

# WATERFRONT LANDING

## SUB AREA PLAN

*Schedule "O" to the District of Squamish  
Official Community Plan No. 2500, 2017*

District of Squamish





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# 1 INTRODUCTION

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Waterfront Landing represents a special opportunity for a new comprehensively planned waterfront neighbourhood in Downtown Squamish through reclamation and restoration of the historic sawmill site. The site offers an extraordinary setting with its location on the Squamish waterfront, surrounding mountain views and proximity to all the services and facilities of the community. The Sub Area Plan is the result of detailed review of the site characteristics, its setting and future role within the Squamish community, as well as servicing and access requirements. Detailed site planning, architectural and landscape design has resulted in a neighbourhood plan that provides many housing choices, a pedestrian-first system of pathways and roads, and places to live and work, all oriented to the waterfront setting. The SAP provides policies to guide implementation and development of this new neighbourhood.

## 1.1 PLAN AREA AND CONTEXT

Located on the eastern shores of Mamquam Blind Channel, directly across from the Downtown, Waterfront Landing extends across 21.5 hectares of former industrial lands. Occupying the historic Interfor sawmill site, the lands are adjacent to the Mamquam Blind Channel to the west and north, the Sea-to-Sky highway and CN Rail line to the east, and a privately owned forested knoll to the south. The broader setting of Waterfront Landing is shown in Figure 1.



## 1.2 RATIONALE FOR UPDATED SUB AREA PLAN

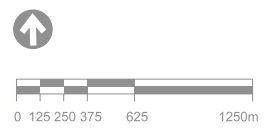
Sub area plans are adopted as schedules to the OCP and provide greater detail regarding neighbourhood density, housing forms, open space and infrastructure requirements. The plans serve as a comprehensive guide for managing future rezoning, development permit and subdivision applications. The Waterfront Landing SAP was originally adopted in 2007. Nearly a decade later, with land ownership changes and an updated Official Community Plan (OCP) underway, the new SAP provides an opportunity to update the vision for Waterfront Landing. The 2016 SAP responds to current housing demands and brings a new perspective on best practices in neighbourhood design. The plan also incorporates new policy directions of the District, including Active Transportation, Smart Growth, Integrated Flood Hazard Management and the Employment Lands Strategy.

Figure 1  
CONTEXT PLAN

LEGEND

APRIL 2017

-  Site Boundary
-  Squamish Municipal Boundary



### 1.3 FRAMEWORK FOR MANAGING CHANGE

The broader planning framework for Waterfront Landing involves both policy and regulatory bylaws as described below.

#### Regional Growth Strategy

The Squamish-Lillooet Regional District (SLRD) Regional Growth Strategy (RGS), adopted in 2008 and amended in 2015, designates this site as part of the overall **Urban Area** of the District of Squamish. Compact urban growth is supported in this area, and the Waterfront Landing Sub Area Plan is consistent with the District's commitment through the Context Statement to implementing the RGS.

#### Official Community Plan

The District of Squamish's OCP (Bylaw 2100, 2009) contains long range planning objectives and policies to guide the future development of the community. The Waterfront Landing site is designated **Downtown** in the OCP. Redevelopment of the Waterfront Landing site fits with OCP goals of revitalizing the Downtown and adjacent waterfront areas through compact, mixed-use and higher density development close to the downtown centre. It is also consistent with the Growth Management policies that population growth be primarily accommodated through infill of vacant and underutilized land in existing neighbourhoods, including Waterfront Landing and the Oceanfront lands. The new SAP is consistent with the current OCP while taking into consideration the emerging directions of the new Official Community Plan (underway at the time of SAP development).

The core Smart Growth principles of the OCP are also addressed in the SAP as follows:

- ***Each community is complete:*** The neighbourhood is planned to integrate residential and commercial uses, linked with parks, trails and bike pathways.
- ***Options to the car are emphasized:*** Local employment, amenities and services are available within walking distance; an active transportation network prioritizes walking, cycling and transit.
- ***Work in harmony with natural systems:*** The SAP provides waterfront parkland to protect significant natural features of the Mamquam Blind Channel and to provide open space within the neighbourhood.

- ***Buildings and infrastructure:*** Best practices in environmental management are central to the development of Waterfront Landing, including use of green building technologies, restored natural systems, and a focus on active transportation.
- ***Housing meets the needs of the whole community:*** A mix of housing forms and tenures, including affordable rental housing, are provided to support a wide range of households, ages and incomes.
- ***Jobs are close to home:*** The SAP provides employment lands both in the Marine Village and adjacent to Laurelwood Road; the Victoria Street bridge also provides direct access to jobs in other parts of the Downtown.
- ***The spirit of the community is honoured:*** Building design and guidelines emphasize a “made in Squamish” vision through use of local materials, design that reflects the historical industrial waterfront character, and reference to local history, including First Nations use of the Mamquam Blind Channel.
- ***Everyone has a voice:*** The SAP has drawn extensively from public consultation, the agency referral process, and direct input from District Council and staff.

#### 1.4 EXISTING SITE CONDITIONS

The Waterfront Landing site is a former lumber mill site, heavily disturbed by previous industrial uses. New environmental and geotechnical reports have been completed which supplement the original biophysical information for Waterfront Landing. The following sections summarize key points from these reports.

##### Landform

The Waterfront Landing site is 21.5 hectares in size, of which 1.8 ha is water area and 19.7 ha is land. The site is relatively level with elevations ranging from approximately 3.3 to 4.3 metres, with some lower areas due to previously excavations. The southeast edge of the site consists of a forested, steep rocky bluff. The south portion of the site was excavated in the past to facilitate a log sort and boat basin. While under water, this area is within the property’s legal boundary.

The site has a predominantly west and south facing aspect, oriented toward the afternoon and midday sun. Panoramic views over the Mamquam Blind Channel towards Squamish and Howe Sound, as well as the Stawamus Chief are accessible throughout the neighbourhood.



### Archaeological Assessment

A previous Preliminary Field Reconnaissance (PFR) assessed the archaeological resource potential of the site and verified that the vast majority of the site has low potential for the presence of archaeological sites. An Archaeological Impact Assessment (AIA) was undertaken along the face of the prominent bedrock knoll (steep rocky bluff) along the southern boundary of the site, which concluded that there were no archaeological sites along the bluff, and no further archaeological work is warranted. This was confirmed by the Archaeology Branch of the Ministry of Tourism Sport and the Arts.

### Environmental Values | Habitat

Although the Waterfront Landing site is largely disturbed and contaminated from previous uses, a number of environmentally valuable resources (EVRs) are located on or near the site. A Preliminary Site Survey was completed in 2015 to determine the condition and extent of EVRs. Seven habitat zones were identified on the site: Zone 1 - Standing Freshwater; Zone 2 - Emergent Vegetation without Trees; Zone 3 – Emergent Vegetation with Trees; Zone 4 – Disturbed Areas with Invasive Plants; Zone 5 – Mixed Forest with Invasive Plants; Zone 6 – Mature Forest; and Zone 7 – Intertidal Marsh. A Detailed Site Bio-Inventory<sup>1</sup> was completed in 2016 in support of the rezoning application and Site Alteration Permit for the site. The report provides an inventory of environmentally valuable features and specifies mitigation and restoration measures necessary for development of the site.

### Hydrology | Watercourses

Water features on the site have been created either by the former lumber mill use or as a result of the 2008-2009 partially completed remediation activities. Filling has drastically disrupted site hydrology. Surface water on site is currently collected in storm drains and directed to culverts flowing into the Mamquam Blind Channel. Waterbodies are believed to have varying levels of contamination in the soils and groundwater. No fish-bearing streams are located on the site.

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<sup>1</sup> *Detailed Site Bio-Inventory, Squamish Lands Remediation Project 1500 Highway 99, Keystone Environmental Ltd., June 2016*

### Shoreline Conditions

The shoreline conditions along Mamquam Blind Channel are variable, with most portions heavily disturbed from industrial use and related marine activities (log sort, moorage). Some rip-rap, retaining walls, and foreshore infrastructure remain along the shoreline boundary. A marine survey completed in 2016 identifies the foreshore slopes, top of shoreline bank and confirms the extent of the navigable channel and foreshore parcels. SAP policies focus marine development within portions of the shoreline that have been previously disturbed.

### Geotechnical Conditions

A preliminary geotechnical report<sup>2</sup> indicates the majority of the Waterfront Landing site has been filled with compact to dense sand and gravel fill, though locally there are pockets of other materials including hogfuel. The groundwater level was identified at an elevation of approximately 2 metres and is expected to fluctuate tidally and following periods of sustained precipitation. Further investigation and detailed analysis will be required at specific fill areas and along foreshore slopes prior to development.

### Flood Hazard

Waterfront Landing is designated as a Coastal Flood Hazard area in the District of Squamish Integrated Flood Hazard Management Plan<sup>3</sup>. The site is considered to be an “unconnected coastal floodplain site”, meaning that if the site floods, it would not also flood other lands. A flood hazard assessment<sup>4</sup> was completed to determine the flood construction level (FCL) and building setbacks for the site. The study reviewed flood hazards in relation to District and provincial guidelines, considering a 1.0m sea level rise from year 2000 to 2100 and 2.0m rise from year 2100 to 2200. Site planning has these incorporated setback and elevation recommendations; detailed assessment and mitigation design will be completed at the design stage for individual development areas.

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<sup>2</sup> *Preliminary Geotechnical Report, Proposed Comprehensive Development, Waterfront Landing, GeoPacific Consultants, December 2016*

<sup>3</sup> <http://squamish.ca/yourgovernment/projects-and-initiatives/floodhazard/jifhmp-2016>

<sup>4</sup> *Squamish Waterfront Landing – Flood Hazard Assessment and Flood Construction Level, Tetra Tech EBA Inc., 2017*

### Site Remediation | Mitigation

Redevelopment of Waterfront Landing requires considerable site remediation. Portions of the site are considered contaminated and require clean up and restoration in accordance with provincial regulations. Derelict boats, old pilings and other remnants from previous industrial use have been recently removed by the owners.

Planned site remediation will involve excavation and management of contaminated soil and wood waste stockpiles, along with some removal of vegetation and the placement of fill. The Detailed Site Bio-Inventory provides recommendations for completion of the work and monitoring measures to minimize adverse environmental effects during site clean-up. Upon completion, remediation works require a Certificate of Compliance under the B.C. Contaminated Sites Regulation.

Figure 2 Existing Site Conditions



## 2 VISION

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### 2.1 A VISION FOR WATERFRONT LANDING

Developing a new waterfront community is an extraordinary opportunity to create comprehensively planned urban neighbourhood just a short walk or cycle away from the amenities of a thriving Downtown core. Waterfront Landing is designed to create a cohesive, compact and liveable neighbourhood that respects the natural environment and preserves and enhances those valued attributes of Downtown Squamish. The Waterfront Landing neighbourhood is based on principles of sustainability, and meets the needs of multiple generations and lifestyles through multi-unit housing choices that include affordable, accessible and adaptable housing and new employment opportunities in commercial areas.

### 2.2 NEIGHBOURHOOD STRUCTURE AND CHARACTER

The neighbourhood design provides for the phased development of a mixed-use waterfront community with a diverse mix of ground-oriented housing in the form of townhouses and 4-6 storey apartment homes, as well as new commercial lands in the **Marine Village** and adjacent to Laurelwood Road. Long term build out is expected to range from 950-1100 residential units with a minimum of 4,600 m<sup>2</sup> (50,000 sq.ft.) of commercial space.

Safe access to the community is provided on Laurelwood Road via a new rail overpass at Clarke Drive and Highway 99. Waterfront Landing is designed as a series of interconnected neighbourhoods; while each is distinct, the neighbourhoods of Waterfront Landing all share a walkable scale with an integrated network of trails and pathways. The Marine Village provides a focal point for the neighbourhood, with vibrant public gathering spaces, access to shops, services and marine recreation and waterfront trails and boardwalks on Mamquam Blind Channel. The new Victoria Street pedestrian bridge provides essential secondary access to the community and to the commercial and civic services in other parts of the Downtown.

Design guidelines for DPA 10 identify the design elements that define the unique character of Waterfront Landing, with west-coast architectural forms and materials, public spaces that reflect the natural and cultural history, including historical uses of the Mamquam Blind Channel by Squamish First Nation, and buildings designed to celebrate the panoramic mountain and water views.

### 2.3 SUSTAINABLE PLANNING PRINCIPLES

In support of the community vision and the Smart Growth principles of the Official Community Plan, the Waterfront Landing SAP reflects the following Sustainable Planning Principles:

#### Foster a vibrant and diverse age-mixed community:

- Provide a variety of multi-family housing types, sizes and tenures to support housing affordability, and to accommodate a range of household types and life-stages;
- Provide a range of amenities for all age groups throughout the neighbourhood.

#### Design compact, safe, walkable neighbourhood | Active transportation:

- Provide an integrated network of streets and pathways that emphasize pedestrian and cyclist safety, with project-specific street standards that prioritize active modes of transportation ;
- Provide public spaces, commercial uses and parks within a 5-minute walking distance of homes for a more socially sustainable community;

#### Support an economically sound community:

- Develop a diverse mix of commercial/employment uses to provide local employment that balances the residential density of the new Waterfront Landing neighbourhood;
- Create local employment in the Mixed Use Commercial areas at the Marine Village waterfront and Laurelwood Road; link with the pedestrian bridge to the rest of Downtown, supporting employment, recreation and social gathering in both areas;
- Plan compact, denser neighbourhoods to reduce infrastructure networks and maintenance costs.

#### Create integrated networks of parks and natural space:

- Provide public parks and natural space within a 5 minute walking distance of each home;
- Provide a continuous public Waterfront Park along the Mamquam Blind Channel, incorporate opportunities to link with upper reaches of the MBC;
- Link neighbourhoods and natural areas with trails and active transportation network;
- Program park and natural spaces to accommodate a variety of active and passive uses for community gatherings and recreation, with opportunities for markets, outdoor festivals and community gardens.

#### **Celebrate local art and culture:**

- Incorporate local art, culture and sense of place in the design of the neighbourhood;
- Educate residents and visitors about local cultural history, including First Nations heritage, through interpretive signage and art installations, particularly along the waterfront;
- Rekindle the spirit of the public spaces, especially on local streets, parks and plazas for the celebration of local art and culture.

#### **Celebrate the natural heritage: Conserve ecological integrity**

- Identify and protect both significant and sensitive terrestrial and aquatic habitats;
- Regenerate historically disturbed natural systems and enhance high value natural areas such as the shoreline;
- Restore fragmented natural areas wherever possible;
- Minimize human-wildlife conflicts;
- Protect the integrity of ecosystems, including the forested rocky bluff along the southeastern edge of the neighbourhood.
- Incorporate and protect identified unique views and vistas, landforms and natural landscape features;
- Promote stewardship of natural systems through interpretive programs and outdoor educational opportunities in cooperation with local stakeholder groups;

#### **Green design and infrastructure**

- Encourage building orientation, materials and technology to benefit from passive climate control to reduce energy use;
- Utilize innovative best practices for infrastructure, including rainwater and stormwater management;
- Explore and encourage alternative energy solutions, such as geo-exchange and passive solar design;
- Foster local food systems through community gardens and kitchens, support of local farms and neighbourhood food retailers;
- Promote native plantings in landscape design that are not highly attractive to bears, with special attention to water conservation; and
- Build to an established “green” building standard to reduce energy and water use, increase building lifespan and reduce waste.

### 3 LAND USE POLICIES

The land use policies for the Waterfront Landing SAP bring into effect the vision for the community. This section describes the land use designations, their planning rationale and development policies to guide the development of Waterfront Landing.

#### 3.1 LAND USE PLAN

The Waterfront Landing Land Use Plan, as illustrated on Schedule A, consists of six land use designations, plus areas for roads. The site also includes approximately 1.8 ha of water areas within the property boundary. A summary of the land use designations and approximate land area for each use category is presented below:

Figure 3 Sub Area Plan Land Use Summary<sup>5</sup>

% of site	Land Use	Area hectares	Principal Uses
11.6%	Higher Density Residential	2.5 ha	Apartment
-	Internal parks + pathways	(1.7)	Strata parks/trails (included with residential parcels)
-	Marine Uses	(0.8)	Marina and associated uses (outside property boundary)
42.3%	Mixed Density Residential	9.1 ha	Townhouse, apartment and two-unit dwellings
11.6%	Mixed Use Commercial	2.5 ha	Mixed commercial, apartment and amenity uses
9.8%	Public parks + pathways	2.1	Public parks/trails pathways
16.3%	Public Roads	3.5	Site access /collector roads
8.4%	Water area	1.8	Open water + marine uses
100%	<b>Total</b>	<b>21.5 ha</b>	

<sup>5</sup> Note: All land use areas and percentages are approximate, intended for planning purposes only. All designated areas and boundaries are subject to refinement through more detailed site design and engineering at the time of zoning and subdivision.

### 3.2 RESIDENTIAL AREAS

A variety of housing choices fosters a vibrant, diverse, age-mixed community at Waterfront Landing. Compact housing will reduce infrastructure and maintenance costs; the mix of housing types, sizes and tenures, including non-market rental housing also contributes to affordability.

The **Mixed Density Residential** designation provides for ground-oriented townhouses, two-unit housing (duplexes) and apartments, arranged within distinct, clustered walkable neighbourhoods. Serviced by private strata roads, townhouses provide individual front doors on semi-private mews within a pedestrian-scaled neighbourhood setting.

The **Higher Density Residential** designation provides a mid-rise building form with 4-6 storey buildings that will support the viability of the neighbourhood commercial areas and increase housing options, including non-market rental housing, an essential part of the housing mix.

#### 3.2.1 Residential Policies

1. Provide a variety of housing forms and sizes, including non-market rental housing, to accommodate a diversity of incomes, lifestyles and life stages.
2. Ground-oriented multiple residential units and duplexes are permitted in the **Mixed Density Residential** designation as shown generally on Schedule A – Land Use Plan. Building forms for these uses will consist of 2-3 storey townhouses and some two-unit (duplex) dwellings units.
3. Apartment dwelling units are permitted in the **Higher Density** and **Mixed Density Residential** designations and in the **Mixed Use Commercial** designation as shown generally on Schedule A. Building forms for apartments will consist of 4-6 storey buildings, except in the Marine Village area, where lower scale (2-3 storey) buildings are supported.
4. Maximum permitted residential density is:
  - a) Townhouse or duplex uses - 1.0 FAR;
  - b) Apartment or mixed commercial/apartment uses - 3.0 FAR.



5. To support efficient land use and increased density in this Downtown neighbourhood:
  - a) A maximum of 5% of total Mixed Density Residential units shall be duplex (two-unit) dwellings; and
  - b) At least 50% of total residential units shall be apartment units.
6. Density, building heights and site coverage for individual parcels will be established in the zoning bylaw.
7. To increase overall site density, additional apartment uses are supported within the **Mixed Density Residential** designation. Any such apartments should preferably be located near Laurelwood Road or the rocky bluff where view impacts will be minimized.
8. Single detached housing is not considered appropriate in this Downtown neighbourhood.

#### **Residential Design**

9. Design in accordance with Development Permit Area No.10 guidelines to establish a unique and unified architectural character for the neighbourhood, reflective of west coast building forms and natural surroundings, visually integrated with the waterfront setting; each neighbourhood “cluster” should provide a distinctive character and avoid repetitive or overly uniform building appearances.
10. Residential design should provide variety in building forms and sizes to ensure a wide variety of housing choices within the neighbourhood.

#### **Affordable Housing; Adaptable Housing**

11. Provide affordable housing in accordance with District community amenity contribution policy, including provision of a minimum of 5% of total units as non-market housing on-site.
12. A portion of the total housing units shall be adaptable units; a minimum of 20% of non-market apartment units shall be fully accessible.

### 3.3 MARINE VILLAGE | COMMERCIAL USE

The Marine Village area will serve as the heart of the neighbourhood, creating an attractive, vibrant, and pedestrian-friendly commercial and public gathering space on the Mamquam Blind Channel waterfront. This area has panoramic views over the Mamquam Blind Channel and the new pedestrian bridge connecting to Victoria Street will provide an essential link between Waterfront Landing and the commercial/civic services of the Downtown centre.

#### Commercial | Employment Lands

In support of the District's Employment Lands Strategy, a wide range of commercial uses are supported at Waterfront Landing. Two main areas of commercial and mixed land use provide a minimum of 4,600 m<sup>2</sup> of phased commercial space. The Village area will provide for local commercial uses on the waterfront, with uses such as restaurant, neighbourhood retail and upper storey office uses. The Village also provides a flex space area for live-work units in townhouses across from the Village centre. The second main commercial area for offices and retail use is located adjacent to Laurelwood Road in mixed use buildings. Home businesses are also an important source of employment, and are supported in the Waterfront Landing zoning.

#### Marine Uses

A portion of the Mamquam Blind Channel shoreline at Waterfront Landing is suitable for marine related uses, while the remainder is intended to remain as natural or improved shoreline. Areas designated for **Marine Use** are located adjacent to the Marine Village commercial area to ensure connectivity with upland uses.

#### 3.3.1 Commercial Policies

1. Support a range of commercial, marine and amenity uses in the **Mixed Use Commercial** designation, as shown on Schedule A – Land Use Plan.
2. Commercial uses may include a range of commercial uses, including retail, office, restaurant, professional offices, personal services and marine and related uses.
3. Commercial uses will be phased in concert with residential development:
  - a) A minimum of 2700 m<sup>2</sup> of commercial space will be provided concurrently with apartment uses during Phase 3;

- b) A minimum of 1800 m<sup>2</sup> of commercial space will be provided concurrently with amenity and apartment uses in the Marine Village during Phase 4; and
  - c) Additional waterfront commercial development will be provided in Lot 12 during Phase 5(b) as shown conceptually on Schedule A Land Use Plan. The amount and exact location of commercial use will be determined at Development Permit.
- 4. Non-market housing is supported above the second storey in the **Mixed Use Commercial** designation near Laurelwood Road as well as within all residential designations.
  - 5. Provide for both commercial and public use in amenity buildings; encourage partnerships and shared uses to provide access to community user groups as well as neighbourhood residents.

#### Marine Uses

- 6. Marine uses are supported in the previously disturbed waterlot areas designated as **Marine Use** on Schedule A – Land Use Plan.
- 7. Marine uses may include marinas, docks, floats, pedestrian bridge, access and storage for kayaks, canoes and other recreational watercraft; associated marine commercial uses may include boat rentals, marine retail, water taxi, boat launch, marine repairs and associated uses.
- 8. Ensure public access to the shoreline and important view corridors are maintained with any marine development.

#### Home Business

- 9. Home businesses are encouraged in Waterfront Landing in accordance with District zoning provisions; home businesses provide an opportunity to expand employment with minimal impact on transportation and servicing infrastructure.
- 10. Live-work units are supported in residential areas near the Marine Village; the location and extent of live-work uses will be established in the zoning bylaw.

#### Form and Character

- 11. Design high quality and vibrant commercial areas in accordance with DPA 10 guidelines to reinforce the village scale with pedestrian focused design; enliven public and commercial spaces through use of patios, boardwalks and seating areas; reflect the character of surrounding Squamish areas and historical waterfront uses and integrate buildings with the natural setting through the use of local colours and materials.

### 3.4 PARKS + PATHWAYS

The Waterfront Landing Parks and Pathways plan (Schedule B) illustrates the significant features and open spaces in the neighbourhood that will be dedicated to both environmental enhancement and outdoor recreation.

Two major waterfront parks provide public access to the shoreline and active use areas, located at the north and south ends of the neighbourhood. These major parks include walkways and boardwalks ensuring full accessibility along the waterfront. The south waterfront park is a sheltered bay that provides for kayak launching and viewpoints southward.

While the waterfront is central to the identity of the neighbourhood, individual residential areas also incorporate local (strata) parks and open space to provide nearby opportunities for a diverse range of recreational needs, from quiet contemplative spaces to imaginative children's playgrounds and community gardens. The multi-use pathway surrounding the neighbourhood also links with the broader Squamish trail network and with other waterfront paths and parks across the Mamquam Blind Channel.



### 3.4.1 Park, Trails and Open Space Policies

1. Provide open space, parkland and trails for the recreational use and enjoyment of all residents and visitors as generally identified on Schedule B – Parks + Pathway Plan.
2. Dedicate the two Waterfront Parks shown on Schedule B to the District for park use. These parks provide natural amenities that preserve habitat values as well as provide for active play and water access.
3. Ensure public access to the waterfront throughout the neighbourhood; provide an accessible, continuous waterfront walkway along the Mamquam Blind Channel with each phase of development.
4. Provide an interconnected network of public pathways – including public walking paths/trails, sidewalks and internal (strata) multi-use pathways – that connect the Marine Village, parks and residential neighbourhoods.
5. Provide active park areas for playgrounds, community gardens, and active use by all age groups.
6. Provide lookout points and seating areas along the edge of the Mamquam Blind Channel to create destination points for sitting, picnicking, socializing and informal lookouts.
7. Consider incorporating public art installations and outdoor performance spaces within parks and public spaces.
8. Install interpretive educational and wayfinding signs to describe elements such as historic uses and features associated with the site, ecosystem function and native species of flora and fauna.
9. Encourage the design of unique play spaces and structures that reflect the natural surroundings and industrial heritage of the site.
10. Incorporate a range of trail and pathway types to provide for a range of recreational uses.
11. All public trails and pathways should be fully accessible to all users.
12. Provide public rights-of-way over private (strata) parks or trails to ensure continuity for all users.
13. Provide public parking areas at each of the two waterfront parks. This commitment will be secured in the Land Development Agreement; the number and exact location of parking spaces will be determined at the time of detailed design and Development Permit.

### 3.5 ENVIRONMENT + HABITAT

The policies in this section are established to protect, preserve and enhance the natural features of Waterfront Landing, including the Mamquam Blind Channel, adjacent shoreline and forested upland area that have higher environmental values. Biophysical conditions and environmental values, as well as supporting background studies are referenced in Section 1.4 of this plan.

#### 3.5.1 Environment Policies

1. Develop in a manner that respects and enhances the site's environmental features, wildlife habitat and riparian areas and addresses any risks associated with flooding and geotechnical/soil conditions.

##### Habitat

2. Ensure that environmentally valuable features are appropriately enhanced, protected and maintained as part of the open space network, limiting human disturbance of these areas.
3. Maintain the steep rocky bluff at the south east corner of the site as an environmental feature and habitat setback area.
4. Eliminate or remove noxious or invasive species from natural areas as appropriate.
5. Provide signs or interpretive elements to describe the ecosystems, habitat areas and range of plant and animal species that may be found in the neighbourhood.
6. Retain natural vegetation where possible and encourage the use of native and drought resistant vegetation for new development.
7. Encourage retention of snags and large trees to provide roosting, loafing and nesting sites for birds, where feasible
8. Avoid the use of plantings that attract bears.

##### Riparian and Shoreline Areas

9. Protect and enhance ecological integrity and water quality of the Mamquam Blind Channel.
10. Limit shoreline development to previously disturbed parts of the shoreline designated as **Marine Use** on Schedule A – Land Use Plan. In other areas, minimize hardening the shoreline through the construction of seawalls, rip rap or other structures except where no other option is suitable for flood protection.

11. Water lots and adjacent upland designated as **Water/Shoreline** are within the property boundary of the Waterfront Landing site, and are intended to remain as undeveloped natural areas, providing for passive recreation, wildlife viewing, boating and similar uses.
12. Provide shoreline enhancement along the Mamquam Blind Channel that offers diverse habitat for a range of plant, aquatic and animal species, including creation of marsh benches and riparian eco-pockets of varying sizes.
13. Protect riparian areas by integrating stormwater management infrastructure that mimics natural flow patterns and rates, where feasible.
14. Environmental impacts of any development, including filled or disturbed areas must be mitigated and/or compensated in accordance with DPA guidelines and provincial/federal requirements.

#### **Public Ownership of Environmentally Sensitive Areas**

15. In accordance with OCP policies, any key habitat area within areas shown as Waterfront Parks on Schedules A and B will be transferred to the District at time of subdivision.

#### **Site Remediation**

16. Complete remedial works as recommended in the Detailed Site Bio-Inventory; obtain a Certificate of Compliance from the Ministry of Environment under the BC Contaminated Sites Regulation prior to any subdivision or development of the site.

## 4 NEIGHBOURHOOD INFRASTRUCTURE

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Principles of smart growth and best management practices are fundamental to the infrastructure policies for Waterfront Landing, and take into account water and energy conservation, capital and long-term maintenance costs and associated environmental impacts. With its location near the Downtown centre and nearby neighbourhoods, water, sewer and other utility infrastructure services are in close proximity to the new Waterfront Landing neighbourhood, allowing for connection to existing systems.

### 4.1 TRANSPORTATION NETWORK

A Transportation Impact Assessment (TIA)<sup>6</sup> was undertaken to evaluate Waterfront Landing within the overall local and regional transportation network, and in the context of other proposed developments in the surrounding study area. The recommendations of that study form the basis of the SAP transportation policies.

#### Access | Roads

Development of Waterfront Landing involves construction of new bridges and roads that will serve both the development and surrounding areas, as well as an internal road network within the neighbourhood. A new 3-lane grade separated rail crossing at Clarke Drive/Highway 99 will provide access to the neighbourhood at Laurelwood Road. Two access points to the development are provided from Laurelwood Road. The main looped roads within Waterfront Landing as shown on Schedule C will be public (municipal) roads. An additional network of strata roads connects to this public road system.

#### Active Transportation | Cycling and Pedestrian Networks

The Waterfront Landing road system and trail network provide a high level of connectivity for pedestrians, cyclists and transit users. Together with the compact urban form, these networks provide active transportation options that will minimize the reliance and use of private vehicles. The site is within cycling distance (up to 8 km) to three schools, shops, restaurants and businesses in Downtown Squamish, the Industrial Park, Garibaldi Village and Brackendale.

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<sup>6</sup> *Waterfront Landing Transportation Impact Assessment; Bunt & Associates, December, 2016*



The site is also close to mountain biking trails in Crumpit Woods and Smoke Bluff Park, accessible via the Valleycliffe community or the UMBC Trail.

Connections to the west/Downtown core will be provided by the new pedestrian/cycle bridge to Victoria Street. Separated sidewalk and bicycle paths on the west side of Laurelwood Road (adjacent to the site) are proposed to extend over the Clark Drive overpass, providing connections to the Valleycliffe neighbourhood.

#### **Safe Routes To School**

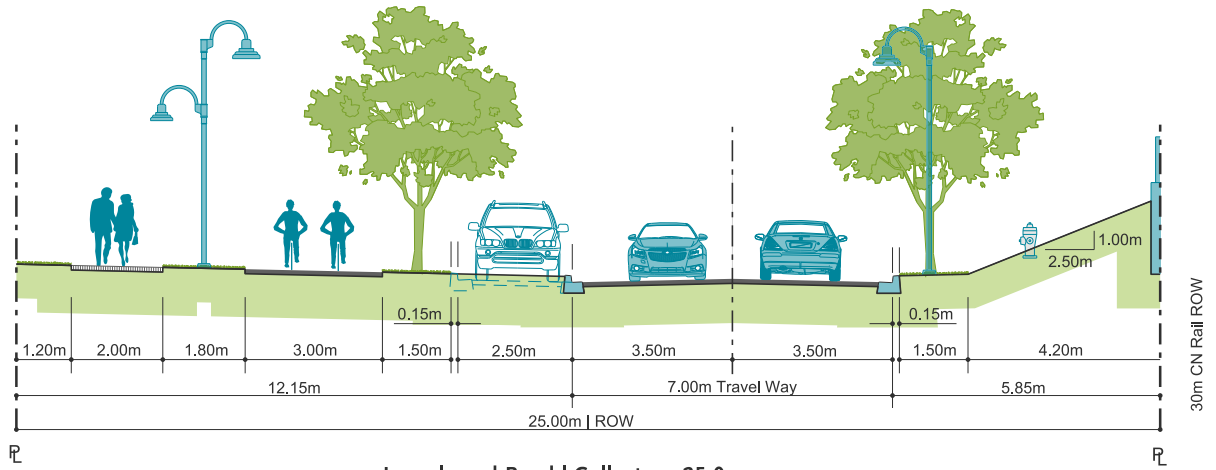
The active transportation infrastructure provides improved safe routes to schools. Construction of Laurelwood Road and the rail overpass at Clarke Drive will provide separated sidewalk and bike lanes with the first phase of development. This route provides connection to the Stawamus Elementary School and Valleycliffe neighbourhood.

Construction of additional pedestrian crossings at the Mamquam Blind Channel (Victoria Street) and Pemberton Bridge in the longer-term will provide pedestrian/cycling facilities to Downtown and schools to the north, including Ecole Squamish Elementary, Howe Sound Secondary School and Capilano University.

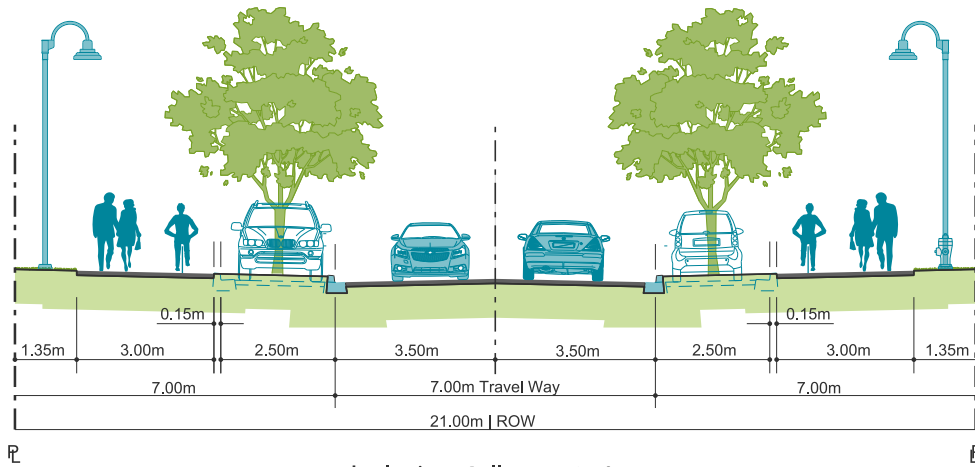
#### **Mamquam Blind Channel Crossing | Pemberton Bridge**

The Waterfront Landing Transportation Impact Assessment recommends that an additional crossing of the Mamquam Blind Channel be completed by 2030 to address overall traffic requirements for an alternative access route to the Downtown from Highway 99. While the additional channel crossing is not required specifically for the Waterfront Landing development, the road network is designed to accommodate a future bridge crossing from Laurelwood Road to Pemberton Avenue. This includes an expanded right of way width on Laurelwood Road, provision of 3 traffic lanes on the Clarke Drive overpass, and limited access points to the neighbourhood on Laurelwood Road.

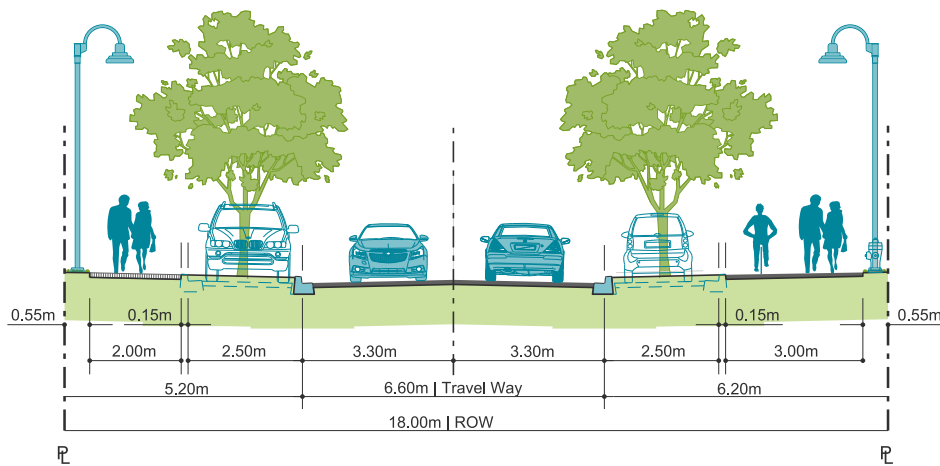
# Typical Cross Sections



Laurelwood Road | Collector - 25.0m



Road A | Minor Collector - 21.0m



Road B | Local - 18.0m

### Transit Network

There is currently limited transit service on the Highway 99 corridor in the vicinity of Waterfront Landing. BC Transit Route 3 (Valleycliffe) is the nearest bus stop, some 400m distance from the site, which could potentially be expanded to serve Waterfront Landing. Additional opportunity to link to transit in the Downtown will be created through the pedestrian/cycle link over the Pemberton bridge and by construction of the pedestrian/cycle bridge across the Mamquam Blind Channel.

#### 4.1.1 Transportation Policies

##### Access + Road Network

1. Ensure Waterfront Landing is connected to other Downtown areas with all modes of transportation, providing safe access for people of all abilities.
2. Road design will balance the need for vehicle use and parking with active transportation and an attractive landscaped streetscape.
3. Road access to Waterfront Landing and the internal road system will generally be in accordance with Schedule C – Street Hierarchy Plan.
4. Primary road access to the neighbourhood will be established via a new grade separated rail crossing at the Clark Drive and Highway 99 intersection, with two new access points into the development on Laurelwood Road.
5. Secondary road access to the neighbourhood may be established in the longer term via a future crossing of the Mamquam Blind Channel, potentially on a route connecting the northern end of Laurelwood Road with Pemberton Avenue.
6. Design of Laurelwood Road will include a 25.0m right of way, a berm/crash wall on the east side adjacent to the rail line, and a separate sidewalk (2.0m minimum width) and multi-use trail (3.0m minimum width) on the west side.
7. Access over the Mamquam Blind Channel to the Downtown centre will be established with a new pedestrian + cyclist bridge from the Marine Village to the intersection of Logger's Lane and Victoria Street (approximate location).

### Internal roads

8. Roads within the development will consist of both public (District) roads and strata roads as indicated generally on Schedule C.
9. Public roads A and B will provide for two vehicle lanes, adequate turning radius for transit and emergency vehicles, landscaped boulevard strips with street parking nodes, sidewalks and bike lanes. Right of way widths will range from 21.0m for main Road A to 18.0m for Road B as generally illustrated in Figure 4 – Road Cross Sections.
10. Strata roads shall meet all requirements for emergency vehicle access and provide suitable access to residential and commercial uses.

### Active Transportation: Neighbourhood Walking + Cycling

11. The neighbourhood will provide convenient and safe route choices to walk and cycle throughout the community as shown generally on Schedule B (Parks and Pathways), Schedule D (Pedestrian + Bicycle + Transit Plan) and Figure 4 (Typical Cross Sections). The District will determine the exact allocation and widths of sidewalks, bicycle and/or shared paths at the time of detailed engineering design review. The commitment to these facilities will also be secured in the Land Development Agreement.
12. Site design will minimize impacts of vehicle traffic with an urban form that emphasizes pedestrian and cycle paths, and reduces vehicle speeds and street crossing distances.
13. Safe pedestrian movement within strata parcels will be provided by internal “mews” between units and by tertiary trail links as illustrated as strata trails on Schedule B (Parks + Pathways).
14. Sidewalks, trails and parking areas will be designed according to barrier free access standards to accommodate all intended users.
15. Public access rights-of-way through strata developments will be required to ensure full connectivity through the neighbourhood.

### Transit

16. The Developer will work with the District and B.C. Transit to establish transit access to the neighbourhood, in accordance with Schedule D (Pedestrian + Bicycle + Transit Plan).
17. Ensure public road widths are sufficient for future bus service.
18. Transit stops will have appropriate curbs, letdowns, shelter and seating for all users.

19. Cycling and walking trails should be connected to transit routes.

#### **Marine Transportation**

20. Encourage active use of the Mamquam Blind Channel for transportation between the Waterfront Landing neighbourhood and other Downtown areas, including creation of a landing facility for water vessels such as a commercial water taxi, kayaks, canoes and rowboats.
21. All marine related transportation should be accessible by pedestrians and cyclists via pathway and trail linkages.

#### **Lighting**

22. Provide appropriate low-level lighting to allow safe pedestrian use of all pathways, trails and mews during night time hours.

#### **Parking**

23. Parking to be in accordance with the District of Squamish Zoning Bylaw CD-40 Zone requirements, unless other standards are supported at time of development approval.
24. Consider opportunities to reduce parking requirements for residential and commercial developments through Low Speed Vehicles (LSVs), car-sharing and/or other forms of alternative transportation.

## 4.2 SITE SERVICING

Construction of new services and extension of existing municipal services are required to meet the needs of the Waterfront Landing neighbourhood. An analysis of the requirements for water supply) and sanitary sewer servicing in relation to the District's existing water and sewer networks was completed in 2016.<sup>7</sup>

The Conceptual Servicing Plans for the Waterfront Landing SAP (Schedules E, F and G) identify the major infrastructure proposed to serve the new neighbourhood. Detailed engineering design will be undertaken with each phase of development and subdivision.

### Water Servicing

Water distribution systems to meet minimum fire flow demands as well as maximum domestic water demands are required for the development. Water service will tie in to existing municipal watermains near the site. Preliminary assessment of service pressures and available fire flows within the existing network indicates that the fire flows within the development are expected to meet District requirements. Some deficiencies exist at adjacent service commercial properties, which will likely be slightly improved with the Waterfront Landing development.

### Sanitary Sewer Servicing

Provision of sanitary sewer to Waterfront Landing requires construction of a new sanitary sewer forcemain as well as a sanitary lift station and internal distribution lines. Five alignment options for the sanitary forcemain were considered, including the preferred option of a new forcemain along the potential Pemberton bridge. As the bridge will not likely be constructed by the first phase of development, the District has supported directional drilling of a forcemain under the Mamquam Blind Channel to connect to existing services on Pemberton Avenue as the next preferred option.

### Drainage

Future stormwater management will utilize a range of Low Impact Development strategies and Best Management Practices, including minimization of impervious surfaces, bio-retention swales where feasible and conventional piped systems. Drainage systems will be designed such that major storm events are controlled within roadways and open space as much as possible.

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<sup>7</sup> *Waterfront Landing Water and Sanitary Sewer System Analysis; Opus Dayton Knight Consultants, June 2016*

#### 4.2.1 Servicing Policies

1. Design water, sanitary sewer and stormwater/drainage systems in accordance with the District's Subdivision and Development Control Bylaw No.2373, 2015, as well as industry Best Management Practices, incorporating Smart Growth principles, where feasible.
2. Timing for provision of major infrastructure upgrades will be determined prior to rezoning of the site.
3. All utilities will be underground as per District bylaws (hydro, communications and gas services).
4. Alternative servicing designs that achieve environmental, technical or economical solutions and provide more sustainable approaches to infrastructure works and services will be considered where warranted by specific site conditions, to be implemented through Development Variance Permits or Development Permits as appropriate.

##### Water

5. Water servicing shall be provided as generally shown on Schedule E – Water Conceptual Plan.
6. Water distribution systems will be designed to meet minimum domestic, fire flow and storage demands defined by MMCD and the Fire Underwriters Survey of Canada, as specified in the Subdivision and Development Control Bylaw.
7. Water meters will be installed at the property line for all commercial and residential buildings per the requirements of the Subdivision and Development Control Bylaw.
8. Landscape design will reduce water use by incorporating best water-management practices, including efficient irrigation systems and drought tolerant or native plantings.

##### Sanitary sewer

9. Sanitary Sewer servicing shall be provided as generally shown on Schedule F – Sanitary Sewer Conceptual Plan.
10. The developer is responsible for all necessary approvals and land acquisition (if required) for construction of the sanitary sewer forcemain, lift station and distribution lines.

### Stormwater | Drainage

11. An Integrated Stormwater Management Plan will be prepared in general compliance with the Schedule G - Drainage Conceptual Plan.
12. Ensure stormwater management systems are designed using Best Management Practices and Low Impact Development strategies as suitable for the development site, including:
  - a) Reduce the area of impervious area and maximize the area of pervious area for sustainable storm water management.
  - b) Provide water quality treatment through the use of bio-swales (where practical), mechanical oil/grit separators and sediment ponds.
  - c) Employ localized flow attenuation to reduce erosion and limit infiltration to incidental infiltration from bioswales, waterways and green spaces.

### Emergency Services | Fire Protection

13. Design to meet the requirements of Squamish Protective Services – Squamish Fire Rescue, RCMP and the Squamish Emergency Program - to ensure adequate emergency response can be provided to all residential, commercial, marine and community uses.
14. Marinas, docks and pedestrian bridge to use non-combustible piles and must be equipped with an acceptable standpipe system with a fire hydrant to meet District requirements.
15. A marked Fire Lane to access the marina is required.

### Noise Abatement

16. Provide structural barriers, building wall upgrades, increased setbacks, landscaping or other means of noise abatement to buffer development from noise and vibration associated with the adjacent rail lines and/or major roads, as recommended by a professional noise and vibration assessment.



#### 4.3 GEOTECHNICAL: FLOOD PROTECTION+SITE REMEDIATION

Details on existing site conditions, soils and flood hazard are described in Section 1.4 based on overview technical reports. The basics of flood protection for this site will be to raise the site to Flood Construction Level (FCL) via placement of fill, provide erosion protection along the foreshore, and provide suitable building elevations and setbacks to meet District policy and Qualified Professional recommendations. Preliminary recommendations include a minimum 15.0m building setback to meet 2011 BC Guidelines for Management of Coast Flood Hazard, and a preliminary FCL of 5.07m elevation. The flood protection strategy for Waterfront Landing is based on a vegetated slope sea defense system; sheet pile dikes are not considered necessary for this area of the Mamquam Blind Channel.

##### 4.3.1 Geotechnical and Flood Protection Policies

###### Geotechnical

1. Recommendations of the Preliminary Geotechnical Report for Waterfront Landing<sup>8</sup> and any subsequent detailed geotechnical reports shall be followed with respect to any site stripping (removal of vegetation, soils or fill materials), compaction, preloading, construction of roads, or placement of engineered fill to raise site grades.
2. Detailed geotechnical assessment is required for each structure or development area prior to issuance of Development Permits and/or Building Permits.

###### Flood Protection

3. Recommendations of the Waterfront Flood Hazard Assessment<sup>9</sup> and any subsequent detailed flood assessments shall be followed with respect to building setbacks, flood construction levels (FCL) and design of sea defense systems.
4. Flood mitigation shall adhere to District flood policy in place at the time of the development including the Integrated Flood Hazard Management Plan, Floodplain Bylaw, Development Permit Area guidelines and Official Community Plan policy, as well as Qualified Professional recommendations for the site.

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<sup>8</sup> *Preliminary Geotechnical Report, Proposed Comprehensive Development, Waterfront Landing, GeoPacific Consultants, December 2016*

<sup>9</sup> *Squamish Waterfront Landing – Flood Hazard Assessment and Flood Construction Level, Tetra Tech EBA Inc., 2017*

5. Building setbacks shall include provision for up to 2 metre sea level rise to allow space for future construction of a sea dike if necessary. Any foreshore and flood protection works shall be prepared in accordance with Qualified Professional recommendations and also meet the objectives and guidelines of DPA 10 (Waterfront Landing), including “Greenshores” principles wherever possible.
6. The District will require a ‘save harmless’ restrictive covenant for flood protection pursuant to Section 219 of the Land Title Act prior to adoption of zoning bylaws.



## 5 IMPLEMENTATION

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Implementation of the Waterfront Landing Sub Area Plan requires further steps and development approvals, including zoning bylaw amendment, development permits and subdivision approval.

### 5.1 IMPLEMENTATION POLICIES

#### Relationship to Official Community Plan

1. The Waterfront Landing SAP provides additional detail regarding land use, housing forms and density, environmental protection and development servicing than the Official Community Plan; in case of any conflict between the plans, the SAP takes precedence.

#### Future Changes to the Sub Area Plan

2. Minor changes to the policies, phasing and servicing described in the SAP may be considered by Council without amendment to this plan, provided the changes do not affect the overall intent of the plan.
3. Changes to the permitted land uses or maximum density described in the plan will require an amendment to the SAP.

#### Zoning Bylaw

4. The Waterfront Landing SAP will be implemented through the regulations of the CD40 (Comprehensive Development) Zone.

#### Development Permits

5. A Development Permit is required prior to any development or subdivision of land in Waterfront Landing as follows:
  - a) Development Permit Area No. **13** (Waterfront Landing) applies to all commercial and multiple family developments and adjacent Mamquam Blind Channel shoreline/water areas outlined in Section 6; and
  - b) DPA **1 (Environmental Protection)** also applies to Waterfront Landing.

#### Land Development Agreement (covenant)

6. A Land Development Agreement will be registered prior to zoning bylaw adoption to reflect current District practices and bylaws, including provisions related to voluntary Community Amenity Contributions (CACs), public land dedication and park improvements, project phasing and timing of major infrastructure commitments.

#### 5.2 PHASING OF DEVELOPMENT

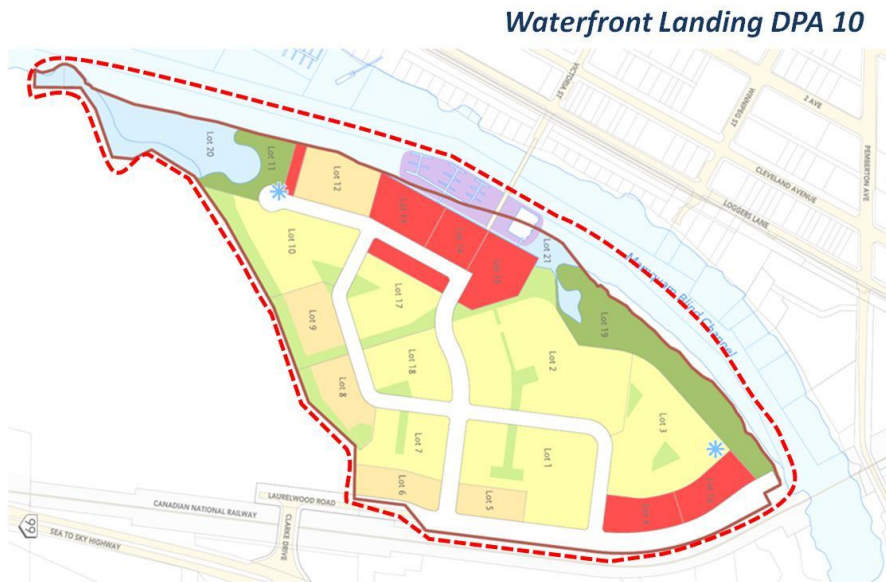
Timing for development of Waterfront Landing will be dependent to a great extent on the market demand in Squamish. The neighbourhood is planned to be developed in phases, with full build-out over a ten year period (approximately). Some flexibility is needed in project phasing to respond to market conditions.

1. Development of Waterfront Landing will proceed generally in the sequence shown on Schedule H – Phasing of Development.
2. Minor changes to the phasing may be considered by Council without amendment of the SAP, provided community amenities and infrastructure commitments established in the Land Development Agreement are met.
3. Major changes to the project phasing may require amendment of the SAP as well as amendment to the Land Development Agreement.

## 6 DEVELOPMENT PERMIT AREA NO.13 - WATERFRONT LANDING

### Designation

DPA No. 13 applies to the land and shoreline areas of the Waterfront Landing site (1500 Highway 99) as outlined on OCP Schedule M. This DPA includes upland parcels, adjacent waters of the Mamquam Blind Channel and parcels that interface with the water's edge as generally illustrated below:



### Application and Intent

Section 488.1 of the Local Government Act (LGA) authorizes the establishment of Development Permit Areas in which the District of Squamish must issue a development permit prior to the subdivision of land, the construction or alteration of a structure, or the alteration of land. The Waterfront Landing DPA No. 10 is designated for:

- The protection of the natural environment, its ecosystems and biological diversity (Section 488.1 a);
- The protection of development from hazardous conditions (Section 488.1b);
- The revitalization of an area in which a commercial use is permitted (Section 488.1d);
- The establishment of objectives for the form and character of intensive residential, commercial, industrial, and multi-family residential development (Sections 488.1e and 488.1f); and
- The establishment of objectives to promote energy conservation (Section 488.1h);
- The establishment of objectives to promote water conservation (Section 488.1i); and
- The establishment of objectives to promote the reduction of greenhouse gas emissions (Section 488.1j).

## Justification + Objectives

Waterfront Landing is a new mixed use neighbourhood with a spectacular location on the Mamquam Blind Channel. DPA guidelines are intended to ensure a high level of design quality throughout the neighbourhood, with visual and functional integration with the rest of Downtown. The underlying design concepts for Waterfront Landing are intended to create a unique sense of place that enhances the connection to the marine environment and surrounding views. This previous industrial site also brings many opportunities for local and historic design references. The guidelines are also intended to integrate best management practices into the design of development adjacent to and within the Mamquam Blind Channel to protect, maintain or enhance the shoreline and marine environment.

## Design Guidelines Organization

The Waterfront Landing Development Permit Area guidelines are intended to be consistent with the DPA guidelines for other parts of the Downtown and Mamquam Blind Channel as much as possible, while also reflecting the specific site conditions and the proposed design approach to Waterfront Landing. The following list indicates the applicability of each section of the guidelines:

Section	Design Guidelines	Applicable to:
A	General Design and Site Planning Guidelines	All developments
B	Residential + Mixed Use Design Guidelines	All multiple unit residential and mixed residential/commercial uses
C	Marine Village Guidelines	Additional guidelines for the Marine Village and public realm
D	Mamquam Waterfront Guidelines	Additional guidelines for development on or adjacent to the Mamquam Blind Channel

## Exemptions

The exemptions listed in Part 5 (Development Permit Areas) of the OCP apply to Development Permit Area 13 (Waterfront Landing). In addition to the exemptions listed in OCP Part 5, a Development Permit is not required for temporary buildings or temporary uses in DPA No.13 (Waterfront Landing).

## A. General Design and Site Planning Guidelines

### Neighbourhood Character

1. Neighbourhood character for Waterfront Landing is intended to reflect a human scale built environment, with both contemporary west coast architectural forms and historic design elements. A number of character sketches (Figures 5-7) illustrate possible approaches to neighbourhood design for parks and trails, residential uses and the Marine Village.
2. Each phase of development shall provide a unique architectural character and design to avoid repetitive or monotonous building appearances.



### Preserve Views

3. New development shall preserve and enhance views of the surrounding mountain and water landscapes.
4. Buildings shall be located to provide views at street ends and between buildings wherever possible.
5. Development shall consider and address view impacts from the water side.



### Setbacks from Water, Parks and Trails

6. Provide appropriate transitions and setbacks between the water edge and upland development, with a minimum 15m setback.
7. Buildings adjacent to waterfront parks and trails should be sited to provide privacy for residents and comfort for public park users.



### Pedestrian Circulation and Accessibility

8. A continuous public waterfront pathway shall be created along the Mamquam Blind Channel.
9. Public pedestrian areas, including paths, trails, boardwalks and plazas shall be universally accessible; internal strata walkways should minimize stairs or other barriers to full accessibility.
10. Public pedestrian access to the Mamquam Blind Channel shall be provided at street ends and between buildings wherever possible, at a minimum every 200m.



11. Waterfront access points shall be designed for active use, including projecting piers, docks, seating areas, viewing and interpretive elements, public art and access to the water, including small craft launching where appropriate.
12. Traffic calming will be incorporated in street design, including measures such as landscaped curb extensions and special paving materials in pedestrian crossing zones.



**Parks, Trails and Open Spaces**

13. All residential units shall have access to shared outdoor amenity spaces such as gardens, courtyards and playgrounds. These spaces should be highly visible from both private and public activity areas.
14. Children’s play areas shall be provided in local strata parks and will be visible, readily supervised and will be accessible to the public.
15. Play areas and active outdoor spaces should be designed for all age groups and should relate to the recreational activities of the region (such as rock climbing, water features), be idiosyncratic and well-designed, and may blur the lines between playground and public art.
16. Garden plots shall be provided for use by residents.
17. Public trail surfaces will consist of a variety of materials, from wooden boardwalk to permeable paving, unit pavers or crushed stone, provided all trail sections are fully accessible.
18. All landscape plans shall identify park and trail improvements, including linkages to surrounding trails, surfacing materials, and trail widths.
19. Public park design and programming for the two waterfront parks will be completed as part of the Development Permit for the adjacent phases of development, and will include provision for both active play and passive uses as part of the landscape design. Parking areas shall be provided for each park. The commitment to design and construct parks will be included in the Land Development Agreement.





## Landscaping

20. All areas not used for buildings or parking must be landscaped to convey an image of a site that is completed or finished. Soft landscaping materials such as ground covers, shrubs and trees are supported; large areas of mulches, gravel or concrete are not acceptable forms of landscaping.
21. The landscape character should complement the natural coastal character of the area, with emphasis on native species and locally sourced materials such as boulders and wood.
22. Boulevard trees and plantings will create visual interest and soften the appearance of buildings, as well as provide separation and protection for pedestrians.
23. Planting design shall use plant groupings that provide year-round interest.
24. Plants that require minimal water (e.g. drought tolerant plants) should be used wherever possible.
25. Site elements such as site furniture and lighting shall be included in open spaces and shall reflect the marine and industrial heritage of the site.
26. Higher quality paving materials will be used in the public realm, introducing pattern and colours in prominent areas such as plazas. Simpler materials will be used in more natural settings such as trails.
27. Landscaping must be provided in order to enhance the appearance of buildings and to screen other necessary features such as storage, parking and mechanical equipment.
28. Chain link fencing is not supported except where necessary for security purposes, in which case landscape screening and finishing details must be provided to reduce the negative visual impact of the fence.

## Lighting

29. All exterior lighting shall follow “dark sky principles” and be directed and/or shielded to illuminate the ground only, to prevent light pollution from encroaching on adjacent buildings, public spaces, natural areas, trails or the Mamquam Blind Channel.
30. Private realm lighting levels must be designed to create a pleasing nighttime environment while also meeting safety and security standards.
31. All public trails shall have appropriate low-level lighting for safe public use during nighttime hours;
32. Energy efficient lighting fixtures should be used wherever possible
33. Exterior security lights should be motion or light activated only.

### Parking + Loading

34. Residential and commercial parking shall generally be provided by underground or covered parking; smaller areas of surface parking are acceptable in commercial and amenity areas. Parking under buildings should be well lit, ventilated and provide a sense of security through good sight lines to entrances.
35. Above ground parking structures should be integrated with the building design and where possible, have usable building space rather than parking along any public streets or open spaces.
36. Parking or loading should be accessed from the side or rear of buildings.
37. Parking lots and loading areas shall be concealed or buffered from the street or public view by landscaping or architectural screens.
38. Surface parking areas shall integrate trees and other vegetation to avoid the image of large areas of asphalt.

### Sustainable Design

39. All building and landscape design shall demonstrate a commitment to better environmental performance and stewardship. Development permit applications should demonstrate inclusion of current best practices which may include, but is not limited to, elements such as :
  - (a) Building to an established “green” rating standard;
  - (b) Habitable rooms and private outdoor spaces with access to daylight and direct sunlight;
  - (c) Building design that utilizes solar orientation to maximize passive solar heating where possible;
  - (d) Operable windows in apartment and commercial buildings to allow passive ventilation;
  - (e) Use of sustainable or “green” building materials including low-carbon, recycled, recyclable and local sourced materials;
  - (f) Innovative on-site water management techniques;
  - (g) Landscape choices and techniques to minimize maintenance requirements, water use and reduce fertilizer and pesticide use.

## B. Residential and Mixed Use Design Guidelines

The majority of residential uses in Waterfront Landing consist of ground-oriented townhouses (and some two unit dwellings) that will range from 2-3 storeys in height. Apartments and mixed use (commercial + residential) buildings ranging from 4-6 storeys are located on the perimeter of the site and on the waterfront. The following guidelines apply to all multiple unit residential or mixed commercial/residential use buildings in Waterfront Landing.

### Relationship to Street

1. All ground level units shall have an individual entrance from the street or internal mews. This entrance shall be visible and distinguishable from the rest of the street frontage.
2. All buildings shall relate to the street on which they front; buildings facing internal pedestrian “mews” should address both frontages, although formal “front doors” will face the mews.
3. Above the ground level, street-facing commercial or residential units shall create a strong visual connection to the sidewalk by providing bay windows or extended balconies that overlook the street.
4. Buildings located on corner lots or adjacent to walkways or courtyards shall have side elevations reflecting the design and scale of the front face of the building.
5. Buildings shall be articulated to create interest and an appropriate pedestrian scale along streets and public spaces.
6. Buildings shall be setback from the sidewalk to allow for landscaped front yards, porches and/or patios.



### Building Height and Massing

7. Buildings shall be positioned and scaled to minimize the impact of shadows on adjacent open spaces, buildings and within the parcel.
8. The siting, massing, shape, roof lines and exterior finish of buildings shall be harmonious, yet sufficiently varied to avoid a monotonous appearance.
9. Buildings shall avoid abrupt changes in scale from neighbouring buildings; higher buildings should step down to be similar in height to adjacent buildings or provide increased distance between buildings.

10. The siting and height of multi-unit buildings should ensure view impacts from adjacent residential developments are taken into account and minimized.

#### Roofscape and Image

11. Generally, buildings above 3 storeys in height will be more urban in character, and flat and sloped roof forms are acceptable.
12. Steeply pitched roof turrets and numerous small dormers should be avoided

#### Building Facades, Materials and Colours

13. Buildings shall express a unified architectural concept in façade treatments and materials.
14. Large areas of glass to maximize views and natural light are encouraged.
15. Express local character through substantial use of materials local to Squamish such as exposed timbers, wood siding and shingles, and granite and other local stone. Textured concrete and steel are acceptable wall materials, especially when combined with wood or stone features. Flat concrete wall finishes, concrete block, stucco, vinyl or plastic claddings are not supported.
16. Exterior finishes should be durable to convey permanence and to withstand severe wind, water and snow conditions.

#### Residential Livability

17. Residential buildings shall provide landscaped front yards, porches and/or patios.
18. Apartments should have an increased setback from the street to create a more comfortable pedestrian scale along the street.
19. Building heights should allow for higher ceilings in living spaces.
20. Housing design should create a balance of privacy and neighbourliness.
21. Design that allows for future adaptation in unit configuration and use (e.g. to allow aging in place) is highly encouraged.
22. Buildings should be designed to minimize overlooking of other units through careful window placement
23. All residential buildings adjacent to Laurelwood Road shall be constructed to mitigate railway noise and vibration in accordance with professional recommendations.



### Common Areas and Amenity Spaces

24. Every residential unit shall have direct access to a private outdoor space such as a patio, porch or balcony of sufficient size to support seating areas and functional use by occupants. Patios and decks should not overlook others and be separated by privacy screens.
25. Balconies should be maximized to provide usable private open space; they should be at least partially covered and an integral part of the building design.

### Commercial + Mixed Use Guidelines

26. Residential and commercial entrances should be differentiated architecturally in mixed use buildings.
27. Commercial buildings should provide signage and entry features that clearly identifies use, but is scaled and oriented to the pedestrian.
28. Store fronts should have frequent entrances and a significant proportion of glazing (at least 60%) to create a strong visual connection and pedestrian scale along the street.
29. Residential units in mixed use buildings shall include sound attenuation features as well as physical and visual separation to provide privacy and minimize conflicts with commercial uses.
30. Vents and mechanical equipment shall be screened from view, integrated with the architectural treatment of roofs and located to minimize noise and exhaust impacts on residential uses and public spaces.

## C. Marine Village + Public Realm

The Marine Village, pedestrian bridge and expanded boardwalk are focal points of the neighbourhood, providing public gathering spaces, commercial uses and amenities as well as connection to the rest of the Downtown. Architectural and public realm elements will reflect the rich history of the area, including detailing that is in keeping with the marine setting. In addition to the general design guidelines, the following apply:

1. A distinctive, expressive architectural character shall be established in the Marine Village and along the waterfront. Buildings should reflect the industrial heritage of the site and the marine setting.
2. Create a strong relationship to the surrounding landscape by framing the views of the Mamquam Blind Channel and mountains beyond through view corridors.
3. Public art and historic interpretive elements shall be central features throughout the public realm in the Marine Village. These elements should

reflect the industrial heritage and marine activities of the Mamquam Blind Channel.

4. Maintain a low scale development form of 2-4 storey buildings to enhance the pedestrian scale and unique waterfront character.
5. Ground level commercial spaces shall have a strong visual connection to the street and provide accessible courtyards, plaza and patios for outdoor seating areas that face or open out onto the sidewalk.
6. Ground level commercial units shall include large doors and windows that open up to the street.
7. Overhead weather protection shall be provided along the front face of all buildings over the pedestrian sidewalk through the use of fabric canopies or fixed building projections.
8. Site furniture including benches, garbage and recycling receptacles, bicycle racks will reinforce the waterfront industrial themes, and be selected for durability and maintenance.
9. Where commercial or private marine uses require secure access, gates and fences shall not interfere with views from the waterfront walkway or public plazas.
10. Parking in the Marine Village may include some surface parking for public use/marina users.

#### **D. Mamquam Waterfront Guidelines**

In addition to the general site planning policies regarding view protection, waterfront walkways and trails, the following guidelines are intended to support the ecological functions of the Mamquam Blind Channel. This involves rehabilitation of previous industrial uses and site contamination, minimizing the footprint associated with new development and enhancing shoreline areas.

##### **Site Planning and Building Design**

1. Design to reflect the four Green Shores principles as much as possible:
  - (a) Preserve the integrity or connectivity of coastal processes.
  - (b) Maintain or enhance habitat diversity and function.
  - (c) Minimize or reduce pollutants to the marine environment.
  - (d) Reduce cumulative impacts to the coastal environment.



2. New upland buildings shall be sufficiently set back and elevated to avoid the need for shoreline protection measures.
3. A minimum 15m setback from the top of bank is required for new buildings, both for flood protection, environmental protection and visual quality.

#### Environment Best Management Practices

4. Native or indigenous vegetation should be retained wherever possible. If not possible, then ecological restoration should be incorporated into the development; replanting should consist of native or indigenous vegetation.
5. Piers on pilings and floating docks are preferred over solid-core piers or ramps.
6. Private docks, piers and ramps shall be restricted to the minimum size necessary to meet the needs of the water-dependent uses.
7. Docks, piers and ramps shall be designed and constructed to avoid or, if avoiding is not possible, to minimize and mitigate impacts to environmentally valuable resources and environmentally sensitive areas, such as eelgrass beds and fish habitat.
8. All structures located and works that take place below the natural boundary of the Mamquam Blind Channel shall have minimal impact on water quality and disturbance of the substrate.
9. All docks and other floating structures should be constructed and sited so that they do not rest on the bottom of the foreshore at low water levels.
10. Piers should use the minimum number of pilings necessary, with preference to large spans over more pilings.
11. Minimize shading of the water by incorporating perforations, using large spacing between deck planks, or by using an alternative deck surface such as metal mesh or grating.
12. Shoreline protection measures shall address habitat values as well as protection against erosion, flooding and wave action. Where necessary for flood protection, shore protection works should be limited to the minimum size necessary, and use the “softest” possible shore protection measures that will still provide satisfactory protection. Measures such as vegetation enhancement, beach restoration, anchor trees or gravel placement (sediment bays) are preferred over “hard” engineered approaches such as rock (rip rap) revetments, lock block, concrete retaining walls or seawalls.
13. On-site drainage shall be designed to minimize impact on shoreline vegetation and ecological functions.

14. Shoreline protection works shall be installed within the property line; “soft” shoreline protection measures or those that provide restoration of previously damaged ecological functions may be permitted seaward of the property line, subject to provincial and federal approvals.
15. Trails should be built to minimize disturbance of the landscape and ecosystems (e.g. elevated boardwalks).

#### Marine Uses

16. Locate marine-oriented uses within waterlots outside the navigable channel.
17. Individual private docks are not supported; any docks should serve multiple users.
18. Docks should be constructed of stable materials that will not degrade water quality. Docks shall not use unenclosed plastic foam or other non-biodegradable materials. The use of creosote pilings is discouraged.

#### Lighting of water areas

19. Lighting of developments built over the water surface shall be kept to the minimum necessary for safety and visibility. Light fixtures on such sites should be simple, unobtrusive in design, focus light on the area to be illuminated and avoid spillage of light into other areas. Fixtures should not result in glare when viewed from areas that overlook the water and should diffuse light on the water. Low-glare fixtures with a high cut-off angle should be used.





Figure 5 Neighbourhood Character  
Parks and Paths



Figure 6 Neighbourhood Character – Residential

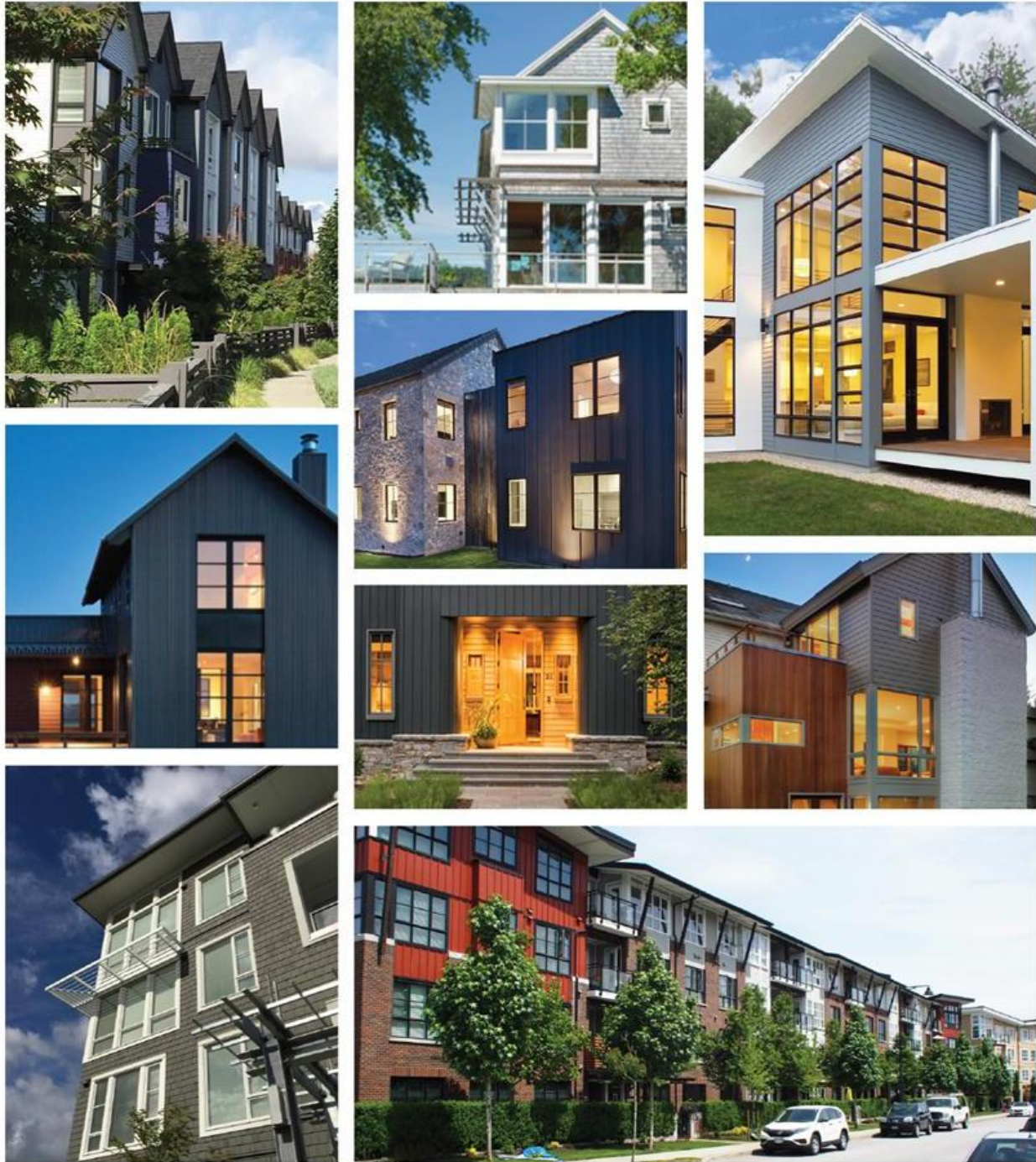
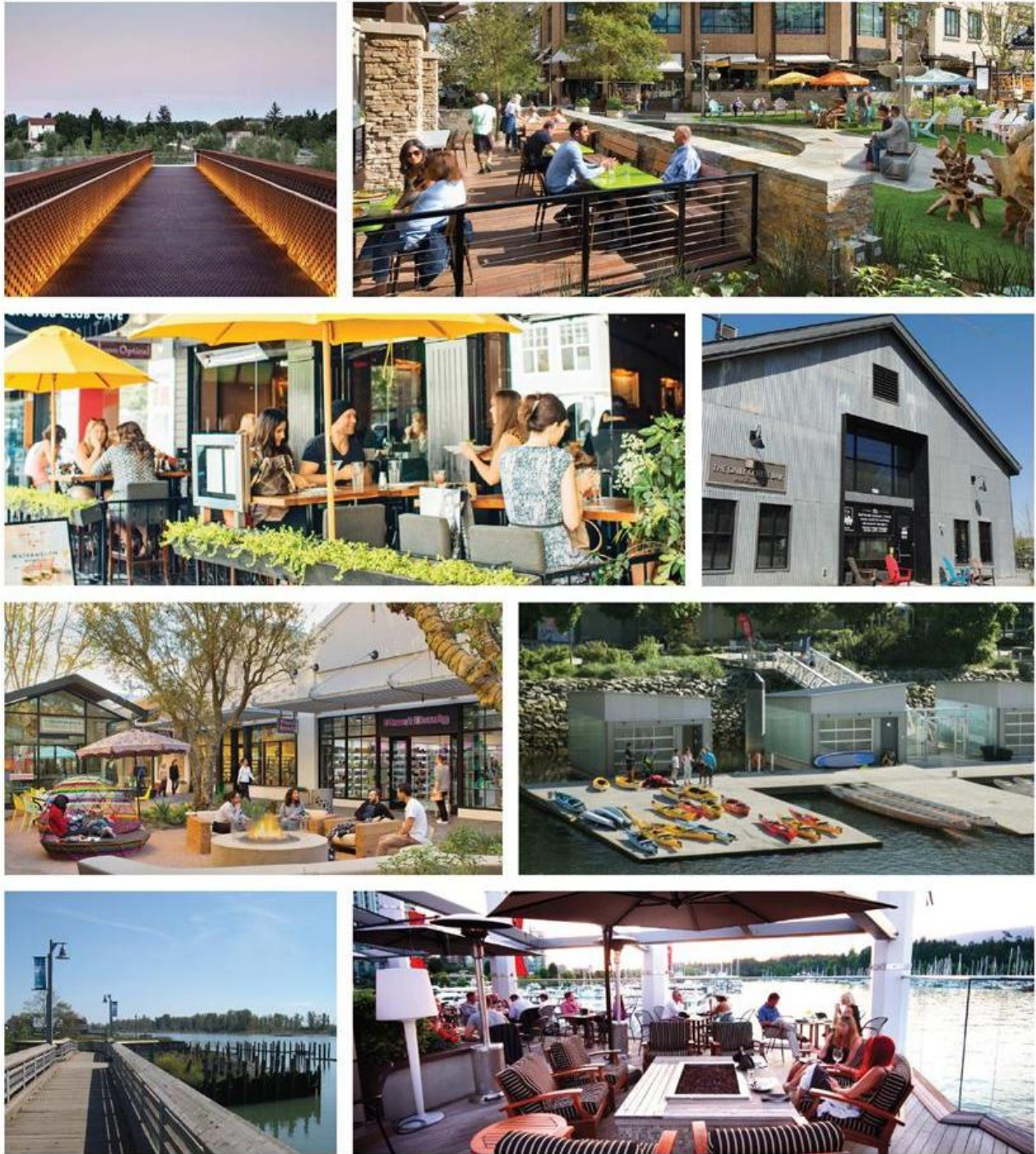


Figure 7 Neighbourhood Character - Marine Village



## 7 SCHEDULES








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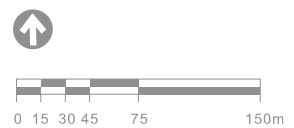
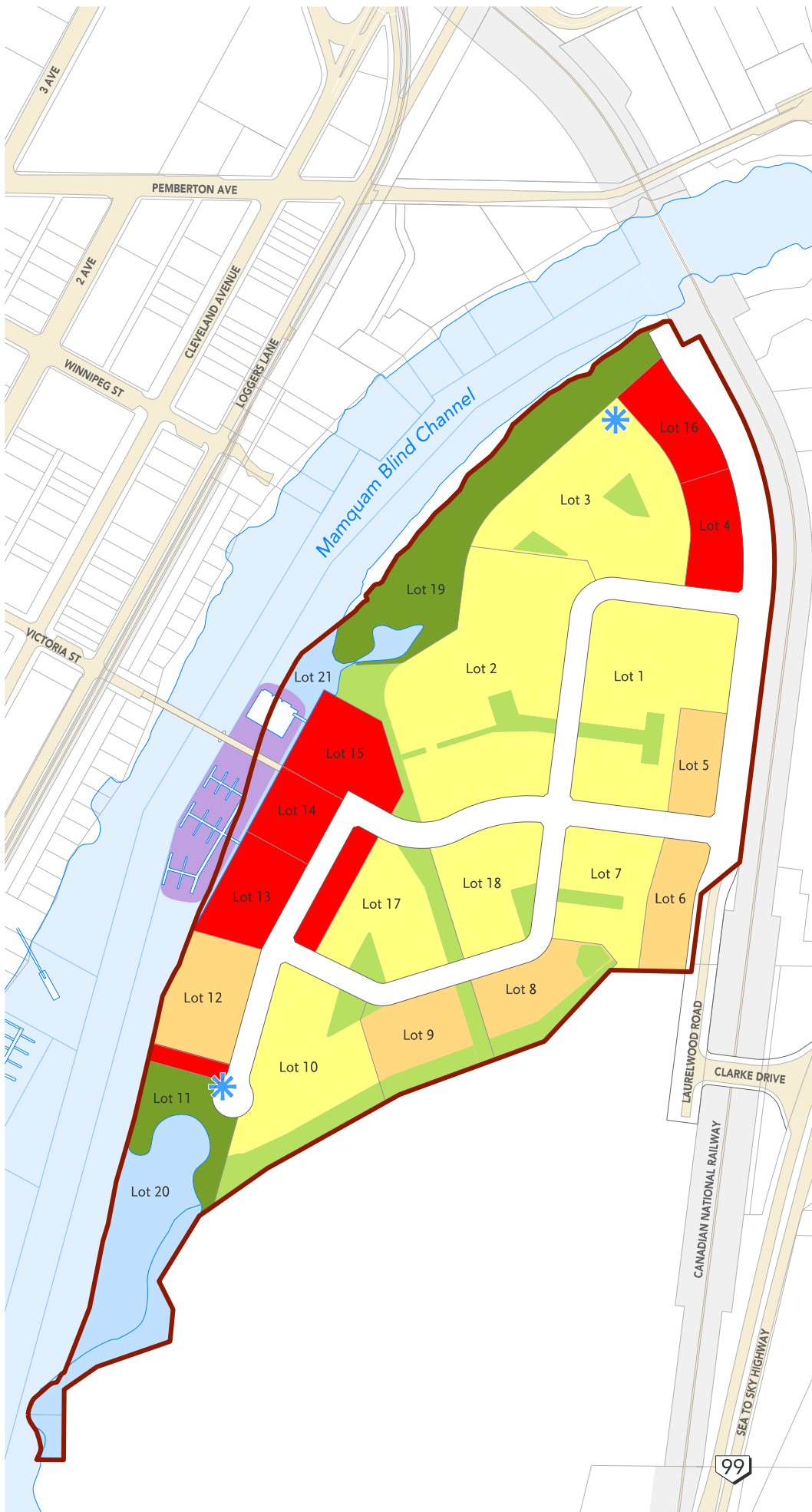
The following schedules are referenced in the policy and background sections of this plan.

Schedule A	Land Use Plan
Schedule B	Parks + Pathways
Schedule C	Street Hierarchy Plan
Schedule D	Pedestrian + Bicycle + Transit Plan
Schedule E	Water Conceptual Plan
Schedule F	Sanitary Conceptual Plan
Schedule G	Drainage Conceptual Plan
Schedule H	Phasing Plan

### Schedule A LAND USE PLAN

LEGEND MAY 2017

-  Site Boundary
-  Mixed Density Residential
-  Higher Density Residential
-  Mixed Use Commercial
-  Marine Use
-  Public Park
-  Strata Park
-  Water | Shoreline
-  Road ROW
-  Public Parking

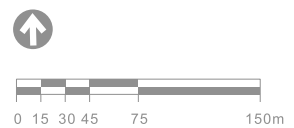


### Schedule B PARKS + PATHWAYS PLAN

LEGEND

APRIL 2017

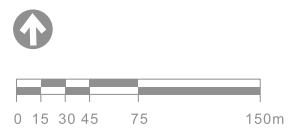
- Site Boundary
- Development Area
- Public Park
- Strata Park
- 6.5m Boardwalk
- 4.5m Multi-Use Trail
- 3.0m Multi-Use Sidewalk
- 2.0m Sidewalk
- 1.8m Bike Path
- 1.5m Strata Trail



### Schedule C STREET HIERARCHY PLAN

LEGEND APRIL 2017








- Site Boundary
- Development Area
- Public Park
- Strata Park
- Water
- 25m Collector
- 21m Minor Collector | Road A
- 18m Local | Road B
- 6.1m Strata Street

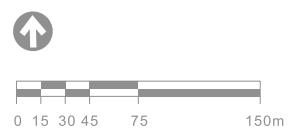
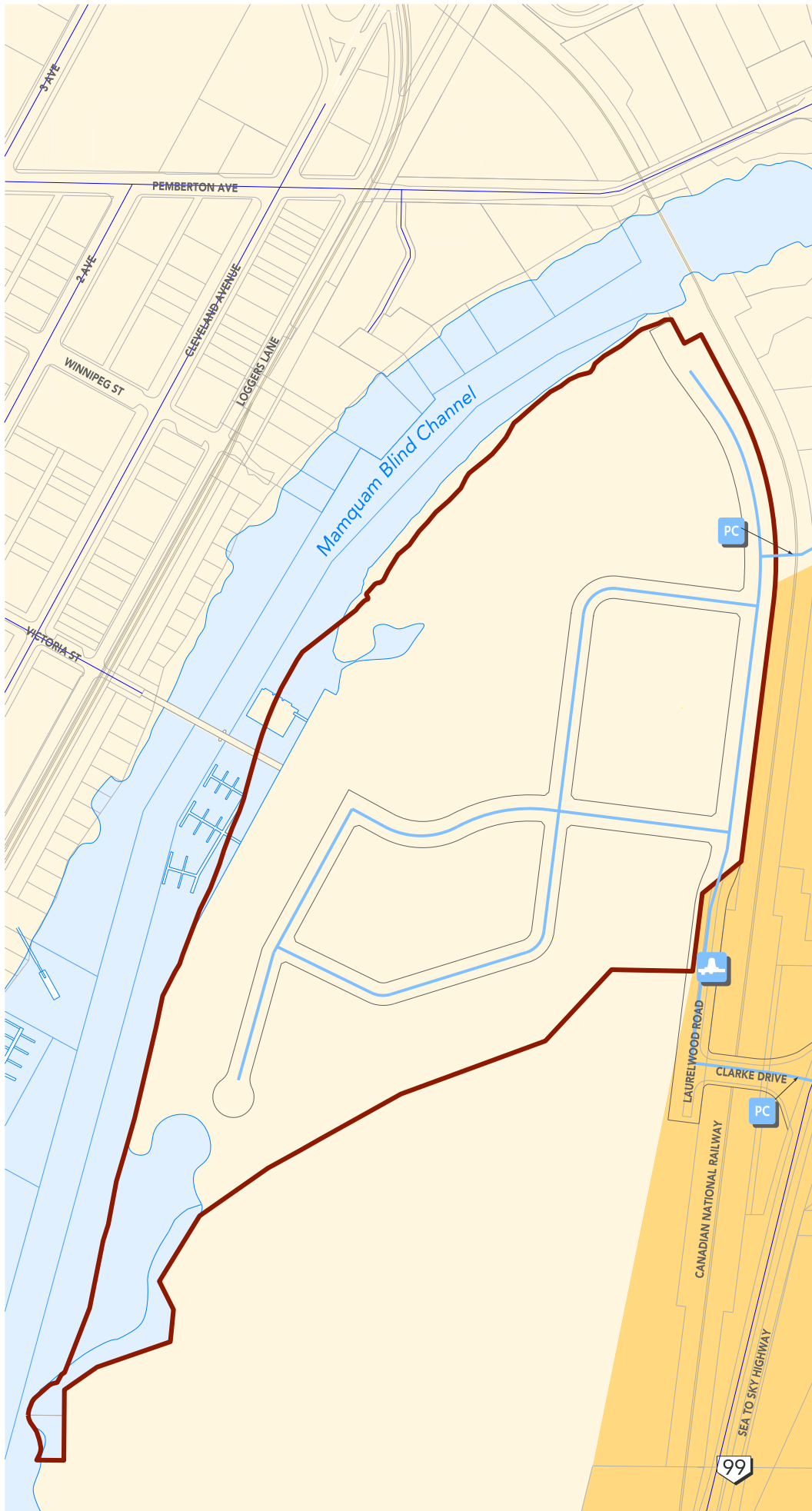


## Schedule D WATER CONCEPTUAL PLAN

LEGEND

APRIL 2017

-  Site Boundary
-  Existing 59m HGL Squamish River Zone
-  Existing 68m HGL Clarke Zone
-  Existing Water Main
-  Proposed Water Main
-  Proposed Pressure Reducing Valve Station
-  Primary Connection Points

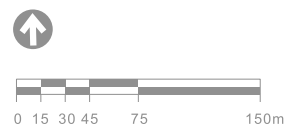




### Schedule E SANITARY CONCEPTUAL PLAN

LEGEND APRIL 2017

- Site Boundary
- Development Area
- Public Park
- Strata Park
- Water
- Proposed Gravity Sewer Main
- Proposed Forcemain
- Proposed Lift Station

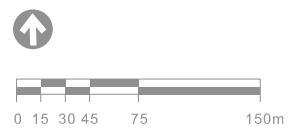


### Schedule F DRAINAGE CONCEPTUAL PLAN

LEGEND











APRIL 2017

- Site Boundary
- Development Area
- Public Park
- Strata Park
- Water
- Proposed Gravity Main
- Proposed Storm Outlet



### Schedule G PHASING PLAN

LEGEND MAY 2017

-  Site Boundary
-  Phase Boundary
-  Sub-Phase Boundary
-  Phase 1
-  Phase 2
-  Phase 3
-  Phase 4
-  Phase 5
-  Phase 6
-  Phase 7

