

## Minaty Bay Community Development Plan

Brian Beresford

The development of the Minaty Bay community captures the spirit of the natural environment by focusing on the newly created Minaty Park and playing field. This community will maximize the potential for outdoor recreation while integrating and enhancing the natural systems by introducing a pedestrian oriented network of streets and greenways to reduce car dependency. These trails will be connected to the Minaty Park boardwalk system providing public access to the beautiful waterfront.

The community is anchored by the Main Boulevard running from the Sea to Sky Highway and ending at the Pedestrian Zone and commercial area before entering Minaty Park. Besides providing a central axis, this boulevard also contains an infiltration bioswale providing innovative natural stormwater management contributing to the natural aesthetic of the community.

The development will introduce a balance of new housing types that are affordable to all income levels, thus creating a strong and diverse social environment.



The above illustration indicates the community development plan for the Minaty Bay community. The focus of this development is to create a strong and unified community centered around the new Minaty Park and surrounding natural environment.

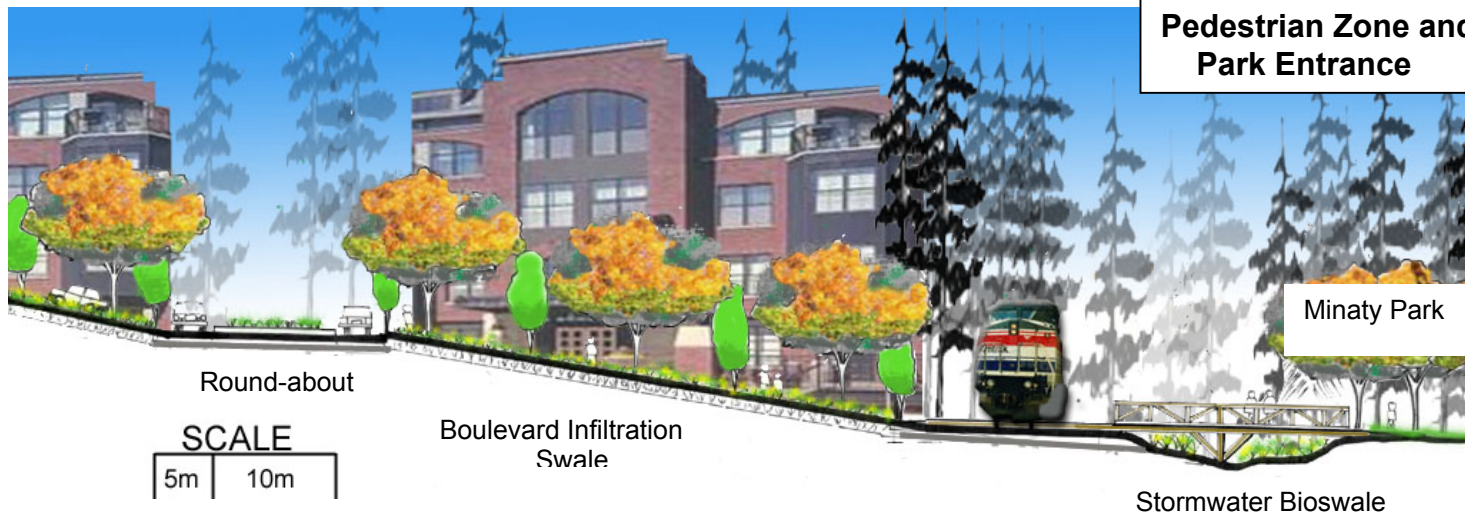


### Minaty Bay Community Centre



The adjacent illustration shows the social core of the Minaty Bay community. This area is the central hub of activity containing both commercial services and public open space to facilitate community events or everyday social interaction. It is also the central section of the Main Boulevard that connects the surrounding community to Minaty Park. The relationship between these two community amenities will contribute to a strong and connected neighbourhood.

### Pedestrian Zone and Park Entrance



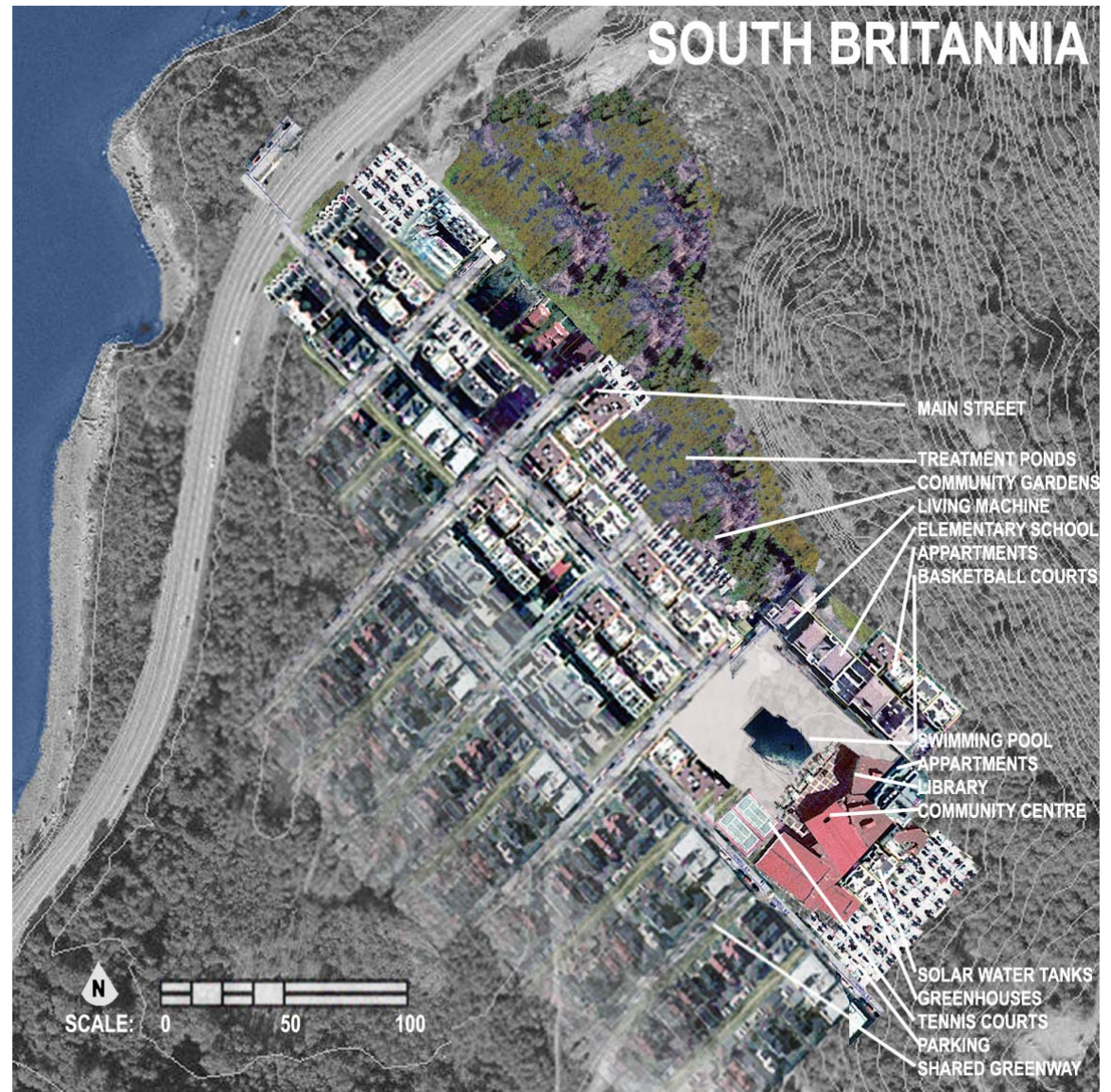
This cross-section illustrates the central pedestrian zone and infiltration swale at the base of the Main Boulevard. The street section below the roundabout is a car-free zone designed as the social and commercial axis of the Minaty Bay community. The main boulevard flows into Minaty Park via the pedestrian bridge across the stormwater bioswale and rail crossing allowing public access to the park and waterfront.



## A Synergistic Community

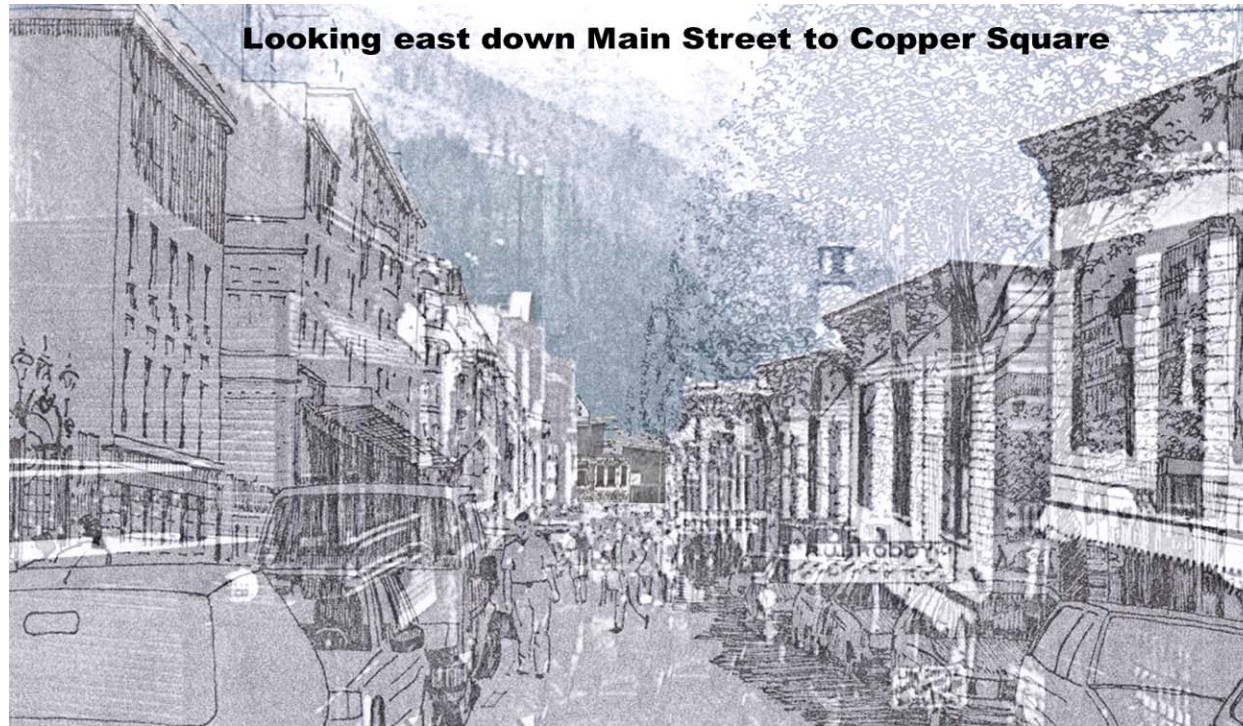
*Alison Maddaugh*

This holistic approach to the design of South Britannia draws on synergies to achieve its community goals. Responding to targets set by the community, the elementary school is clustered with the community centre and library, and is adjacent to a large park site where treatment ponds filter runoff and water from the 'living machine' system. The park and the large plaza provide open space to support a variety of community events and activities. The facilities capitalize on the south-west facing slopes through greenhouses, solar water tanks and passive solar design. A district heating system utilizes geo-thermal heat from the ADR, which also heats an outdoor pool. The pool is the focal gathering site, and reflects the unique history and strong community identity of Britannia, as it echoes the historic outdoor pool of Jane Camp. The area surrounding Copper Square integrates community institutions with residences, providing housing for locals, research interns and visiting artists. Community partnership and system integration create a vibrant core for South Britannia.

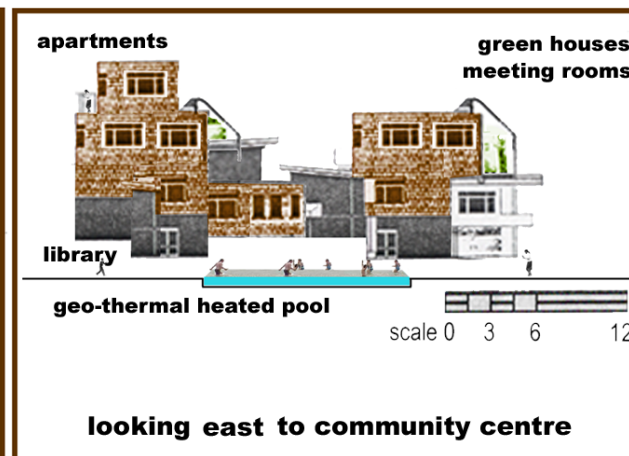
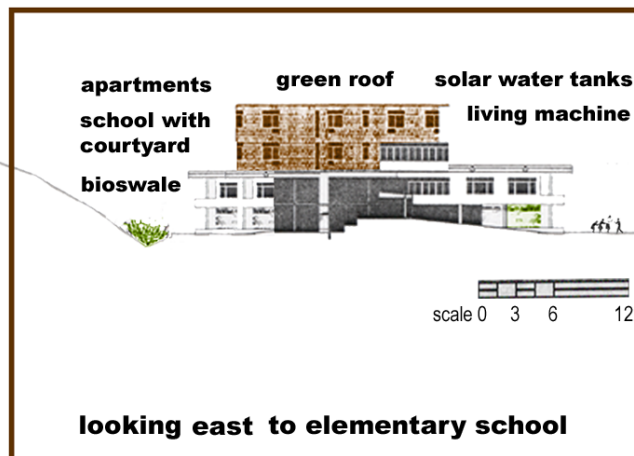


Britannia South: Main Street to Copper Square: A strong, vibrant community identity is established through partnership within the community and integration of natural systems.





The spirit and unique identity of the community is honored by emphasizing the view corridor between the mountains and the water. Main Street runs along this east-west axis, linking views from the highway up to the community square and the mountains beyond, and from Copper Square down to the water. A mix of housing types and lot sizes accommodate a diverse and stable community, with basic commercial services located within walking distance. Buildings reflect the regional character of Britannia, while adopting 'green building and green infrastructure' in order to meet environmental targets.



Natural systems are integrated into the community buildings which feature passive solar design, green roofs, greenhouses, and solar water tanks. The living machine is an educational feature of the elementary school adjacent to it, and processed water flows into treatment ponds located in the large park to the west.

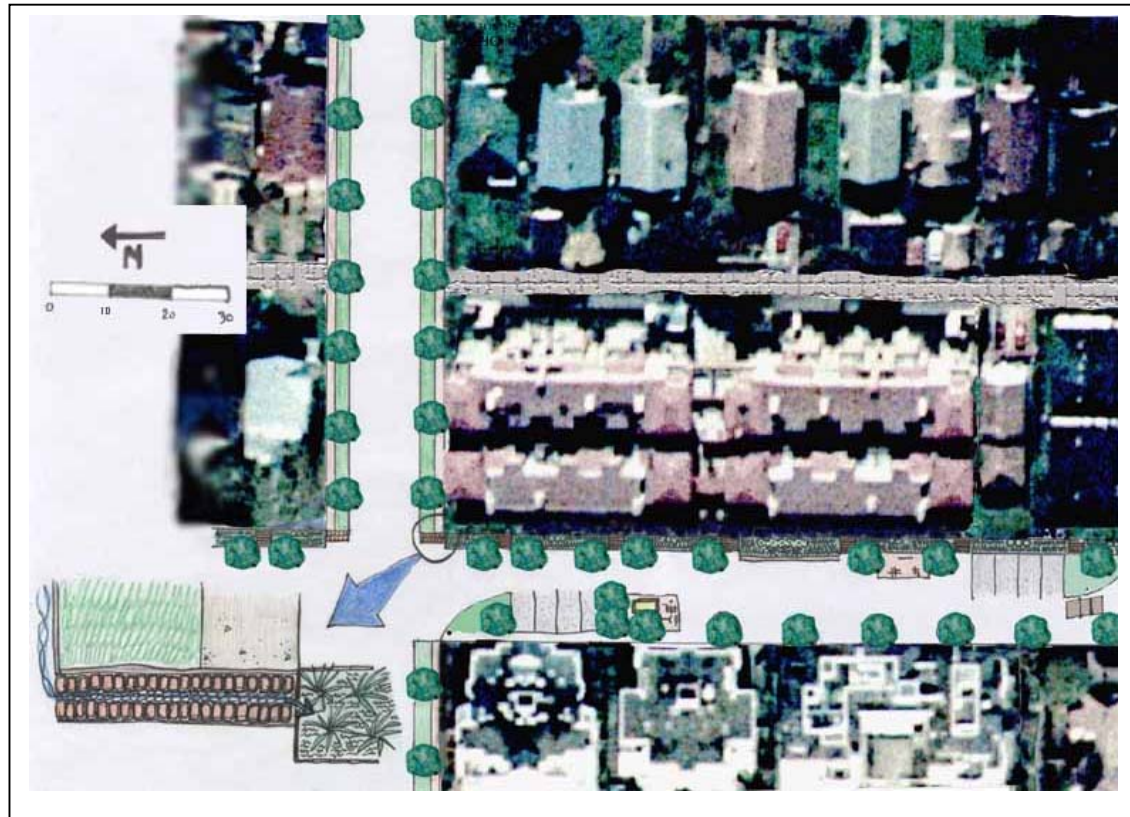
Apartments are integrated into these institutional buildings to share infrastructure and reduce building footprints and energy use. They provide housing for locals as well as visiting research and artist interns.

## Shared Green Street

Kelly Rodgers

This Shared Green Street (sometimes called a “woonerf”) is a street open to vehicles, but scaled in size for pedestrians. The Shared Green Street runs north-south in South Britannia, linking the community to the school and community center at the north end of the site. Visual cues in the street, such as street trees, benches and play equipment, signal drivers to slow down to the pace of a pedestrian. The narrow width of the street requires “queuing” for vehicles to pass.

This Shared Green Street also provides valuable stormwater management services, collecting stormwater runoff from adjacent streets and infiltrating the water in a long swale and a few planter boxes. Water from the adjacent “gray” streets is routed into the swale through a brick-lined gutter (see detail).

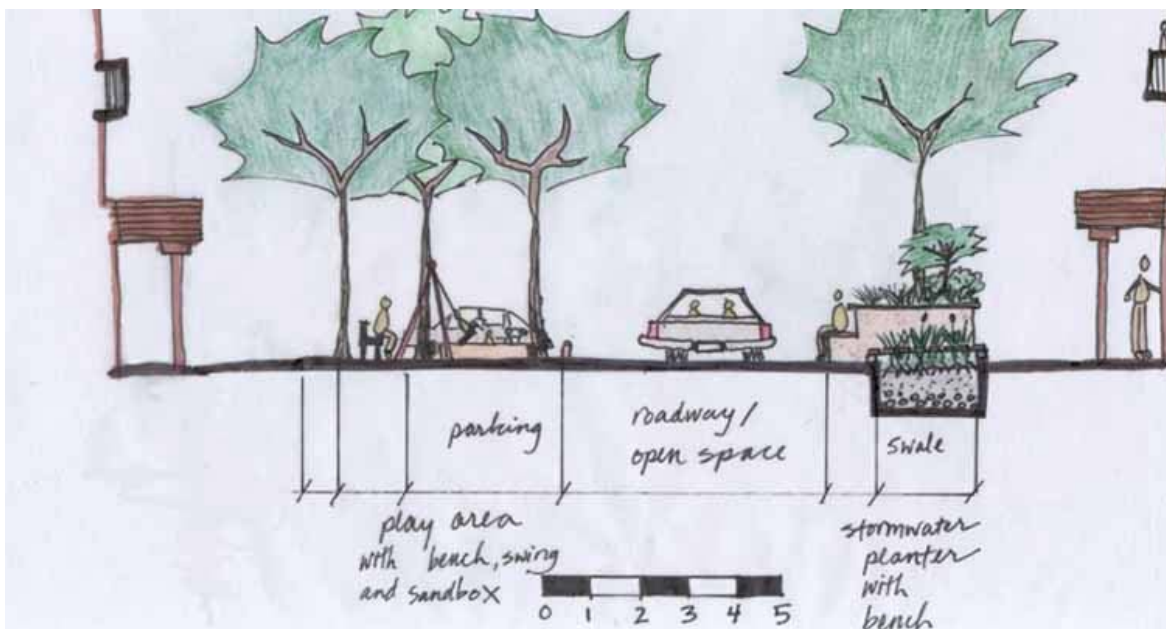


This Shared Green Street assists The Britannia Beach community in meeting its goals for “green infrastructure technologies” and a pedestrian network of streets to reduce car dependency.





A swale runs the length of the Shared Green Street, which carries stormwater runoff from the street and adjacent cross-streets. Small bridges cross the swale to link the streetscape with the abutting properties. The swale is planted with native plants that are accustomed to very wet and dry conditions. The stormwater planter is a raised planted box that also serves as a bench. Trees are planted near the swale and planter, to provide shade to both the plants and people.

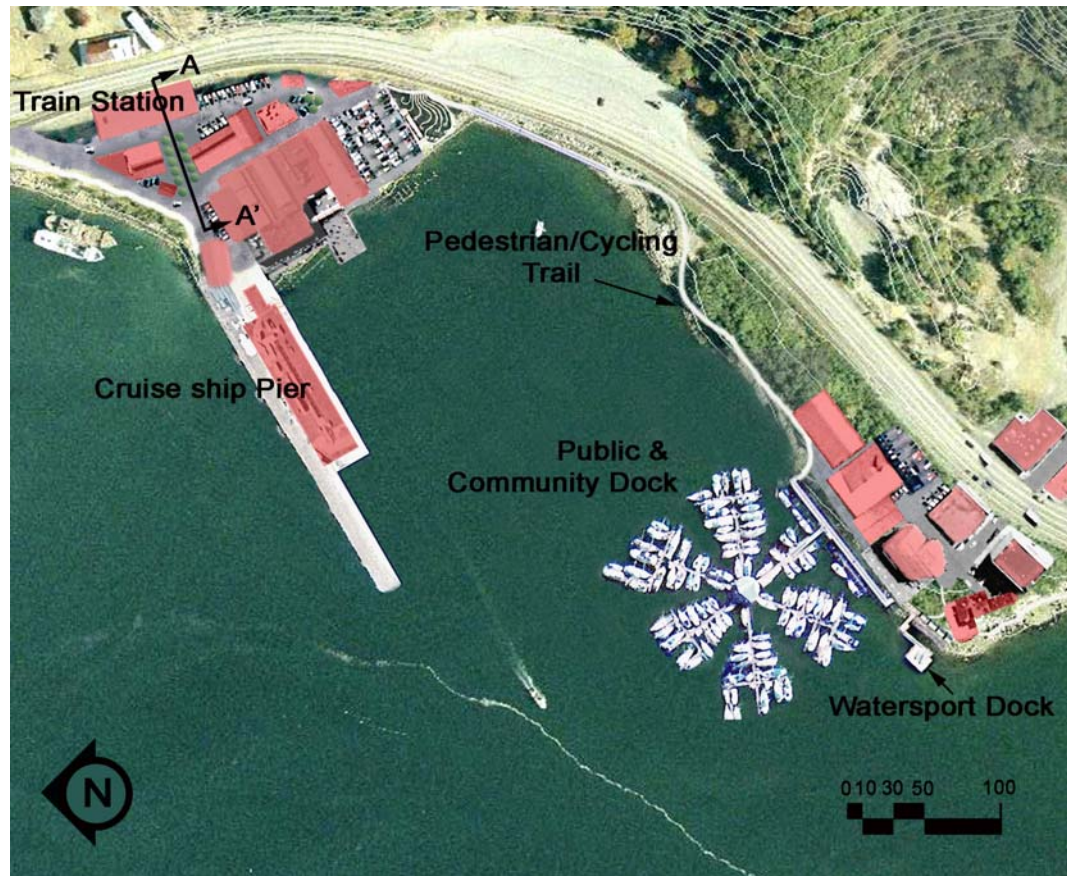


This section describes the condition of the Shared Green Street as a roadway and open space for the community. The stormwater planter provides a bench for resting, as the plants create visual interest. A play area extends into the roadway, protected by parked cars on one side and bollards on the other. There is ample room for a sandbox and swing set.

## Community Waterfront

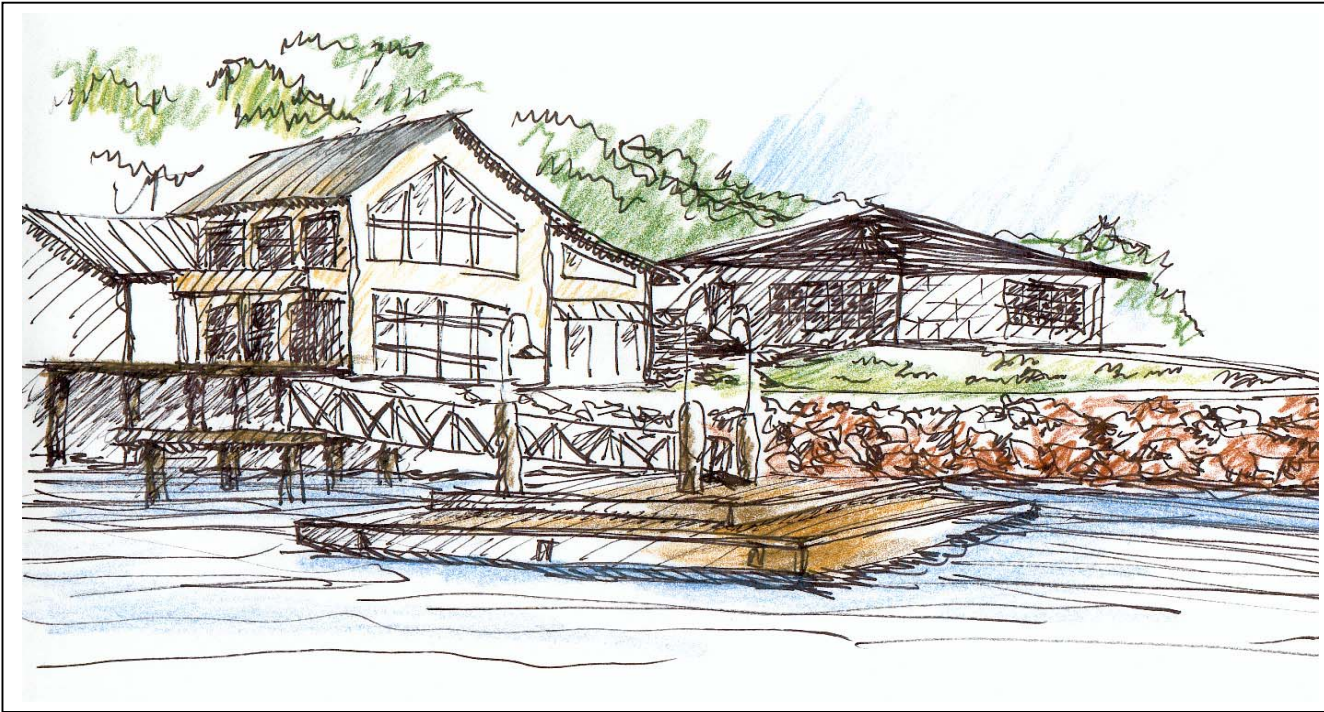
Josie Wiens

The community waterfront development is designed in two parts though they share the same broad design goals. The waterfront is seen as an opportunity for both economic and community development. The waterfront adjacent to Britannia Beach becomes the main, large transportation hub linking highway, rail and water together with the train station and the cruise ship pier. This area also has a tourism focus with exhibition and work space for local artisans. The second area is the waterfront connected to South Britannia Beach. The goals are repeated here but at a smaller scale. The main feature of this development is the public and community dock. This waterfront design continues the main commercial street over the highway to form a continuous street not bounded by the highway. The commercial buildings in this area are focused more on resident's needs. Both highway crossings are handled at grade with traffic lights. A pedestrian/cycling path links both waterfronts and continues on to either Furry Creek or Squamish.



Waterfront plan for Britannia Beach. The transportation focus turns the existing waterfront into an opportunity to attract tourism by rail and by small cruise ship. The waterfront south allows for smaller boats with a public and community dock. On the smallest scale there is a dock for water sports such as windsurfing and sea kayaking. Both areas are not automobile focused allowing room for pedestrian and bicycle access.





Perspective sketch of the South Britannia Beach waterfront. The small pier is a launching point for water sports. The restaurant overlooks the activity and beauty of the waterfront. Other commercial buildings in this area that continue the water theme include a marina. The street is carried over the highway and treated in more of a traditional way with the vehicular and pedestrian traffic being separated by a definite sidewalk.



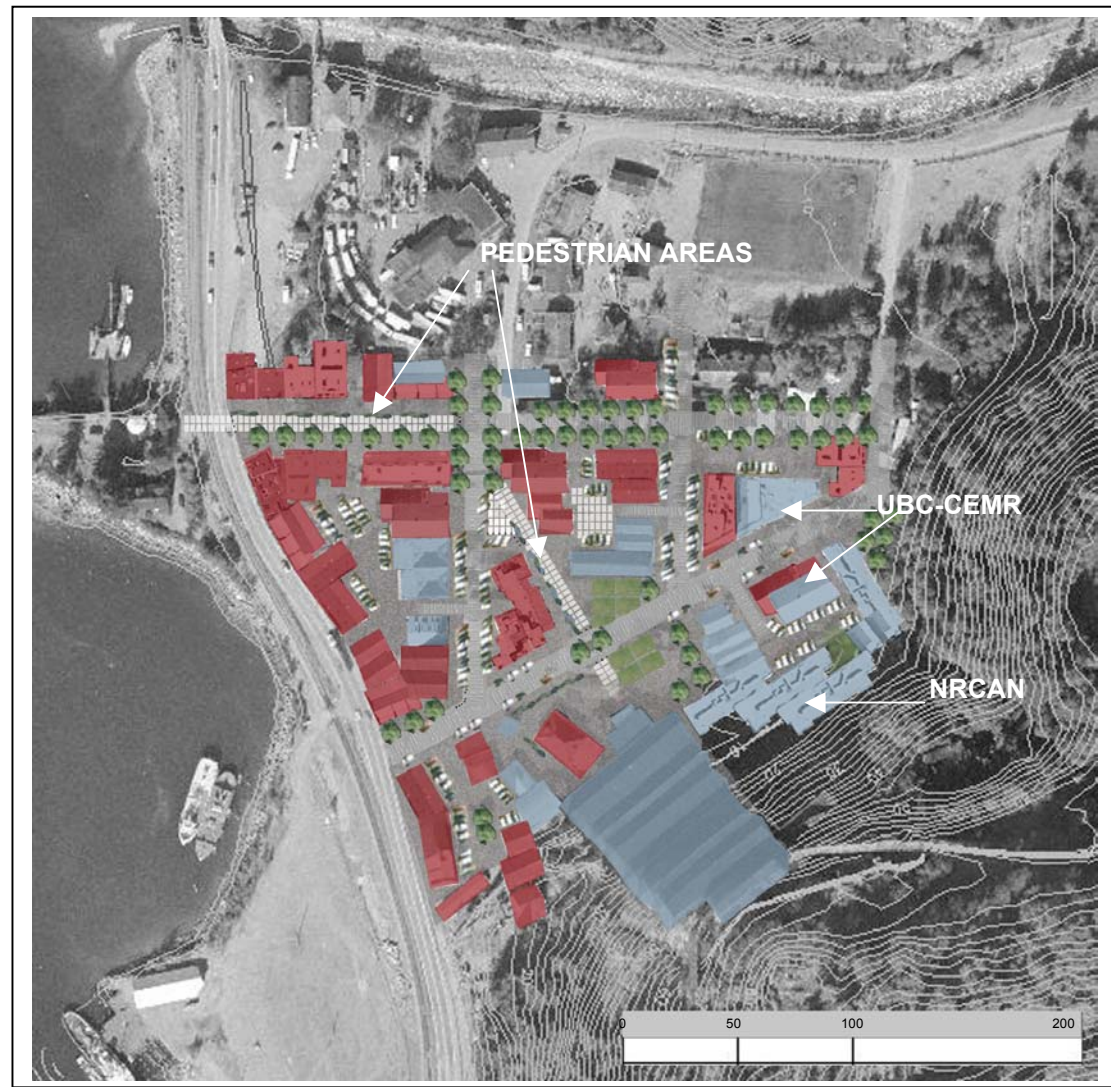
Section from the north waterfront development looking south. This section illustrates the free movement flow within the area. The streets are not differentiated from the sidewalks except with slight cues. Pedestrian and bicycle movement is encouraged. The section also shows the connection from the train station to the market building.



## Britannia Beach Community Centre

Maureen Hetzler

The intent of this design for Britannia Beach is to create a synergy between the research institutions, commercial activities, community spaces and environmental systems. Soil pollution throughout the site requires it to be capped with impervious materials. This creates an opportunity to create an even ground surface (no curbs) that encourages shared spaces between the structures, greenways and transportation systems. Synergy is also increased through the relocation of the main entrance by forcing a certain image of Britannia Beach. This image combines research, and commercial, but it also provides direct routes to transportation, commercial and institutional nodes. Public spaces act as an interface between building uses and thus become shared spaces. The pedestrian walkway linking the concentrator building to the commercial node is the central public space. It creates a framed view to the concentrator building; plays an integral role in a storm water canal drainage (green system); and creates a functional interaction space between different community uses and systems.

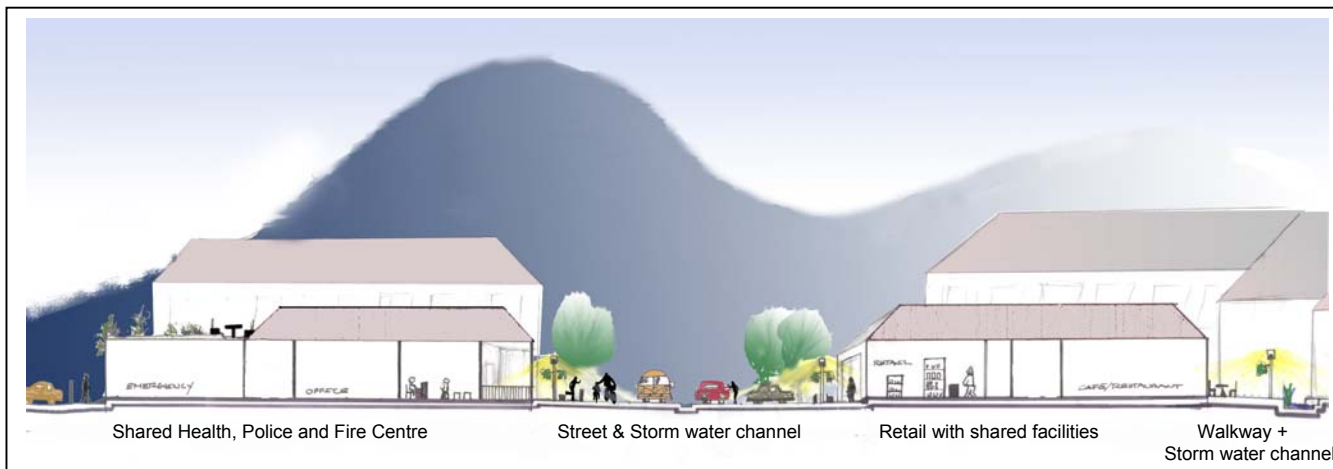


Britannia Beach community centre is designed using its historic grid pattern. It encourages the interaction between community members through pedestrian links, various public spaces, shared resources and a layering of uses within each building. This design also allows for shared transportation systems between pedestrian, cyclist, water and car.





The pedestrian walkway serves as the heart of the community. It is a public space, a view corridor, a storm water channel and a pedestrian thoroughfare. The walkway is permeable from all sides allowing for the constant influx of people. It is also fully accessible for those with disabilities. The buildings form a friendly front and their angled relationship to the walkway creates calm pockets. The presence of water and vegetation 'soften' the hard ground surface and may create feeling of relaxation. The north-south orientation of the corridor takes full advantage of daylight hours and its heating potential.



The layering of uses is essential to a functional community. The street is shared by the car, pedestrian, cyclist and water channel. The relationship between buildings and the street is 'friendly' and accessible. Buildings have mixed uses and share resources such as water, energy, and spaces such as bathrooms, reception rooms, and lunch rooms.