

INTRODUCTION: ROLE OF THE AQUARIUM IN VANCOUVER'S URBAN FABRIC

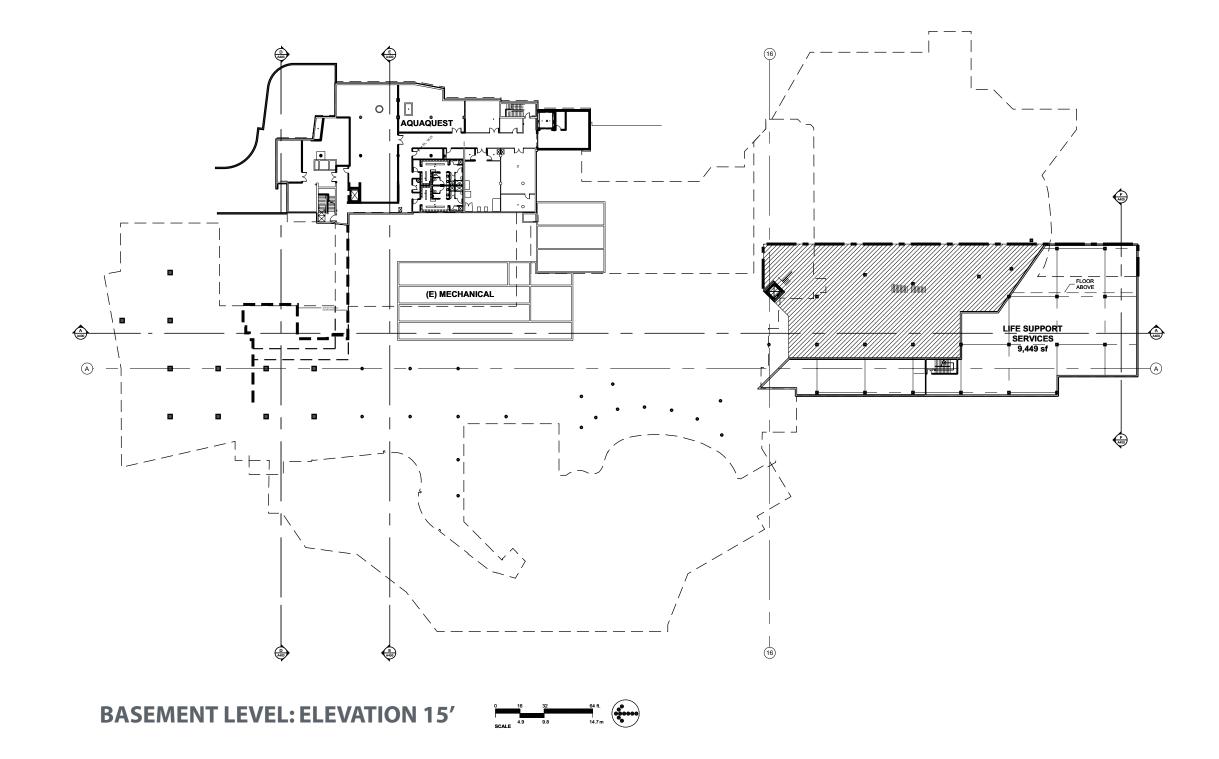
The Vancouver Aquarium is proposing to expand and revitalize its facilities using a phased Master Plan, as outlined in the accompanying material. The conceptual basis for this Master Plan was presented at the November 27, 2006 Parks Board Meeting and the Master Plan has been developed and revised in response to the conditions outlined in the minutes of the November 27, 2006 meeting and subsequent discussions with Parks Board Staff.

The Master Plan consists of a new Arctic Canada Habitat, revitalized and expanded BC Coast exhibits, new free public viewing enhancements, new service and office elements, expanded laboratory space and a new entry pavilion. New formal and informal plaza spaces are accessed by new pedestrian routes and flanked by new bistro and washroom buildings.

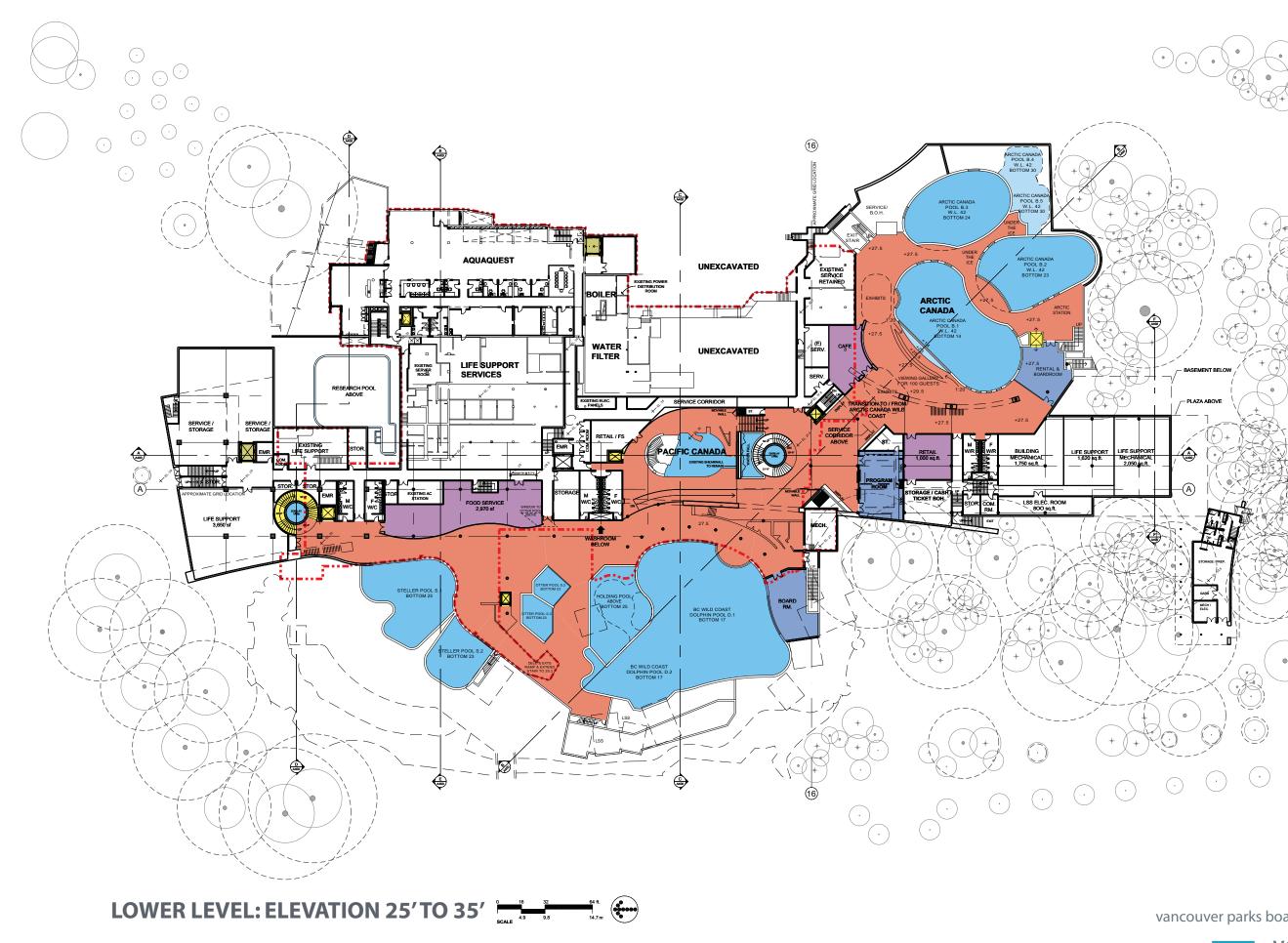
The expressed concepts for the architecture and landscape of this master plan - how the Aquarium will look and feel for visitors and others coming to it, or even driving by, respond to the emerging sense that Vancouver can use a visual "boost". The city's cultural institutions should clearly contribute significantly to the overall impression of Vancouver's vitality, an ever more interesting and unique urban landscape, and should also provide some memorable imagery. It is also clear that this goal will mean different approaches need to be taken as the various cultural institutions around town are built or re-built. What is appropriate for one (say a new Vancouver Art Gallery), would not be appropriate in Stanley Park.

The concepts presented here focus on providing more civic clarity of identity and imagery for the Aquarium, and thus for the City itself, yet one that fits into the landscape and physical setting of Stanley Park









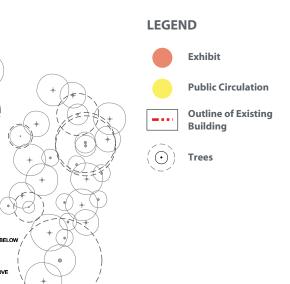


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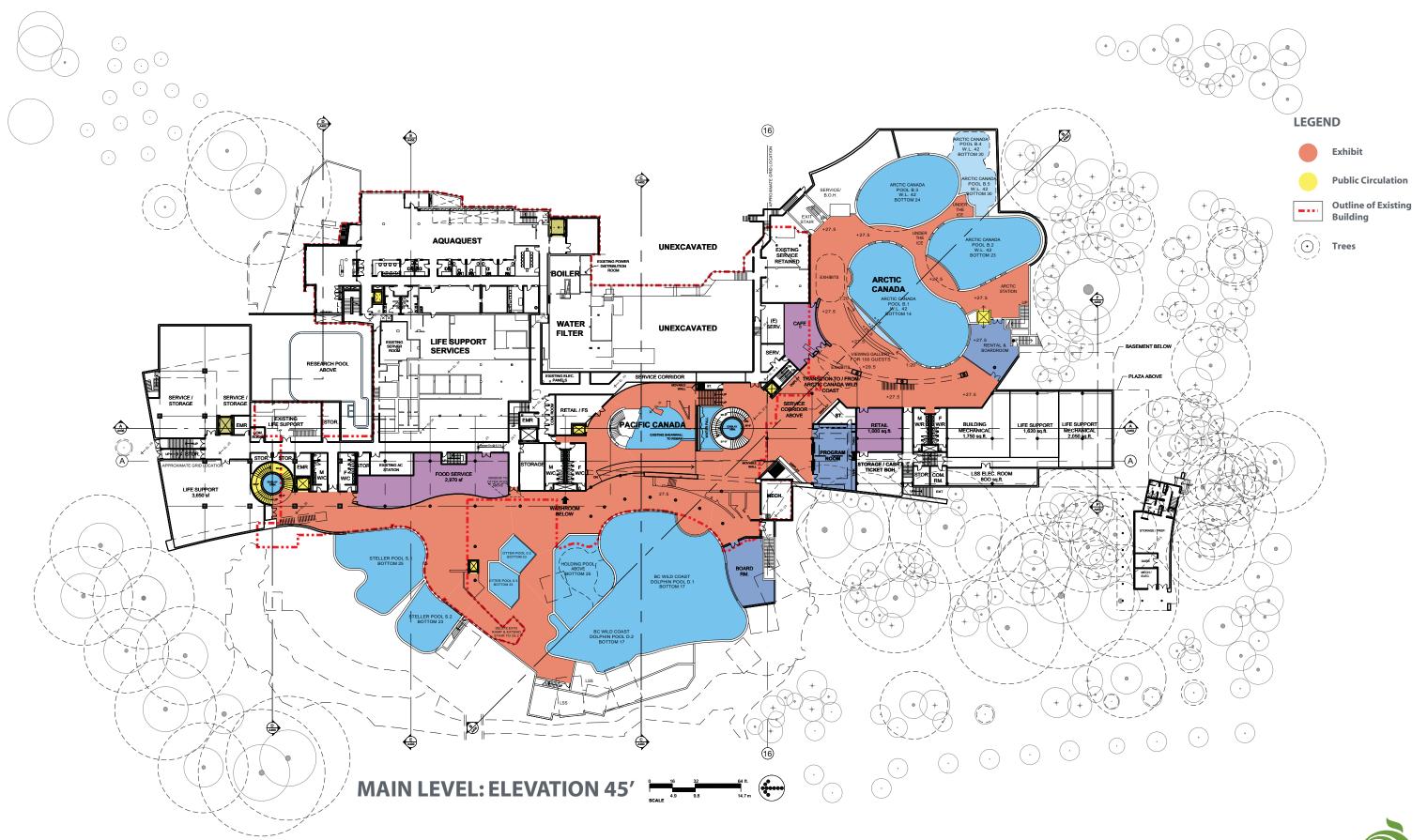
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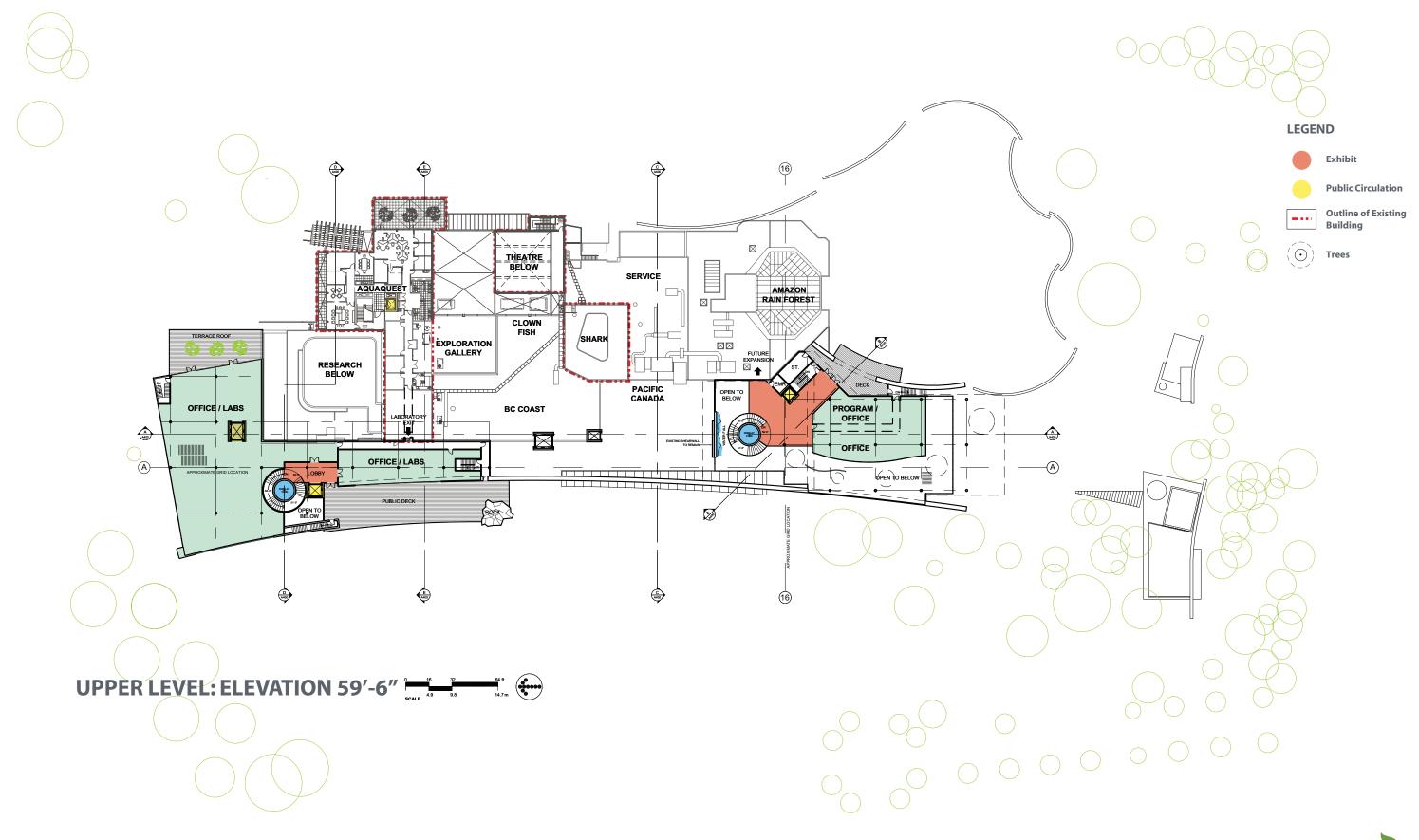








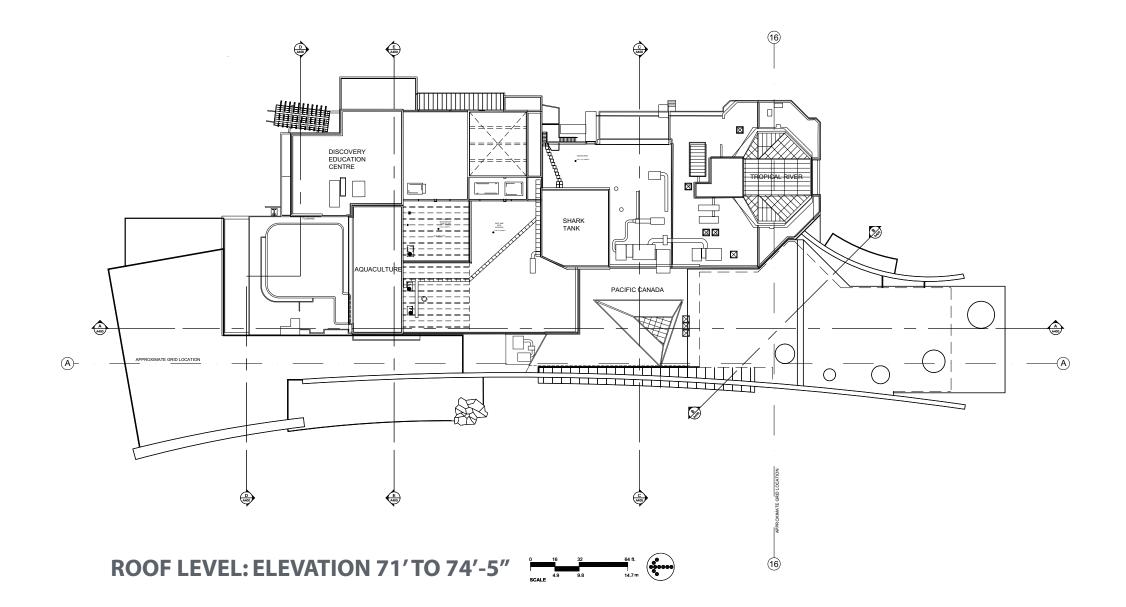
















WEST ELEVATION



EAST ELEVATION







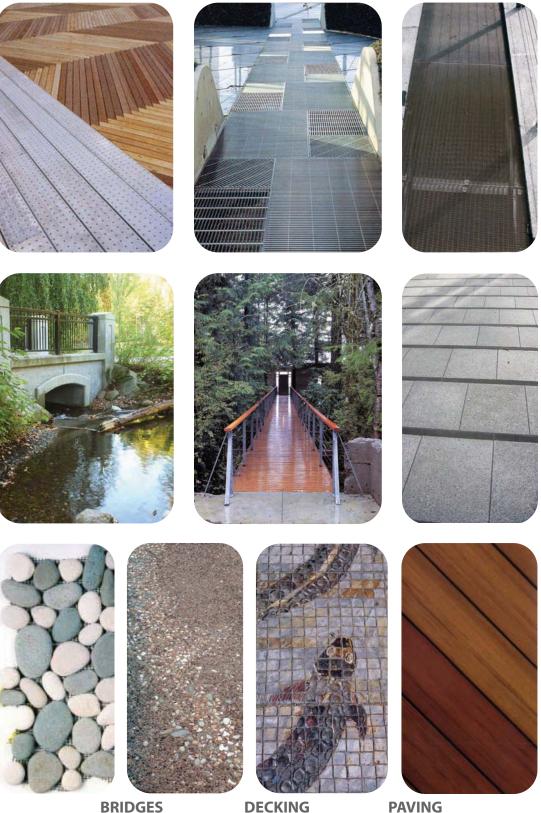




CONCEPT SKETCHES







Plaza Landscape Design Rationale

Stanley Park offers a natural oasis within the urban core of Vancouver. The large expanses of west coast forest have a significant impact on residents and visitors alike. The formal and informal plaza spaces planned around the Vancouver Aquarium expansion provide an opportunity to create a landscape that is respectful of its natural roots.

The overall formal and informal plaza design theme adjacent to the Aquarium expansion responds to the natural image of Stanley Park. The design drew inspiration from the landscapes of the salmon stream and the forested areas to the east. To ensure that these open spaces met the goals of both the Vancouver Park Board and the Vancouver Aquarium, Open Space Design Goals were developed. These goals have directed the design decisions and shaped the overall aesthetic.

Landscape Open Space Design Goals

- 1. existing native conifers in the Vancouver Aquarium precinct.
- 2. Aquarium program elements.
- 3. experience.
- 4.
- 5. Stanley Park.
- 6. Board (see program below).
- 7. Aquarium and Stanley Park.
- 8. Provide easily accessible seating opportunities for large groups, families and individuals.
- 9. the Aquarium entry (it's historic relationship) and the Stanley Park experience.

To embrace the open space design goals and respect the ideals of Stanley Park the landscape design proposed for the Vancouver Aquarium expansion area is broken into two design expressions: a formal plaza that provides a forecourt to the Aquarium entry and informal landscape and plaza to the east and west of the Aquarium entry.



Preserve and/ or enhance the existing Stanley Park open space and ecology including the significant

Rationalize the use of hard surface or permeable surfaces as they relate to Stanley Park or Vancouver

Seek a balance between park use, hard surface area and efficiency that does not compromise user

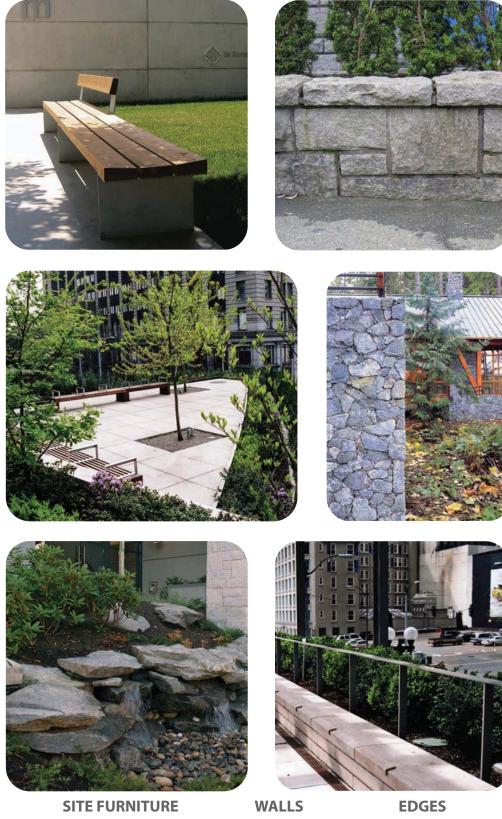
Ensure that the visitor can clearly identify park destinations (east of Pipeline Road to Avison Way) and clearly utilize various circulation routes and way finding opportunities to travel to these locations. Illustrate the goal of park preservation and the importance of park green space to the legacy of

Develop an open space plan that satisfies the program goals of both the Aquarium and the Park

Enhance the publicly accessible ecological and habitat display experience associated with the

Respect the existing Bill Reid sculpture and site it in a location that is prominent in relationship to





Plaza Landscape Design Rationale (cont'd)

The formal plaza provides a prominent location for Bill Reid's 'Killer Whale' sculpture. Although the sculpture is being relocated the size of water feature pool and type of water display will be recreated to match the current condition. The plaza edges are defined by the built forms of the Aquarium, Bistro/ Bistro patio and public washrooms as well as the forest edge which will be reinstated as close to the formal plaza edge as possible. The organization of the plaza hard landscape elements including the benches, paving and accessory elements will reflect the formality and urban character of the space. The overall feeling one will have while in this plaza will be that of a formal space set within the forest of Stanley Park.

The informal plaza and landscape to the east and west of the formal plaza responds to the natural lines of the forest. The shapes and forms are gentle curves, benches and seating areas flow along the edges providing ample opportunities for family gathering, places to rest and enjoy the activities of the park. Paving materials will be in keeping with similar areas within Stanley Park and include concrete unit pavers in patterns and colours that will feel comfortable and be easily maintained in the forest setting. Strong axial connections from the north - south Stanley Park spine and Avison Way parking area ensure that there is also an unencumbered path of travel for those visitors heading directly to the formal plaza and the Vancouver Aquarium.

To ensure the continued health and long-term legacy of the existing trees, careful attention has been given to the existing grades and the critical root zone around these trees. As an example the axial path connection from the west crosses over tree critical root zones as a bridge. The axial path from the Avison Way parking area is a raised walkway. Both pedestrian connections land gently on existing grade with a footprint that does not impact adjacent existing trees. This approach has been taken around all existing tree areas. Where proposed grades do not meet existing grades, elevated surfaces will be designed to ensure that the delicate root systems remain undisturbed and intact.

The replanting strategy follows the design principle of park preservation. We believe there is an opportunity to use this project to illustrate how a previously disturbed area can be brought back to a naturalized state. Initial planting will be of species native to this area of the Lower Mainland and Stanley Park. Careful attention will be taken to match species selection with light condition and location adjacent to park features, e.g. riparian planting beside the salmon stream.

The western portion of the informal park area includes the current duck pond. The duck pond will undergo improvements including reworking of existing rock and as necessary adding additional boulders found during excavation of the Aquarium Expansion buildings to reinforce and stabilize the bank condition. The character of the pond will be updated to physically and visually appear as a salmon stream completing the expression that begins at Coal Harbour. Riparian planting, root wads and logs sourced from the recent Stanley Park storm damage will be used to add to the character of the stream edge. In addition two river rock beaches will be created for interaction with the waters edge. The Salmon Hatchery will be relocated to the north east corner of the informal park area in close proximity to the revitalized salmon stream and will provide additional education and interpretive opportunities to park visitors.











GREEN WALLS TRELLIS

Sustainability

There is a strong synergy between a naturalized design expression and sustainable goals in the landscape. First and foremost we recognize that preservation and enhancement of the natural ecology of this area of Stanley Park will go a long way to illustrate sustainability. As a tool to organize our priorities we have defined the following goals:

Landscape Sustainability Design Goals

- 1. existing trees in the Vancouver Aquarium precinct.
- 2. Aquarium program elements.
- 3. Stanley Park.
- 4. Aquarium and Stanley Park.
- 5. Develop a storm water management program for the site with the goal of zero run off.
- 6. Planted areas will not be irrigated. Grow in irrigation will be removed after two years.
- Utilize overhead tree canopy to shade hard surface paved areas. 7.

This area of the park is currently a combination of lawn, introduced non - native (high water demand) plants and native tree species set in an asphalt hard surface area. The design concept sets the stage to remove the asphalt, lawn and non-native species and carefully retain the significant existing native conifers. Planting will consist of native tree, shrub and groundcover species of various heights and sizes to immediately provide cover for the exposed native soils. As noted whereever possible the native soil and organic material will be retained and augmented with organic material as needed to ensure proper establishment. The goal is to not import growing medium onto the project site.

We have developed a grading design that directs storm water run off from hard surface pedestrian paved areas directly to the adjacent planted areas. Appropriate volume and velocity reduction devices, e.g. river rock channels will be employed to eliminated scouring and disruption of planting. The goal of the project is to utilize the new landscape forest areas to absorb all of the run off. In addition, areas of the informal plazas will incorporate permeable paving to further reduce storm water runoff.

The irrigation system will only be employed for grow in. This will be carefully monitored to ensure that the minimum amount of water possible will be provided to the new plant material to ensure healthy growth. Typically the system will only be active June, July and August.

Over and above the issues of water and site we believe there are social sustainability issues that can be addressed with this project. Reclaiming a disturbed site, replanting it with native species and providing opportunities for park users to watch the transformation over many generations is both informative and ecologically sound. Further enhancement of the salmon stream and bringing the salmon hatchery out into public view will increase public interest and awareness, and illustrate to park users the difficulties salmon have in an urban environment.



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Rationalize the use of hard surface or permeable surfaces as they relate to Stanley Park or Vancouver

Illustrate the goal of park preservation and the importance of park green space to the legacy of

Enhance the publicly accessible ecological and habitat display experience associated with the

vancouver parks board presentation

vancouver







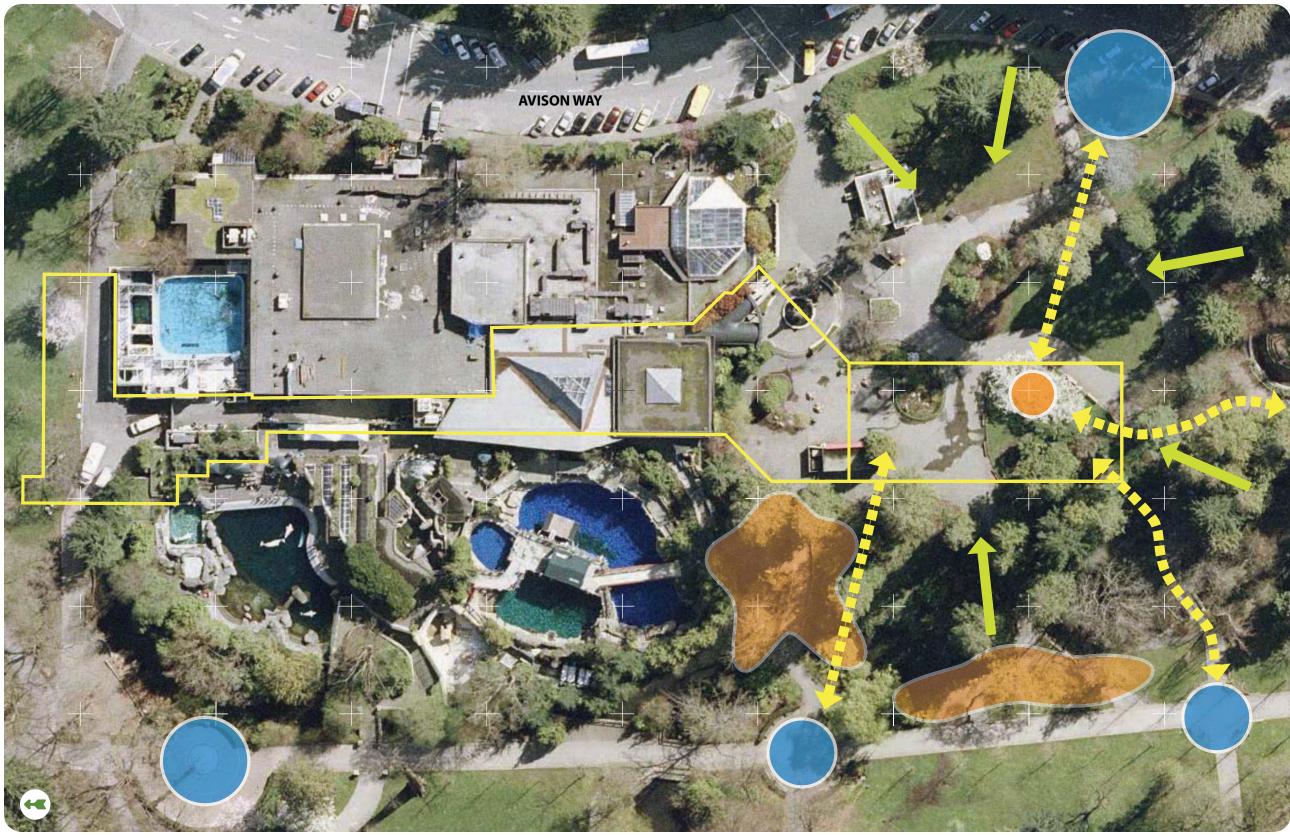
CONTEXT PLAN Stanley Park

LEGEND









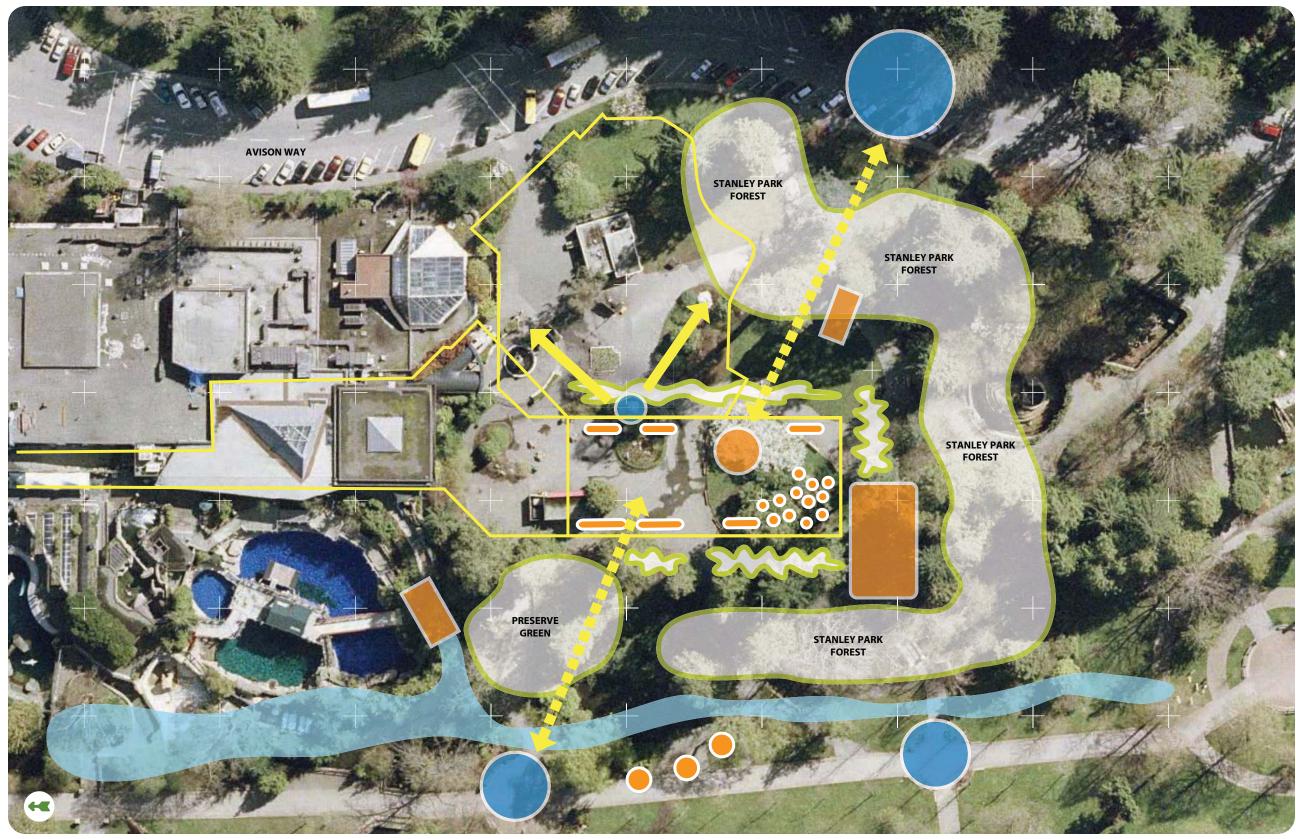
SITE PLAN Aquarium

LEGEND









SITE PLAN Plaza

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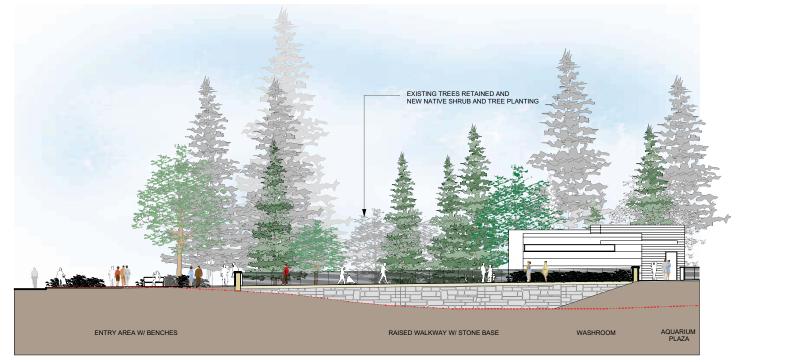










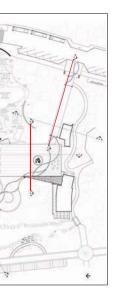


SECTION A: AVISON WAY TO AQUARIUM PLAZA LOOKING SOUTH



SECTION B: EAST TO WEST THROUGH PLAZA AND BISTRO



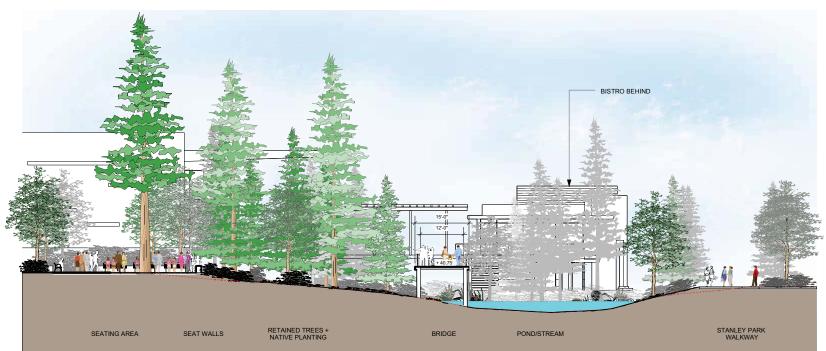


KEY PLAN





SECTION C: SOUTH TO NORTH FROM BISTRO THROUGH PLAZA TO AQUARIUM LOBBY

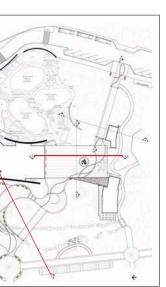


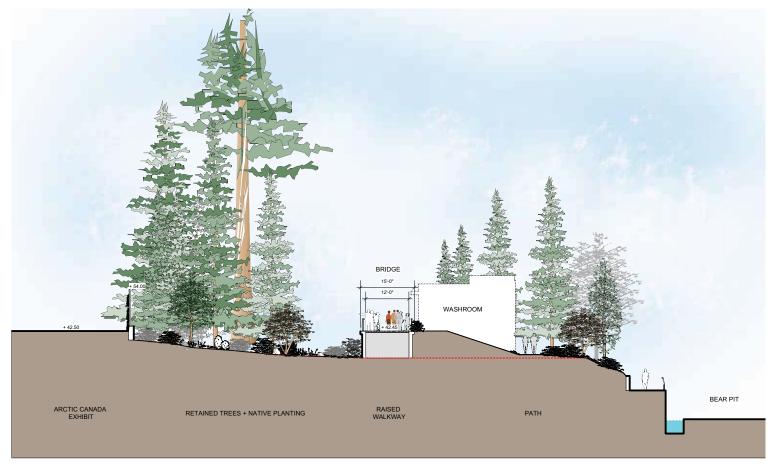
SECTION D: EAST TO WEST THROUGH PARK PLAZA & BRIDGE TO SPINE





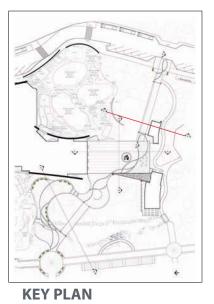






SECTION E: NORTH TO SOUTH FROM ARCTIC CANADA EXHIBIT TO BEAR PIT

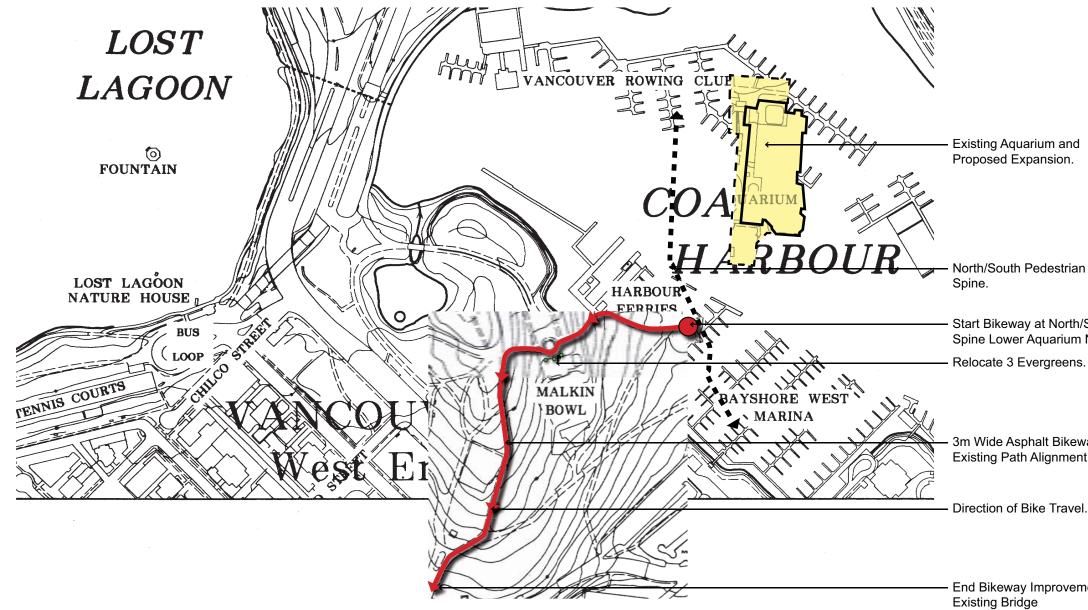


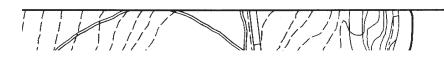














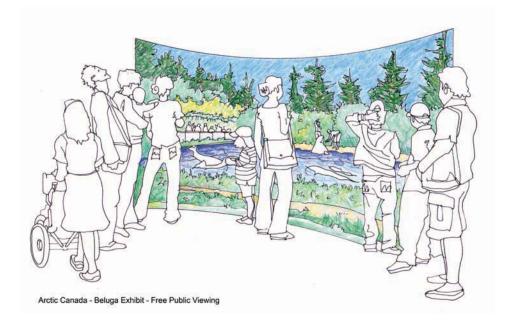
- Start Bikeway at North/South Spine Lower Aquarium Node.

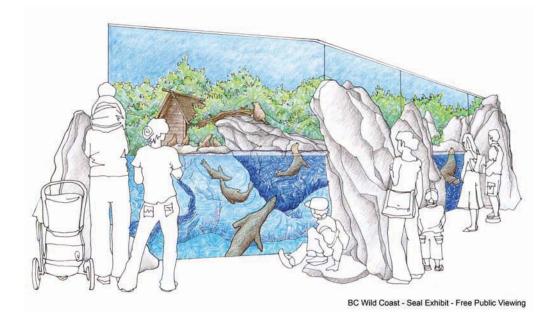
3m Wide Asphalt Bikeway on Existing Path Alignment.

- End Bikeway Improvement at









Free Public Viewing Enhancements

The Aquarium today has one free public viewing area where Park visitors can view belugas above water and seals above and below water. The total linear viewing space is about 23 metres (75 feet). In the 2006 Community Consultation conducted by the Vancouver Aquarium it was proposed to include three free public viewing areas in any expansion of the Aquarium, including two that would offer underwater viewing. It also met the expectation of the Park staff in providing greater combined viewing space than that currently provided.

The expansion and revitalization plan as presented now provides for free public viewing at four (4) locations with a combined linear viewing space of approximately 36.5m (120 feet). They are described in more detail with the illustrations and plans that follow:

1. Beluga Viewing: At the Plaza/Aquarium Entry (south), public viewing above water of the New Arctic Canada Exhibit and into the Main Beluga Pool. (Plan A)

2. River Otter Viewing: Underwater views from a a shelter adjacent to the Salmon hatchery and above water views along the path from the Salmon Stream to the Plaza/Aquarium Entry. (Plan B)

3. Seal Viewing: To the west in a shelter along the path that parallels the moat. (Plan C)

4. Salmon Hatchery Viewing: Within the Hatchery building to the south, off the path from the Salmon Stream to the Plaza/Aquarium Entry. (Plan B)

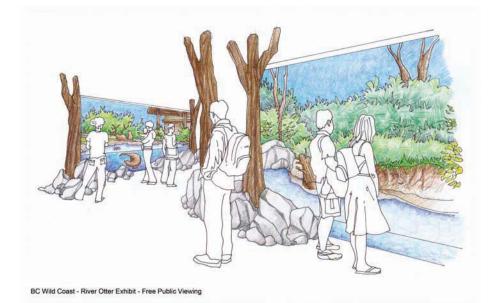
In general, these are located inside modest shelter buildings and are provided with interpretive and informational materials that engage both the Aquariums Mission and the interests of the Park.

The design and materials of these buildings will be sympathetic to the vocabulary of the Park. We anticipate the use of timber construction, high durability materials and finishes, and "green" landscaped roofs. They will all be fully accessible during normal hours of operation of the Aquarium.

Appropriate animal care and management require controlled viewing through glazing panels for the safety and comfort of the animals, and the closure of the viewing shelters at night. The design of the shelters will be as open visually as possible to enhance public safety and encourage proper use of the spaces. The Aquarium will provide security services for these areas, as well.







<image>

BC Wild Coast - Beaver Pond - Free Public Viewing

1. Beluga Public Viewing:

At the Plaza/Aquarium Entry (south), public viewing is provided above the water level of the Arctic Canada Exhibit and Main Beluga Pool.. Views extend extend over shallows, where belugas tend to congregate and along the main axis of the major exhibit pool and include the Arctic Science Station and the Arctic Canada landscape.

2. River Otter Public Viewing:

Located in a viewing shelter adjacent to the Salmon hatchery along the path from the Salmon Stream to the Plaza/Aquarium Entry, the River Otter exhibit provides an underwater view from within the shelter and an above water view of the habitat from along the pathway. River otters are a playful and active B.C. species that is common along our coast in both the freshwater and marine environment. The shelter will also contain interpretive and habitat information. The shelter will be closable at night.

3. Seal Pool Public Viewing:

This viewing site is located to the west in a shelter along the path that parallels the moat. It is accessed via the existing stone bridge. As above, the public area is located within an open shelter structure and it provides underwater and above water viewing into a new Seal Pool within the Aquarium. This pool will hold Harbour Seals, Northern Fur Seals, or Steller Sea Lions, at various times. Views encompass diving, surface swimming, haulout and resting behavior, and the care and management of these interesting animals. Interpretive graphics will define the biology and natural history of the seal species and, more importantly, outline the Aquariums activities in research and conservation of these charismatic animals. The shelter will be closable at night.

4. Salmon Hatchery Public Viewing:

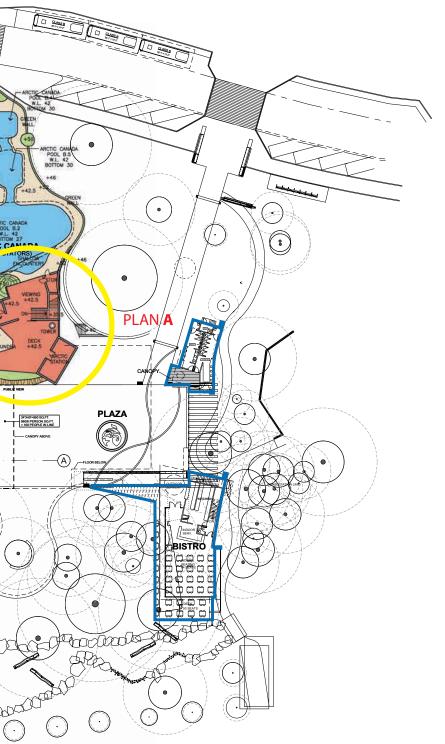
The demonstration Hatchery building is located to the south, off the path from the Salmon Stream to the Plaza/Aquarium Entry. This exhibit shelter will contain underwater views into a major Beaver Pond/Salmon Pool, Salmon hatchery trays and holding tanks, and interpretive material relative to the process of raising Salmon, the management and biology of the Stanley Park Salmon Stream, and the overall conservation and management of B.C. Salmon. It will be planned to allow for programs and demonstrations during the Salmon release and return periods. The shelter will be closable at night.



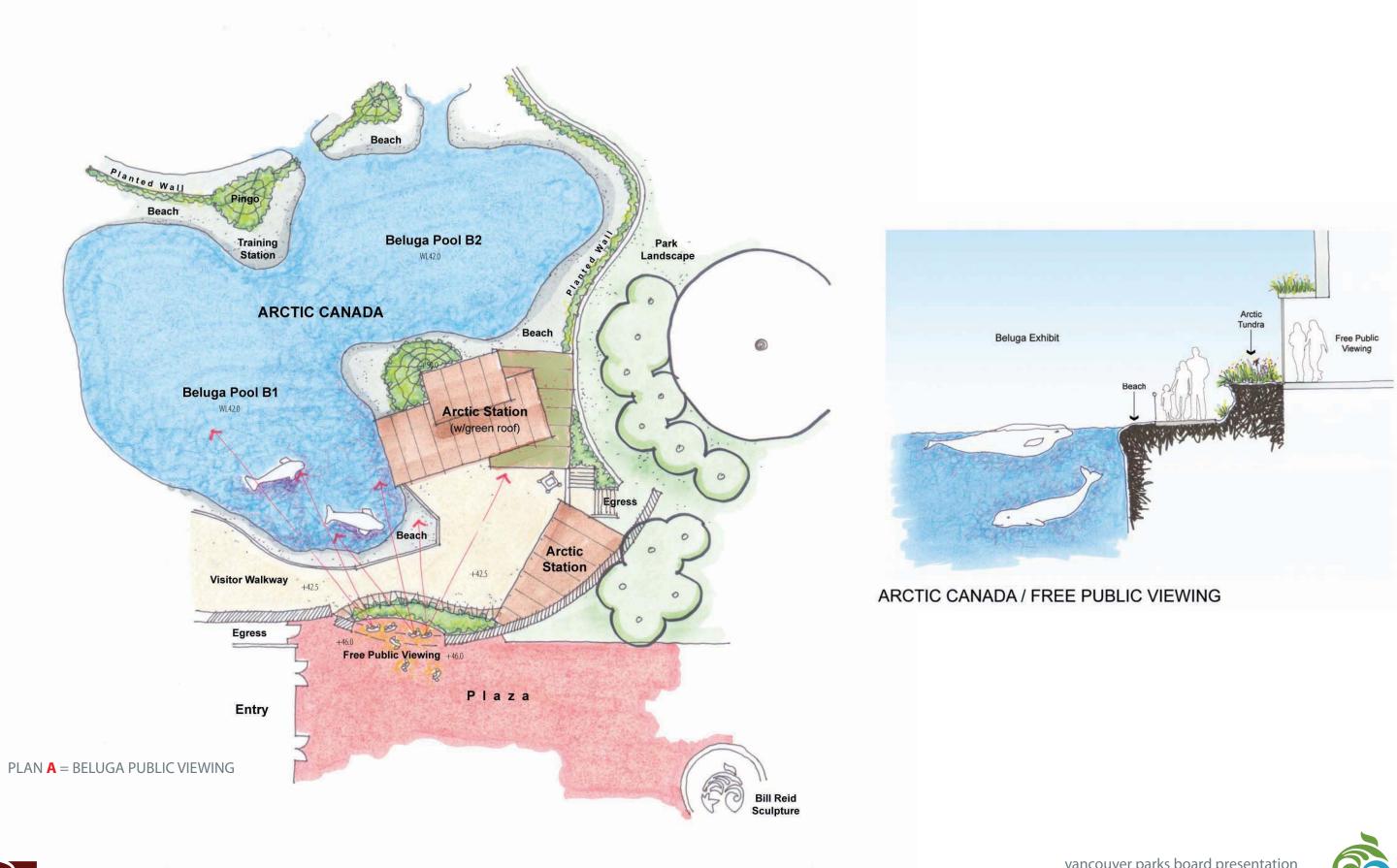




SERVICE +47.5 C GLASSIE ARCTIC CANADA POOL B.3 W.L 42 BOTTOM 24 -----ADMIN. Ŀ GIANT FISH _____ SERVICE POOL B.1 W.L. 42 AMAZON RAIN FOREST īΠ CLOWNFISH 🛱 COVE 🚂 SHARKS TROPIC ZONE FEATURE TROPIC EXPLORATION GALLERY RESEARCH BAY POOL PACIFIC CANADA BC COAST LOADING DOCK CLAM SHELL 2.0 3,723 sf R 24'X40'-960 SQ.FT. 9606 PERSON SQ.FT. = 160 PEOPLE IN LINE W.C. (E) STAIRS FOOD SERVICE STOP w.c. (A)-W MEMBER SERVICES MEMBERS | G GROUP EXIT LSS ELEC. \400 sf LIFE SUPPORT MECHANICAL 1,033 sf E/-> i P DISPLAY TANK +46 DON LIVE SUPPORT 2,408 sf 100000 ٠ W.L. 39 BOTTOM 25 BC WILD COAST DOLPHIN POOL D. W.L. 37 BOTTOM 17 50' X 120' • S NEW CREEK SOURCE •)¢ ۲ SERVICE ۲ LSS BC WILD COAST DOLPHIN POOL D.2 W.L. 37 BOTTOM 23 50' X 86' -32UF De rates ٠ ۲ 0200000000 S. (EXSTA-PLAN B \odot • \odot \odot ۲ DO ۲ R (16) PLAN C • **MAIN FLOOR PLAN - PUBLIC VIEWING**



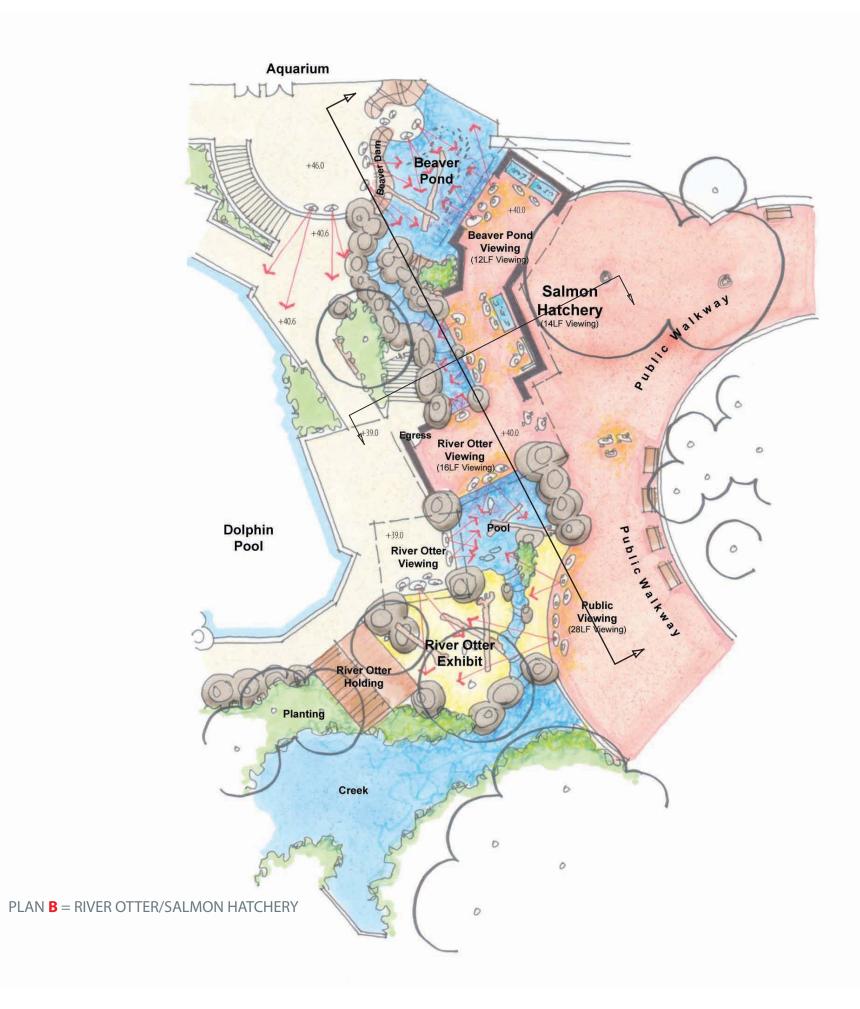






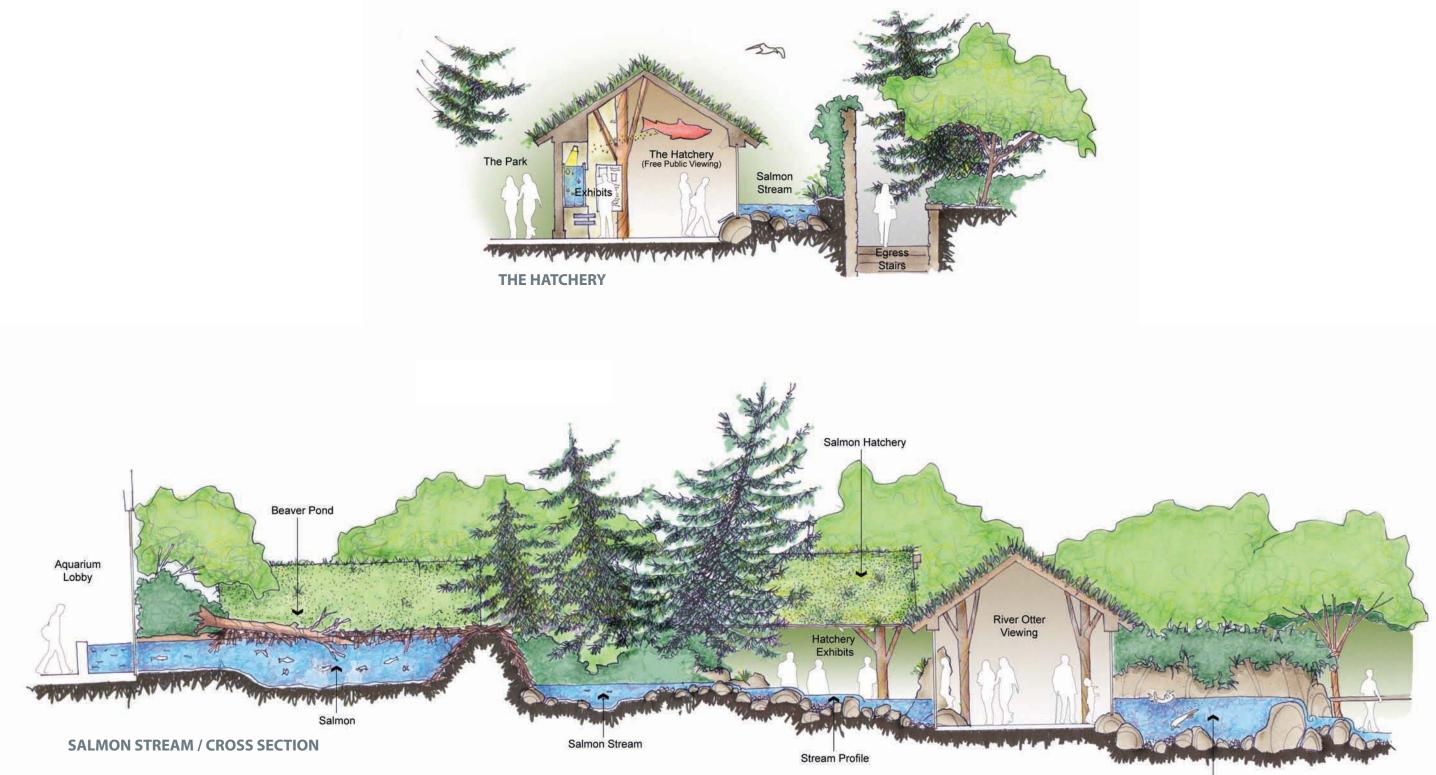








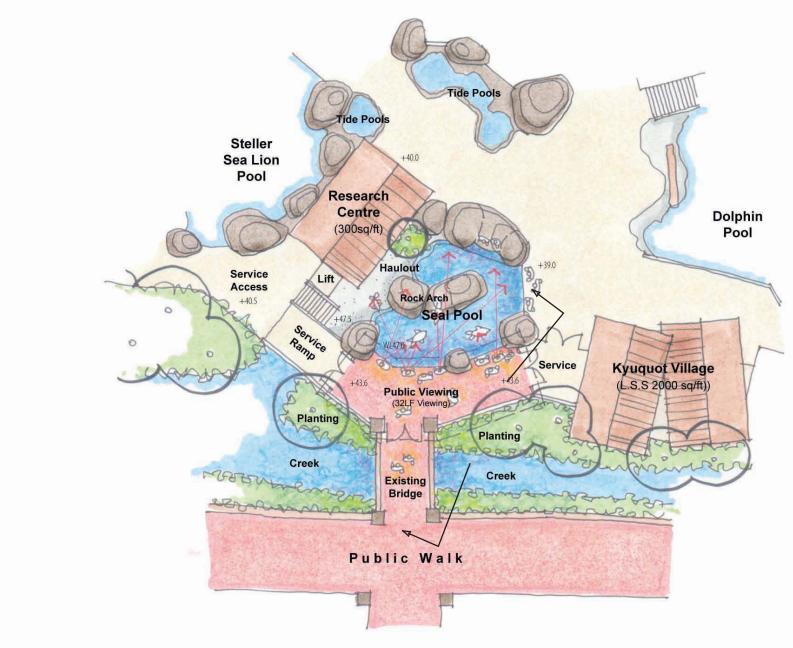






River Otter Pool





PLAN **C** = SEAL PUBLIC VIEWING





