natural playgrounds, open lawn areas, sport courts)
- Diverse open spaces for different forms of recreation (e.g., gathering, respite, walking, sports)



A GREEN REFUGE IN THE CITY

Create an open space network that provides a green refuge in the city through:

- The creation of layering of private and public spaces (e.g., courtyards, greenways, and parks) characterized by green landscaping and minimal vehicular impacts.
- Abundant, climate-adaptive landscaping that provides urban habitat throughout the area
- Rich tree canopy coverage in parks, open spaces, and streets to help create a distinct sense of place and provide many benefits to residents and visitors alike, including shading and cooling



PATHS, PORTALS AND PLACES

Utilize the principles of paths, portals, and places to maximize the comfort and quality of open spaces through:

- Well-defined parks and plazas (e.g., bordered on three sides by buildings and/or abundant landscaping) that provide comfort, safety, and enjoyment
- Link pathways and key destinations (e.g., parks) to support wayfinding and create a sense of arrival
- Locate multiple amenities and functions together to attract more visitors and vibrancy to key public spaces

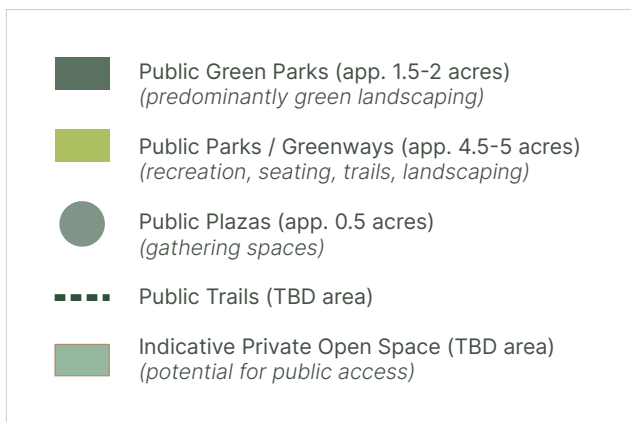
6.3 OPEN SPACE NETWORK PLAN

This Open Space Network Plan illustrates the network of public parks, plazas, trails, and greenways in the District – as well as indicative open spaces (private or publicly-accessible) on private lands.

The plan was informed by the site-adaptive and integrated design approach provided by Murdoch De Greeff Landscape Architects.

See Section 6.4 Blue-Green Strategy Plan for a corresponding plan of the stormwater and landscape network. See Section 6.6 for conceptual park and trail designs.

Approximate combined park site areas are noted below. These areas are indicative and will be detailed at subsequent stages of the development process.

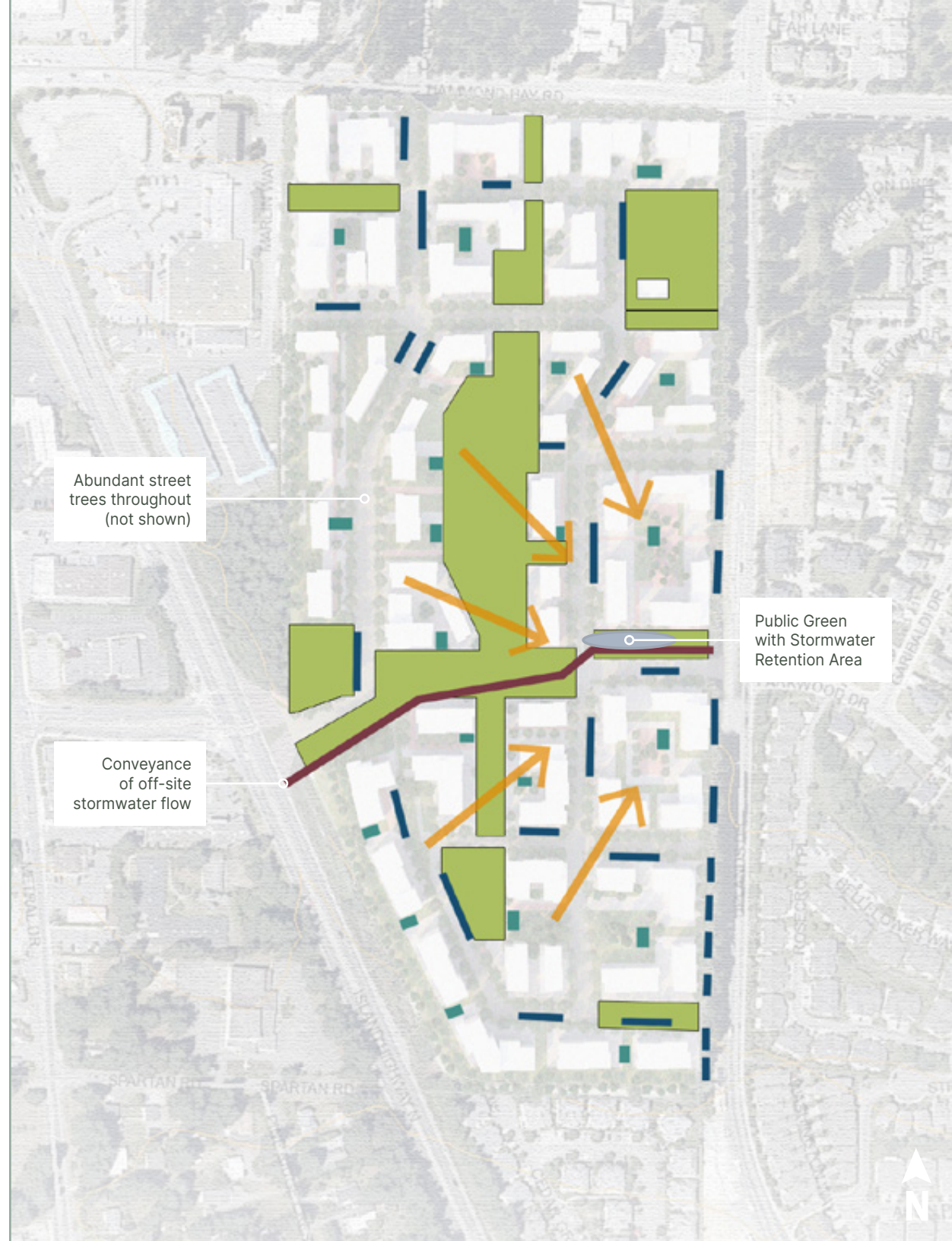
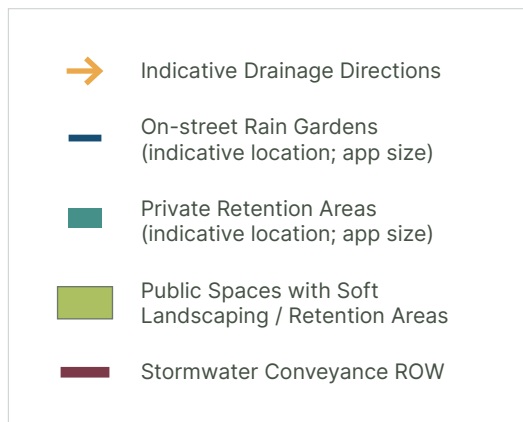


6.4 BLUE-GREEN STRATEGY PLAN

The Blue-Green Strategy Plan illustrates the proposed network of key strategies for managing stormwater and enhancing ecological values and functioning in the District.

This plan was informed by the site-adaptive and integrated design approach provided by Murdoch De Greeff Landscape Architects. That work also informed the policies of corresponding policies in Chapter 7 regarding stormwater management, tree canopy coverage, and green site design.

The Blue-Green Strategy focuses on maximizing public and private green space on the site while integrating stormwater management into site design and planning that meets the City's standards for stormwater retention, detention, and treatment.



6.5 OPEN SPACE POLICIES

6.5.1 OPEN SPACE NETWORK ACQUISITION

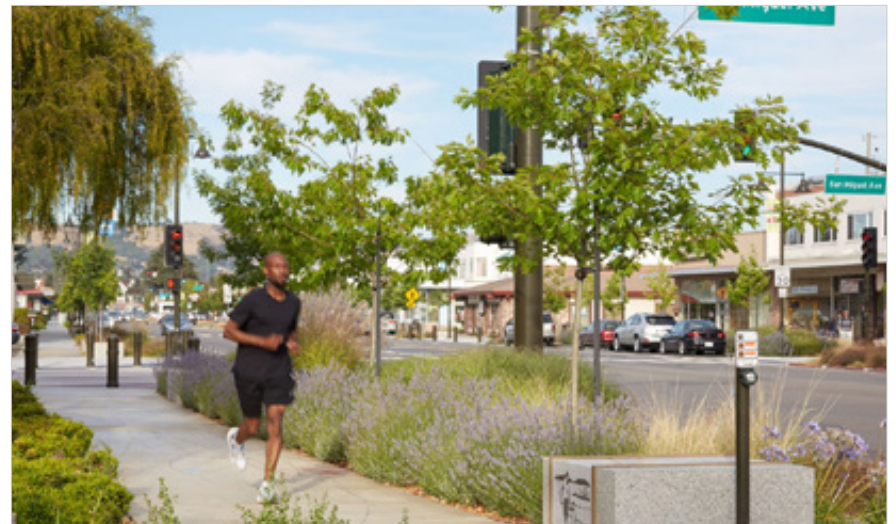
1. Desired public open spaces, including parks, plazas, greenways, and trails, are shown on 6.3 Open Space Network Plan and will be acquired or legally secured in accordance with the policies of this plan.
 - » The Open Space Network Plan fulfills the direction in the OCP for a City park on this site and anticipates 30% of the site as open space, including a minimum of 16% of the site as public parks and greenways.
2. Additional semi-private and privately-owned public spaces will also be legally secured in accordance with the policies and indicative designs of this plan.



An urban park with abundant soft landscaping and tree canopy coverage

6.5.2 OPEN SPACE DESIGN AND FUNCTION

1. Parks and open spaces will be multi-functional, including passive and active recreational opportunities, and diverse in character, consistent with [a] the policies and directions of this chapter and [c] City policies, design and tree planting standards (MOESS), and maintenance standards.
 - » Park designs will involve further community consultation and will seek to meet the community's evolving needs.
2. As a whole, the Open Space Network will seek to serve all ages and abilities, such as play areas, water features and water play elements, pathways, and seating areas.
3. All parks may support wildlife habitat and urban forest principles by incorporating related best management practices and placing a high priority on ecological integrity in landscaping and vegetation management.



Sidewalk with abundant landscaping and street trees

4. Tree canopy coverage will be integrated into the design of public open spaces as a climate resiliency measure and help mitigate urban heat effects, as well as provide a place of shelter and shade in extreme heat events.
5. Parks, plazas, and other open spaces will be well-integrated with the mobility network through the design and location of these spaces and the addition of public realm improvements, such as pedestrian crossings, bike racks, seating, lighting, wayfinding, and additional landscaping.
6. Public open spaces will incorporate a cohesive design palette of furniture and lighting, including benches and chairs, waste receptacles, bollards, and pedestrian-scale light fixtures.
7. In general, parks, greenways, and trails may incorporate features such as:
 - » Walking and cycling connections;
 - » Seating and gathering spaces, including shaded areas;
 - » Amenities to support activities appealing to users ranging from children to seniors, as well as accessible spaces;
 - » Landscaped areas that define space, beautify the space, and serve ecological functions, such as habitat creation or stormwater management;
 - » Landscape elements that showcase urban agriculture and local food production;
 - » Tree plantings; and,
 - » Public art.



A greenway connection intersects with a sidewalk



A central plaza area with retail frontages

8. The Central Park area identified in 6.3 and illustrated in 6.6 is envisioned to include features such as:
 - » Multi-use pathways and walking trails, linking the site from east to west and north to south;
 - » Landscaped areas, open lawns, and abundant tree plantings;
 - » Seating areas;
 - » Playground(s) for children and youth;
 - » Small-scale sport facilities (e.g., sport court, pickleball court, tennis court); and,
 - » Opportunity for a community garden.
9. The forested park in the northeast corner of the site includes a historical building that may be retained as a community amenity (e.g., gathering place, educational centre).
10. Integration of a community-based food program (e.g., community garden) will be strongly encouraged.
11. Adjacent buildings will be designed to mitigate shadowing impacts on adjacent parks and public open spaces.
12. Consider supporting encroachment agreements or enabling land dedication for building or site elements that improve the public realm (e.g., weather protection, planters, underground infrastructure).
13. Parks will be developed with consideration for Crime Prevention Through Environmental Design principles.



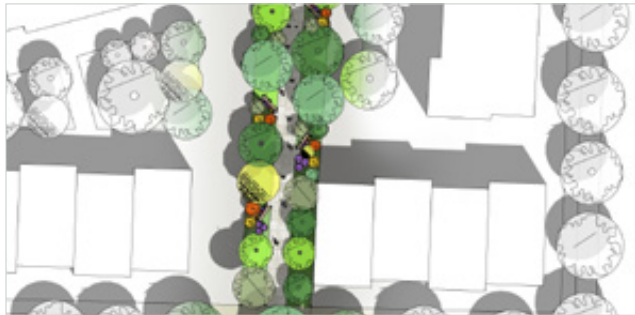
A mid-block connection and plaza area



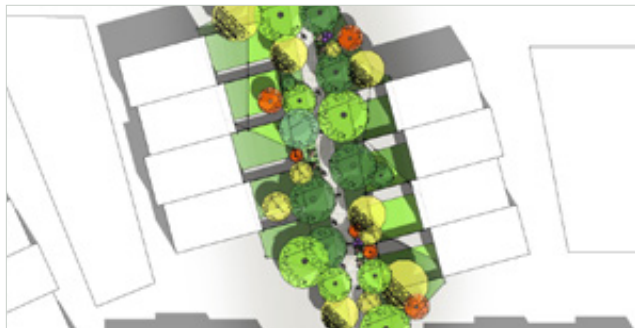
Adventure playground in heavily landscaped park

6.6 CONCEPT ILLUSTRATIONS

These are indicative designs of [a] the central public park space with adjacent trail connections, plaza, and courtyard areas (image to right) and [b] public trails/greenways (images below). These images are provided for illustrative purposes only, with conceptual designs to be developed at the time of Zoning Amendment.



Typical mid-block trail connections



Mid-block trail/greenway with fronting townhomes





7. Sustainability and Low-Impact Development

7.1 OVERVIEW

This chapter provides Sustainability and Low-Impact Development directions and policies that serve to guide future decision-making about development and design of all private and public lands in Bowers District – ranging from green buildings to green infrastructure. Bowers District strives to respond to the Climate Emergency through its land use, built form/architecture, energy systems, transportation, landscaping, and infrastructure.

The policies and directions of this chapter were informed by two professional reports that were submitted in support of the OCP Amendment application:

- **Assessment of Sustainable Design Opportunities – Origin Sustainable Design + Planning**
This report focused on achieving practical and meaningful climate action in six areas of sustainability. For each area, Origin provided a high-level feasibility analysis and a list of potential strategies to consider in Bowers District.
- **Watershed and Stormwater Analysis – Murdoch de Greeff Landscape Architects**
This report focused on [a] site and stormwater analysis that have helped inform the overall site planning process and [b] preliminary stormwater calculations and design considerations that have been used to help inform future the private, parks, and stormwater infrastructure (and strategies) to the site, with a focus on landscape-based solutions.

In providing guidance for low-carbon, climate resilient, and water-sensitive development, this chapter strikes a balance between firm policies, guiding principles, and recommended strategies to be undertaken or considered as the development of Bowers District is undertaken.

The policies and directions of this chapter are guided by the goals and principles found in Chapter 3 and should be considered in tandem with the other Chapters of this plan.

7.2 SUSTAINABILITY APPROACH & PRINCIPLES

7.2.1 OVERVIEW

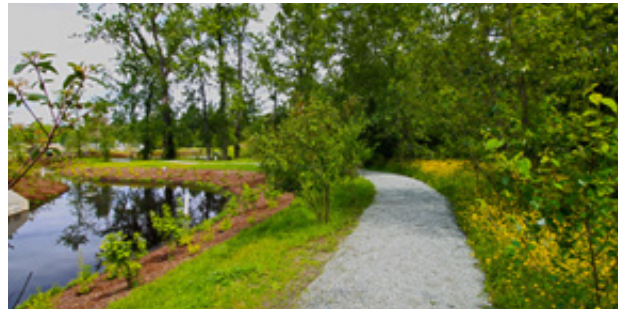
The approach to developing a sustainable public and private built environment for Bowers District was based on three key principles:



A GREEN URBAN REFUGE

Provide urban habitat, create an abundant tree canopy, and create a 'green' urban refuge through:

- Requiring extensive tree plantings on private and public lands, including in parks and on streetscapes
- Ensuring that trees are planted in deep soils and that a diverse selection of trees are planted, including many large canopy trees
- Integrating large and connected soft landscaping areas throughout the District, providing urban habitat to pollinators, birds, and other animals.



GREEN INFRASTRUCTURE

Encourage 'green' infrastructure to manage stormwater and enhance the urban environment (e.g., water quality, air quality) through:

- Utilizing landscape-based stormwater management solutions (e.g., rain gardens, swales, green roofs, permeable paving) on private and public lands, including parks, plazas, and streets
- Integrating extensive soft landscaping and vegetation throughout the site, in all land use areas
- Highlighting green infrastructure facilities as key design elements, learning opportunity, and character-defining features



HIGH PERFORMANCE AND HEALTHY BUILDINGS

Build high performance and healthy buildings to improve energy efficiency and resident well-being through:

- Requiring buildings to meet a higher BC Energy Step Code standard than required by the City
- Utilizing a higher percentage of local and regional building materials
- Ensuring the use of healthy and non-toxic materials
- Encouraging other, innovative and low carbon building methods

7.3 URBAN FOREST POLICIES

The following policies are meant to maximize the health and integrity of the urban forest (i.e., all future trees on the site) and create an extensive tree canopy cover on streets, in parks, and on private land in Bowers District. This will not only offer a host of ecological benefits but also as a climate resiliency measure, mitigating urban heat effects and providing a shade and shelter during extreme heat events.

7.3.1 MINIMUM SOIL VOLUMES

1. Proposed trees will have access to soil volumes identified in the City's MOESS or the following minimums, whichever is greater:
 - » Large-canopied trees: 15m³
 - » Medium-canopied trees: 12m³
 - » Small-canopied trees: 8m³

7.3.2 STREETS

1. Street improvements will maximize tree canopy cover and tree health on public rights-of-way in a manner consistent with the following and the City's MOESS requirements:
 - » Require new development to install street trees along their frontages in accordance with this plan and all relevant bylaws.
 - » Tree species will be consistent with the City's Climate Resilience Strategy goals.

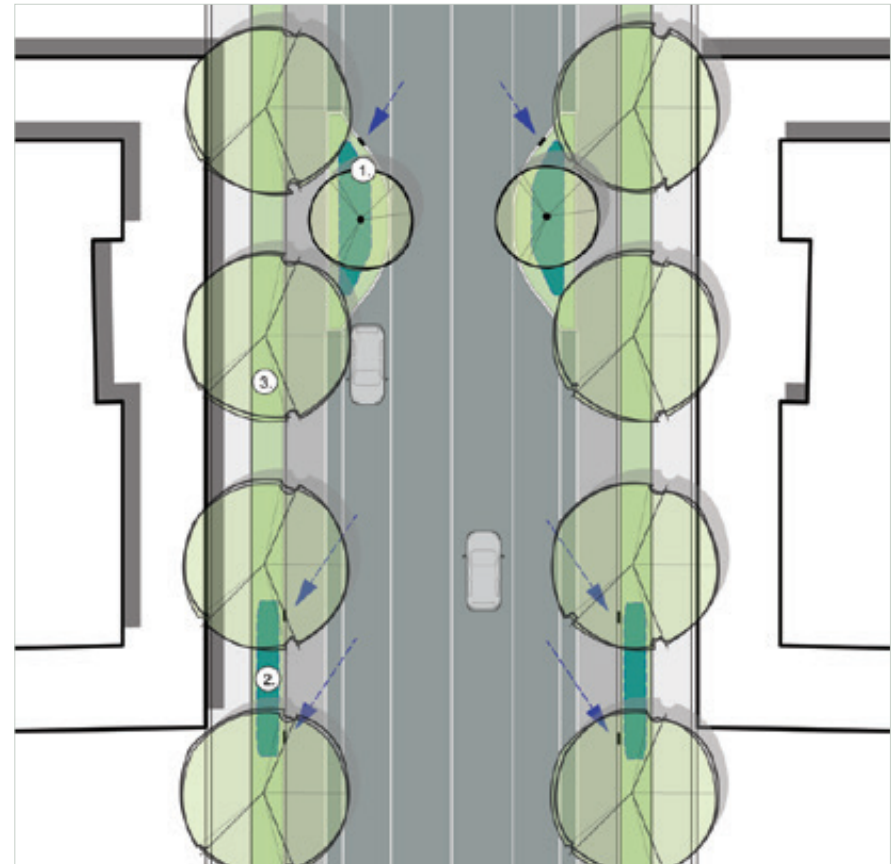
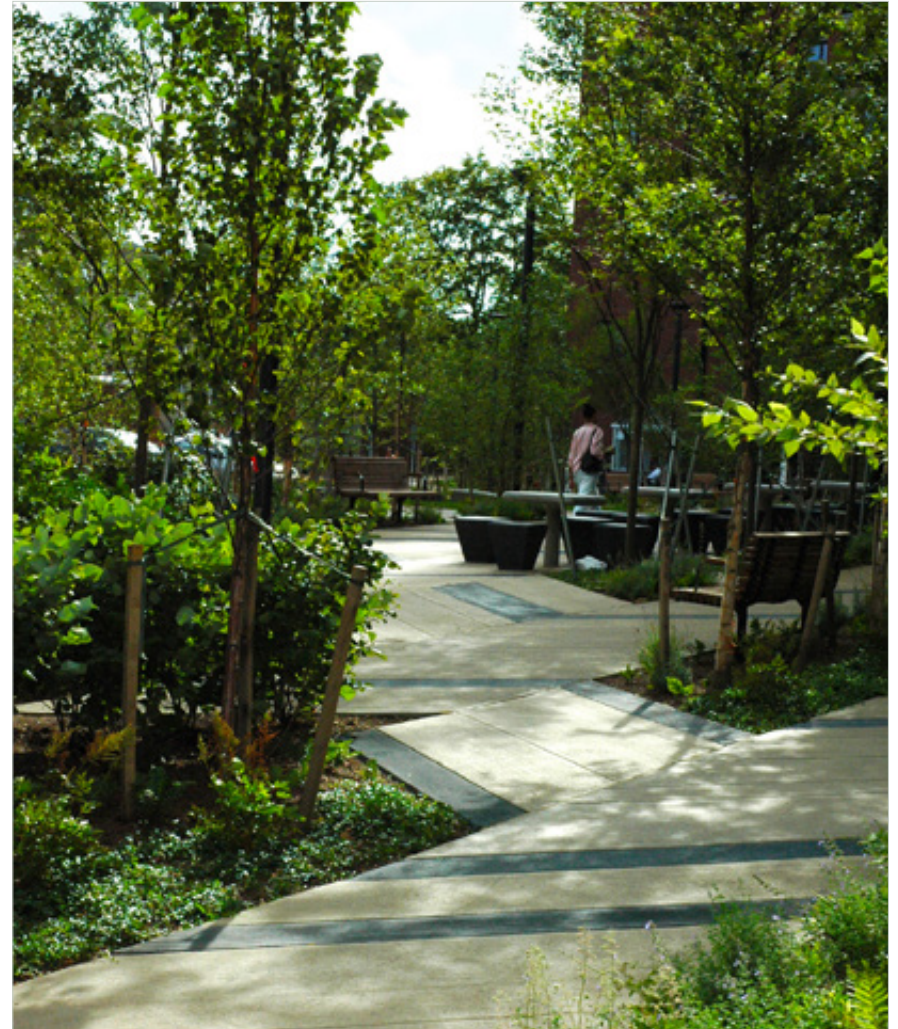


Diagram showing:
1. Rain garden in bumpout sized at 5% of road catchment
2. Rain garden in boulevard sized at 5% of road catchment
3. Boulevard with large trees spaced at 10-14m centers

- » Space trees as follows:
 - Large-canopied trees: 10-14m apart
 - Medium-canopied trees: 8-12m apart
 - Small-canopied trees: 6-8m apart
- » Install min. 600mm depth of soil in boulevards and show that proposed trees will have access to minimum soil volumes as outlined in this plan and all relevant bylaws.
- » Minimum boulevard width is to be 1.5m (1.8m preferred) to allow for planting of boulevard trees.

7.3.3 PARKS, GREENWAYS, & TRAILS

2. Park improvements will maximize tree canopy cover and tree health in public parks and trails in a manner consistent with the following:
 - » Plant large full-canopied trees where possible and ensure species selection is consistent with the City's Climate Resilience Strategy goals.
 - » Minimize impervious surfaces and provide a minimum of 20% of the public open space area as soft landscaping.
 - » Target a minimum of 50 trees per hectare.
 - » Proposed trees will have access to minimum soil volumes as outlined in 7.3.1 and relevant City bylaws and standards.



An urban plaza with high tree canopy coverage and softscaping

7.3.4 PRIVATE LAND

1. Private developments will maximize tree canopy cover and tree health in a manner consistent with the following:
 - » Proposed trees will have access to minimum soil volumes as outlined in 7.3.1 and relevant City bylaws and standards.
 - » Install large-canopied trees where possible and ensure species selection is consistent with the City's Climate Resilience Strategy goals.
 - » Prioritize landscaping treatments that allow tree planting in soft landscaping or rain gardens. As a last-resort option, plant trees in soil cells where rain gardens and adequate softscaped areas are not possible (or use in combination with the above, where appropriate).



On-site tree plantings (yet to mature) in rear yards and common stormwater facility



Large green courtyard with abundant (still young) tree plantings

7.4 STORMWATER MANAGEMENT POLICIES

The following policies are meant to enhance the infiltration, retention, and storage of rainwater (i.e., stormwater management) in Bowers District.

7.4.1 GENERAL

1. Rain gardens and other bioretention facilities will be a preferred approach to managing stormwater on private and public lands, in accordance with the policies of this plan and City bylaws and standards.
 - A general guideline for success is that rain gardens should make up approximately 5% of the catchment area, if designed with min. 600mm growing medium depth, high growing medium infiltration rates, and min. 150mm flood depth
2. The development of all roads, boulevards, and road right-of-ways in Bowers District will meet the City's MOESS stormwater requirements and seek landscaped-based solutions in a manner consistent with the following:
 - » Install rain gardens on lot frontages in accordance with the directions of this plan and relevant City bylaws and standards.
 - On-street rain gardens may be located within the public road ROW or on adjacent private lands.
 - » Where possible, integrate stormwater and urban forest goals by including street trees in rain gardens. 7.4.3 Parks



Curb extension with rain garden at crosswalk on village main street

CATCHMENT AREA

The term 'catchment area' refers to the total up-slope surface area that drains to a known collection point, such as a catch basin or rain garden.

3. The development of all parks in Bowers District will meet the City's relevant stormwater requirements and seek landscaped-based solutions in a manner consistent with the following:

- » Maximize the use of soft landscaping areas with deep soils as absorbent landscape.
- » Direct runoff from pathways and small paved surfaces to absorbent landscape.
- » Use permeable paving or soil cells when hardscape is installed over more than 75% of the public park site.

4. The development of private lands in Bowers District will meet the City's MOESS stormwater requirements and seek landscaped-based solutions in a manner consistent with the following:

- » Minimize impervious surfaces.
- » Favour the use of rain gardens to meet City stormwater requirements.
 - A general guideline for success is that rain gardens should make up approximately 5% of the catchment area.
- » Use soil cells where rain gardens are not possible (or use in combination with the above, where appropriate).
 - A general guideline for success is that soil cells should make up approximately 5.5% of the catchment area.
- » Use permeable paving where rain gardens are not possible (or use in combination with the above, where appropriate).
 - A general rule of thumb is that soil cells should make up approximately 20% of the catchment area.



An example of permeable surfacing and soft landscaping area at the entry to a public park



A stormwater facility (swale) within a residential development

SOIL CELLS / SILVA CELLS

Soil cells or Silva Cells (a brand name) are modular under-pavement systems that provide larger soil volumes and improved growing conditions to support tree growth in restricted urban environments. Soil cells can also provide improved on-site stormwater management capacity.

7.5 SUSTAINABLE DESIGN POLICIES

The following policies are meant to increase the environmental performance and health of all buildings in Bowers District.

7.5.1 HIGH PERFORMANCE & LOW CARBON BUILDINGS

1. All buildings in Bowers District will meet [a] the following minimum BC Energy Step Code requirement or [b] exceed the City's minimum requirement by one Step – whichever is greater:
 - » Part 9 Residential = Step 3
 - » Part 3 Wood Frame Residential = Step 3
 - » Part 3 Concrete Residential = Step 2
 - » Part 3 Commercial = Step 2
2. Consider and explore the use of mass timber construction, while seeking to leverage its aesthetic beauty.
3. Encourage the creation of low carbon, “all electric” buildings that utilize space heating and cooling and domestic hot water provided by electric heat pumps.
4. Low carbon efficiency will be encouraged to exceed the City's and BC Building Code minimum requirements.



A high performance (Passive House, Step 5 equivalent) residential building with thermally broken windows and a low window-to-wall ratio

MASS TIMBER

Mass Timber buildings use specialized wood products (e.g., cross-laminated timber, glulam beams) that can replace concrete, steel, and masonry as building materials. Because it displaces emissions-intensive steel and concrete, mass timber can significantly reduce the “embodied carbon” in buildings. And, because wood stores carbon dioxide from the atmosphere, mass timber construction is also a carbon removal technique.

7.5.2 RENEWABLE ENERGY

1. Encourage the use of solar photovoltaic energy systems (i.e., solar panels) to generate electricity and reduce GHG emissions.

7.5.3 WATER

1. Encourage the use of greywater recapture and storage systems in larger (e.g., mid-rise, high-rise) buildings to supply water for site-wide irrigation.
2. Encourage the use of on-site rainwater collection (e.g., cisterns, rain barrels).

7.5.4 LOW CARBON MOBILITY

1. Electric Vehicle charging will be provided as required by the Off-Street Parking Regulations Bylaw.
2. Provide a minimum of four short-term/visitor bicycle parking stalls per building or as required by City bylaws.
 - » Short-term bike parking should be covered from the elements and close to primary building entrances
3. Provide one long-term bicycle storage space per residential unit or as required by City bylaws.
 - » Long-term bike parking should be secured (e.g., in underground parking garage)



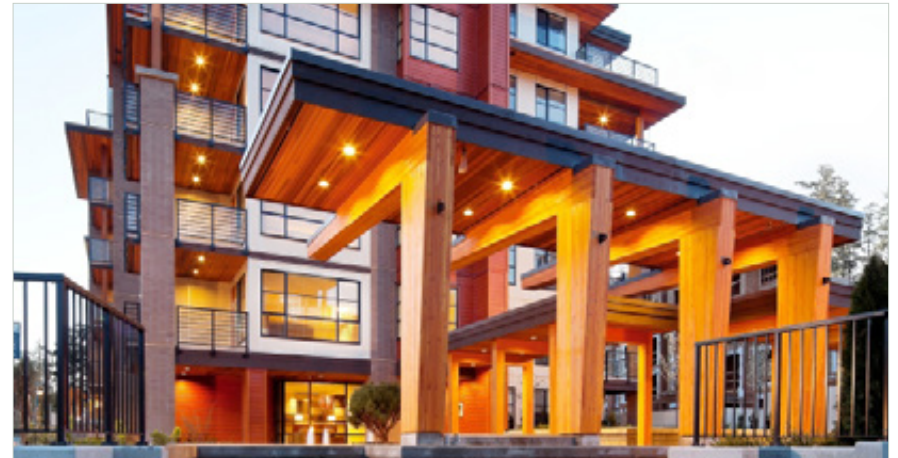
Rooftop PV system



Utilizing greywater recapture for site-wide irrigation and a design feature

7.5.5 BUILDING MATERIALS

1. Encourage maximizing the use of local/regional building materials, seeking a goal of 20% by construction cost.
2. Encourage maximizing the use of recycled, local/regional, and healthy building materials, seeking a goal of 20% by construction cost.
3. Encourage maximizing the use of healthy building materials, including no-VOC, flame retardant free, and plasticizer-free products
4. Encourage using a construction waste management plan for each new development site, with a goal of diverting 95% of construction waste from the landfill



Utilizing and highlighting mass timber construction in a residential building

7.5.6 SUSTAINABLE SITES

1. Encourage the Incorporation of green roofs on larger buildings (e.g., mid-rise, high- rise).
2. Support the creation of a community garden in the new Central Park (see Section 6.5.2)
3. Support the creation of community gardens in Bowers District (e.g., on vacant development sites, on rooftops).
4. Employ habitat creation through soft landscaping, native and adaptive non-native plantings, and abundant tree plantings, as well as restoration strategies to restore areas damaged by construction.



A residential building with accessible green roof and PV system



8. Infrastructure

8.1 OVERVIEW

This chapter provides Infrastructure directions and policies that serve to guide future decision-making about development of lands in Bowers District. This Chapter focuses on conventional infrastructure, rather than the Green Infrastructure policies and directions found in Chapter 7 (and elsewhere).

8.2 INFRASTRUCTURE POLICIES

8.2.1 GENERAL

1. In addition to on-site stormwater management, the stormwater outflow that enters the site near the Island Highway (and originates from the west of the site near Enterprise Way) will be conveyed directly across the site and into the City's storm sewer infrastructure.
2. The City will work with the developers to explore the creation of a stormwater detention area (and landscape feature) near the intersection of Uplands Drive and Parkwood Terrace, as identified in 6.3 Open Space Network Plan and 6.4 Blue Green Strategy Plan.



9. Placemaking and Culture

9.1 OVERVIEW

This chapter provides Placemaking and Culture directions and policies that seek to address issues of aesthetics, arts, character, culture, and placemaking in Bowers District. The planning and design of Bowers District strives to respect and honour the past while creating a distinct and vibrant character for the area.

The placemaking and culture of Bowers District should acknowledge and celebrate the recent history of the site, as well as its place within the traditional territory of the Coast Salish peoples.

Today, a third generation of the Gerke family now proudly manages the nursery and garden centre. The family's vision is to see the spirit of Green Thumb live on in the Bowers District. This means a place that [a] brings community together; [b] honours and celebrates the land; and [c] provides a place where people feel at home.

The future landscaping, site design, architecture, and other elements (e.g., public art) can create a distinct sense of place in the Bowers District by embracing and celebrating these histories.

9.2 PLACEMAKING APPROACH & PRINCIPLES

9.2.1 OVERVIEW

The approach to placemaking in Bowers District was based on three key principles:



LANDSCAPING AS A FOCUS

Make landscaping a focus of development in the District and define its sense of place through:

- Incorporating abundant and diverse tree plantings on streets, in parks, and on private land
- Integrating rich and high quality soft landscaping areas on streets, in parks, and on private land
- Utilizing soft landscapes to define key edges and gateway areas to the District



ELEGANT, NATURAL AESTHETICS

Seek an elegant, 'green' building aesthetic and well-defined sense of place through:

- Primarily utilizing substantial, natural building materials such as masonry, stone, and wood into building facades
- Expressing a unified contemporary architectural concept, while avoiding overly complex massing or articulation
- Integrating a range of architectural features and design details into building facades to create visual interest, particularly at the street-level



FOCAL POINTS AND GATHERING PLACES

The social experience in Bowers District will centre on key focal points and gathering places in the area through:

- Designing the large, central park area as the primary neighbourhood focal point and recreational hub
- Creating view corridors and neighbourhood gateways that focus on the large central park area and other gathering places
- Integrating smaller parks, plazas, and internal courtyards within the pedestrian network to create a series of social spaces and gathering places

9.3 PLACEMAKING & CULTURE POLICIES

9.3.1 GENERAL

1. To help establish a unique sense of place, encourage site design on private and public land that incorporates rich and extensive soft landscaping and large canopy trees to help develop a strong sense of place rooted in green landscapes.
2. Landscaping and architectural design will have a cohesive and complementary character that speaks to the past and future of this site – with an elegant, natural aesthetic and abundant soft landscaping.
3. Consider authentic and historically-relevant street and place (e.g., park) names.
4. Support the development of interpretive signage and interactive public art that reinforces the site's history.
5. City projects in the study area will conform to the City's Cultural Plan and Community Plan for Public Art and allocate funds to public art accordingly.
6. Recognition of local First Nations' history, culture, and language in architectural, public space, and landscape design and naming will be considered through engagement with Snuneymuxw First Nation and Snaw-naw-as Nation.
7. Public art will be integrated into the streetscape of mixed use areas and key public spaces.
8. Support the inclusion of arts-based spaces and organizations (e.g., galleries, studios, incubation spaces, non-profits) into the Bowers District.



Creating a distinct sense of place through landscaping and architectural design



Integrating historically- and locally-relevant art into the public realm.



10. Implementation

10.1 OVERVIEW

The Bowers District lands will be developed over several decades through a multi-phased implementation of this Master Plan, including subsequent development approval processes – in collaboration with the City – for subdivision, rezoning, development permits, and building permits. Public space and amenity areas will also be secured and provided in a phased manner through these approvals and as the site build-out is achieved.

10.2 PHASED DEVELOPMENT

10.2.1 GENERAL

Implementation of the Bowers District Master Plan will be achieved through a series of phases to be defined through a future rezoning application. Each phase of development will identify the anticipated build-out and servicing needed to support the development, as well as planned community amenities to be provided. A number of City review processes will be required, including:

- Rezoning
 - » Requires Council approval and further community engagement
- Subdivision
 - » Requires approval by the City's Approving Officer
 - » Public park dedication provided
- Development Permit
 - » Requires review by the Design Advisory Panel and Council approval (typically)
- Building permit and Civil Engineering design approval
 - » Authorize construction of buildings and infrastructure (e.g., roads, utilities)
- Each application will need to be consistent with the policies and directions of this master plan and other relevant bylaws to be approved

10.2.2 COMMUNITY ENGAGEMENT

Community input will continue to play an important role as phases of redevelopment are proposed. The developer will engage the community at the time of rezoning(s) through subsequent public meetings or Public Hearings.

10.2.3 DEVELOPMENT AGREEMENT

During the first phase of redevelopment, the City and the developer will enter into a development agreement (e.g., Phased Development Agreement) that provides greater certainty to phasing of infrastructure and community amenities relative to redevelopment of private lands. This agreement will become binding to the development of the Bowers District lands for any future developer and the City.

