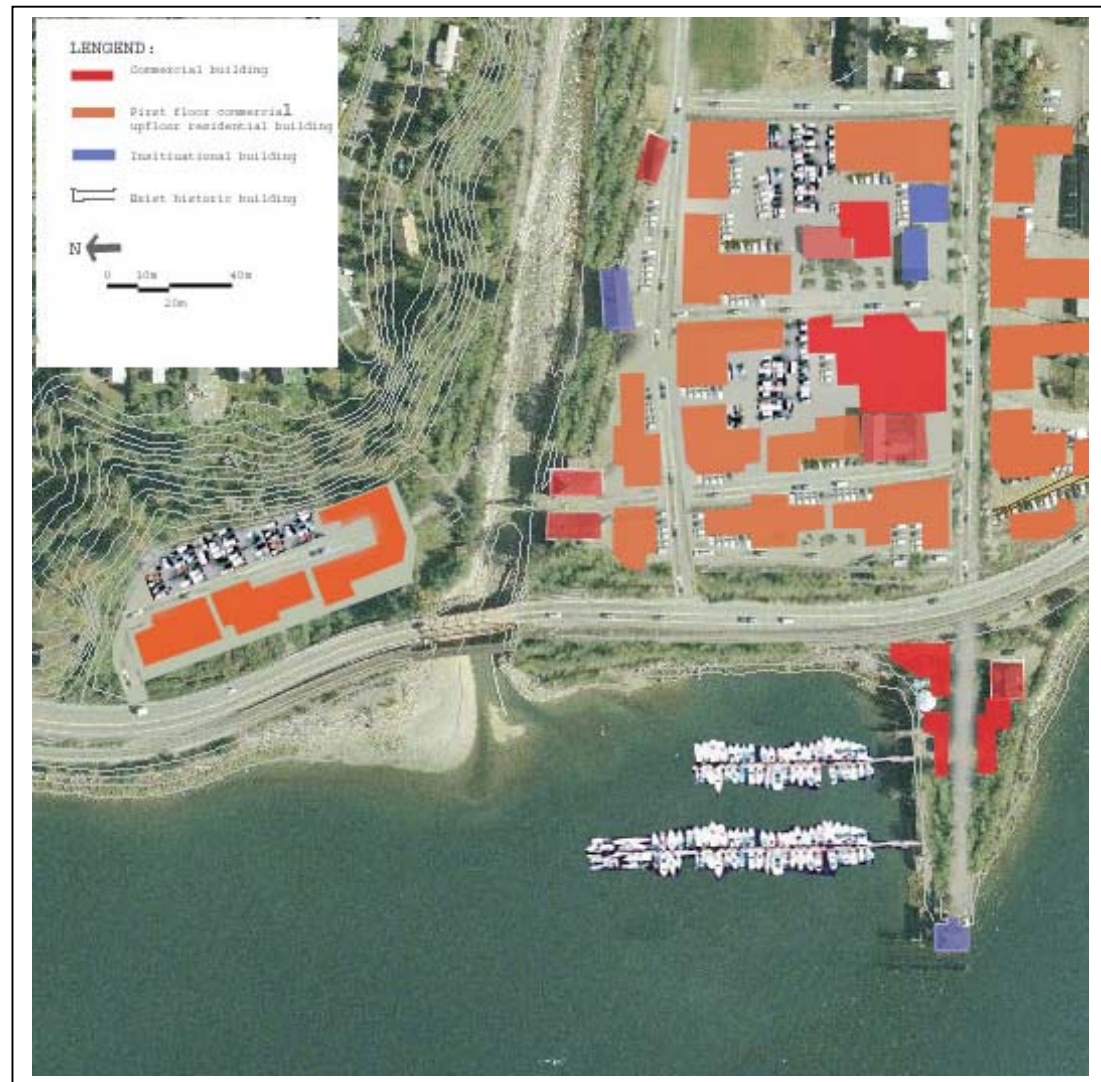


Heritage Town Site for New Development

Yongdong xi

There are great economic opportunities involved in celebrating and protecting the unique heritage town site. There are a few important issues to get the target:

- Keep the historic building for institutional, commercial, and residential uses.
- Restrict the new buildings with the local and historic character.
- Provide open space near the important historic building for people to celebrate the history of Britannia.
- Provide pedestrian friendly scale and environment to experience the heritage small town.
- Setback the big parking lot behind the buildings to provide a friendly face to tourist and local people.
- Promote living and working in the same buildings or mixed use building to provide enough people for a active town.
- Establish a maritime heritage precinct and activities.
- Provide a connecting “Main Street” .



Plan of the town site shows the proposed development with the historic characteristics and vibrant economic opportunities.



The perspective of “main street” provides a linear public open space for people to explore the historic town and interact with the environment. It also provide a pedestrian friendly space because of its scale, street parking, wide side walk, narrow street, and mixed use buildings. It is the chain among beach, rail, highway, town site, mining site, and community. It is a corridor to the beach view and mountain view.



This section shows the relationship among the most important features in the town site: ocean, beach, highway, mountain, heritage and commercial area. It makes a sense of the interaction between people and the environment. It also provides comfortable spaces for people to experience varied activities.

South Britannia Green School

Sarah Howie

The focus of this elementary school site for the residents of South Britannia is environmental stewardship and green design.

Elements on the site include:

- Elementary school for 250-300 local children
- Two playgrounds for different age groups (Grades K-3 and 4-7)
- Soccer and baseball fields
- Garden plots for each class
- Native plant demonstration garden
- Community picnic area
- Forest ropes course

Green infrastructure includes:

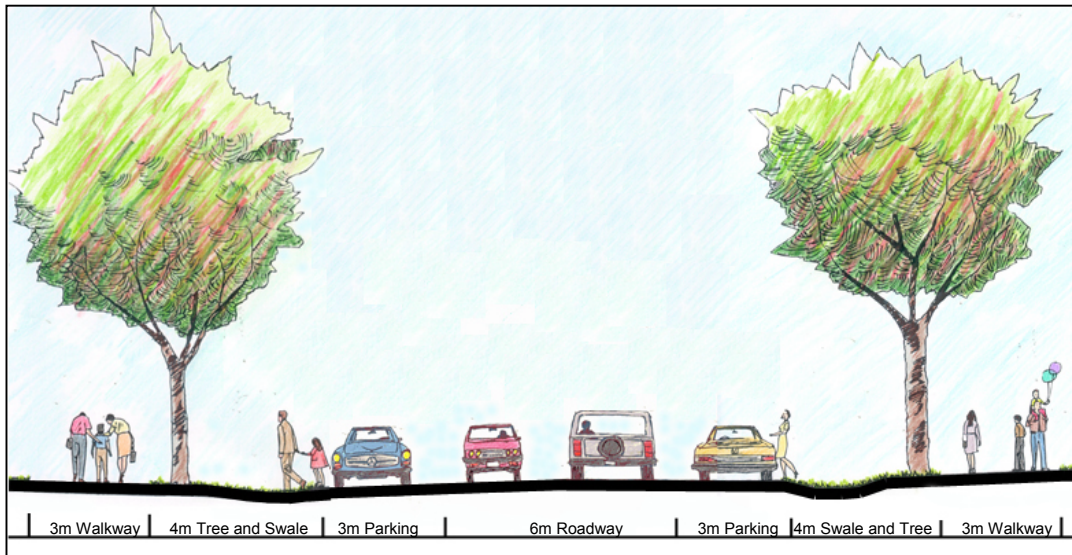
- Riparian areas preserved (minimum 30-metre buffers)
- Forest cover maintained on steep slopes to minimize erosion
- Significant natural features (stream corridors, forested areas, waterfront) are protected for wildlife habitat and community use
- Non-polluting development (green roofs, green streets, permeable parking, fit with topography)
- Alternative sources of community water (use rainwater for irrigating fields and gardens)



Green School: Plan illustrating proposed elementary school site and adjacent areas for context. This site emphasizes the use of green infrastructure. The dotted red line denotes a recreational trail system that links the community with the school, mountains, and Howe Sound; note that the entire waterfront is accessible to the public. A roundabout at the intersection of Main Street and Highway 99 slows traffic and increases safety for residents. Roads become bridges at stream crossings.



This perspective sketch illustrates a section of Main Street as it appears looking south from the edge of the school soccer field. Key features shown here include large street trees for maximum rainwater evapotranspiration, drainage swales at the edge of the parking lanes for efficient and cost-effective stormwater management, and wide sidewalks to accommodate a high level of recreational activity. The background shows that the existing forest is maintained wherever possible, creating an attractive backdrop to the school site and entire South Britannia community.



This is a section cut through Main Street in front of the school site. This is an example of a green street. The wide sidewalks are asphalt for accessibility. The side slopes of the grassy swales are gradual enough to walk across comfortably from the crushed stone parking lanes. The narrow street width slows traffic and creates safer conditions for pedestrians, which is a necessary precaution in this school zone.

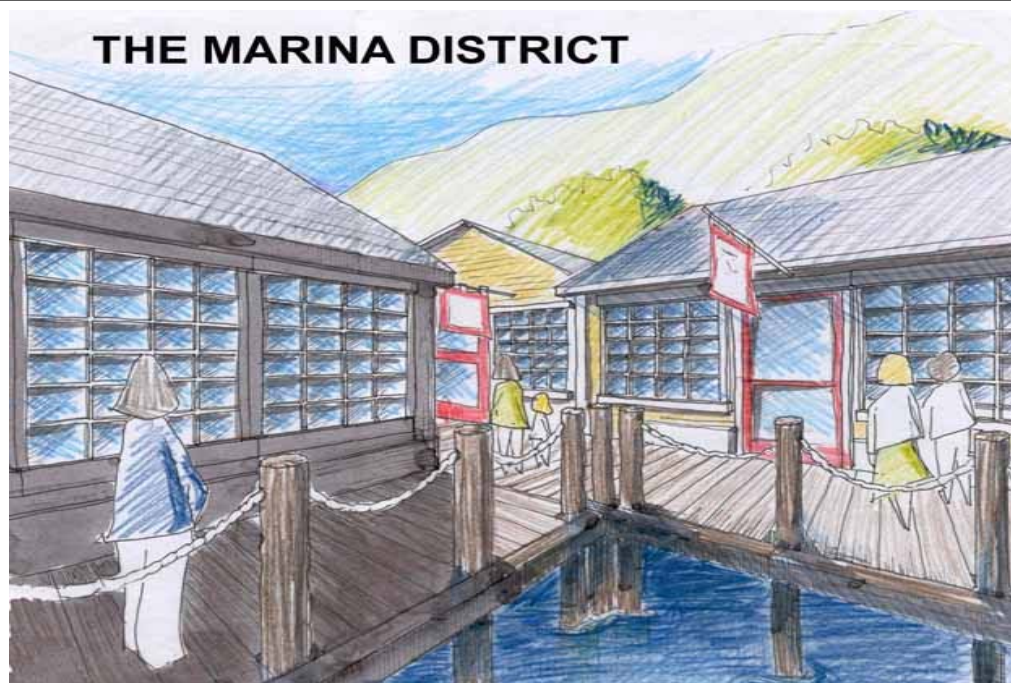
The Waterfront Connection

Heather Scott

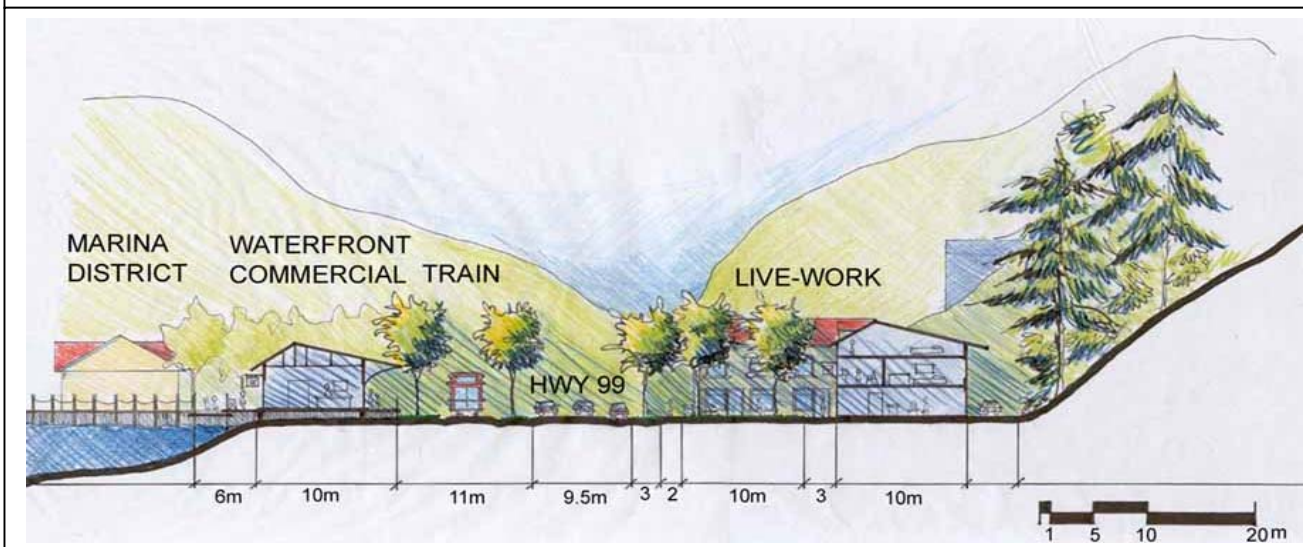
This “waterfront connection” accommodates traffic of train, car, foot, bicycle and wheelchair passengers and is the hinge that connects the residents of Britannia South to the commercial facilities of Britannia North. The ferry terminal overpass (shown in blue) is reminiscent of an historic materials conveyer, and along with the narrowing and slowing of the Sea to Sky Highway creates a strong connection between the marina and the heritage and educational value of the mine site. By maintaining and restoring existing buildings and using cues from their character in the building of new ones Britannia’s imageability and character as a national heritage site are maintained. Tourist and local needs are both met on-site by providing both everyday and tourist-oriented commercial types. The live-work facility presents a welcoming face to the street and is the ultimate meeting of tourist and local needs. Similar in form and density, the medium-density housing to the south provides a smooth transition to Britannia South.



The Marina District acts as a springboard for the whole town site by welcoming visitors traveling by boat, train car, bicycle and on foot and facilitating their connection to the open space to the south, the heritage town site to the East and the water sports centre to the North. It also provides useful and compelling commercial uses for visitors and residents alike.



Perched on the edge of Howe Sound, Britannia will become a destination for many. Through an interconnected series of wharfs, the marina precinct services both the tourist and resident communities. Its markets, restaurants, cafes and artisan shops will both entice the visitor and support the local community. Its intimate scale is in keeping with the character of this national heritage site and its location and accessibility along the highway, train and ferry routes will encourage people to stop and shop.



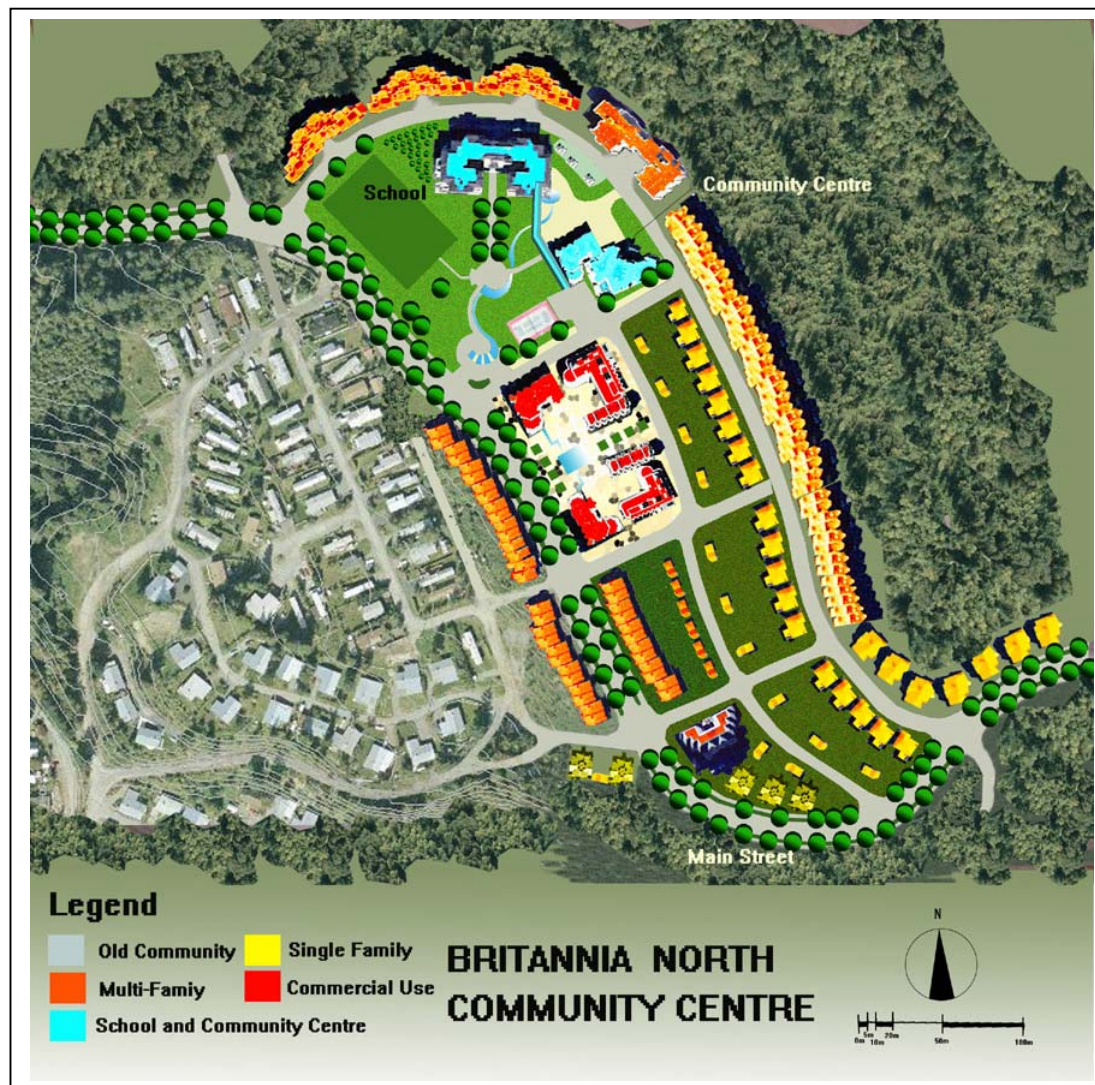
This section through the waterfront commercial and live-work areas helps demonstrate the strong connections possible across and along the Sea to Sky corridor. Shoppers stroll along boardwalks, trains rattle by, cars travel up the highway and residents and visitors to the live-work complex all make use of the same corridor. The narrowing of the highway makes it more permeable to visitors and residents and encourages connections from sea to sky.

Britannia North Community Centre

Hongbing Chen

In order to provide plan to accommodate existing residents, the design incorporate preserved existing parcel and integrate new housing for modest means in new areas. Various housing types, including single family, townhouse, apartment (4-6 stories), are affordable to people with different income levels and different life stages. The mixes of new buildings enhance the visual quality of the community.

The Main Street in the middle of this community connects the Britannia South. A pedestrian-oriented network of streets reduces car dependency and is safely and friendly accessible to the outdoors recreation open spaces. In order to integrate residential with a variety of institutional uses, an elementary school to serve 100-300 students locates at the northeast with great view to the south and west waterfront, combining the community center and library together. Integrating the social plaza, the commercial area is situated at the center within a five-minute walk for the community.

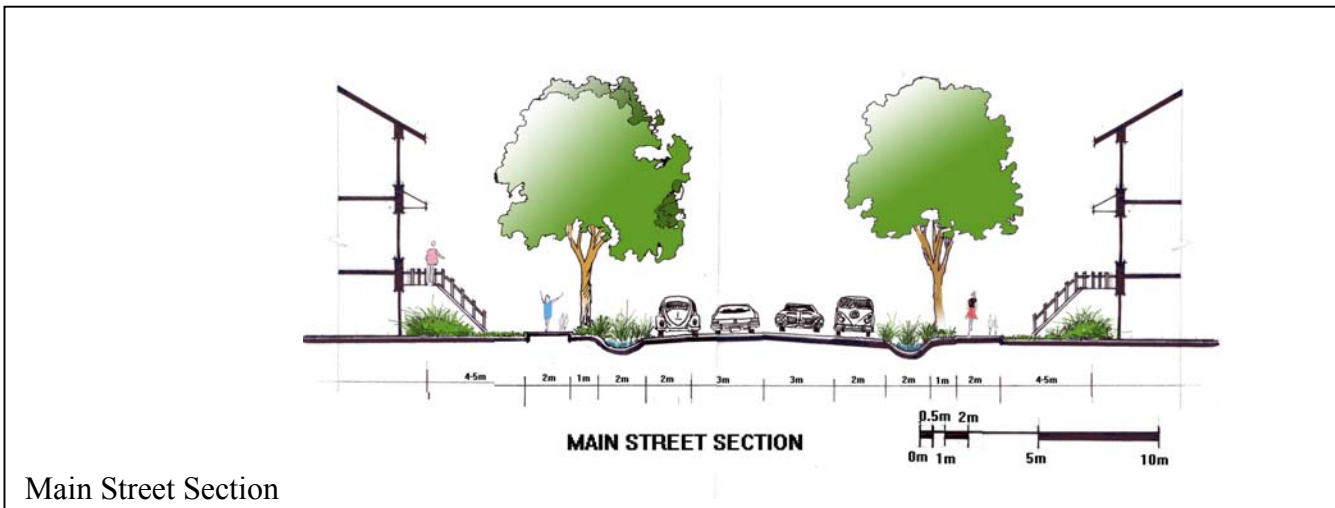


Britannia north community center provides a diversity of house types, convenient commercial facility, friendly social plaza and wonderful view value. To integrate residential with a variety of institutional uses and public amenities, the elementary school, community center and public library are combined together within five-minute walk. Main Street is the main road connecting Britannia South and further north area



Pedestrian Perspective

Along the Main Street near to the commercial area, the pedestrian road is widened to 6-8m. With the street tree and planting beds, the pedestrian street creates an amenity and friendly atmosphere for people. Also, combining with the social plaza, the pedestrian block integrates the commercial, social, and recreational functions together. It is a good place for community people and tourists shopping, chatting, resting, and enjoying the beautiful landscape and for kids to play around. The upper levels of the commercial buildings are used for residential purpose.



Main Street Section

The Main Street is one of the most important roads in this community, which connect north and south of Britannia. The pedestrian road (2m wide) is on both sides. In order to build a sustainable community, the parking lanes are penetrative fine gravel pavement. The driving lane is paved. The street trees and the small shrubs around the swale area give people shades and friendly atmosphere.

Downtown Britannia

Chris Midgley

Achieving synergy within this primarily institutional downtown area requires taking a holistic approach to design oriented around four guiding principles:

Remediate Everywhere

Green areas on the Site Plan represent opportunities for remediation. Self-contained constructed wetlands restore soil and add aesthetic benefits to the pedestrian area. This represents a rethinking of mining. Rather than extraction leaving a legacy of harm, here extraction leaves a legacy of restoration.

Shared Space

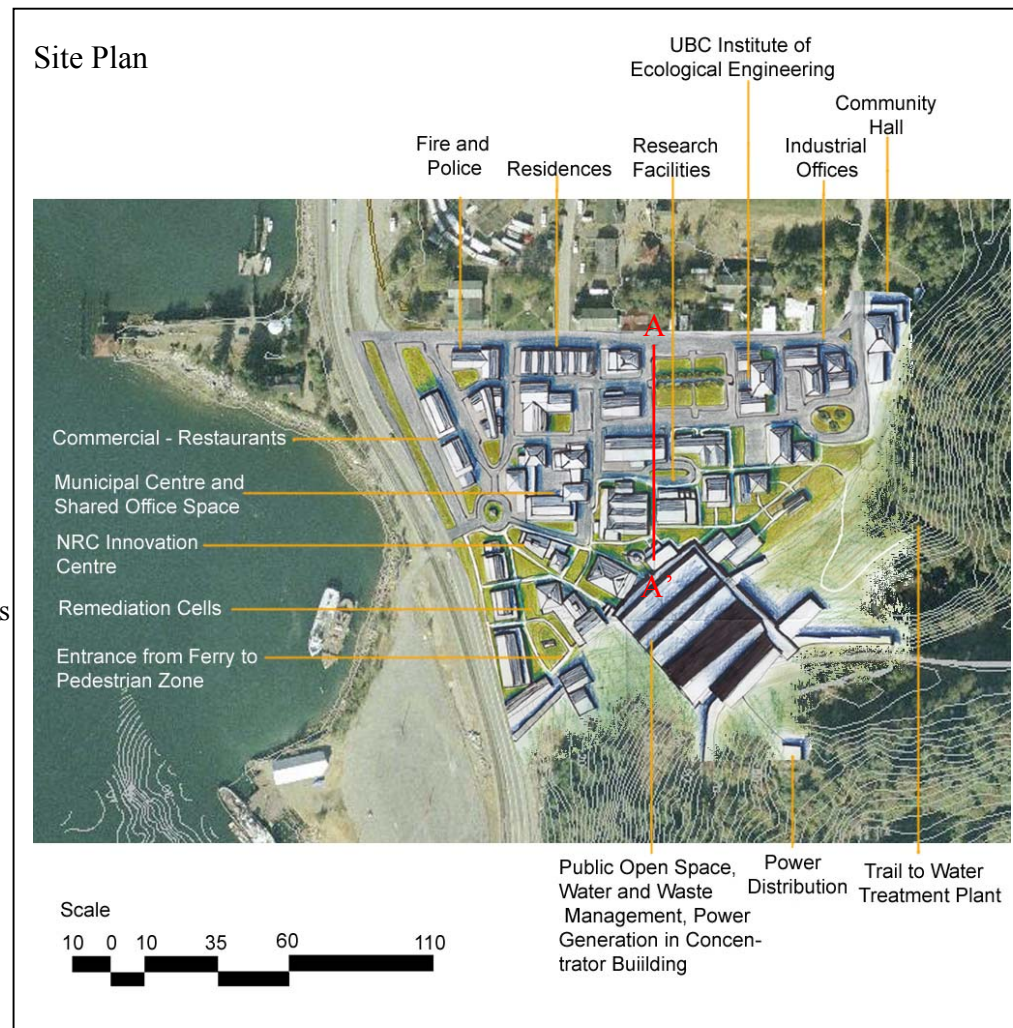
The strong connections between buildings reveal the principle of shared space. No owner or renter occupies more than 60% of a given building. Outside, parking lots and courtyards are completely shared, reinforcing the notion of connectedness.

Adaptive Structure

As development proceeds incrementally, a multiplicity of structural arrangements are formed as different areas serve transportation or remediation areas at different times.

Integrated Systems

Using the principles of eco-industrial networking, power, water, and waste management systems are localised and completely integrated. Together, the system creates a closed loop for the energy and material flows for Downtown Britannia..



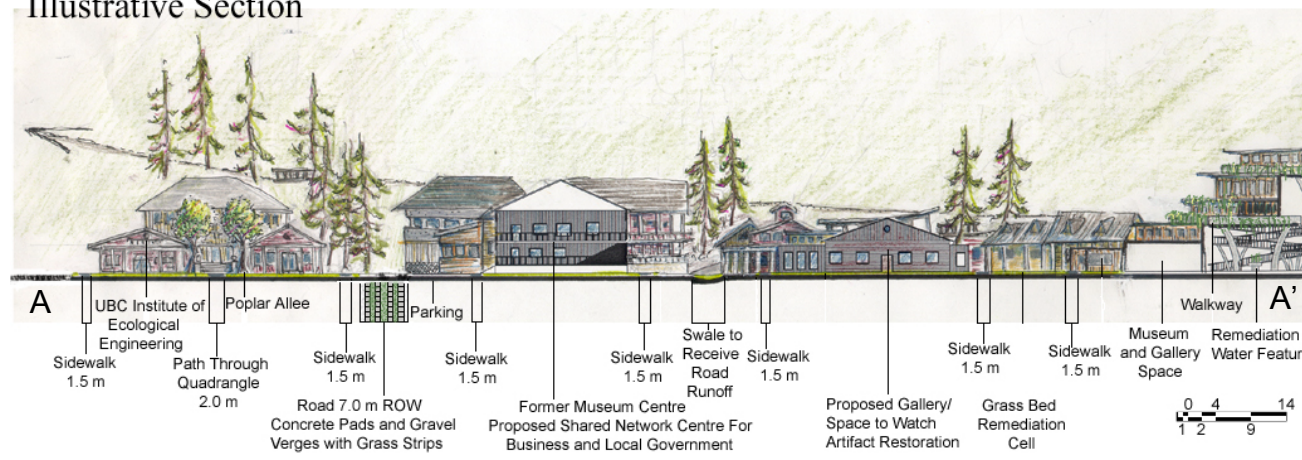
The plan above retains the buildings in Downtown Britannia in their current locations. Proposed buildings and a system of pedestrian walkways and green streets give order to the site while offering opportunities to restore contaminated soil. Restaurants capitalize on the views over Howe Sound while educational, research, and institutional uses fill out the remainder of the site.

Perspective Sketch



The arrival into the pedestrian area of the downtown site from the ferry and train stations and the marketplace celebrates an alternative vision of mining. Rather than extracting resources, contaminants are extracted leaving a restored environment. The derelict pumphouse is used at the centre of a water garden that uses water hyacinth to purify water as soil is slowly restored. The water is then pumped into remediation cells located throughout the site. Storm water and gray water are also managed in this system of linked cells.

Illustrative Section



Inside the Concentrator building, a structural skeleton provides the framework for a public walkway. Integrated into this is a systems of water features that relay water down to remediation cells outside, while also using heat pumps to derive power from the water. Interconnected streets, paths, and a recreational trail system makes the site highly permeable to people while reducing pedestrian conflicts with automobiles. LEED principles guide the design for buildings.