



# LAND USE STUDY & POLICY STATEMENT

Prepared for the District of Squamish | May 2012



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# 1. INTRODUCTION

The Upper Mamquam Blind Channel (Upper Channel) area is a unique and pivotal location within the District of Squamish, given its potential to facilitate the realization of many local and community-wide aspirations.

- **Sense of Arrival**

Placed along Highway 99, the area provides a sense of arrival to the District, lending to one's initial impressions of Squamish.

- **Community Integration**

Situated at the junction of the Downtown, the Hospital Hill and the Valleycliffe neighbourhoods, the Upper Channel area represents opportunities for greater integration towards a more cohesive sense of community within Squamish.

- **Enhanced Connectivity**

The multi-modal nature of the area is emphasized by the intersection of Highway 99, the Upper Channel and the many trails in the area. With its many internal land- and water-based connections, there is potential to facilitate greater linkages, be they for hikers, climbers, paddlers or drivers.

- **Recreational Focal Point**

The area with its proximity to Rose Park and Smoke Bluffs Park currently accommodates many active and passive recreational opportunities, offering the possibility for their further enhancement.

Yet, as key a location as the Upper Channel might be, little policy vision specific to the area has been articulated.

Since 2007, the area has been the focus of several planning initiatives and community engagement efforts, much of which has been generated by past development applications.

With the intention of developing a policy basis to help shape future options for the Upper Channel area, independent of any development application, the District's Committee of the Whole recommended on November 10, 2009:

- "THAT Council endorse retaining a consultant for consultation on the land use study of the Upper Mamquam Blind Channel and the geographical area proposed by staff."

The Upper Mamquam Blind Channel Policy Statement builds on the study of the land use, transportation, public realm and open space opportunities and challenges inherent to the area. Its purpose is to outline the general planning principles that collectively describe the future of the area.

Specifically, the policy directions provided in this document will speak to how issues such as land use, transportation, connections, open space and public realm should be addressed through future rezoning and development permit processes. Noting the public and private interests involved in the area and its future, the Policy Statement offers a broad and flexible perspective; one that can accommodate a variety of possible ensuing plans and choices, while maintaining a community-wide focus to ensure that regardless of the future, the area continues to contribute to the greater vision of a vibrant and active Squamish community.

## 2. CONTEXT

### 2.1. Study Area

The Upper Mamquam Blind Channel is a tidal channel surrounded by natural spaces, Rose Park and Smoke Bluffs Park along its northern end. The southern portion of the Upper Channel area has predominantly been developed, historically by the forest industry, while more recently it has accommodated commercial and industrial activities.

To the west, Highway 99 forms a physical barrier between the Upper Channel area and Squamish's Downtown, with Rose Park serving as a buffer for much of the area's western edge.

To the east, steep slopes separate the area from the Hospital Hill and Valleycliffe neighbourhoods and the Squamish General Hospital.

### 2.2. History

The Upper Channel has had a long history as an important north-south trade route linking the SKwxwú7mesh Nation with the Lil'wat, Tsleil-Waututh, and Musqueam First Nations. From the 1870s onward, settlement and industrialization, coupled with significant alterations to the terrain to facilitate forestry, agriculture, flood protection, and access, began to mark the Upper Channel. The 1926 arrival of Merrill and Ring, with operations extending from Valleycliffe to Alice Lake, marked a change in the scale of activities and increased use of Howe Sound and the Upper Channel for industrial forestry and wood processing.

From the 1960s, with the relocation of activities to the waterfront and to Woodfibre and subsequent reductions in forestry activities, the Upper Channel has seen its northern portion re-naturalized to a degree, and a variety of low-intensity commercial and industrial uses occupy the southern portion.

Also at that time, the area we now call Smoke Bluffs Park, was developed for rock climbing and has since evolved into a primary destination for outdoor climbing in the Lower Mainland. Today, it is estimated that the Park experiences in the order of 40,000 to 50,000 climber-visits per year.

### 2.3. Policy Context

The District of Squamish has robust policies that inform and guide the development of policy for the Upper Channel area. Key policies include:

- **Official Community Plan (2010)**  
The Official Community Plan (OCP) lays out the long range plan for the community of Squamish. The OCP designates the lands within the upper reaches of the Mamquam Blind Channel as a mix of Downtown and Greenway Corridors and Recreation.
- **2031 Multi-Modal Transportation Plan (2011)**  
The Plan establishes overarching transportation policy for the District of Squamish over the next 20 years. The Plan envisions a truly multi-modal strategy which addresses the needs of private passenger vehicles, car-pooling, commercial vehicles, public transit, cyclists, and pedestrians, while also considering connectivity of the various communities within Squamish.

- **Growth Management Study (2005)**  
The purpose of the Growth Management Strategy is to provide direction to manage population growth through the location, and servicing of future development within the District of Squamish through to the year 2031.
- **Downtown Neighbourhood Plan (2008 DRAFT)**  
The DRAFT Downtown Neighbourhood Plan is being developed to encourage the vitalization of the downtown area of Squamish. While the Upper Channel area is outside the Downtown Neighbourhood, the policy framework established through the DRAFT Plan provides potential insight into the portion of the Upper Channel area that is designated *Downtown* in the Official Community Plan.

### 2.4. Land Use Designation

Land use in the area is directed by the District's Official Community Plan (OCP) which overlays two designations for the study area: *Greenway Corridors and Recreation* upon the northern natural area located between the Channel and the rocky outcroppings of Smoke Bluff Park and *Downtown* upon the southern bench that is adjacent to Scott Crescent and Highway 99.

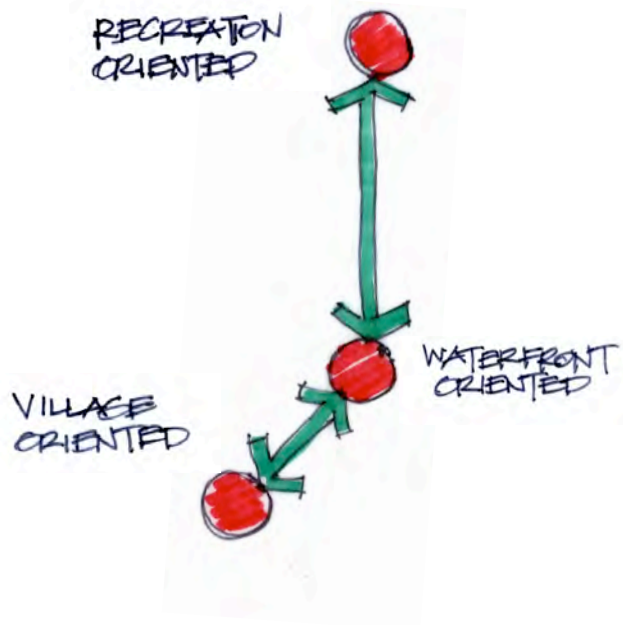
*Greenway Corridors and Recreation* means habitat protection areas such as the Squamish River Estuary; riparian areas for watercourses; campgrounds; golf courses; trails and other areas used for recreational purposes.

*Downtown* means residential uses (single-detached, duplex and multi-unit buildings); commercial uses including retail shops and restaurants; educational facilities; places of worship; neighbourhood parks and recreational facilities and municipal offices and facilities.

### 3. POLICY INSPIRATION

The policy framework developed through this document takes inspiration from detailed assessments of the area as well as from key insights and observations provided by the community; gained through their daily experiences living in proximity to the area and/or by utilizing the area previously.

Through these perspectives, the Upper Channel area is conceived as being comprised of three key sub-areas - a **Village** orientation, a **Waterfront** orientation; and a **Recreation** orientation - that together form a series of distinctive experiences.



### 4. GUIDING PRINCIPLES

Building on the policy inspiration, a set of guiding principles were established to ensure that the public's expressed experiences and opportunities remain at the forefront throughout the process as the interpretation of the area shifts from a community-wide perspective to the more local, sub-area focus.

#### 4.1. Village-Oriented

- Take advantage of the many **gateway experiences** found in the area;
- **Respond to the historical and cultural elements** as the design inspiration for any area enhancements;
- **Prioritize the pedestrian and cyclist** to create a safe and walkable environment;
- **Practice sustainability**, reflect the natural setting.



#### 4.2. Waterfront-Oriented

- **Tread lightly** reflecting the Upper Channel's banks and water environment as a sensitive habitat;
- **Activate the water**, highlighting the Upper Channel as a unique focal element for Squamish;
- **Take advantage of views** of the Upper Channel and surrounding natural elements.



#### 4.3. Recreation-Oriented

- Look for opportunities to **engage and inform**;
- **Strengthen connections**, building upon the existing network of trails that surround the Upper Channel area;
- **Reflect upon the key spaces** within the Upper Channel setting that make it unique.



### 5. LAND USE

#### 5.1. Village-Oriented

Located along the southern portion of the study area, between Highway 99 and Scott Crescent, land use in this sub-area should contribute to the creation of a village heart providing a sense of animation and arrival.

- 5.1.1. Multi-unit, mixed-use residential should be the predominant use accommodated through attached townhome and low-rise apartment forms of development.
- 5.1.2. A maximum of 929 sm (10,000 sf) of locally-oriented retail opportunities should be provided at grade, with multi-unit residential above, and be designed to accommodate a variety of tenant opportunities.
- 5.1.3. The focus of the retail opportunities should be local area as well as recreational serving.
- 5.1.4. Residential densities should range from 1.3 to 1.5 FSR of the site.

- 5.1.5. A community-oriented facility that makes a landmark architectural statement should be located adjacent to Highway 99, taking advantage of this highly visible location.
- 5.1.6. Opportunities should be pursued to provide attainable housing in the sub-area through the provision of affordable units, rental units, and flexible 'lock-off' units.
- 5.1.7. Consideration should be given to providing a variety of housing opportunities appropriate for families with children, in terms of unit size, number of rooms and with direct access to the street or outdoor spaces.

## 5.2. Waterfront-Oriented

Located on the opposite side of Scott Crescent, this sub-area transitions to the natural areas to the north, offering the chance to engage the waterfront and the experiences it affords.

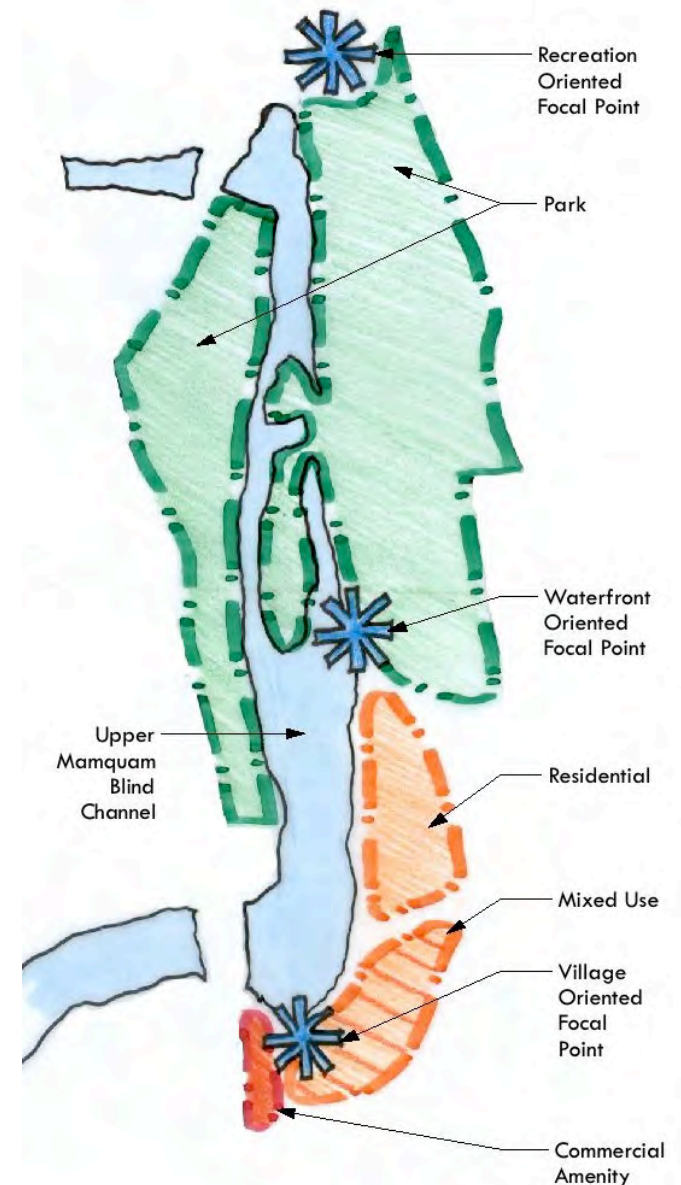
- 5.2.1. Multi-unit residential should be the predominant use accommodated through attached townhome and low-rise apartment forms of development.
- 5.2.2. Focused on an envisioned pier and waterfront walkway, a limited amount of tourist-accommodation use should be considered, to take advantage of the water-oriented pursuits available in close proximity.
- 5.2.3. Residential densities should range from 1.3 to 1.5 FSR of the site.

- 5.2.4. Opportunities for attainable housing should be provided in the sub-area through the provision of affordable units, rental units, and flexible 'lock-off' units.
- 5.2.5. Consideration should be given to providing a variety of housing opportunities appropriate for families with children, in terms of unit size, number of rooms and with direct access to the street or outdoor spaces.

## 5.3. Recreation-Oriented

- 5.3.1. Natural passive and recreational park use should be accommodated throughout the northern extent of the study area, with a focus on maintaining the current greenway network of trails and existing habitat found in this area.
- 5.3.2. As a gateway to the greenway and recreation corridor, the existing industrial operation located on Loggers Lane should be re-conceived: serving as a launching point to the Blind Channel and Smoke Buffs and providing limited opportunities for tourist/recreation-oriented accommodation.

## Land Use Concept





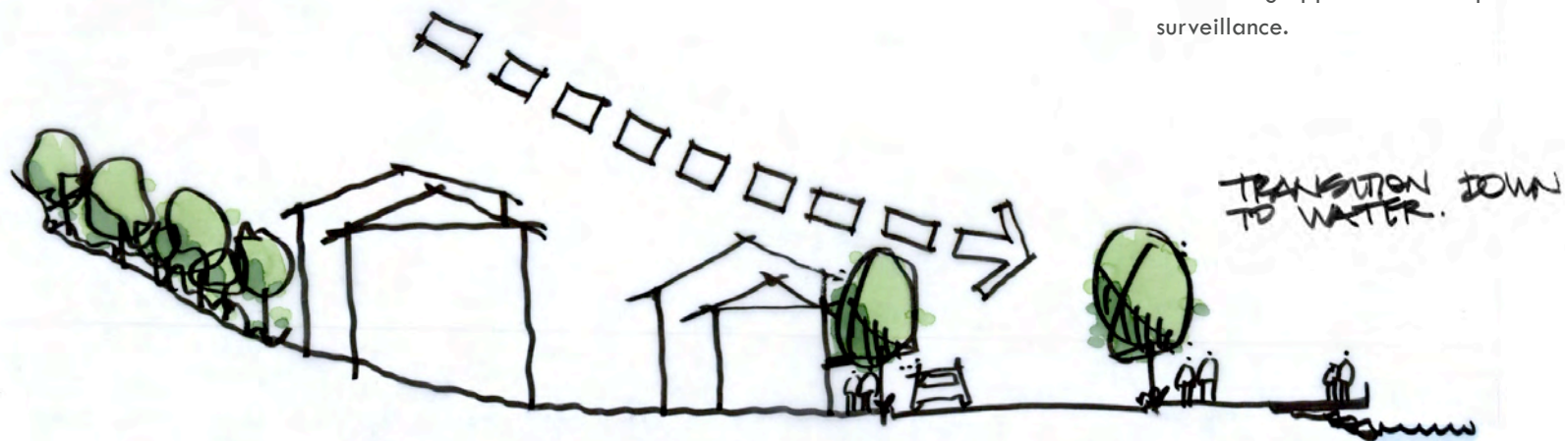
## 6. BUILT FORM & CHARACTER

- 6.1. Within the Village-Oriented and Waterfront-Oriented sub-areas, the heights and densities of the buildings should step down as they approach the water, with higher elements tucked-up against the escarpment, to protect views through the areas to the water, maximize solar-orientation and ensure that an appropriate scale is created for the many public spaces envisioned along the water's edge.
- 6.2. The heights of the buildings within the Waterfront-Oriented sub-area should also transition downward as they approach the boundary with the Recreational-Oriented sub-area.

- 6.3. The internal street network should be defined by buildings, with as many units as possible providing direct access to the street.
- 6.4. Street-oriented retail spaces in the Village-Oriented sub-area should maximize physical and visual transparency through the provision of glazing and entrances.
- 6.5. Storefronts should be small in scale and demised to 'read' as unique and individual storefronts.
- 6.6. The retail opportunities found in the Village-Oriented sub-area should be provided in combination with appropriately scaled public gathering spaces to provide an animated and engaging setting.

- 6.7. Semi-private and private spaces immediately adjacent to the residential buildings should be afforded opportunities for usable amenity space. For ground-oriented units these spaces should read as belonging to individual units and should incorporate opportunities for individual residents to customize and maintain these areas.
- 6.8. The design of the buildings and key public spaces should draw inspiration, in terms of materials palette and character expression, from the industrial heritage of the Blind Channel.
- 6.9. Given the spectacular vistas and views that are abundant within the Upper Channel, viewing opportunities should be framed in an effort to enhance the visual connectivity of the area with its surroundings.
- 6.10. Ensure that open spaces are designed according to Crime Prevention Through Environmental Design (CPTED) principles, maximizing opportunities for passive surveillance.

### Height & Density Transition



## 7. PARK AND OPEN SPACE

Parks and open spaces within the Upper Channel area provide a variety of spaces: from an urban plaza in the Village-Oriented sub area, to small parks for active and passive recreation, to spaces that celebrate the natural environment and capitalize on stunning views in the Waterfront-Oriented sub-area.

The parks and open spaces contribute to the overall character and identity of the neighbourhood, linking residents and visitors alike to the natural and cultural history of this unique area.

- 7.1. Establish a series of open spaces to accommodate a range of active and passive recreational activities, suitable for people of all ages.
- 7.2. Parks and open spaces should be located and designed to serve as identifiable nodes and link to trails and other connections in the area, specifically Rose and Smoke Bluffs Parks.
- 7.3. The northern Recreation-Oriented sub-area should be designated as a largely naturalized park, providing a buffer and transition between the other sub-areas and the Smoke Bluffs park.
- 7.4. This newly formed park should extend the experience of Smoke Bluffs Park and emphasize that the Upper Channel area is a natural, functioning ecosystem and a valued recreational destination in Squamish.

- 7.5. A key feature of the Upper Channel is the Rose Park Spit. The spit is ideally located to take advantage of sunlight exposure and spectacular views south to the Chief and surrounding cliffs. The addition of a foot and cycle bridge will facilitate a strong link between the east and west side of the Channel as well as the Downtown.
- 7.6. The spit should be maintained in a natural state, with consideration for the addition of a boardwalk, platform or other measures to ensure damage is not caused by human activity.
- 7.7. Enhance Rose Park as a more structured “formal” park space, in contrast, but complimentary to the Recreational-Oriented spaces and Smoke Bluffs Park.
- 7.8. A public pier within the Waterfront-Oriented sub-area should be provided in alignment with Scott Crescent as it enters the Upper Channel area, offering viewing opportunities of the Channel and punctuating the terminuses of the many trails that connect the area with the Valleycliffe neighbourhood.
- 7.9. The Upper Channel has a long history of industrial use for the forest industry, which should be captured in the design of parks and open spaces through the incorporation of artifacts, use of materials and choice of furniture and play structures.

- 7.10. To further celebrate the area’s history, space within Rose Park should be established for the Squamish Historical Society to provide a Forestry Centre.
- 7.11. The northern entrance to the Upper Channel area found along Loggers Lane should be enhanced in its visual identity, to strengthen the visual connection with the Adventure Centre, consistent with its significance as a gateway to the area and Smoke Bluffs Park.



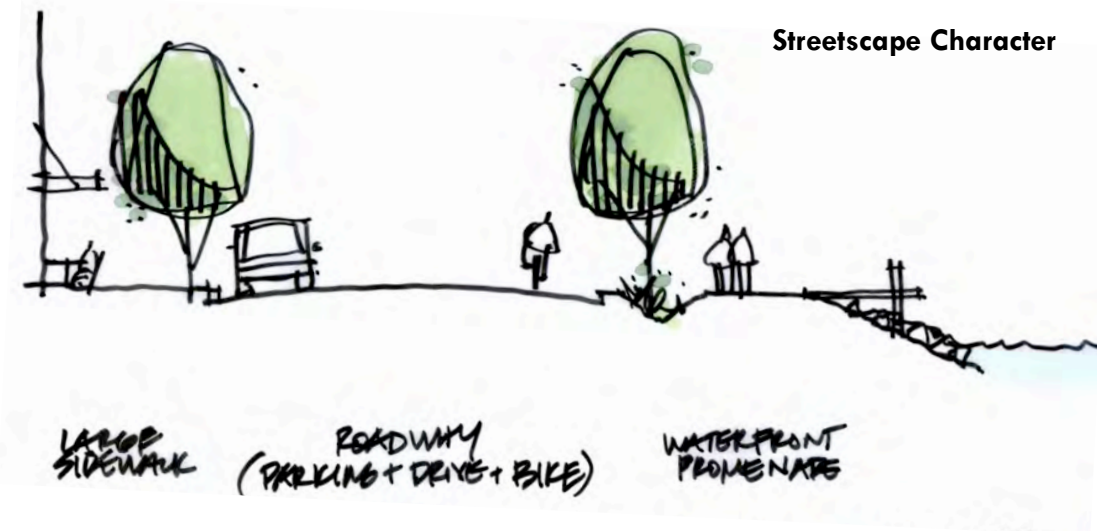
## 8. PUBLIC REALM

In the discussion of public realm, mention is often made of 'sense of place' or the intrinsic spirit of a space. Contributing to the public realm are public and private elements such as streetscapes; trails and linkages; natural elements; and public art.

### 8.1. Streetscape

The streets that provide vehicle access and travel into/through the area can play a pivotal role in defining the public realm. The term 'Streetscapes' is used to describe the character and role of streets, lanes, mews or pathways, which can be made up of hard and soft surface treatments, street lighting, and street furniture.

- 8.1.1. A quality public realm affords a clear and balanced hierarchy of movement that emphasizes walking, cycling, waterfront access as well as provides for local serving vehicle access; all of which are safe and afford universal accessibility.
- 8.1.2. The entrance to the site from Highway 99 should be denoted through a change in surface texture, a raised crosswalk and welcoming signage.
- 8.1.3. The intersection of Scott Crescent and Clarke Drive provides a further gateway experience, and should be punctuated with a feature such as a roundabout. A roundabout in this location would present a key opportunity for a landscape and public art that could further enhance the entrance for visitors to both the Upper Channel and the Hospital Hill areas.



- 8.1.4. Internal connectivity should be enhanced through street designs that calm traffic, in particular as Scott Crescent enters the Village-Oriented sub-area, where the priority is placed on pedestrian movement and activity.
- 8.1.5. Within the Village-Oriented sub-area a generous sidewalk width should be provided along Scott Crescent sufficient to facilitate side by side walking as well as street trees and planting areas
- 8.1.6. At key intersections, particularly within the Village-Oriented sub-area, sidewalk bulges at street corners should be accommodated in order to maximize pedestrian visibility and shorten crossing distances for pedestrians.
- 8.1.7. On-street parallel parking shall be provided throughout the Upper Channel area to support the retail uses and provide a constant buffer for pedestrians from the travel lanes.
- 8.1.8. Age-friendly street and sidewalk designs that provide universal accessibility should be provided.
- 8.1.9. Improved wayfinding should be developed in order to direct pedestrians and cyclists to natural amenities, trails and the mixed use retail node.
- 8.1.10. Where appropriate, landscaped boulevards, medians, traffic circles and other elements of the should be included to enhance the "greening" of the site, and contribute to stormwater management and surface permeability.



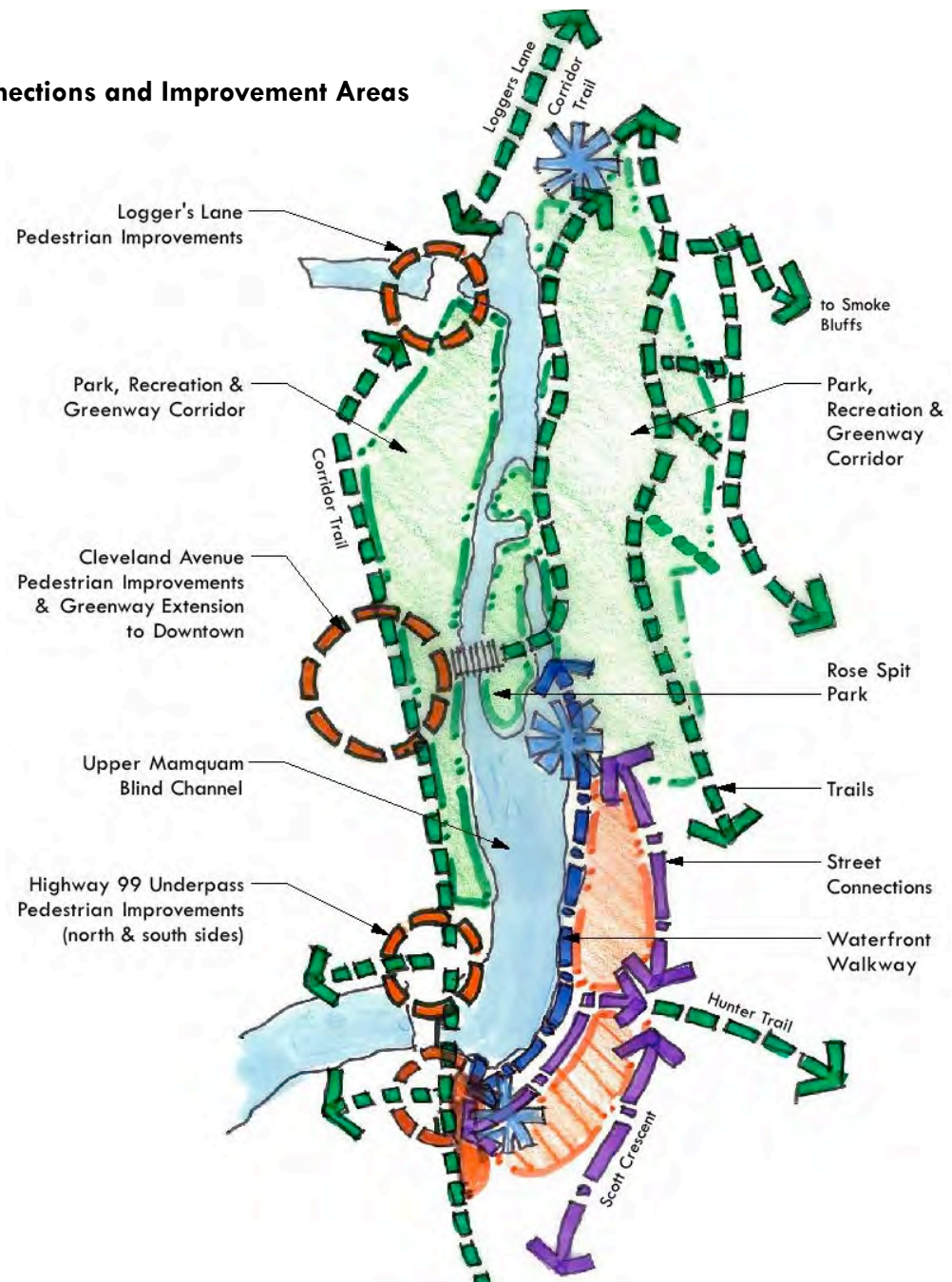
## 8.2. Trails and Linkages

Squamish's reputation as a recreational destination for walking, cycling and hiking trails is well deserved; Squamish's trails are also actively used for commuting purposes.

The breadth of trail options within the Upper Channel area is extensive, however the system is incomplete in the sense that it does not take advantage of the many present opportunities to link trails, avoid inconsistencies in design standards and form a more comprehensive network.

- 8.2.1. The public realm should facilitate new and existing linkages of unconnected places, providing connections that help tie the area together.
- 8.2.2. A complete trail network should contribute a Waterfront Trail that encircles the water's edge, connects the community with the Upper Channel, draws people from the surrounding areas and strengthens the prominence of the waterfront experience.
- 8.2.3. The Waterfront Trail should provide for a variety of experiences such as walking, cycling, lookout points, seating and interpretive and educational opportunities.
- 8.2.4. In the northern portion of the area, the Waterfront Trail should be more natural in character. In the southern portion of the area, the Trail should be semi-formal in character balancing natural character with adjacent uses. It should also allow for access to adjacent activities such as restaurants and water-oriented recreational facilities.

### Connections and Improvement Areas



- 8.2.5. Opportunities for the implementation of a boardwalk structure within the Waterfront Trail, reflective of the tidal marsh environment, should be explored as the Waterfront Trail enters the Waterfront-Oriented and Village-Oriented sub-areas.
- 8.2.6. The boardwalk should continue to near Highway 99, where a shore-based under-Highway crossing can be accommodated to provide access to the west. Crossing under the Highway, particularly on the south bank of the Upper Channel will be prone to tidal fluctuations.
- 8.2.7. The Hunter Trail should accommodate pedestrian/cyclist links between Hospital Hill, Valleycliffe, the Upper Channel area, and Downtown.
- 8.2.8. Key connections between the Hunter Trail and the Waterfront Trail should be emphasized and appropriately denoted with wayfinding signage and treatment patterns to ensure a safe and identifiable connection point.
- 8.2.9. The Rose Park Spit connection through a foot and cycle bridge should maximize opportunities to observe wildlife and, through interpretive signage, learn about the ecology of the Upper Channel.
- 8.2.10. The Corridor Trail, as it passes through the Upper Channel area, should be enhanced and adjusted away from the Highway 99 shoulder to provide a key north/south linkage.
- 8.2.11. Internal trails should connect the site's internal natural and open spaces with both the Smoke Bluffs and Valleycliffe trail network, as well as the waterfront and Downtown, via the Rose Park Spit.

### 8.3. Public Art

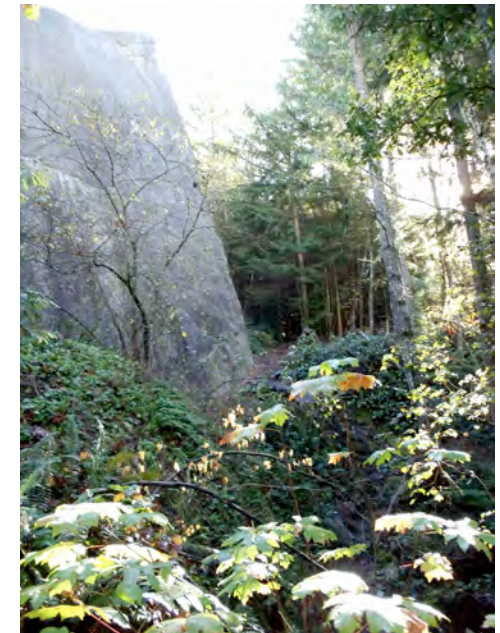
Public art installations contribute to the character and identity of an area, providing texture and an added layer of interest to the public realm.

- 8.3.1. Interpretive and artistic elements should highlight the ecological value and complexity of the estuary environment, including the biodiversity and natural processes acting in the Upper Channel, and the estuary's role in the greater local ecosystem. Information on the species supported by the Upper Channel habitat, should be presented as an enhancement to spontaneous wildlife viewing.
- 8.3.2. Public art displays should communicate the historical value of the Blind Channel, including the following aspects:
  - First Nations presence and use of the site as a waypoint on the trade routes linking the Skwxwú7mesh Nation with the Lil'wat, Tsleil-Waututh, and Musqueam Nations.
  - Forestry and industrial history of the Blind Channel, including previous uses for log sorts, the WJ Dent/Empire Mills sawmill (across the channel from the Adventure Centre) and later shingle mill (on the site currently occupied by the Inn on the Water).
  - Historical recreation uses, including the use of the Upper Channel for loggers sports, as well as early adoption of kayaking, mountain biking, and other outdoor activities.

### 8.6. Natural Environment

Squamish abounds with natural assets such as the Upper Channel. To sustainably support the active use of the area in the future, public realm improvements will need to enhance the existing habitat while relating the community with its natural surroundings.

- 8.6.1. The public realm should help educate the community on the natural environment and the role it plays in the Upper Channel. Explore passive and active educational opportunities, wherever possible, to contribute to a true learning experience



- 8.6.2. Reflective of the surrounding natural systems, public realm designs should facilitate approaches towards stormwater management that capture rain water close to where it falls and facilitate infiltration to ensure continued sub-surface flow and recharge of the Upper Channel.
- 8.6.3. New connections or elements introduced should take great care in ensuring the long-term health of this unique tidal ecosystem.
- 8.6.4. Trails and public spaces as they transition to the northern more natural areas should include features such as bioswales as well as permeable surfaces.

- 8.6.5. Streetscapes and public spaces in the southern areas along the Upper Channel should be provided with more formal treatments including rain gardens and streets designed to capture and channel rain water towards infiltration opportunities.
- 8.6.6. Landscaping should reflect the area's natural setting and utilize native plant species that are appropriate for the various environments of the estuary and the escarpment in particular.
- 8.6.7. The semi-formal landscape treatments in the southern area of the Upper Channel should integrate landscape treatments that will help restore the link between escarpment and estuary through the creation of continuously vegetated corridors.





## 9. TRANSPORTATION CONNECTIONS

The site is located southeast of where Scott Crescent intersects Highway 99, with access provided by right-in/right-out turns only from/to Highway 99. The area is also accessible via Clarke Drive to Scott Crescent from the signalized intersection at Highway 99 and Clarke Drive.

From numerous past traffic impact assessments, various road network improvement schemes have been assessed to enhance vehicle access and egress. Based on the past studies, sufficient roadway and intersection capacity exists within the existing road network, suggesting focus be given not to alternative schemes, rather to maximizing the use and efficiency of existing infrastructure.

With a goal of advancing opportunities for alternative forms of transportation, policies have been developed to enhance existing access and egress points and improve connections with surrounding neighbourhoods; all towards prioritizing the safety of pedestrians and cyclists while maintaining vehicle movements.

### 9.1. Connections

- 9.1.1. The provision of a foot and cycle bridge from Rose Park along the western edge of the Upper Channel to the spit located in the centre of the Channel will improve the integration of the Park with the Upper Channel area, provide an extension of the many existing trails, allow visitors to utilize the parking facilities of Rose Park and provide convenient access to/from Highway 99 and the Downtown in order better access and enjoy the area.
- 9.1.2. As a westerly-oriented extension of the connection between the Upper Channel area and Rose Park, once established, Cleveland Avenue should be re-conceived as a greenway providing direct linkage from the Upper Channel area with the Downtown. Specifically, the improvement of Cleveland Avenue towards a greenway, or a street landscaped to reduce the present auto-orientation while also promoting the priority of pedestrian, cyclists and other non-automotive forms of transport, would provide a more celebrated gateway twofold; namely, a focal entrance to Squamish's Downtown as well as Rose Park and the Upper Channel area beyond.
- 9.1.3. As Highway 99 and its bridge over the Upper Channel present a physical and visual barrier, opportunities such as a passage under the bridge along the north and south banks of the Upper Channel should be explored to provide a safe means

for crossing and to improve the connectivity of the Upper Channel with the rest of Squamish's waterfront, especially the planned Waterfront Landing neighbourhood, via the BCRP Trail.

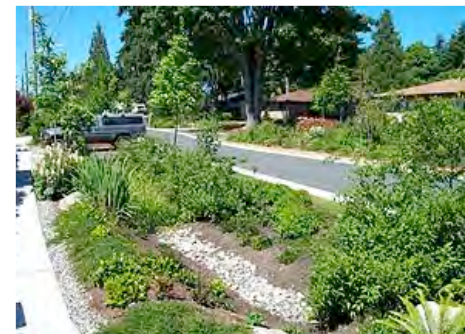
### 9.2. Promote Alternate Forms of Transportation

- 9.2.1. In considering movement and circulation in the Upper Channel area, pedestrians, cyclists and transit should be prioritized with the road network designed for low traffic flows and vehicle speeds.
- 9.2.2. The internal road network should offer a fine-grained series of mews, lanes, and pathways to encourage walkability and slow traffic.
- 9.2.3. Bicycles should be accommodated within all road designs, along with the provision of secure and conveniently located bicycle parking for area residents, visitors and employees of the retail uses.
- 9.2.4. Throughway passages should be provided in the design of any long building form for pedestrians and bicycles, especially in the Village-Oriented and Waterfront-Oriented sub-areas where physical and visual connection with the water is enhanced.
- 9.2.5. Parking spaces for auto cooperatives should be anticipated in the built form and street network to encourage less car ownership and reduce the demand for parking.

### 9.3. Streets and Parking

- 9.3.1. Improve existing access from Highway 99 at Scott Crescent with the introduction of a dedicated northbound right turn lane to safely separate northbound through traffic from right turning traffic that need to slow down.
- 9.3.2. Scott Crescent, as it enters the area from the Clarke Road signal controlled intersection at Highway 99, should be converted into a two-way local road.
- 9.3.3. Alternative and sustainable road standards should be considered in the redesign of Scott Crescent. Namely, and to respond to the existing context and topography:
- Subject to further study, the design of Scott Crescent should endeavor to similarly reflect the existing slope contours, providing separation of two travel lanes marked by a naturally landscaped change in elevation (so that the downhill lane is higher up the slope than the uphill lane).
  - As Scott Crescent enters the Village-Oriented sub-area, the transition should denoted as the two travel lanes are brought back together prior to corner entrance with a change in surface treatment and texture as well as a raised crosswalk.

- 9.3.4. Opportunities for a shared street concept should be explored for Scott Crescent through the Village-Oriented sub-area, premised on the prioritization of pedestrians and cyclists.
- 9.3.5. A network of local service lanes should be considered in the design of the internal street network for access to parking and loading/servicing areas.
- 9.3.6. The design of local service lanes should incorporate a high degree of permeability in surface treatments, and be premised on travel at speed that encourages shared space walking and cycling.
- 9.3.7. Parking should ideally be provided in underground areas, that are well lit and offer good sight lines.
- 9.3.8. Where underground parking cannot be accommodated, to the satisfaction of the District, surface parking should be provided away from the edges of public spaces and streets, ideally located behind buildings.
- 9.3.9. Surface parking and loading areas should be designed to minimize heat island effects and to manage stormwater on site through the use of permeable surfaces and landscaping features such as bioswales that serve to slow and contain surface runoff. Light-coloured and extensive tree cover should be considered.





## 10. RESILIENCE & SUSTAINABILITY

- 10.1. All landscaping should reflect the area's natural setting and utilize native plant species that are appropriate for the various environments of the estuary and the escarpment in particular.
- 10.2. Lighting should complement the different streetscapes, trails, and public places of the Upper Channel, and be designed in accordance with dark sky principles, seeking to reduce the upward and outward direction of light.
- 10.3. Consideration should be given to developing efficient and healthy buildings, demonstrating the performance of the built form through the pursuit of building rating programs such as Natural Step™, LEED™ or Built Green™ or similar programs.
- 10.4. Exploration of Neighbourhood Energy Systems is encouraged, towards utilizing hydronic systems for space heating and domestic hot water.
- 10.5. All new developments should accommodate a rough-in/stub-out in the design of their mechanical systems to anticipate future connection to a hydronic-based Neighbourhood Energy System, should one not be pursued at the time of development.

- 10.6. A stormwater management plan that achieves at least a 25 percent reduction in the rate and quantity of stormwater run-off from pre-development to post-development conditions should be provided.

- 10.7. The mitigation of future heat island effect should be provided through the use of highly reflective and emissive roofing material and high-albedo surface treatments as well as tree planting.



