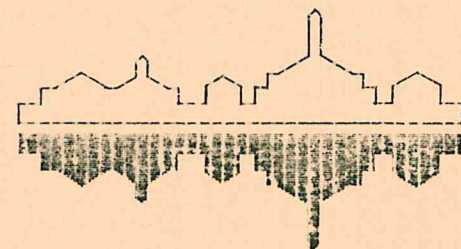


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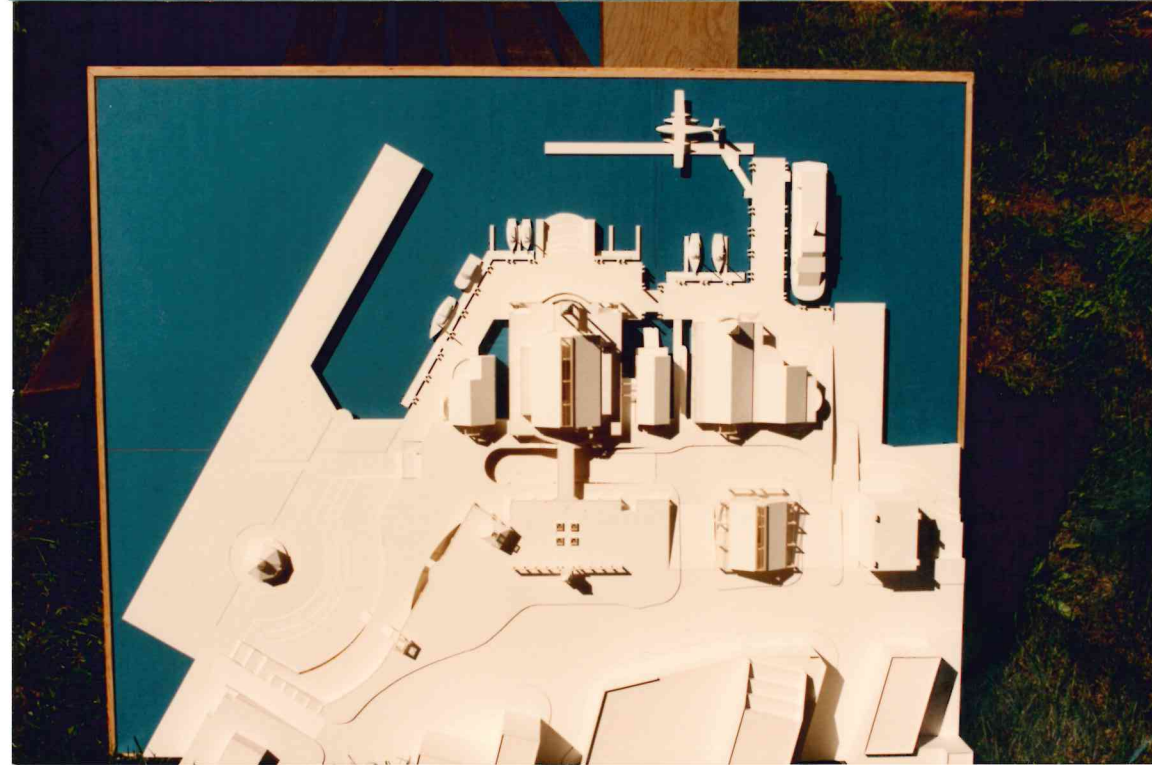
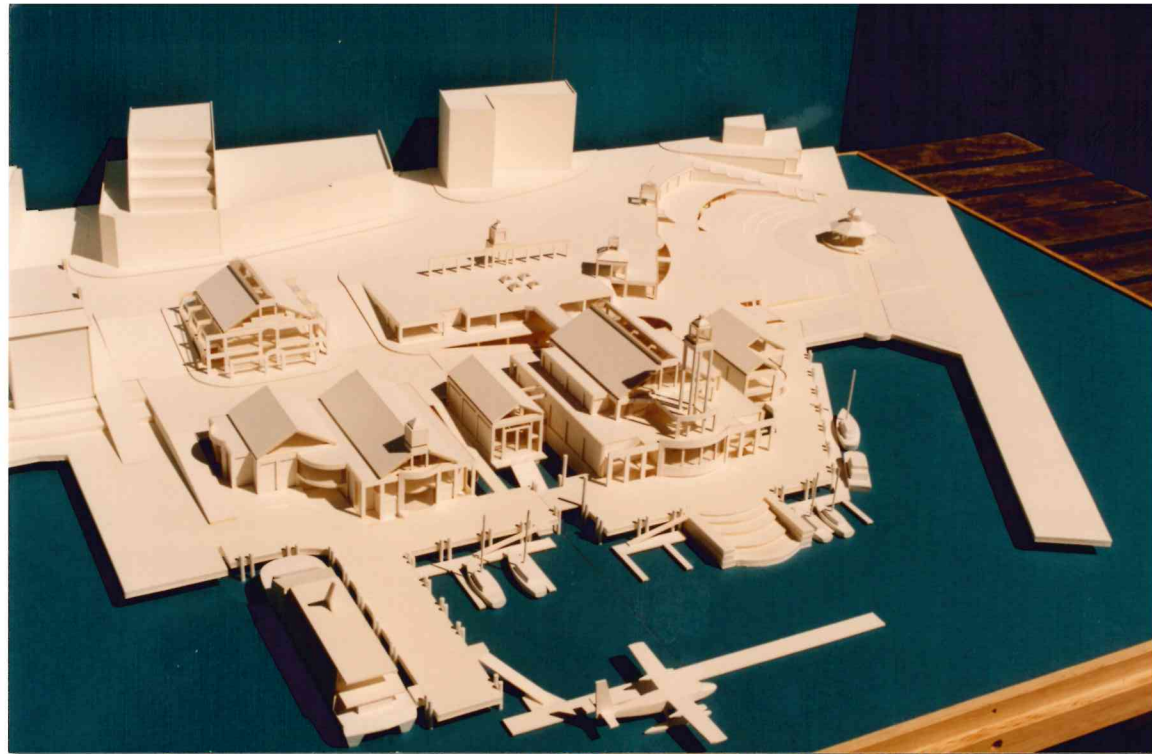
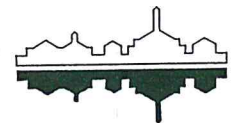


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INTRODUCTION

In the early 1900's, the Inner Harbour was a bustling centre for the shipping trade, with steamer services serving southern British Columbia, but by the mid-1960's, it was an industrial slum. In the 1960's and '70's, public interest in the harbour's architectural heritage revived, resulting in several urban renewal and redevelopment proposals.

Two large areas of waterfront land, the North (Reid) Site, owned by the Provincial Capital Commission, and the South (Ocean Cement) Site, jointly owned by the City of Victoria and the PCC, saw proposals in the 1970's for various uses including residential, recreational, retail market-place, convention centre and maritime museum.

In the late 1980's, interest again was aroused for development of both sites. In 1989, the City and PCC prepared an Issues and Design Brief to serve as a development guideline for the combined North and South Sites.

This thesis project focuses only on the South Site and proposes the same uses described in the Brief, that is, a maritime museum, a transportation terminal, parking, some commercial space and generous public spaces, walkways, and viewing points. This project differs from the Brief in that the size of the Museum is proposed for 50,000 ft.² in lieu 25,000 ft.², and the Transportation Terminal for 20,000 ft.² in lieu 7,000 ft.². These increases in area are as a result of detailed research with the potential users of the Site, namely Air BC, Lake Union Air, Victoria Clipper, Canada Customs, and the Maritime Museum Society.

Although the increase is a significant departure from the Design Brief, the author felt that it could be accommodated without compromising the goals of the site as a vibrant people place. The increased density, in fact, can add to the intrigue and allure of a waterfront development, as witnessed in the successful example of Granville Island. This proposal demonstrates that by dividing the large programme components into smaller linked pedestrian scaled forms, representing a much more appealing community of buildings rather than the otherwise intimidating "large black box on the edge of the water".

Alan R. Roy Dec 91

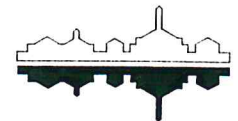
ACKNOWLEDGMENTS

The author wishes to express gratitude and appreciation to the following for their generous assistance:

The City of Victoria Engineering and Planning Departments.

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Dorrie Wood	- Wagg & Hambleton Architects

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PROJECT

Development of Victoria's Ship's Point to provide a 50,000 ft.² relocated Maritime Museum and a 20,000 ft.² Ferry and Air Terminal facility.

THESIS STATEMENT

A waterfront architecture that integrates historical industrial forms with a classical vocabulary can be both unique and appropriate to Victoria.

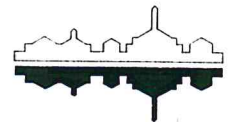
SUMMARY

The "classical industrial" architectural style respects Victoria's industrial maritime heritage in this area. The humble boatshed form is transformed into urban sophistication by applying a wardrobe of classical elements, while maintaining an expression of its industrial roots.

The housing of each major function in a separate building form provides clarity, while the arrangement of the many parts creates a visually interesting and complex whole that matches the scale and rhythm of the backdrop of heritage buildings along Wharf Street. This arrangement of similar forms, each a "variation on the theme", and their accessible spaces in between, stimulates public interaction, attracting visitors into the area to participate in the various maritime adventures.

The organization of the site elements maintains a sensitivity to Victoria's planning goals for this area. Important harbour and Legislature views along Wharf Street, continuous waterfront pedestrian circulation, and generous passive and active open spaces are planned into the architectural solution.

This site also plays an important role in the overall planning of the Inner Harbour. Since it is Victoria's gateway to incoming air and sea travellers, it requires an architecture that provides a strong visual image. The references to maritime forms, the complexity of facades, the readability and accessibility of the various functions, the reduced pedestrian scale, and the prominent landmark features inherent in this solution, ensures a memorable impression.



PROJECT GOALS

Multiplicity of Use

A variety of uses for both tourists and locals to establish the site as a festive and vibrant people place with both active and passive spaces.

- ☐ Maritime Museum complemented by outdoor activities and exhibitions (craft, boat displays).
- ☐ Transportation Terminal/Customs with docking facilities.
- ☐ Market Retail, fish, produce.
- ☐ Maritime Pub/Restaurant
- ☐ Terrace Restaurant
- ☐ Countertop Retail.
- ☐ Water Taxi terminal.
- ☐ Amphitheatre w/bandshell.

Views

Maximize views of the inner harbour from Wharf St. and maintain views of the Legislature along Wharf St.

Building Height

Limit building height to one storey above Wharf St.

Architecture

Provide an architecture appropriate in scale and style to both its marine setting and the classical backdrop of Victoria heritage buildings.

Night Use

Provide a development that establishes evening uses in a safe and brightly-lit environment.

Accessibility

Provide strong pedestrian links through the site and along the water edge. Provide public access to the site for boaters.

Water Edge

Provide a varied water edge treatment with an appropriate maritime character. Avoid "black box" on the edge of water at the museum location.

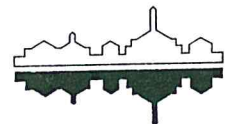
Site Uniqueness

Feature the complementary association of the museum and passenger terminal. Past sailing adventures of square-rigged "Thermopylae" contrasted with the present day "Clipper", one of the worlds fastest ships.

Harbour Gate

Provide a dynamic image of a waterfront gateway landmark for first time visitors arriving at Victoria by air and water.

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HISTORICAL CONTEXT

Background

Since its early beginnings in 1900, waterfront development in James Bay has had an architectural character typified by long narrow "boatshed" shaped buildings built out over the water. They were 1 - 2 storeys in height, had pitched roofs with predominantly gabled ends and usually had a piered walkway attached.

Construction was wood framing supported on wood piles which created a strong vertical rhythm along the water edge.

Common also were raft platforms accessed by ramps which allowed for the tidal movement.

Project Theme

Historical references to boatshed buildings are created in this scheme by the perpendicular arrangement of buildings along the waterfront, of similar scale and form to their predecessors.

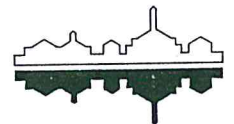
EXISTING CONTEXT

The existing site is a paved parking lot accessed by ramps at North and South ends. Portable trailer building structures are awkwardly laid out along the seawall and provide limited facilities for the Victoria Clipper, B.C. Air and Customs.

A curvilinear rock faced seawall forms the water edge. Some bench seating is provided.

Planting areas and planters exist at the South section of the site.

The Ship's Point pier accommodates docking facilities for fishing vessels and the Sail and Life Training Association's tall ships, the "Robertson II" and "Spirit of Chemainus".



ARCHITECTURAL EXPRESSION

The building style can be termed "classical industrial", "classical" in the reference to basic elements of column, entablature and pediment, and "industrial" in the exposure of structural elements (steel roof trusses) and the choice of industrial materials (standing seam metal roofing).

The rigid structural frame system consists of concrete columns and pilasters supporting continuous header beams (entablature), which in turn support the gabled roof (pediment). This straightforward expression of structure has its early beginnings in Greek architecture.

Facades along the street are generally infilled glazed panels to provide a storefront quality to the street. Gable ends of roofs are also glazed to allow harbour views to be glimpsed through the roof spaces which are level with Wharf St.

Visual complexity and texture is created by the waterfront facades out of plane with each other, and by the use of pilasters and columns framing recesses, providing visual and physical penetrations.

The two storey columns framing the waterfront elevation at the maritime museum play a dual role: to frame a stairwell for the exterior stairs, and with the cornice treatment, to add a hint of institutional dignity appropriate to a museum.

The continuous fascia beam is the horizontal ordering element for all buildings. It is set at a constant height above the street interrupted only at feature window panels on the museum and terminal building.

FEATURE ELEMENTS

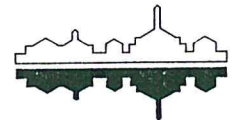
The predominant landmark feature is the lighthouse tower which has two roles. It is a beacon for incoming marine traffic, its scale increased by the ascending arrangement of concrete frames forming its base. It is also a climbable tower and lookout for visitors to appreciate the harbour's panoramic views.

The colonnaded entrance at Wharf St. is a transplant of various key elements from the main building and has a dual role; as a symbolic entrance with vehicle drop-off and sign tower, it effectively brings the exhibit hall closer to Wharf St.; as a screen it also frames the outdoor exhibit area. The sign tower resembles the lighthouse and is aligned on the main building axis. The long approach over the bridge to the main hall creates anticipation and heightens the sense of arrival.

The elevator pavilion provides vertical access to the buildings and the parkade below, and serves as an information booth or coordinating centre for plaza activities and exhibits. Its cupola is historically reminiscent of the historical James Bay Athletic Association Building (refer historical photographs).

WATER EDGE

The east faces of the waterfront building are aligned to respect the street. The west side, in contrast, is intentionally a ragged edge with water filled gaps, a ramped walkway and boathouse slip, that help dissolve the land edge, thus reinforcing historic precedent of edge as a dynamic transition of maritime industrial load/unload activity.



SITE ORGANIZATION

An internal street provides the major axis and ordering element for the site (the street is aligned, with the central axis of the Legislature buildings across James Bay).

The only deviation from the orthogonal layout is the S.E. building. It is hinged at the elevator and rotates away from the other buildings to align parallel to the strong element, the Ship's Point pier.

The street axis is intersected by a secondary E-W axis which connects the Maritime Museum elements together. The upper bridge on this axis allows Wharf Street to extend in the form of a promontory overlooking the waterfront and emphasizes the approach to the museum's main entrance.

The site has three levels; Wharf St. level, Main level, and Seawalk level. The Wharf St. level has only one major building, a retail "open air" Marketplace, which aligns with the adjacent Malahat building and ties the development to Wharf St. The colonnaded gateway at Wharf St. is the main entrance to the Museum and site. The remaining open plaza, containing lawn areas, flower gardens and a water feature, provides general view points of the site and harbour.

The intermediate "main" level provides the main entrance to the passenger terminal and access to the Maritime Museum Programs and Administration building, the Maritime Museum Club, and the lower level of the Marketplace. Small retail components are spaced along the east sidewalk, which leads to a curved plaza area that overviews and frames the grassed amphitheatre below. Along the west sidewalk, one can overview boatbuilding in the boathouse, preview museum exhibits in the glassed display windows of the main exhibit hall, and catch glimpses of waterfront activity between the buildings.

The seawalk is a continuous extension of the James Bay causeway, bypassing the amphitheatre and the buildings along the waterfront to connect to the walkway on the north site.

The lower "seawalk" level accommodates maritime museum workshops, service access to the main exhibit hall, the pub restaurant, the customs component of the passenger terminal, and parking.

The main passenger terminal pier and the airplane jetty configuration together with the ships point pier enclose a mini harbour containing docking facilities for boaters and a water taxi service. Expansion of the Victoria Clipper operation is possible by adding a second docking pier to the North.

MASSING / SCALE

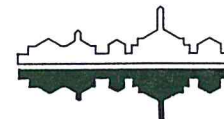
A community of smaller scale buildings, as opposed to one or two larger buildings will lend itself to a more intricate network of circulation. The spaces created between buildings will not only allow harbour glimpses but will appeal to the pedestrian's sense of intrigue and adventure.

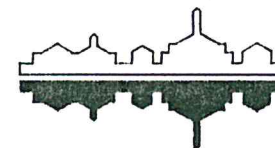
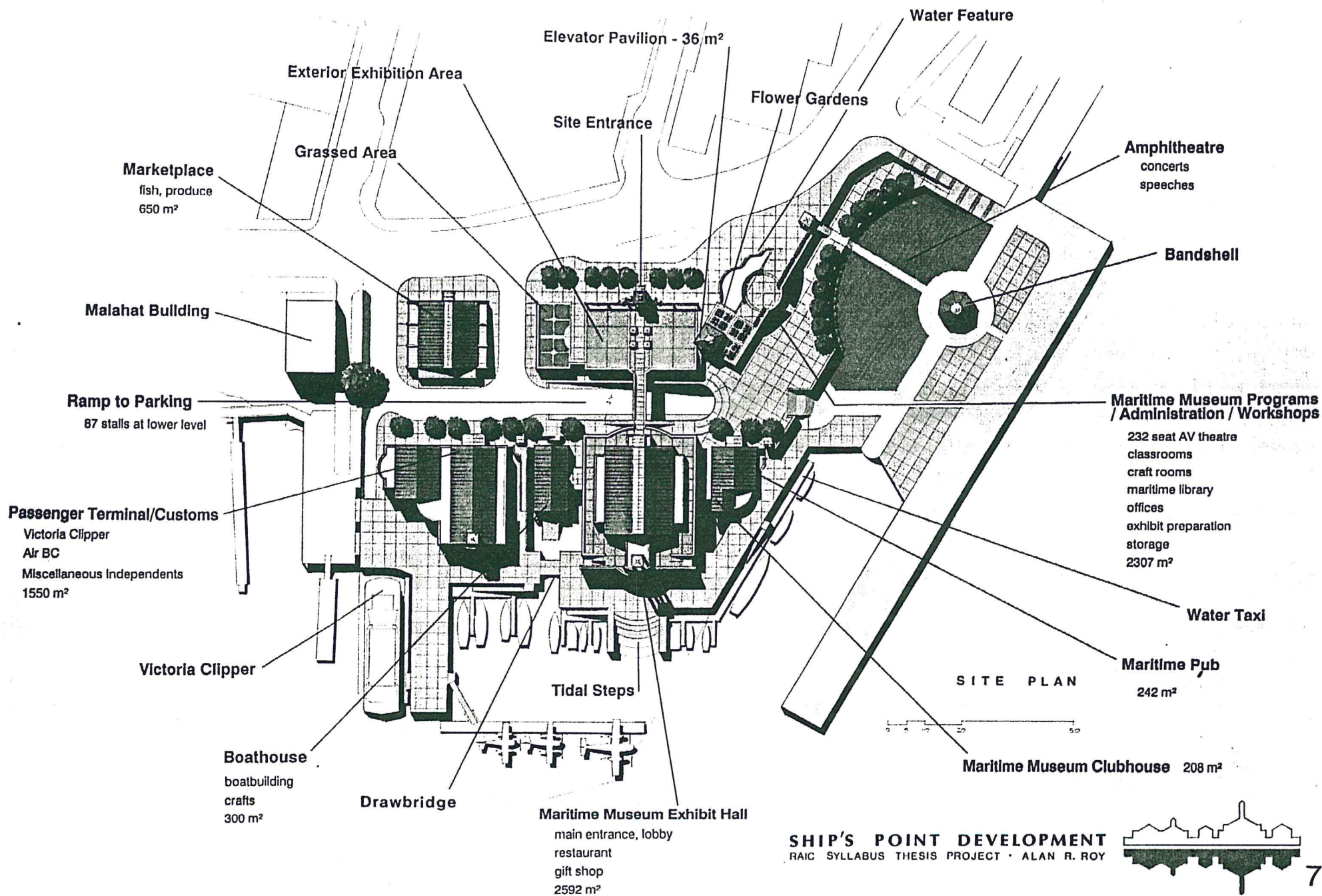
The majority of development is below Wharf St. level to minimize building impact on the site in agreement with the proposed zoning regulations. Exceptions are the Museum Restaurant/Gift shop and the Marketplace.

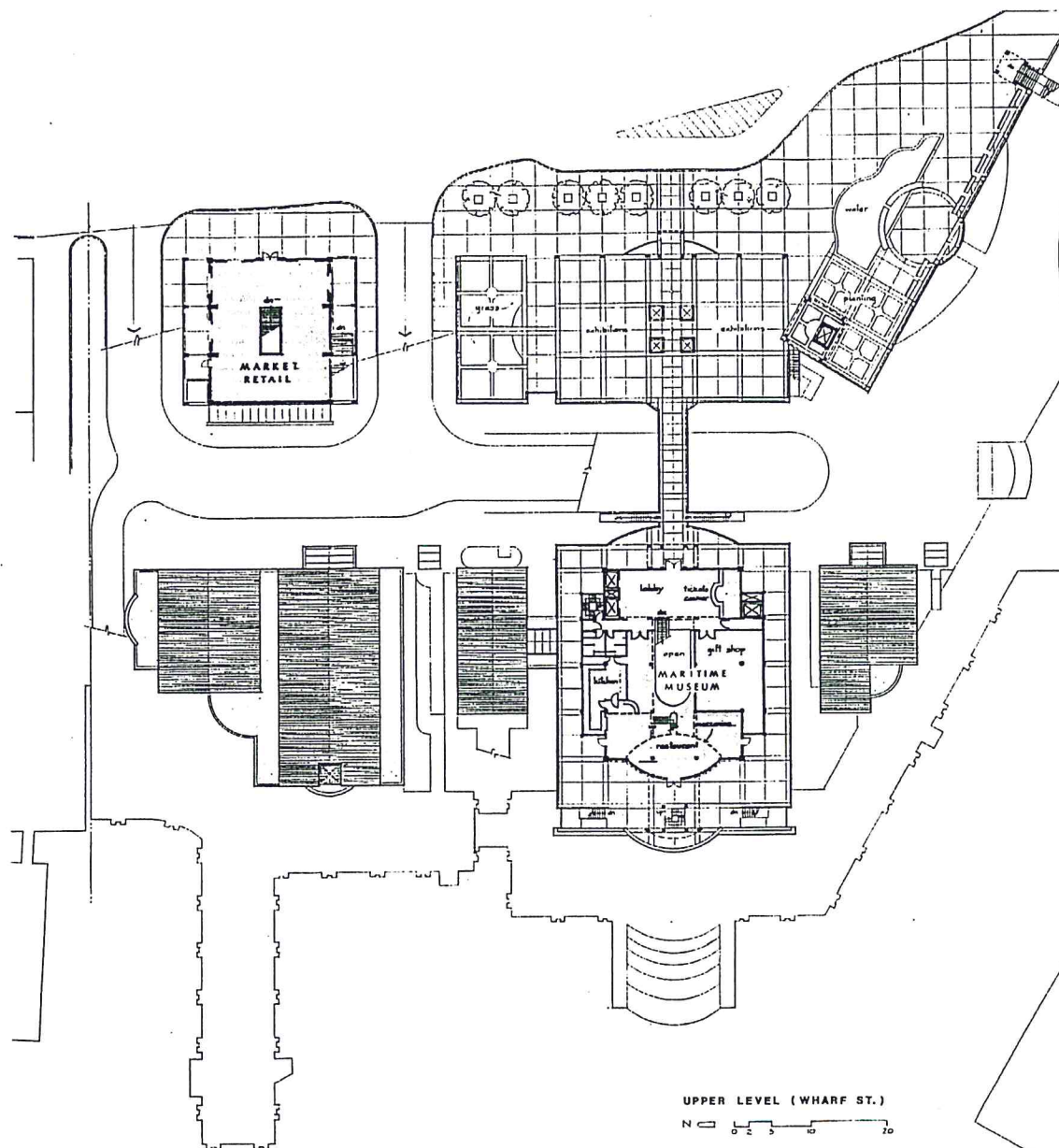
The roof of the terminal building is composed of two smaller pitched roofs rather than one large one to reduce the scale and allow harbour views from the East.

Buildings along the internal street, at 1 storey in height, are scaled to pedestrians. On the waterfront side they are 2 storeys above the water with full height columns and pilasters to increase the scale for viewing from distant harbour approaches.

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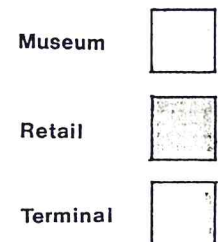


PROGRAM

Maritime Museum	- 50,000 ft. ²	4647 m ²
Passenger Terminal/Customs Bldg.	- 20,000 ft. ²	1860 m ²
Market Retail	- 7,000 ft. ²	650 m ²
Pub/Restaurant	- 2,600 ft. ²	244 m ²

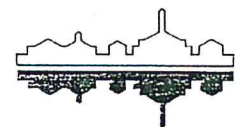
Total 79,600 ft.², 7400 m²

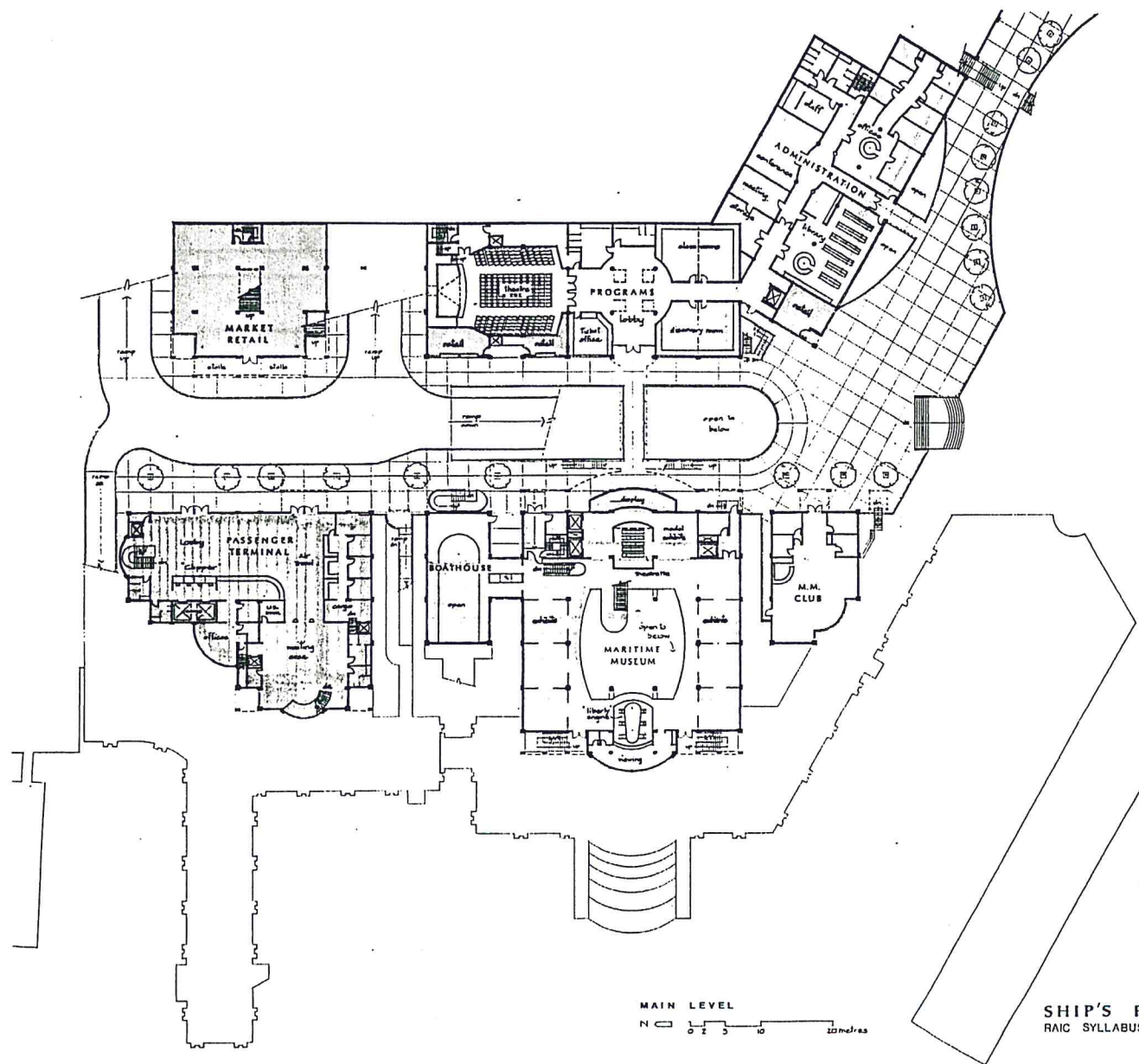
Parking 87 stalls
Amphitheatre w/bandshell



UPPER LEVEL (WHARF STREET)

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MARITIME MUSEUM

For the reasons previously described and because of differing functions and access requirements, the Maritime Museum is proposed as a community of smaller linked buildings.

Main Exhibit Hall

Two floors of exhibits with a boatshed as an adjunct to the main hall, gift shop, a harbour view restaurant and terrace, and a climbable lighthouse tower. This building would be the main ticketed tourist attraction.

Programs / Administration

232 seat theatre, classrooms and craftrooms for both day and evening use by local groups, maritime library and museum offices. The separate entrance and lobby allows for flexibility of use of the AV theatre, the classrooms, and the library. Separate private access to the administration area is achieved through the elevator pavilion or via the bridged access at the main level plaza.

Workshops / Storage

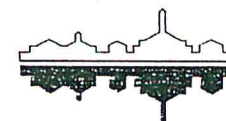
Linked to the Administration offices above by elevator and stairs. Goods and material transportation between workshops and main exhibit hall is facilitated by locating loading doors directly opposite each other.

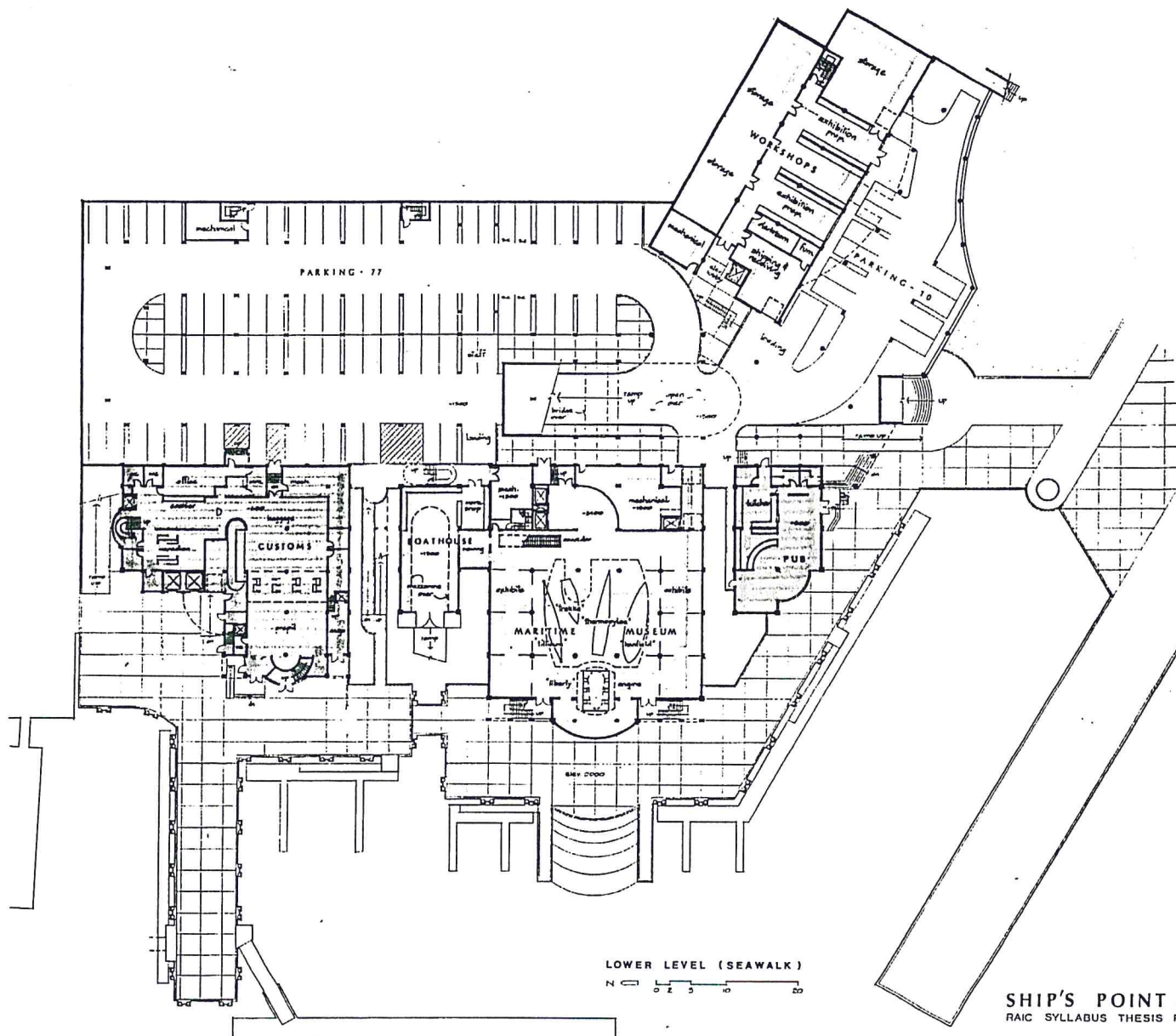
Social

The Maritime Museum Club is accommodated in its own "clubhouse" building at the upper level, with separate access. Between Club uses, the space could generate public rental revenue from meetings, conferences, parties, etc. The lower level is proposed as a maritime pub/restaurant with outdoor seating and functions as a lively destination for boaters.

MAIN LEVEL

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STRUCTURE & MATERIALS

Floor Construction

6" reinforced concrete slab on concrete columns at suspended slabs generally, except Maritime Pub Bldg. and Terminal Bldg., which is 5" concrete/metal deck on steel joists, 6" reinforced concrete slab on grade at lower levels.

Foundations

Geotechnical report from Thurber Consultants recommend founding on existing bedrock which ranges from .9 to 24.5 m where shallow, excavate foundations to bedrock. Where bedrock is at a greater depth, provide grade beam on steel driven piles.

Walls

Structural frame of acrylic finished reinforced concrete header beams and columns /pilasters. Glazed infill panels of tinted heat absorbing double glazing in thermally broken aluminum frames. Solid infill panels of acrylic finished cement board, 6" steel stud framing, R20 batt insulation vapour barrier, and gypsum wall board painted.

Roofs

Pitched roofs of blue standing seam metal decking, 10" channel purlins, R33 batt insulation, metal decking (painted) fabricated steel trusses at 6 m o/c with intermediate wide flange beam bracing. Roofdecks of paving stones on sand bed, rubber membrane roofing, 6" reinforced concrete slab sloped to drain, 4" rigid insulation in 2-bar furring at underside of slab. Flat roof construction at terminal building of concrete paver ballast on 220 inverted roof system on concrete roof slab sloped to drain.

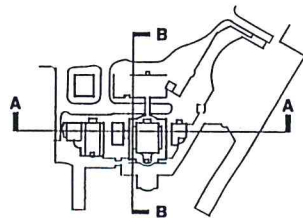
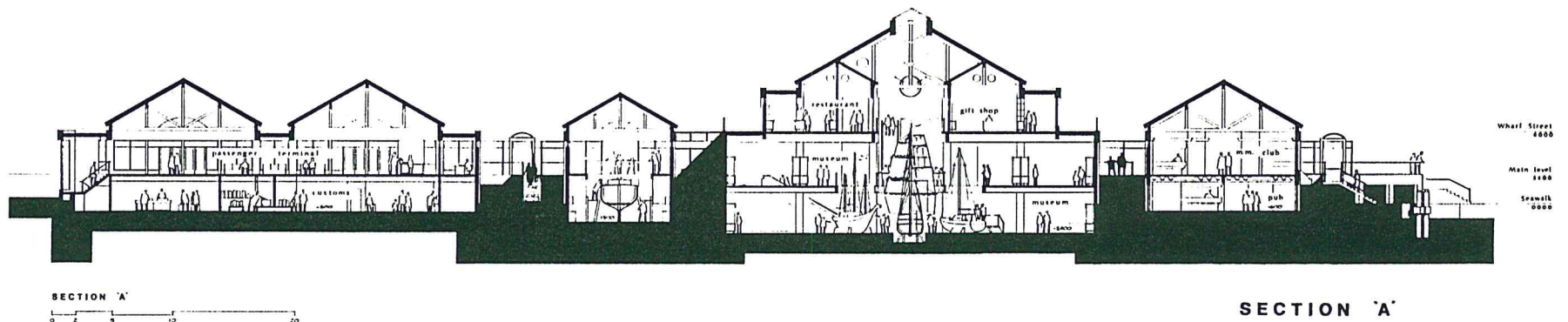
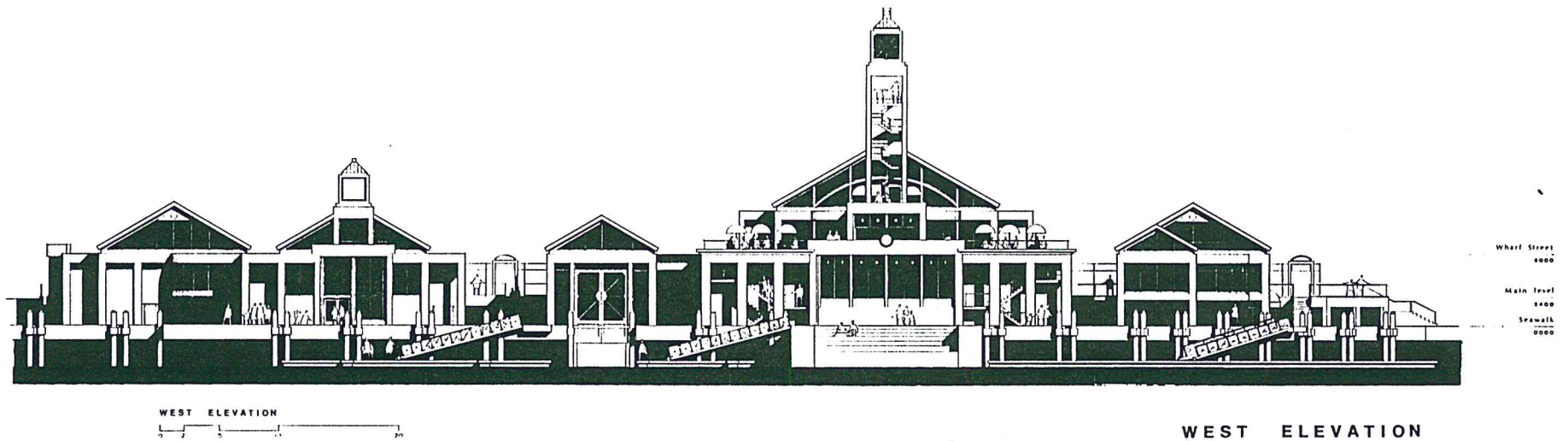
Seawalk

6" reinforced concrete slab suspended over water supported by a concrete beam and corbelled twin concrete post system at approximately 8 m o/c. Finishes at seawalk and plazas are exposed aggregate concrete finish with plain concrete finish and tile borders.

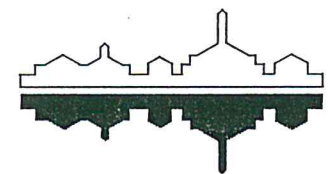
SEAWALK LEVEL

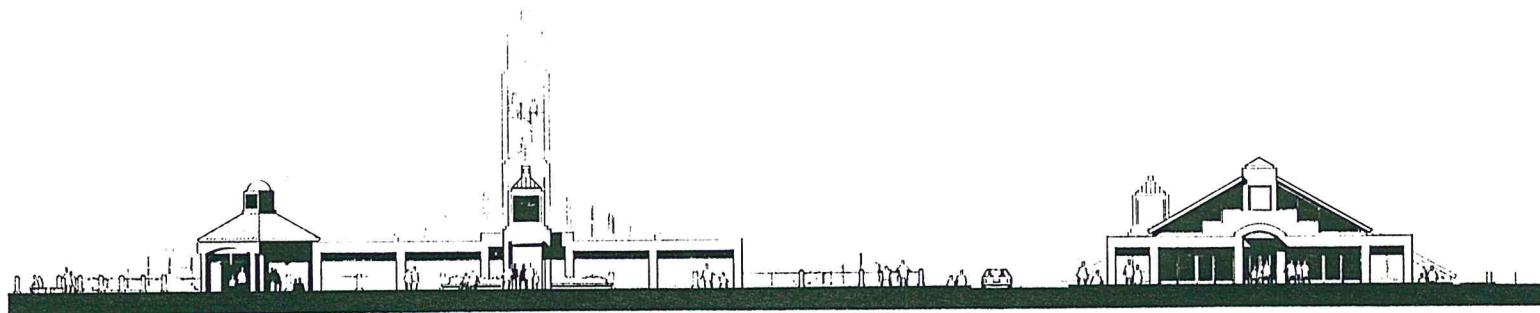
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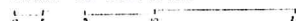


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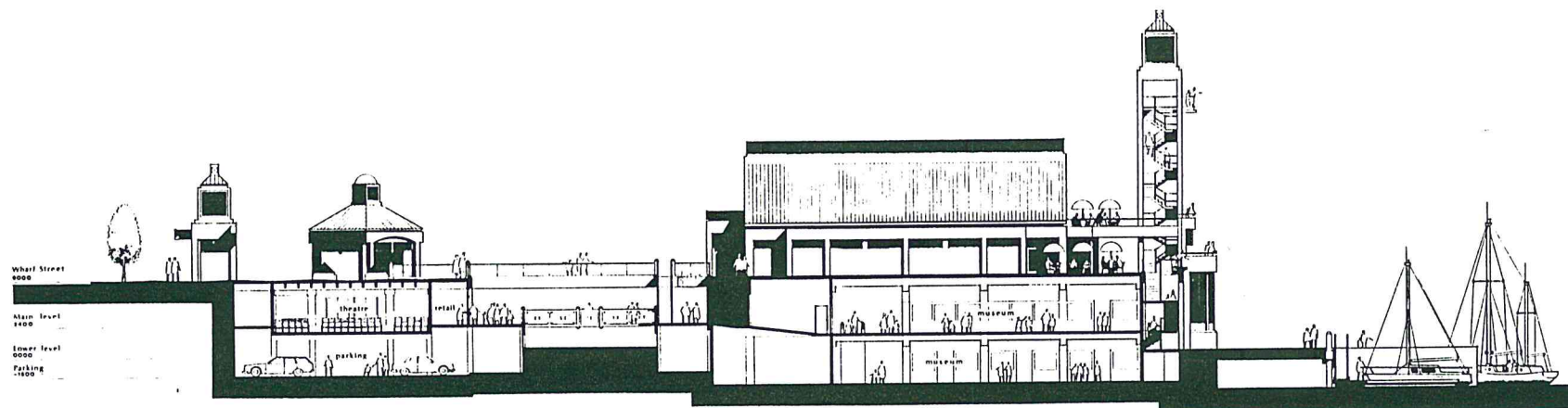




WHARF ST. ELEVATION

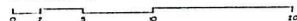


WHARF ST. ELEVATION

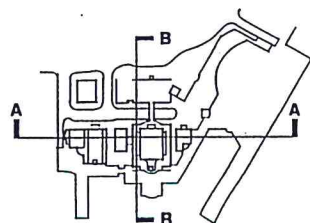


Wharf Street
+000
Main level
+100
Lower level
-100
Parking
-120

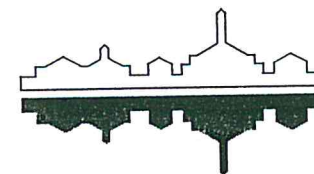
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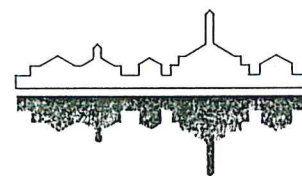
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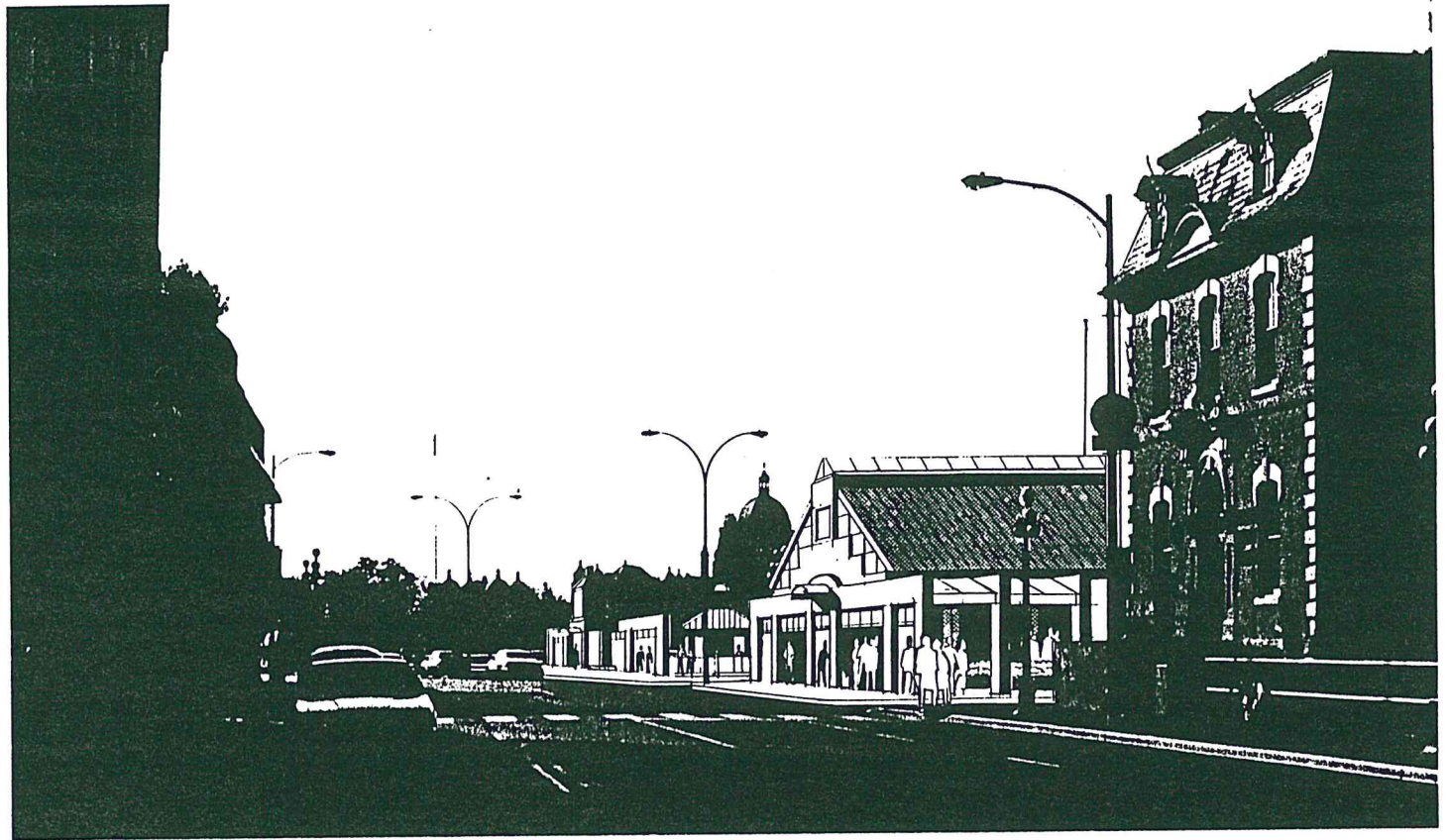




Harbour View of Site

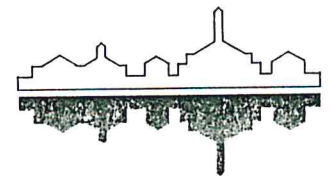
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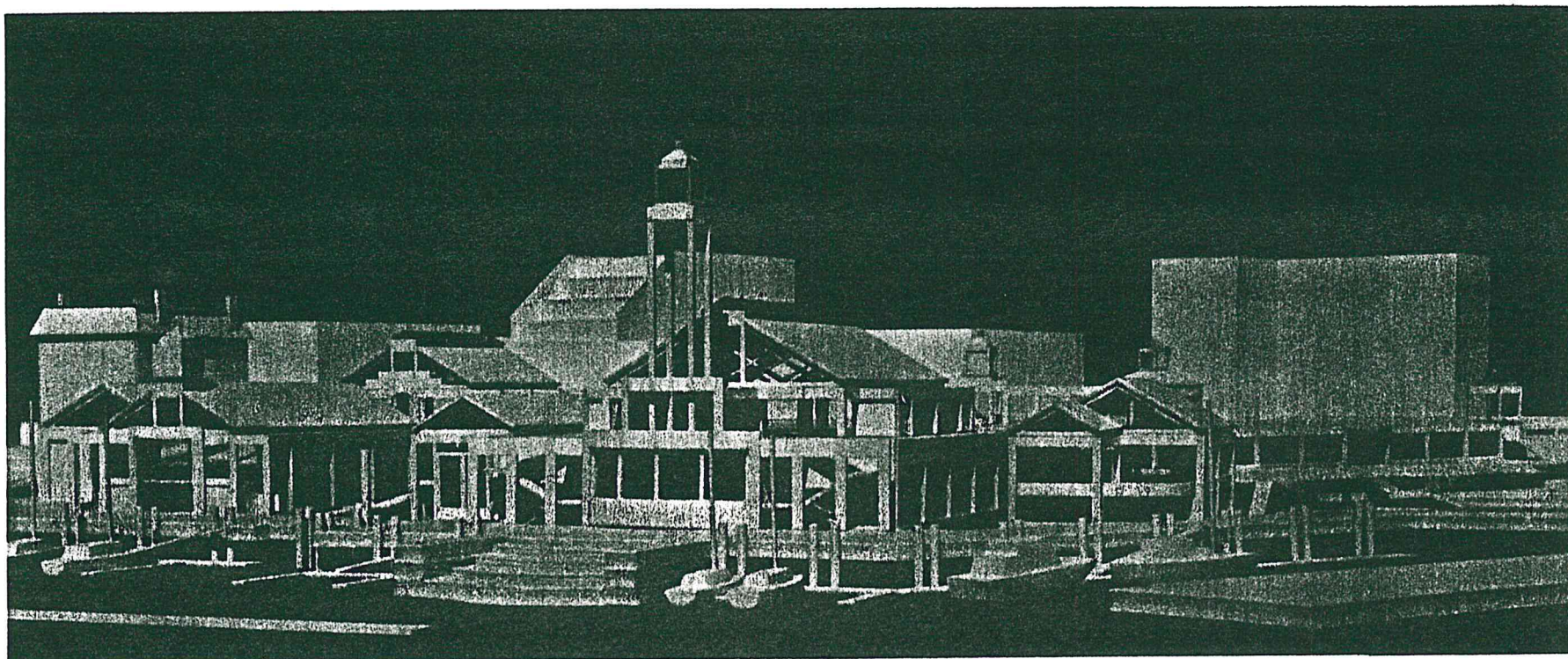




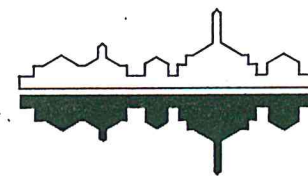
South View along Wharf Street

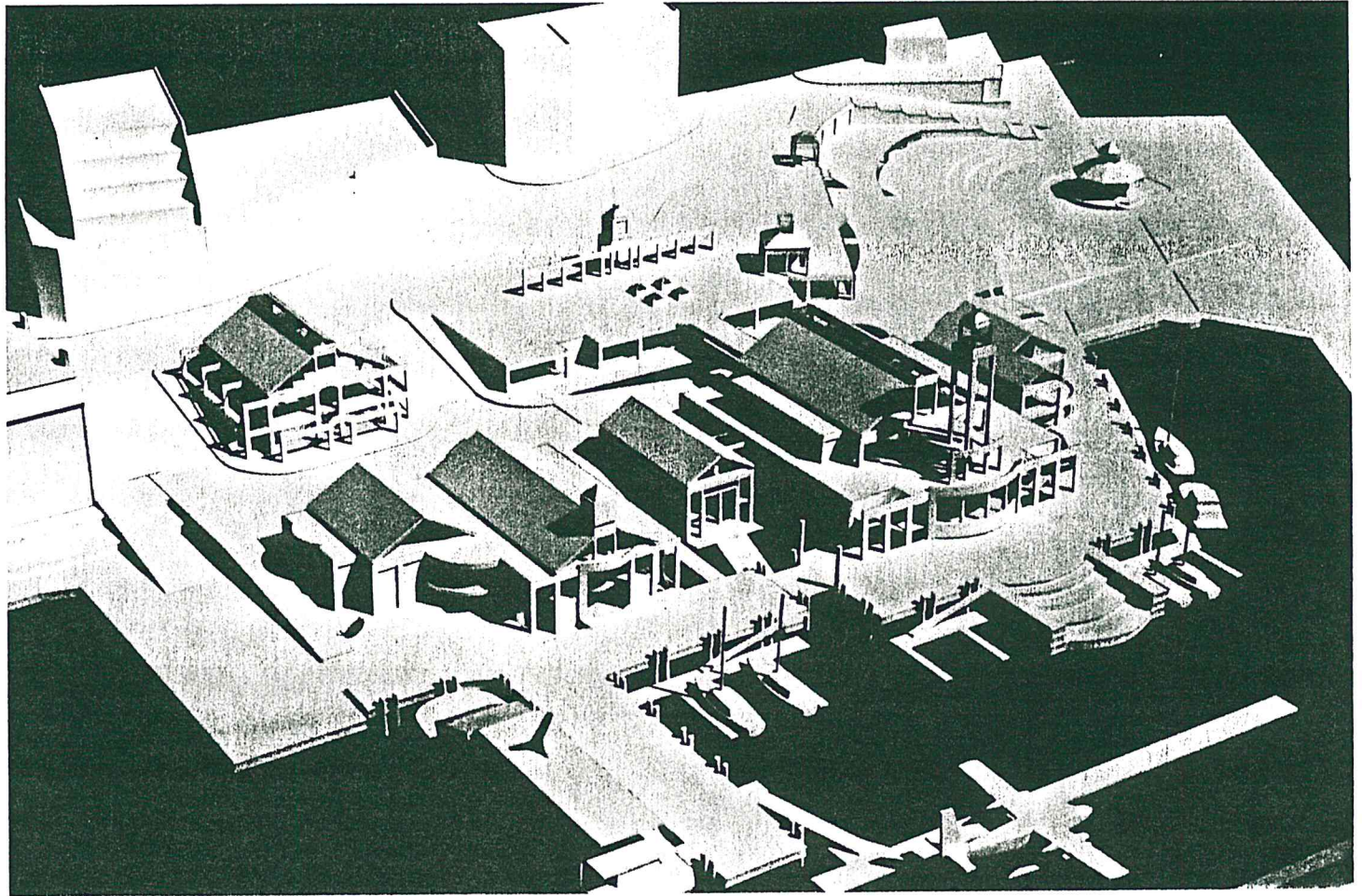
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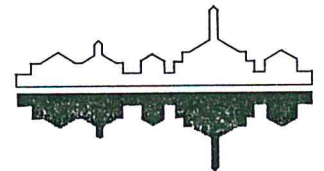


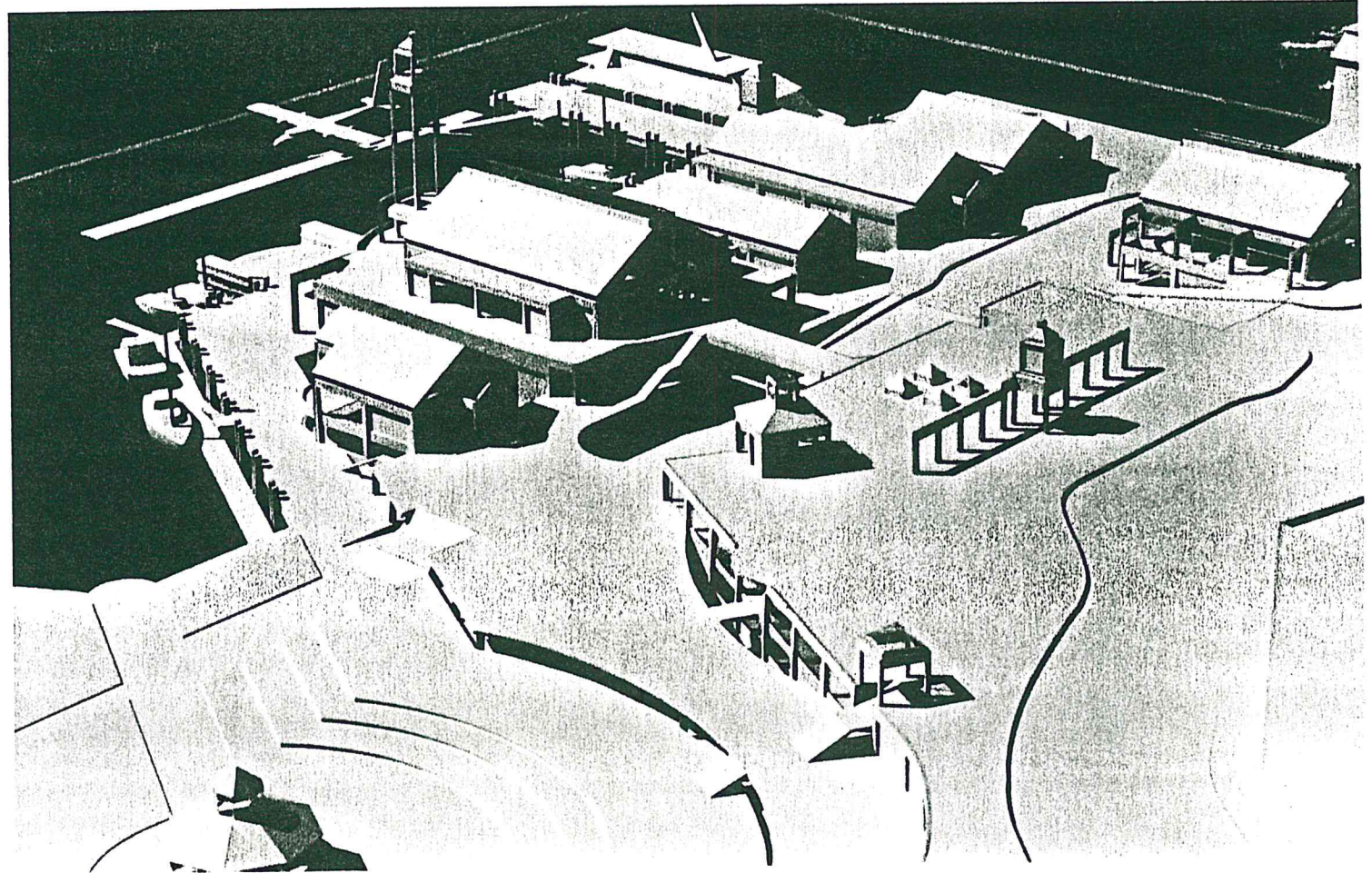
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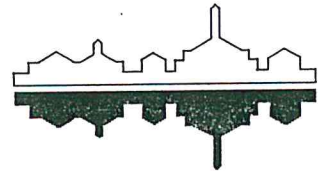


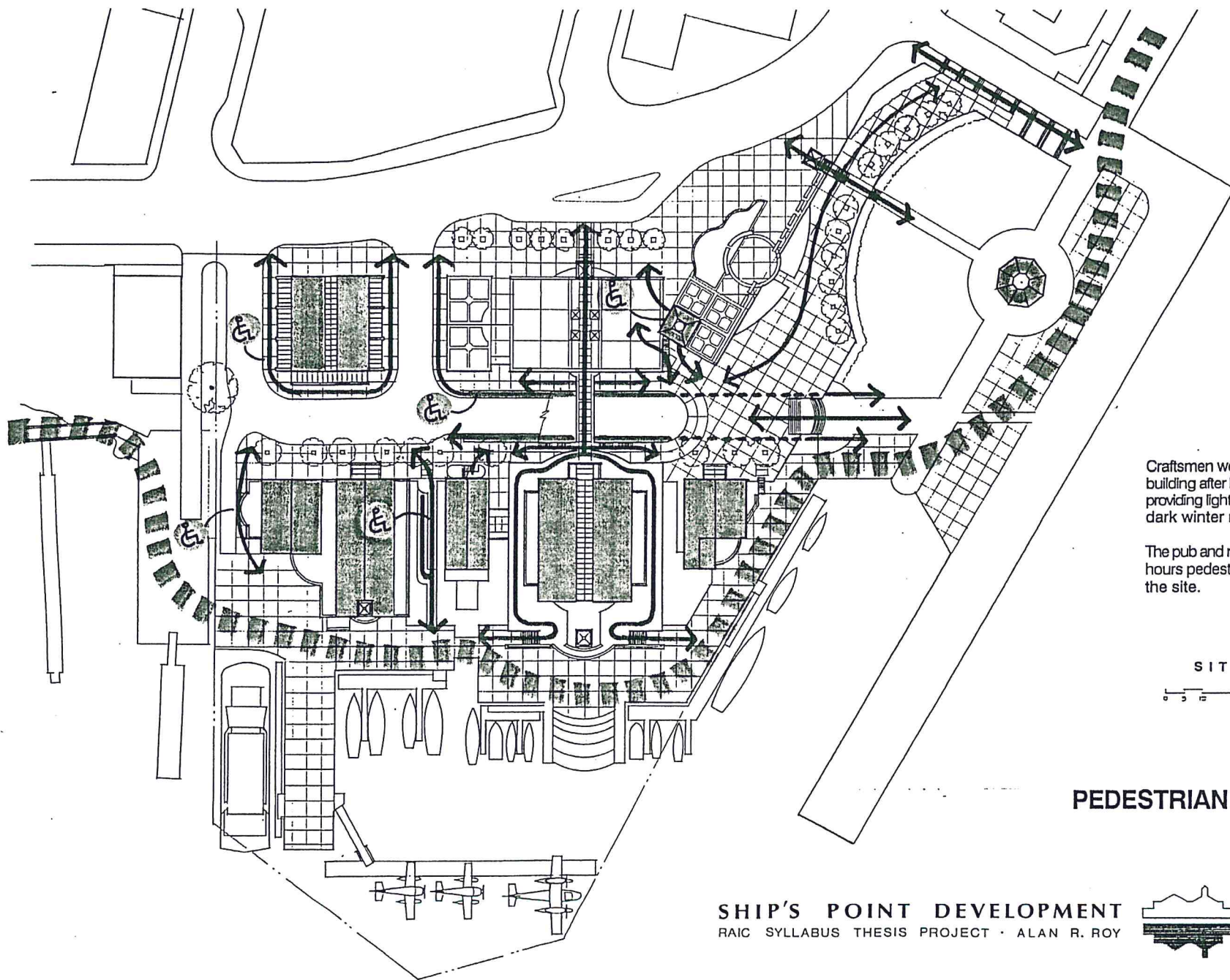
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Craftsmen would likely continue boat building after hours in the "boathouse", providing light and life to the site during dark winter months.

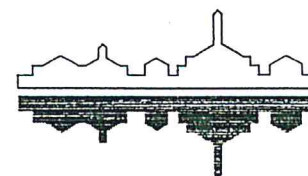
The pub and restaurant promotes after hours pedestrian circulation through the site.

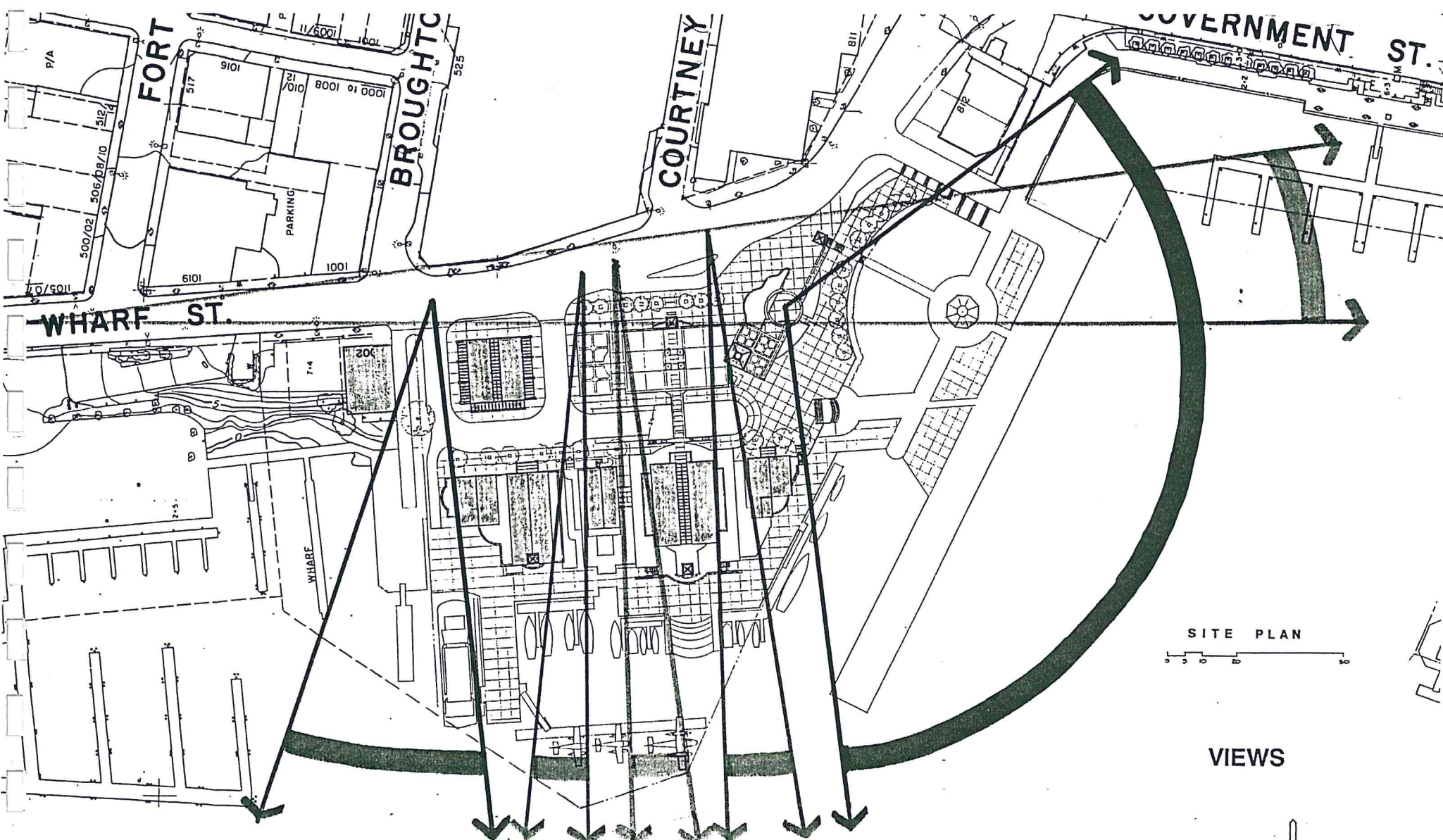
SITE PLAN



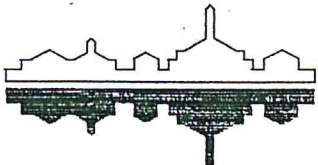
PEDESTRIAN CIRCULATION

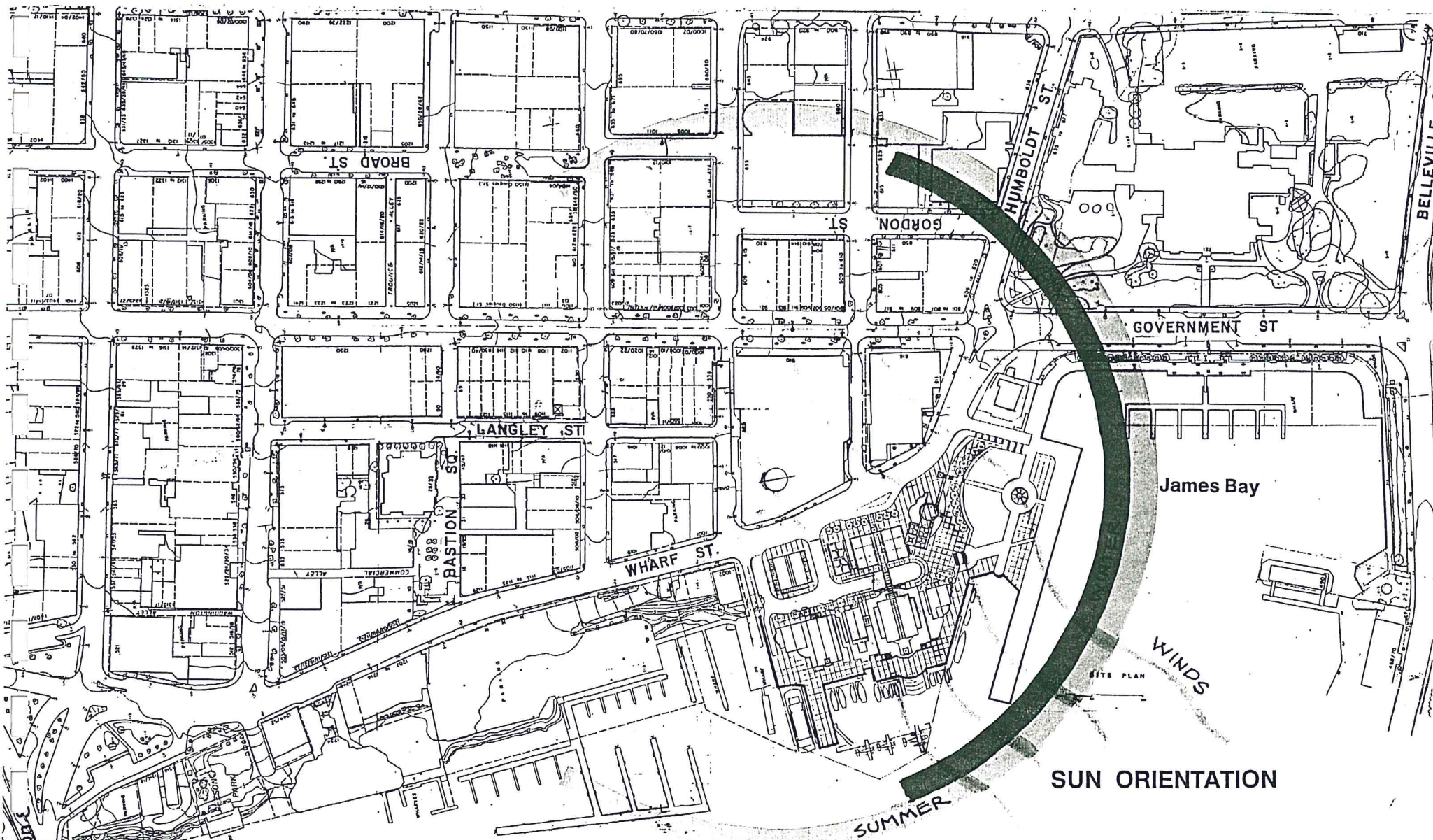
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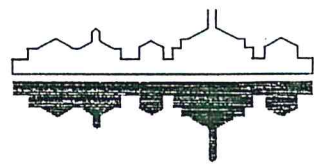


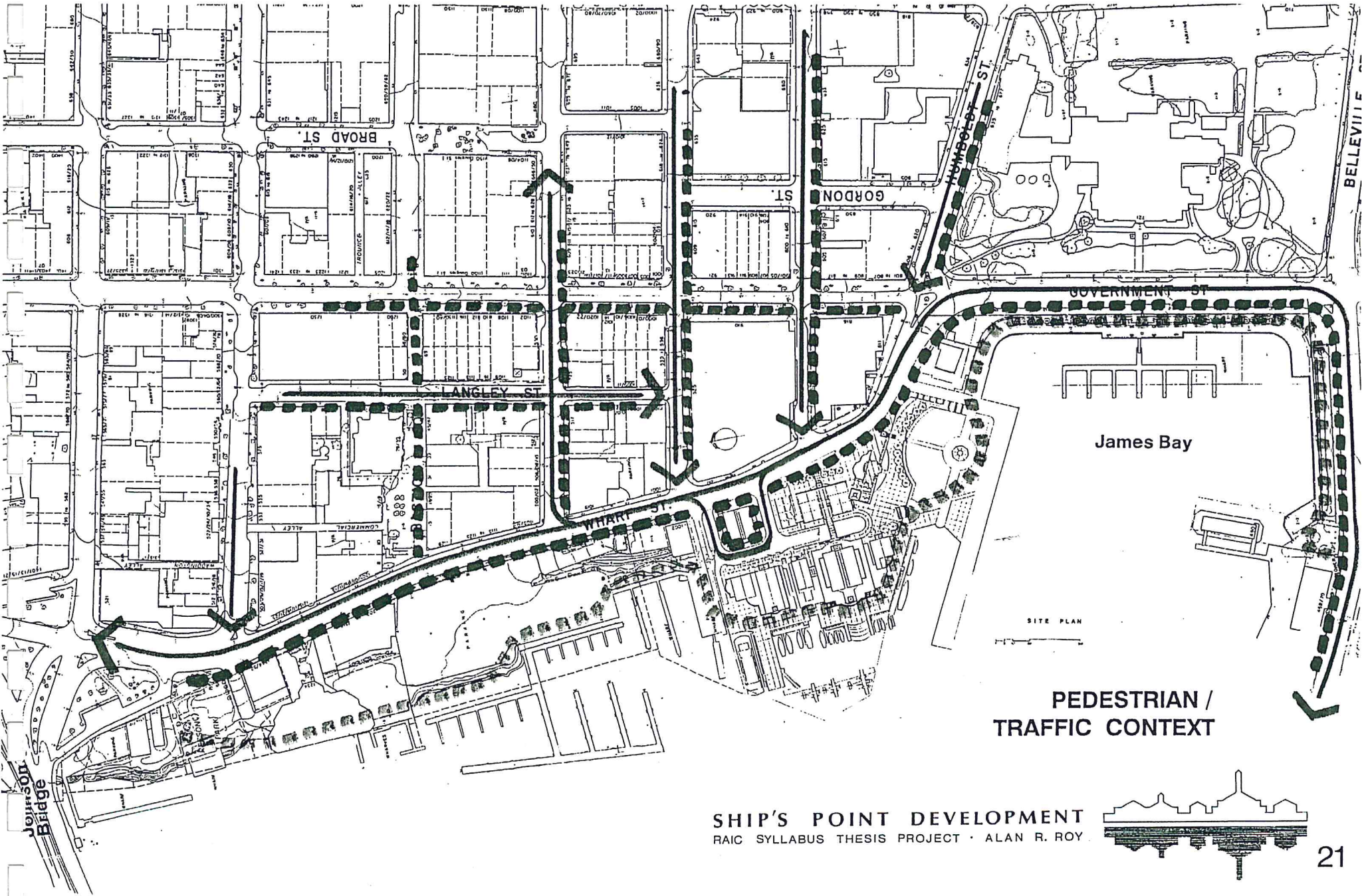
SHIP'S POINT DEVELOPMENT
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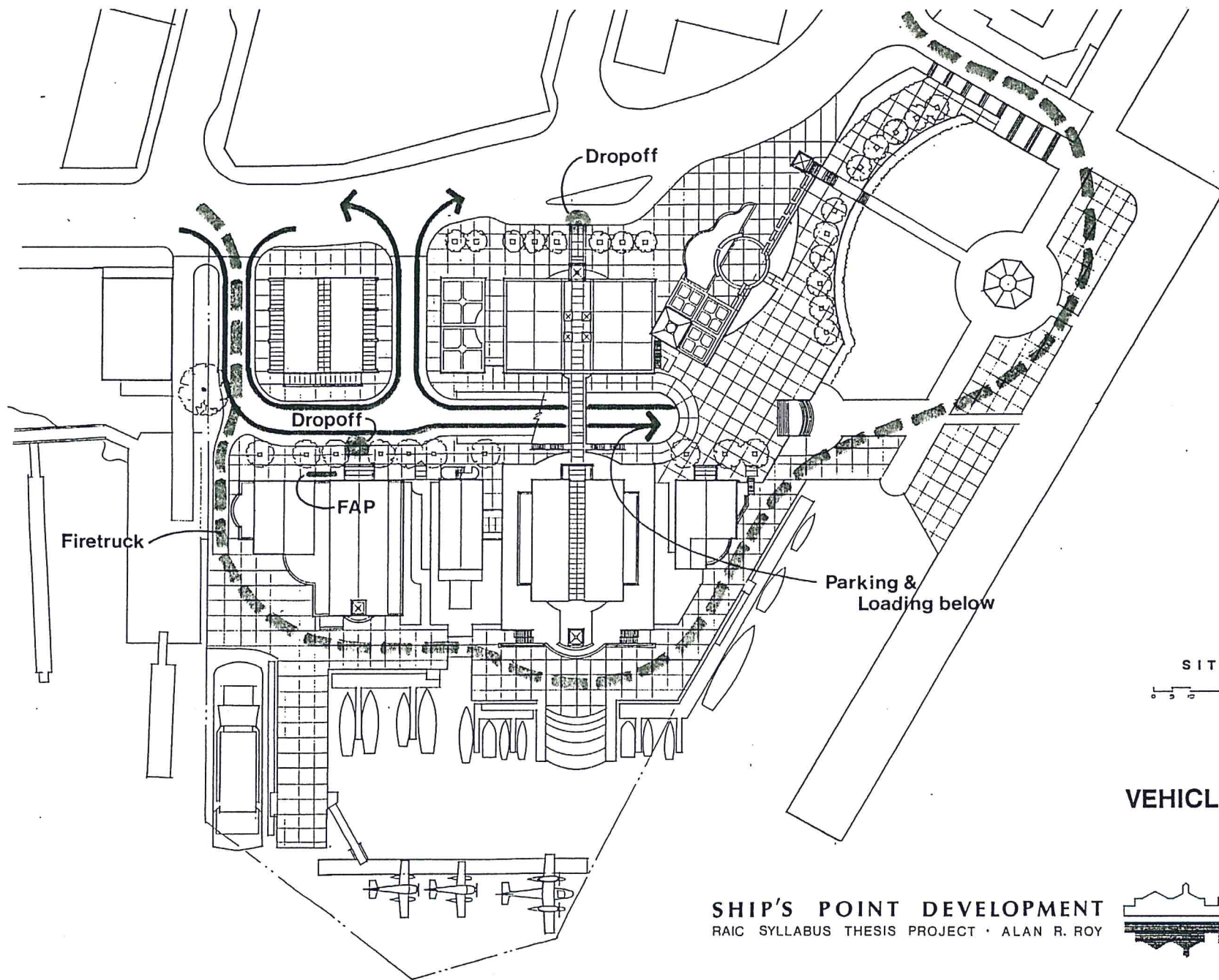
SHIP'S POINT DEVELOPMENT
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PEDESTRIAN /
TRAFFIC CONTEXT

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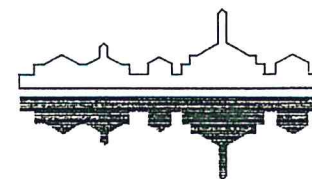


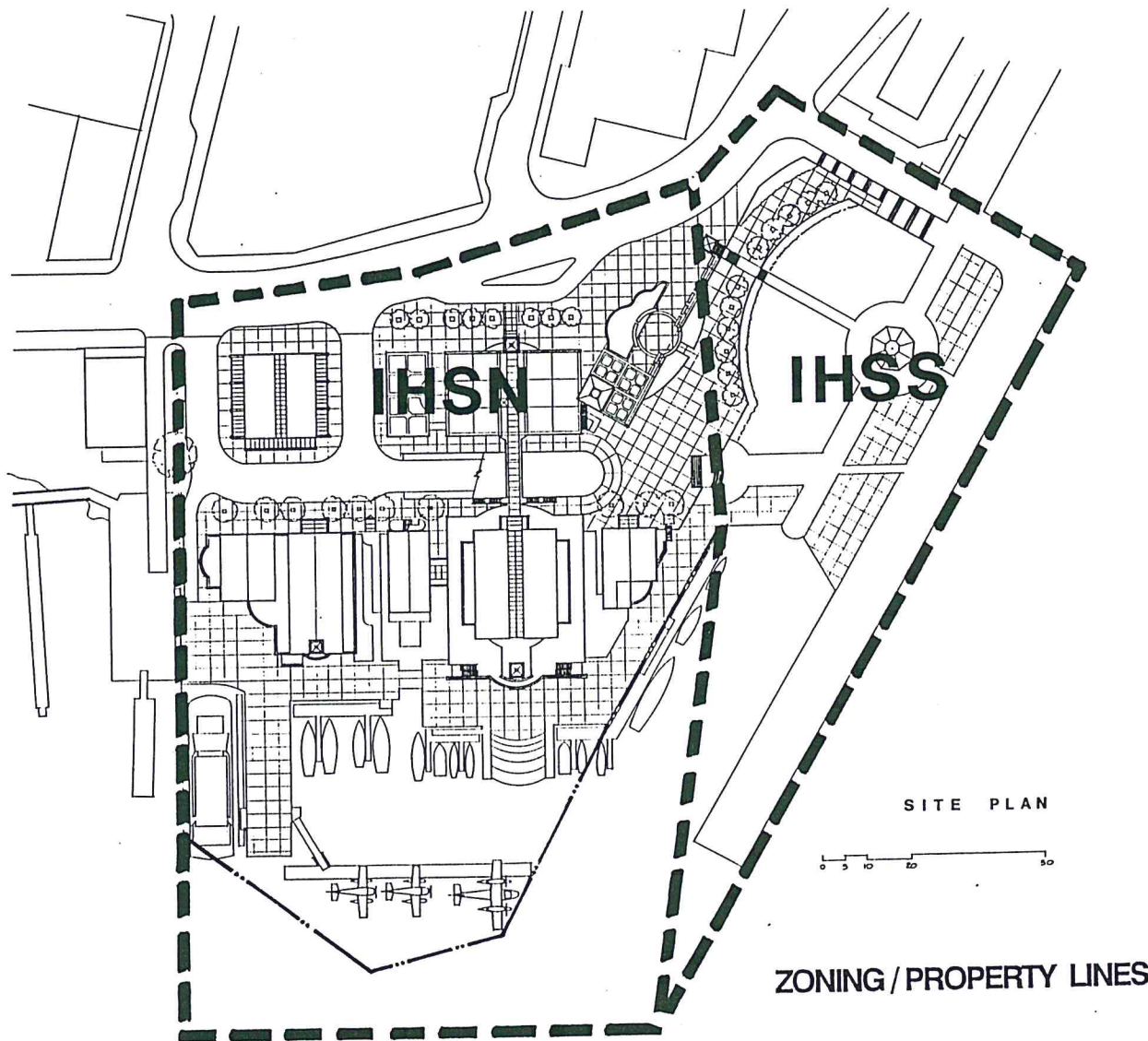
SITE PLAN

0 10 20 30 40 50

VEHICLE ACCESS

SHIP'S POINT DEVELOPMENT
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This proposal follows the proposed zoning of the City of Victoria 1989 Issues and Design Brief, which proposes amendments to the 1983 zoning.

Zoning (1983)

Inner Harbour Ship Point South District (IHSS) - no permanent structures.

Inner Harbour Ship Point North District (IHSN)

Permitted Uses:

- public markets
- offices and buildings serving tourists
- docks for pleasure boats
- docks for fishing boats
- docks for aircraft and ancillary offices
- exhibits
- parking
- parks

Density/Height/Setbacks

- Maximum FSR 0.8 to 1.0
- no building height above Wharf St.
- buildings setback a minimum 7.5 m from high water mark
- pedestrian access to roof decks.

Issues/Design Brief Proposed Zoning (1989)

Permitted Uses; add:

- museum
- retail shops
- restaurants
- licensed premises
- craft and artisan trades
- recreation facilities
- seaplane terminal and docking
- foot passenger ferry terminal and docking

Maximum Height:

Relax to permit limited development above Wharf St. by means of development permit rather than rezoning.

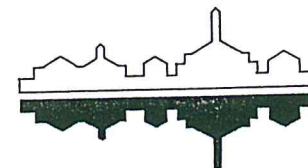
Setback:

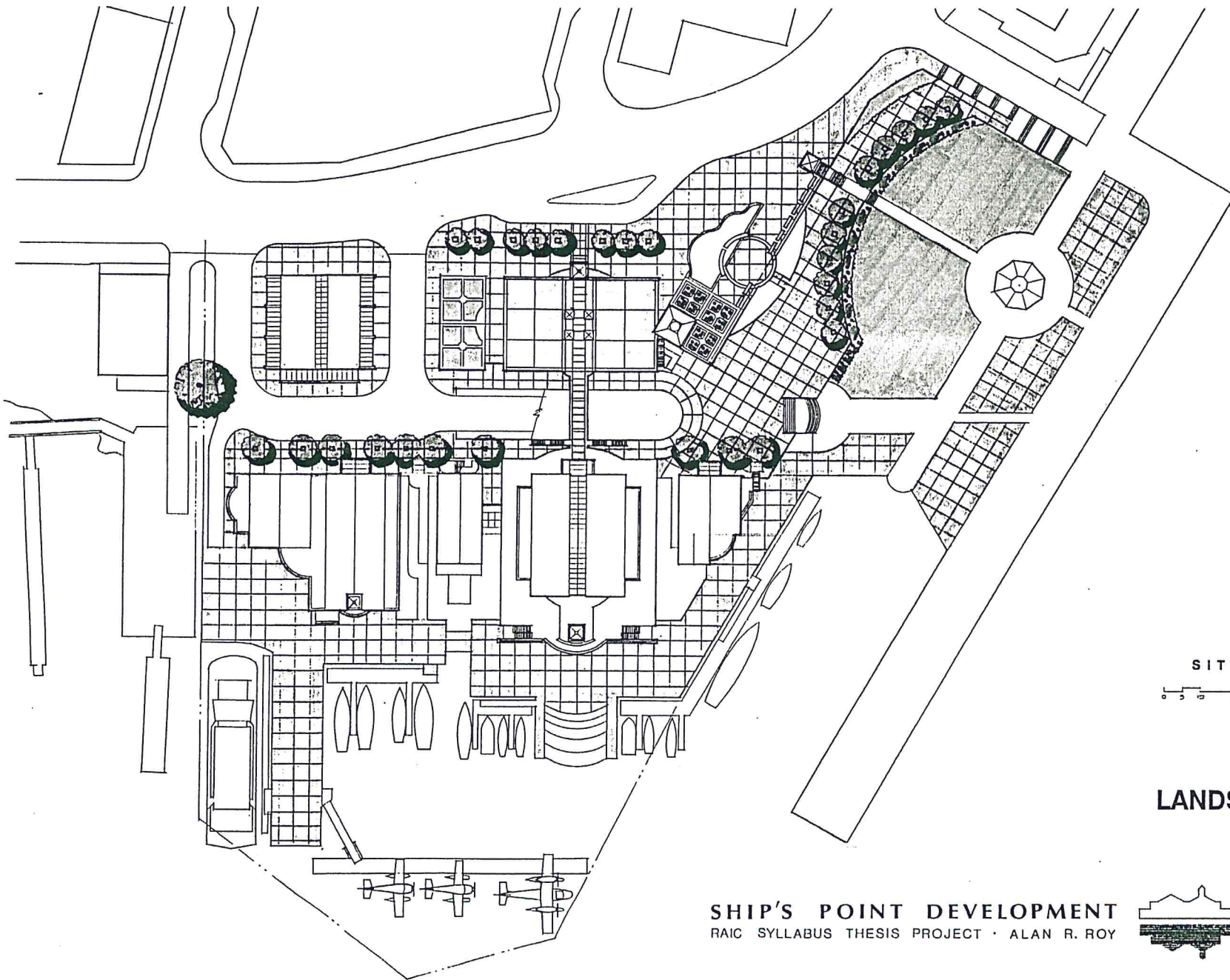
Relax subject to adequate flood protection and provision of continuous waterfront walkway.

Exclusion of above grade parking from density calculation.

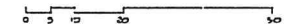
SHIP'S POINT DEVELOPMENT

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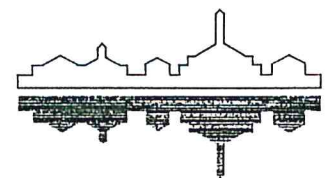




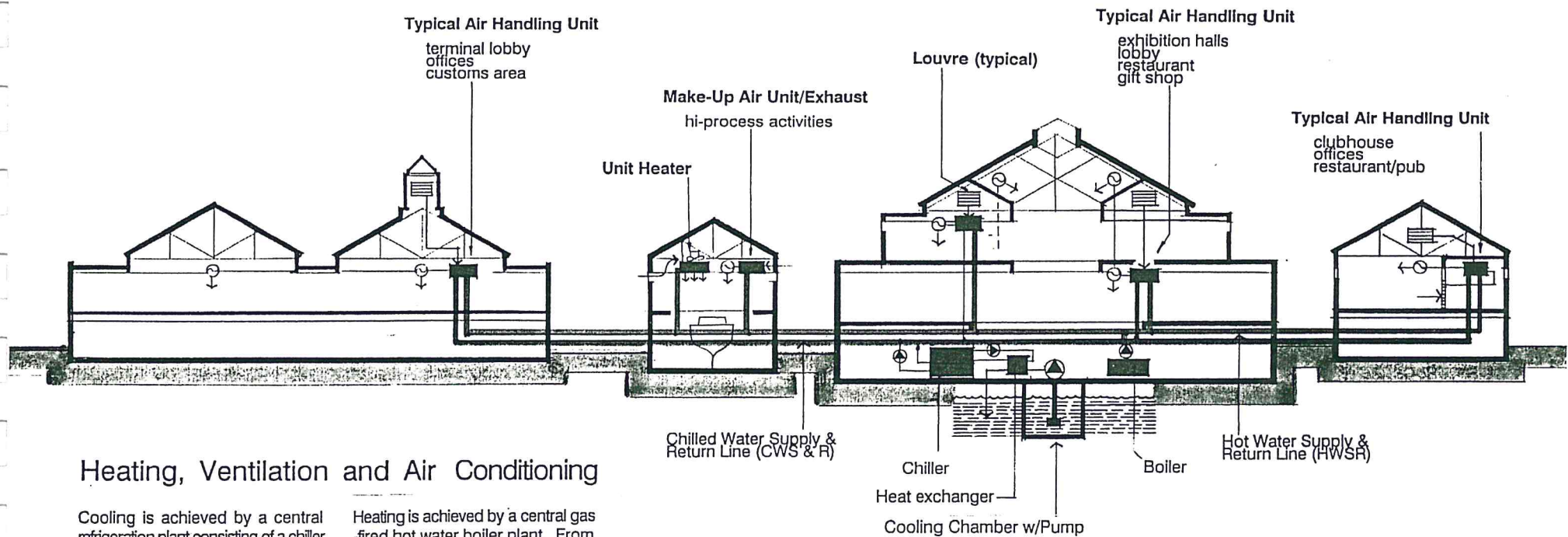
SITE PLAN



LANDSCAPING



SHIP'S POINT DEVELOPMENT
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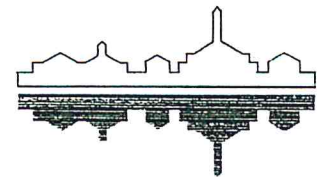
Heating, Ventilation and Air Conditioning

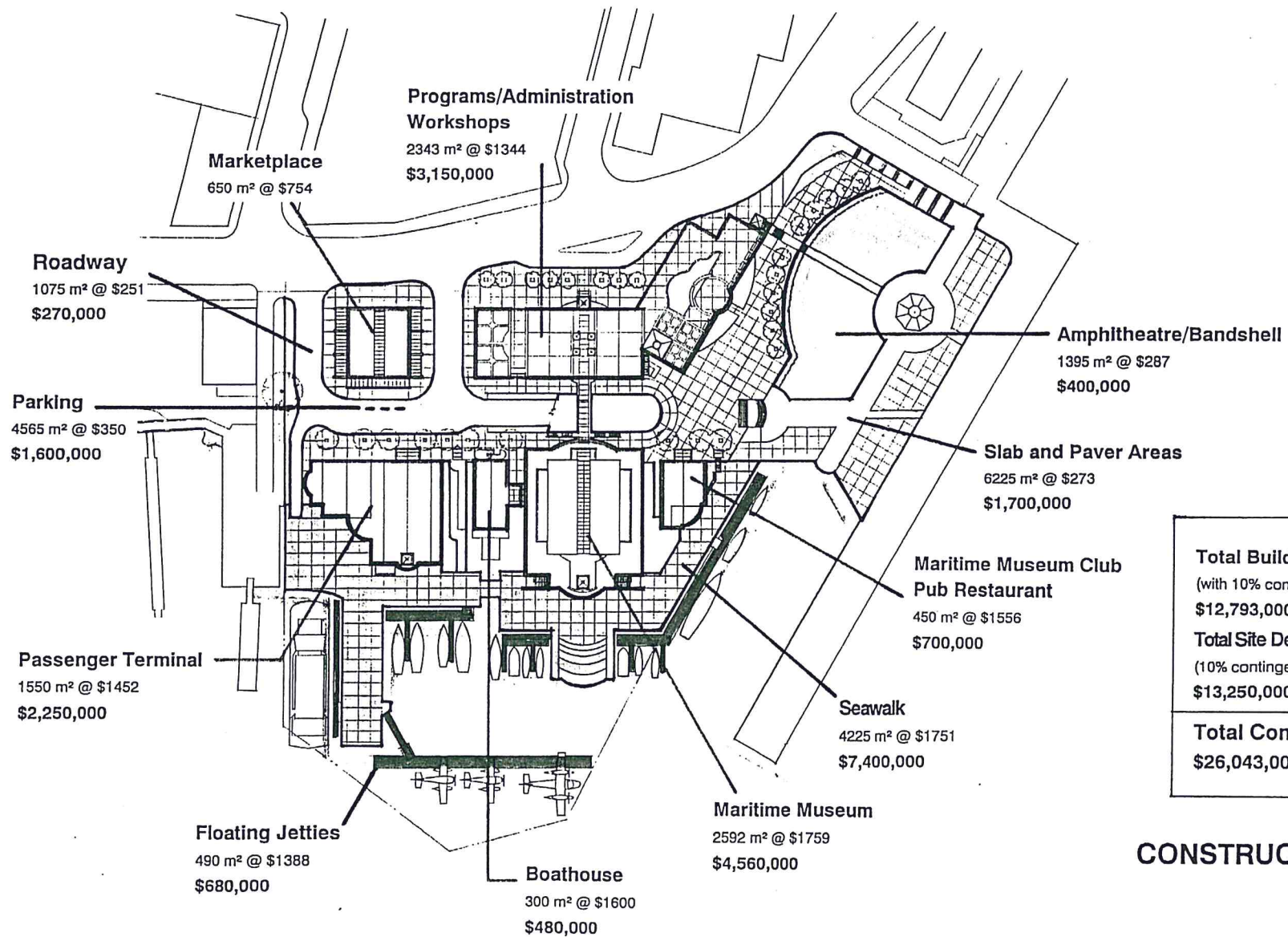
Cooling is achieved by a central refrigeration plant consisting of a chiller that rejects the heat to a salt water system through plate heat exchange. From this central plant chilled water is pumped to air handling units located in all buildings.

Heating is achieved by a central gas-fired hot water boiler plant. From this boiler, hot water is pumped to the air handling units located in all buildings.

MECHANICAL SYSTEMS

SHIP'S POINT DEVELOPMENT
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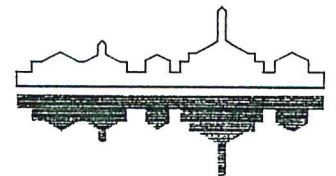
Total Building Costs
(with 10% contingency)
\$12,793,000

Total Site Development Costs
(10% contingency)
\$13,250,000

Total Construction Costs
\$26,043,000

CONSTRUCTION COSTS

SHIP'S POINT DEVELOPMENT
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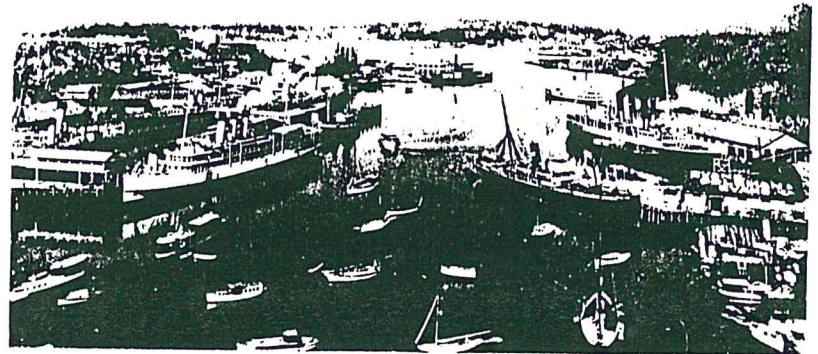




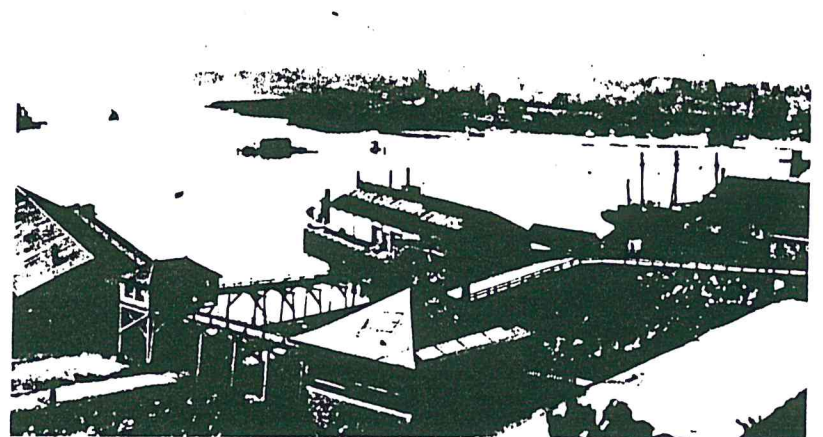
View from South - 1900



View from South - 1900

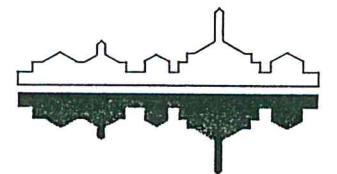


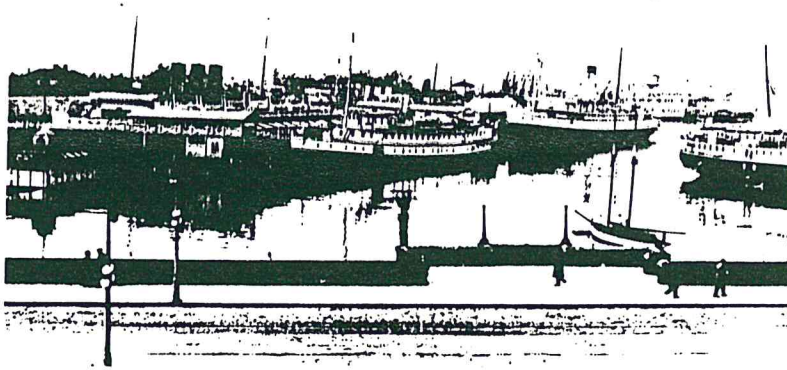
James Bay - 1912



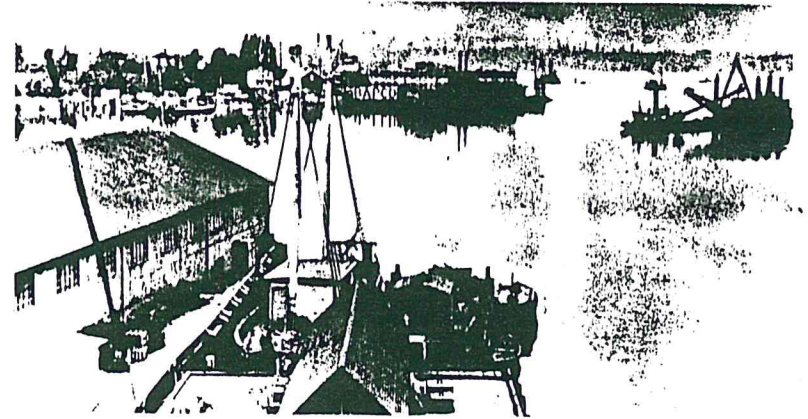
Site looking West - 1914

SHIP'S POINT DEVELOPMENT
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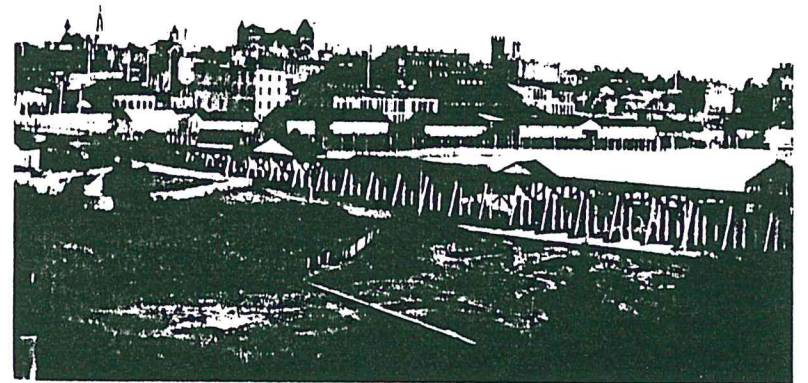




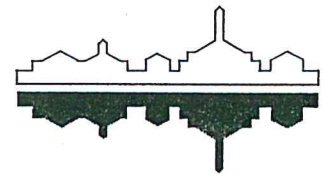
Inner Harbour from Causeway - date unknown
JBA Clubhouse on far left. CPR Terminal behind.



Site looking West - 1914

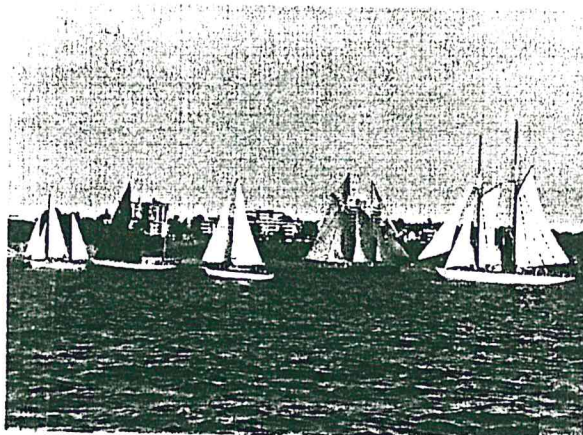


View from Songhees - 1898



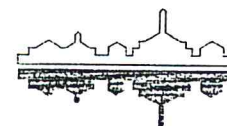
APPENDIX A

RESEARCH REPORT



APRIL 1990

SHIP'S POINT DEVELOPMENT
RAIC SYLLABUS THESIS PROJECT • ALAN R. ROY



MARITIME MUSEUM

EXISTING BUILDING

The present 20,000 ft.² building at the Bastion Square location, has serious shortcomings for the operation of the Museum. It is land-locked, thus missing opportunities for display of floating exhibits. It is undersized by approximately 30,000 ft.², seriously lacking collection storage space and workshop and curatorial space. The shipping/receiving facilities are non-existent, but most importantly, the mechanical systems do not provide the proper environmental control of relative humidity, temperature, and ventilation. The many windows also do not prevent the harmful effects on display exhibits of ultra violet radiation.

PROPOSED MARITIME MUSEUM

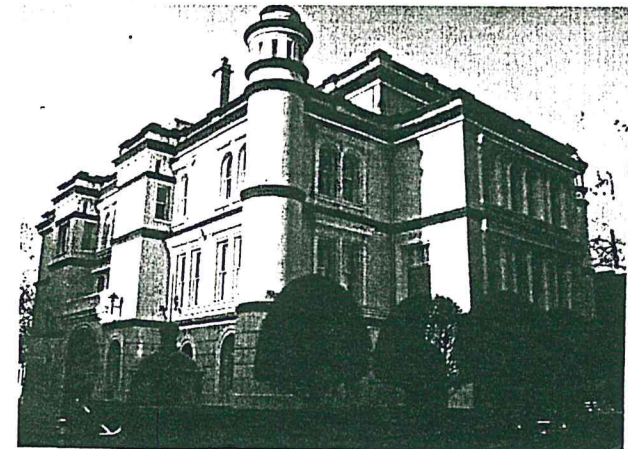
The Maritime Museum Society proposes to relocate its entire facility to a 50,000 ft.² building at the Ship Point site.

The new facility would house a range of functions from permanent exhibitions to special programmes, as well as administrative, social, retail, and technical functions.

The new museum's extended scope would include the following:

- a. Public interaction with craftsmen engaged in traditional boatbuilding and arts and crafts.
- b. Permanent exhibition galleries having the following major themes; the ocean, evolution of ships and boats, early pacific maritime heritage, exploration and trade, naval architecture, navigation and pilotage, resource harvesting, steam and motor ships, naval history, signalling and communications, underwater access, coastal built heritage, yachts and boats, and water-based recreation.
- c. Showcasing of "cutting edge" marine technologies developed by B.C. companies and professional mariners.
- d. A special audio-visual programme in a theatre setting.
- e. Educational interaction by public in designing a boat on the computer, making rope, in a classroom setting.

- f. A maritime marketplace which would offer fine works from contemporary maritime artisans, i.e. ship models.
- g. Classes in wooden boatbuilding, recreational fishing, navigation, marine carving, naval architecture, naval history, yachting, etc.



Existing Maritime Museum

PASSENGER TERMINAL

A new 10,000 ft.² (building footprint) combined foot passenger ferry and air terminal facility is required to replace the existing inefficient operation.

SEAPLANES

Air BC's operation carries 50,000 passengers per year on Twin Otter Aircraft (19 seats). Approximately 14 - 15 flights per day in summer and 10 flights in winter.

Lake Union Air is a Seattle based operation which shares facilities with BC Air, and has 4 flights/day with a Twin Otter and up to 5/day with a Beaver aircraft at 6 passengers each.

Various independent operators such as HYAK Air, presently operating from the facility at the Regent Hotel, carry approximately 18,000 passengers per year. Their operation could co-locate at the new proposed terminal.

FERRIES

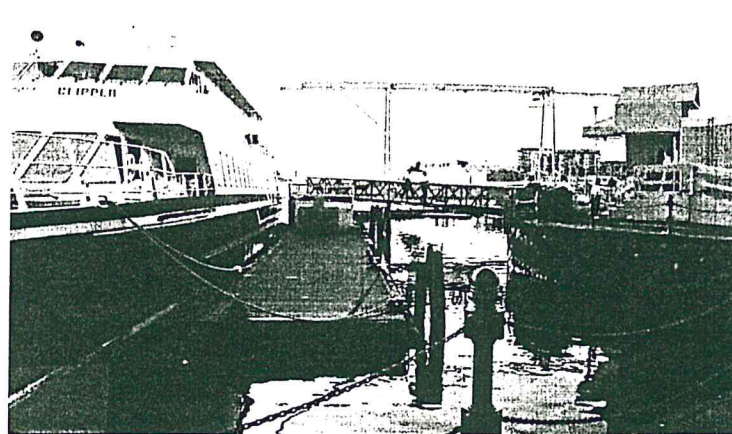
The "Victoria Clipper" operation would be the main tenant in the new terminal building. A 300 passenger high-speed catamaran operates 2 daily trips between Victoria and Seattle and will likely increase next year. The operation will also be adding a 500 passenger catamaran in the near future and increasing its routes.

The ferry operation is presently based on a 1 hour turnaround for off-loading and boarding, i.e. the vessel will leave 1 hour after it has arrived. Arrivals must clear Canadian Customs. Departing passengers purchase tickets and are checked through US Immigrations to a "holding area" prior to loading.

A more efficient baggage loading system is required. The present operation loads luggage into 4' x 4' x 5' high metal containers which are wheeled to the vessel where they are loaded onto the 2nd level rear deck area by means of a retractable crane. A protected 36 m² (preferably interior) baggage preparation area is envisaged located adjacent to the ticketing area.



P13 Existing Clipper Terminal



Victoria Clipper

CANADA CUSTOMS

All deplaning passengers from both the ferry and seaplanes would funnel through "sterile" passageways to the "PREPIL" lines where they will then begin the standard customs clearance routines of custom declarations, baggage checks and payment of duties and taxes. A flow description is attached.

Size of Operation

The Canada Customs operation is presently undersized and lacking in proper facilities.

The ideal size of customs operation to handle the maximum 500 passenger inflow based on Transport Canada standards would require a facility that is oversized and economically unviable. Instead the size of the operation can be reduced by increasing the number of Customs officers and reducing the PREPIL waiting by unloading the ship in "batches" of say 175 persons. This would avoid long lineups outside the building. A conceptual plan of this operation endorsed by the Canada Customs General Manager, Mr. Haig Bozoain, is attached.

U.S. IMMIGRATION

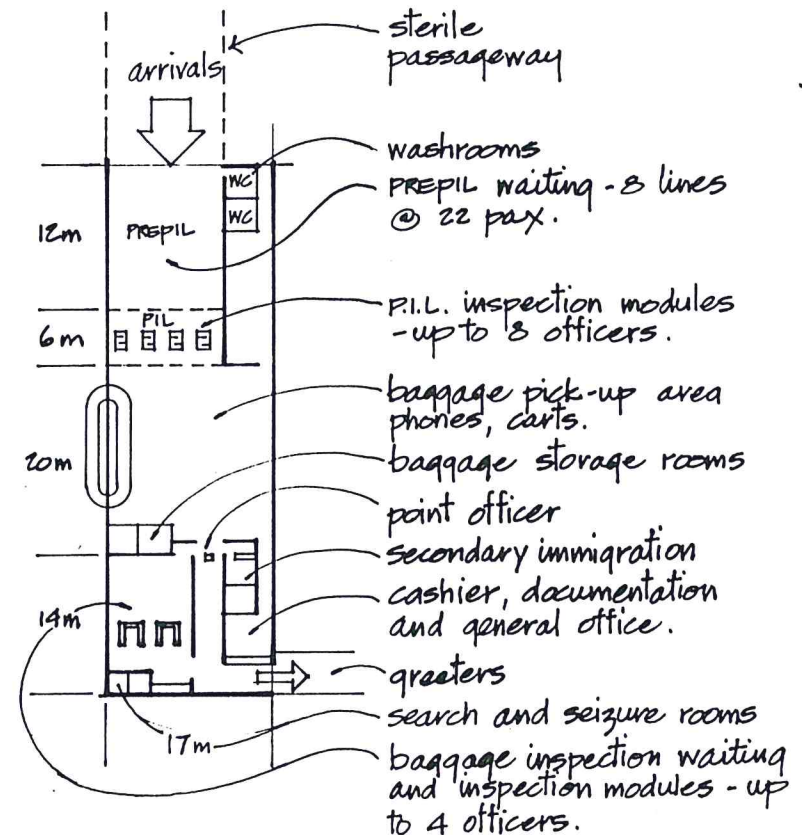
A checkpoint for US Immigration occurs following purchase of tickets for both air and ferry passengers. Tickets are checked and passengers can proceed to a holding area prior to embarking on the ferry.

Size of Holding Area

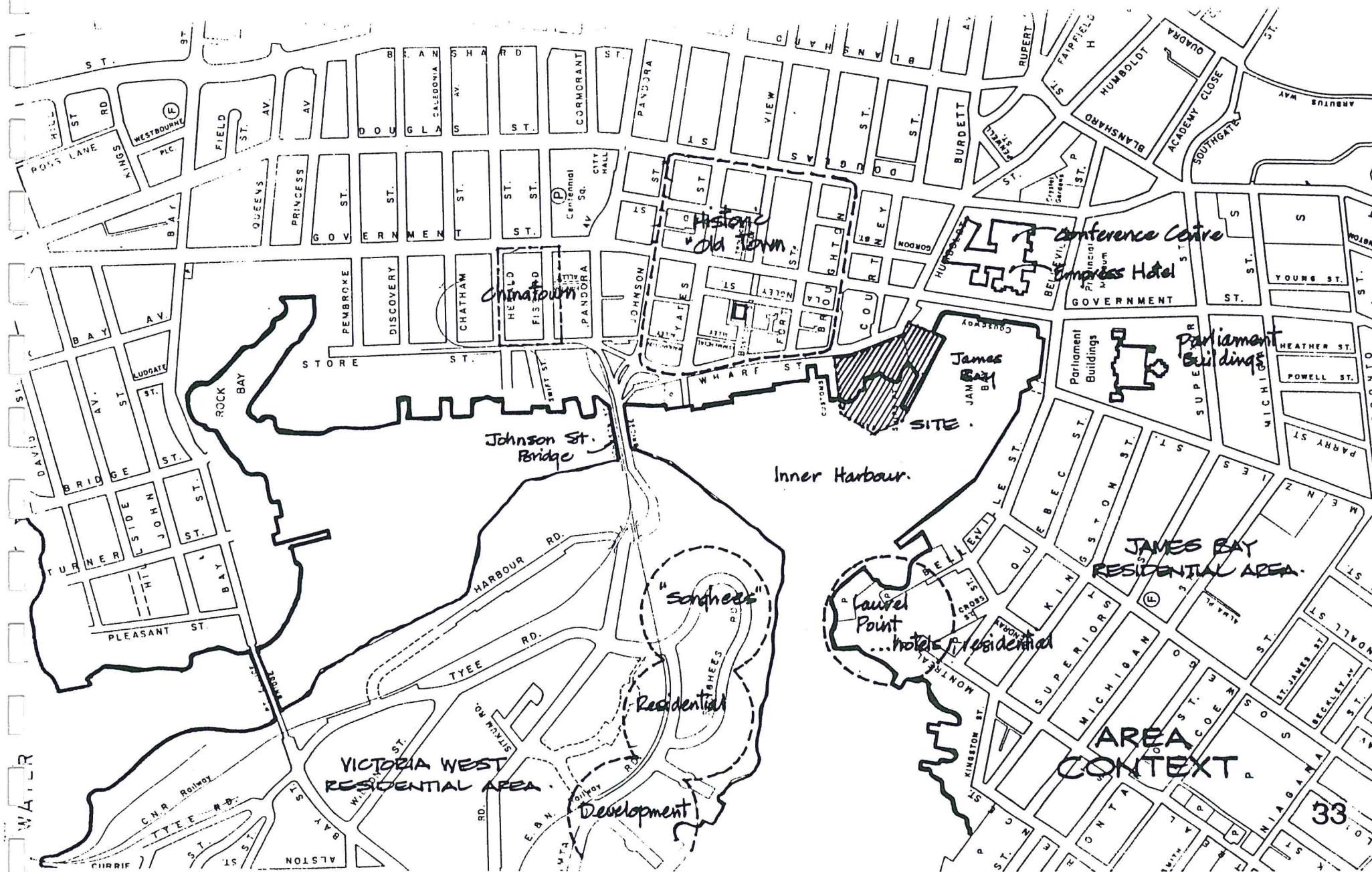
It would be impractical to build a holding area that would accommodate the maximum 500 passenger Clipper load. Perhaps a 200 person waiting area could be planned with remaining passengers waiting in the public areas. As loading commences, they could "flow through" as the holding area empties. Again, this procedure could be coordinated for efficient flows by increasing the number of US immigration Officers as the demand (passenger load) requires.

PROGRAMME

A consolidated programme for the combined terminal based on a 10,000 ft.² building footprint is attached.



Conceptual Plan - Canada Customs



AREA CONTEXT

EAST

Directly east is historic old town Victoria, its pattern and form dominated by a richness of heritage architecture. Its historic focal point is Bastion Square, an open plaza surrounded by classically detailed vintage buildings. South of Bastion Square, the east side of Wharf Street consists of a row of heritage facades ranging from 1 - 3 storeys.

The Harbour Mall, immediately east is a modern mixed use structure with residential units on the upper floors.

NORTH

The Malahat Building property borders the North edge of the site. It is an 1875 vintage building originally serving as the Customs House. Beyond it is a site presently used for 180 parking stalls flanked by an old stone retaining wall on the East and a Federal marina accommodating 90 small to medium fishing and pleasure boats on a water lot leased by the Provincial Capital Commission.

Further North is the Regent Hotel, Reeson Park and the Johnson Street Bridge.

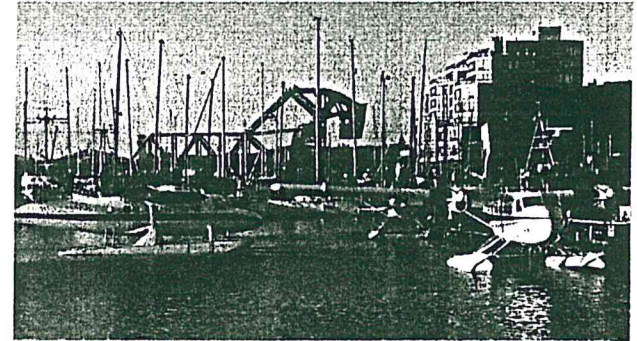
The Federal Fisheries Department operates the Broughton Pier immediately West of the Malahat Building.

WEST

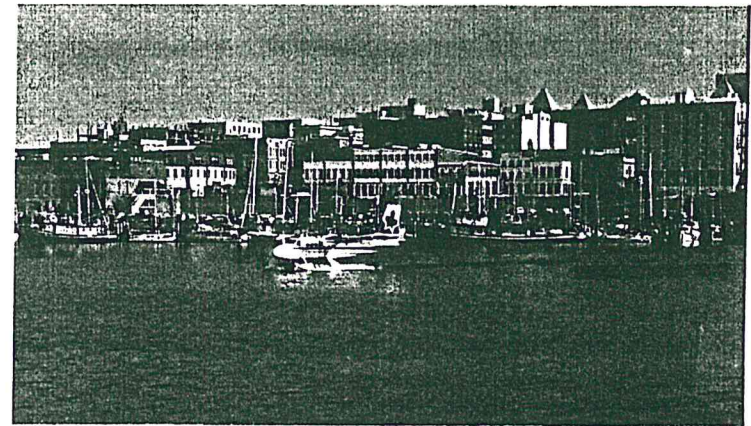
The Songhees Development on a 170 acre peninsula beyond is rapidly emerging as a thriving mixed use community. 5000 - 6000 new residents are expected, possibly creating future harbour linkages, e.g. water taxis, to the site.

SOUTH

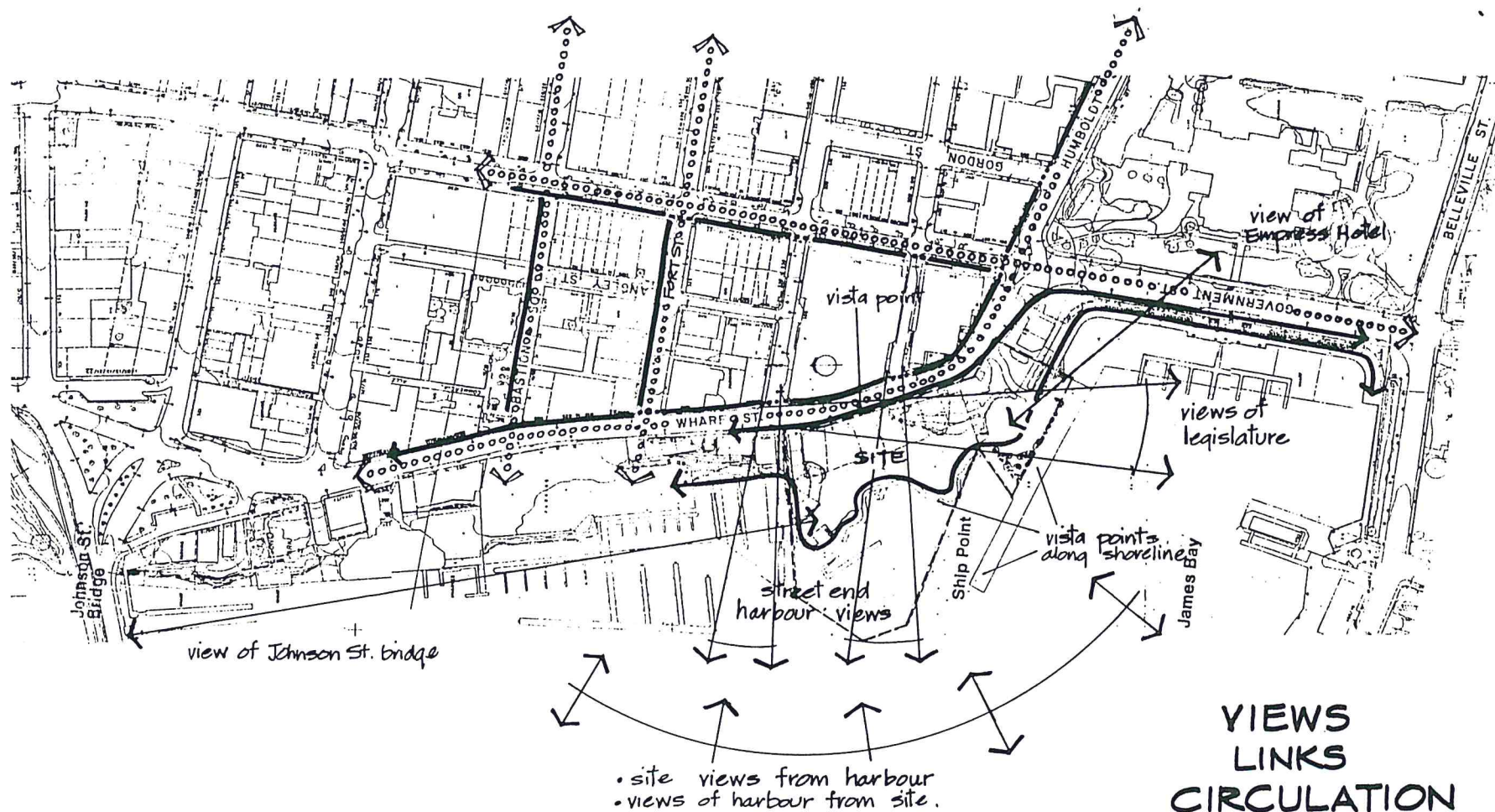
James Bay is immediately South. It is ringed by the pedestrian causeway, the Empress Hotel and Conference Centre, and the Legislature building immediately to the South. The Belleville Street waterfront contains Undersea Gardens, a Wax Museum, and a car ferry terminal for the COHO.

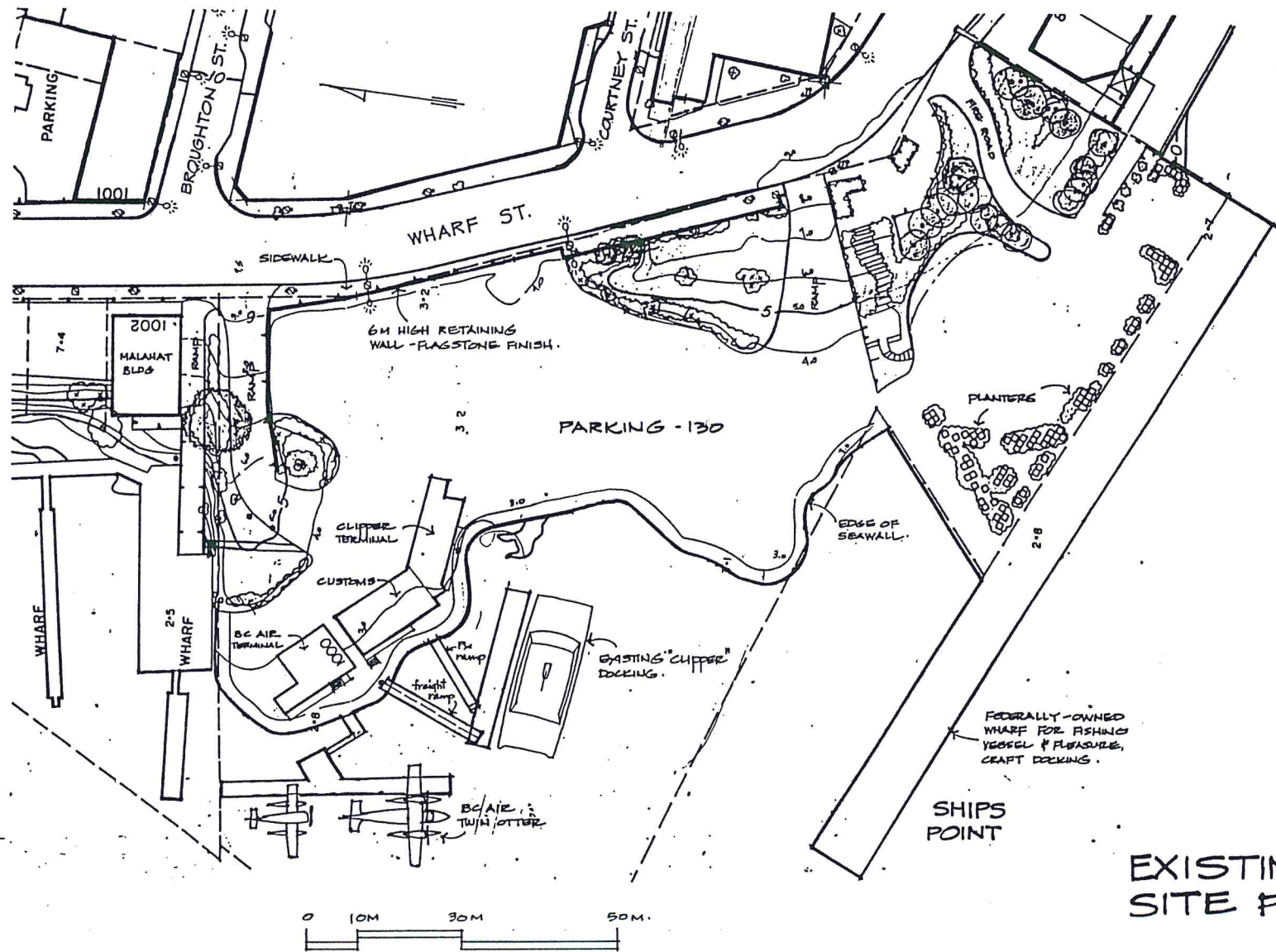


BC Air

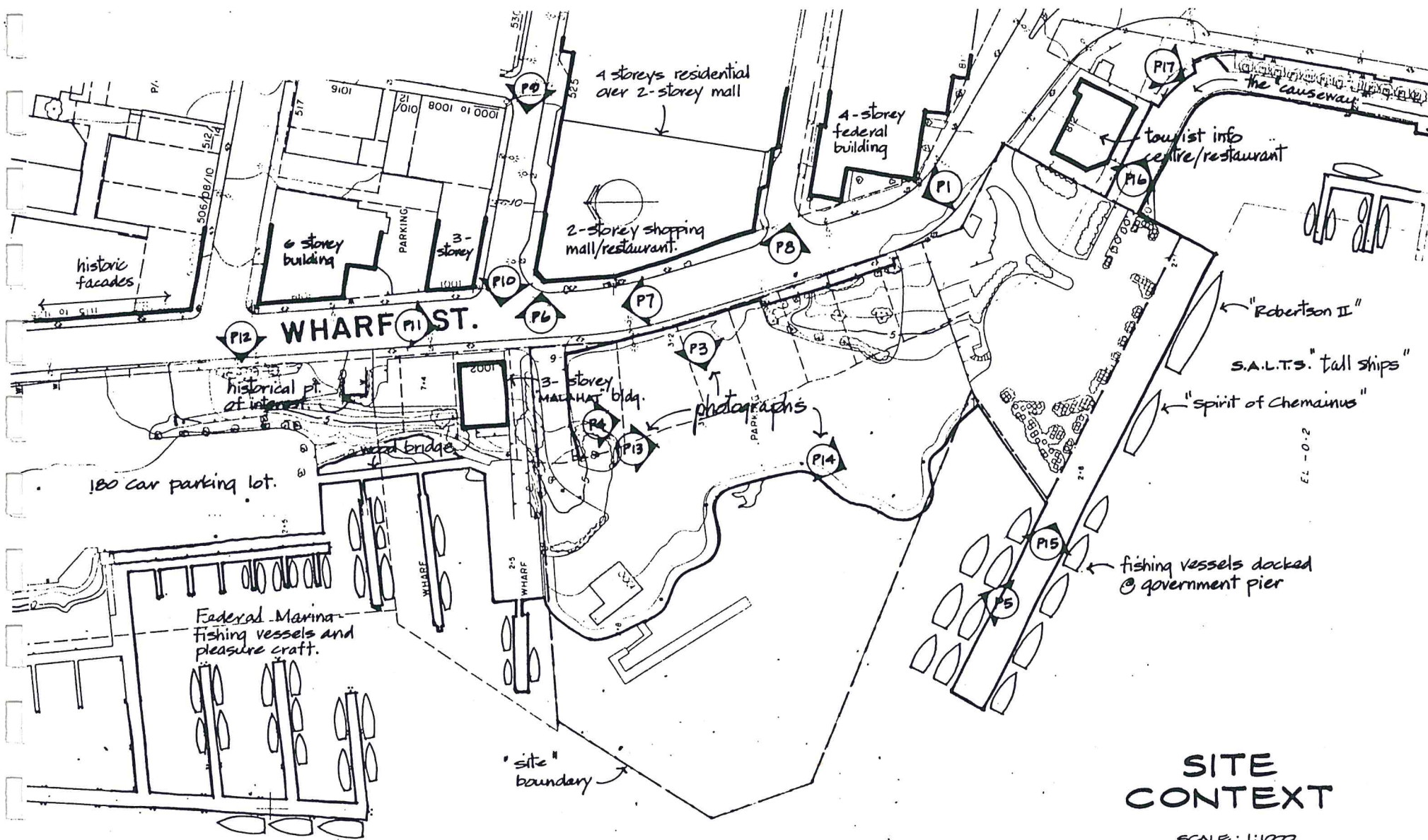


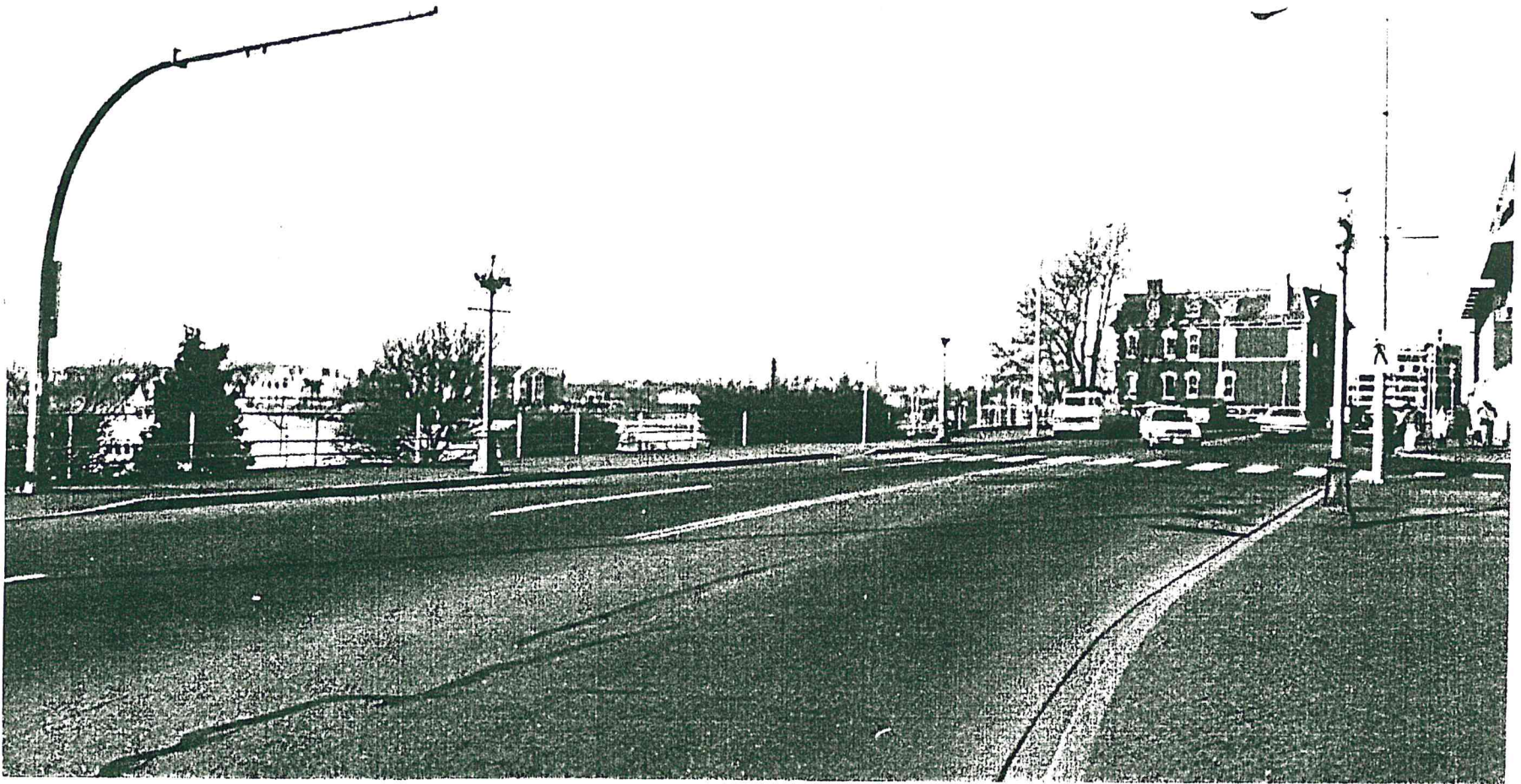
- → main vehicular routes
- views & visual links
- main pedestrian routes





EXISTING
SITE PLAN

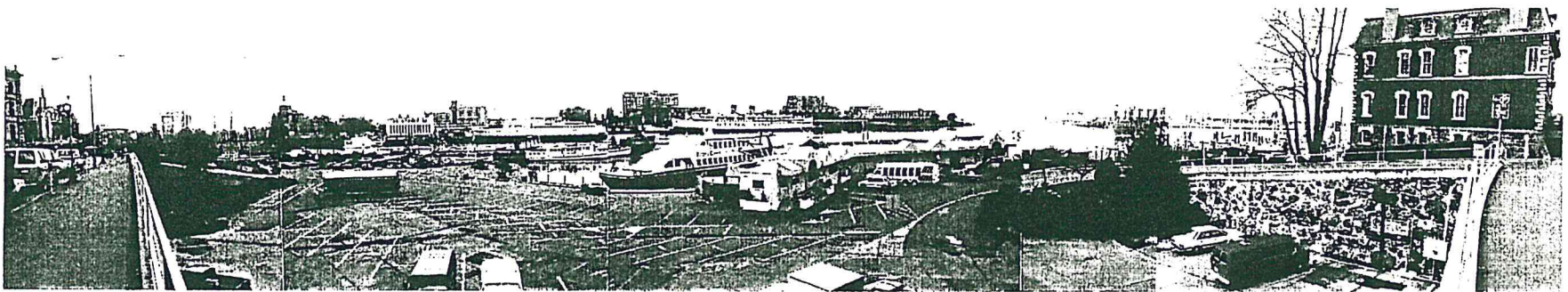




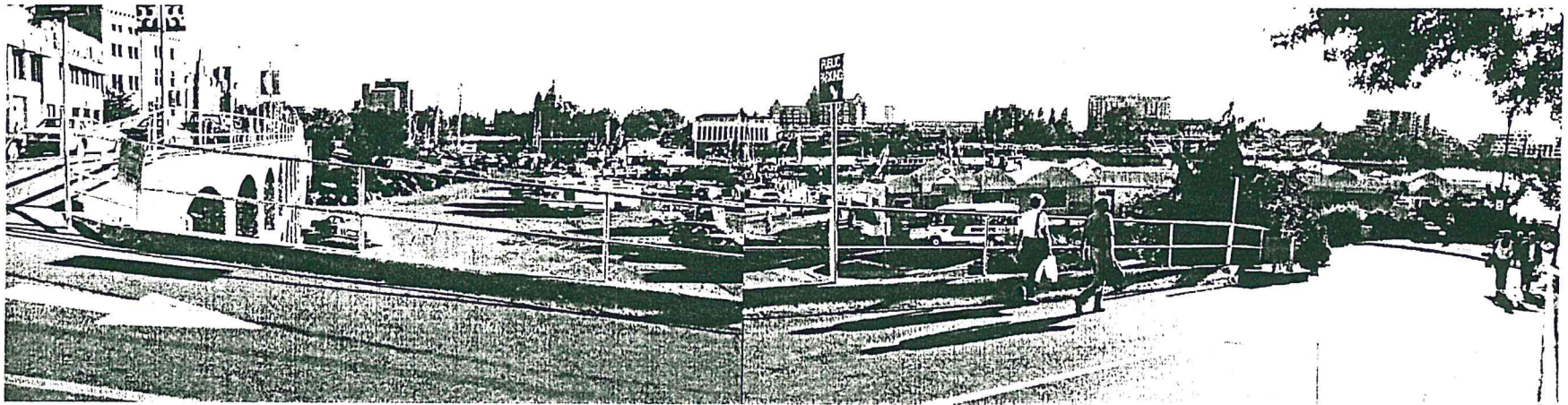
P1 North View of Site from Wharf St.



P2 Harbour Approach to Site



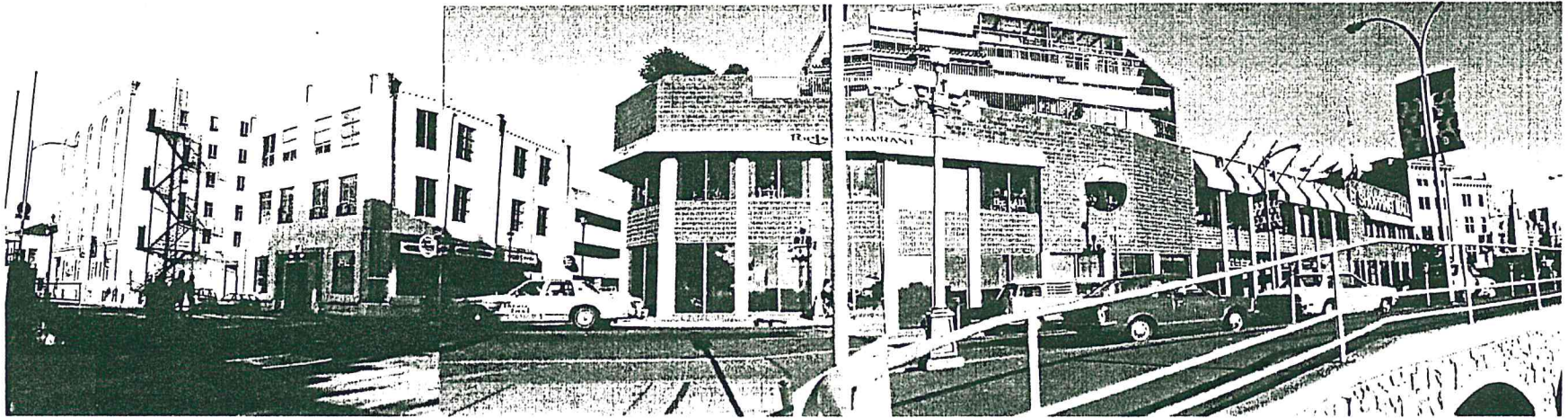
P3 Panoramic View of Harbour



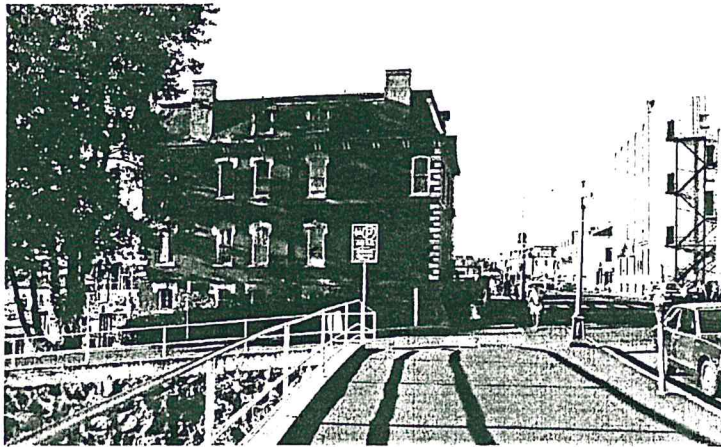
P4 South View



P5 North View of Site from Ships Point



P6 East View/Harbour Mall



P7 The Malahat Building



P8 Courtenay St. Federal Building



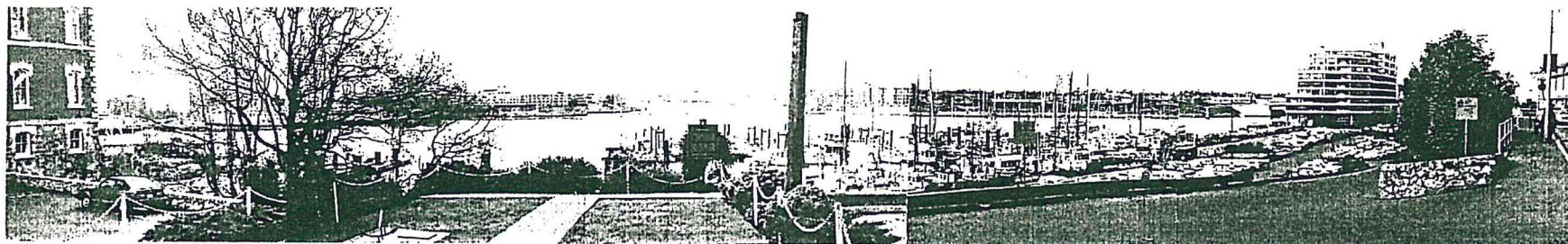
P9 View from Broughton St.



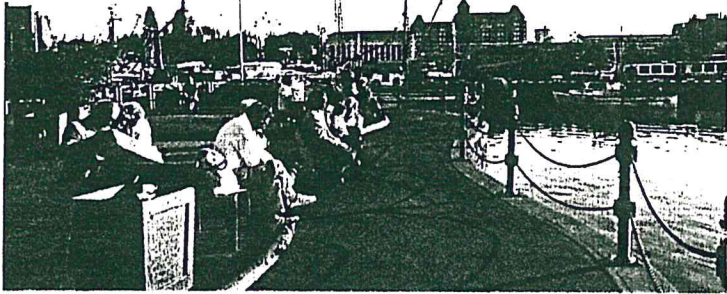
P10 The Malahat Building



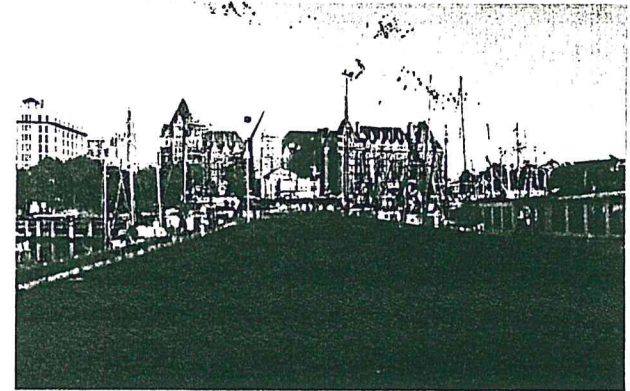
P11 South View of Site from Wharf St.



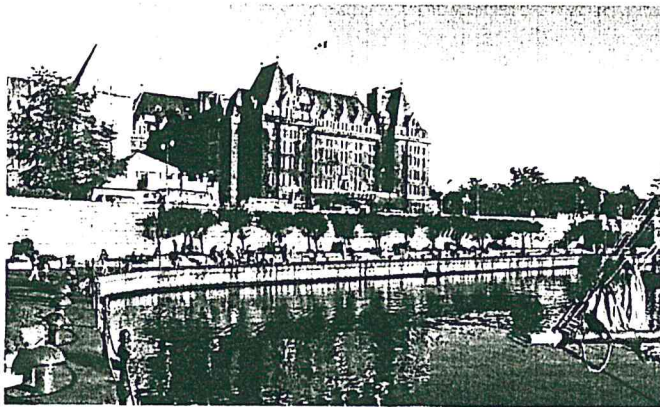
P12 View from North Site



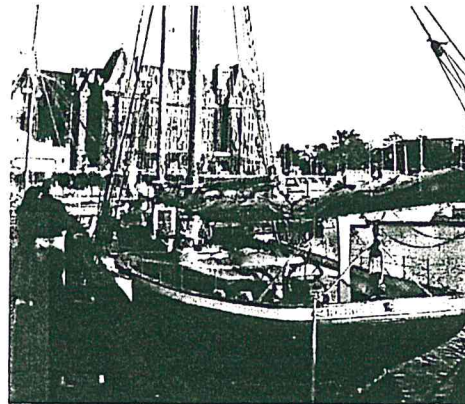
P14 Existing Pedestrian Edge



P15 View of Empress Hotel from Ships Point



P16 Empress Hotel and Causeway



P17 Causeway and Legislature Buildings

oooooooo>> - pedestrian axis or link.

Museum entrance - 1 level
bldg above Wharf St., transparent
structure, possible maritime retail
components.

Develop strong pedestrian
"edge" along Wharf St. -
patterned paving, benches,
trees.

Gate - site entrance,
signage, celebrative.

Sloped grass with planting, tree
buffer acts as amphitheatre
seating, views over inner harbour

to Causeway &
Empress Hotel.

Loading access to
maritime museum.

Historical point of
interest.

Marshall building

Maritime Museum - 50,000 ft²
on two levels with landmark
feature, i.e. - tower, lighthouse,
highly visible entrance.

"Edge" - public access,
continuous, consistent pattern
& materials, railing detail.

Mini Harbour - museum attraction,
display boats, piers, launching
ramp.

Maritime Crafting area (eq - boat building)
rest area, telescopes, benching.

Feature Floating
exhibit, i.e. "tall ship"

Terminal - combined sea
ferry & air operation w/
custom facilities and
sterile passageway. -
20,000 ft² on 2 levels.

Pt. of Interest, viewpoint; mini landmark, i.e.
mast, historical display as visual magnet.

SITE CONCEPT

SITE CONCEPT/OPEN SPACE

ACTIVITIES

This site is envisaged as a prime "people place". In addition to the two building functions, numerous colourful activities could take place:

- a. Viewpoint areas at Wharf Street level overlooking the harbour. These could be adjacent to Wharf Street or as landscape development over the roofs of the proposed buildings.
- b. Plaza activities adjacent to the buildings, i.e. fast food (fish & chip) outlets with sitting areas for eating, street musicians, artists' display.
- c. Nodes of interest at the water edge of the buildings, i.e. the floating exhibit area adjacent to the museum, a "closer look" viewpoint of the transportation terminal activities (watching the "clipper" and the "twin otters" docking), a maritime crafting display area, a kids mini harbour with models in operation.
- d. Festival retail activities could be set up along Ships Point with semi-permanent lightweight structures with colourful canopies, awnings, selling fresh produce, fish, etc.
- e. The open space immediately adjacent the pier could function as an amphitheatre complete with bandshell for special events, i.e. small concerts, Sunday afternoon symphony practice performances, "beer fests", etc. The amphitheatre is seen as gentle grassy slopes bordered by appropriate soft landscaping material, suitable for passive use by weary tourists and lunchtime office workers to bask in the sun. The amphitheatre also would be oriented to face the inner harbour with views of the legislature and the inner harbour activities, especially the proposed ceremonies for the 1994 Commonwealth Games.
- f. See also Site Concept Plan.

WATERFRONT ACCESS

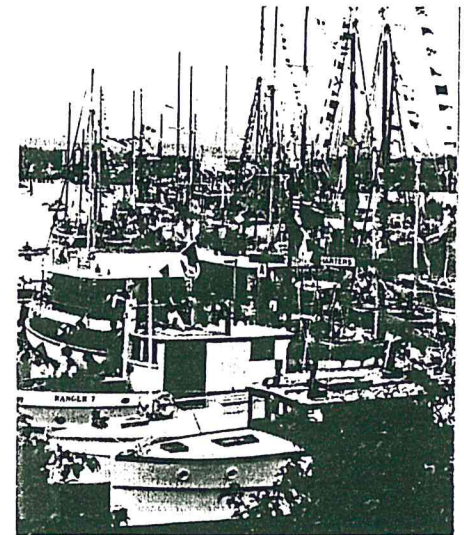
It would be desirable to maintain public access to the entire waterfront along the site to ensure a continuous pedestrian link around the inner harbour. This may be difficult to achieve at the terminal area because of loading/unloading and the Customs operation where "sterile" areas/passageways are mandatory.

MATERIALS, PATTERN

Materials that offer richness of colour and texture and the ability to pattern would be desirable, i.e. paving stones, exposed aggregate concrete, brick, wood.

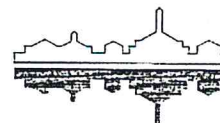
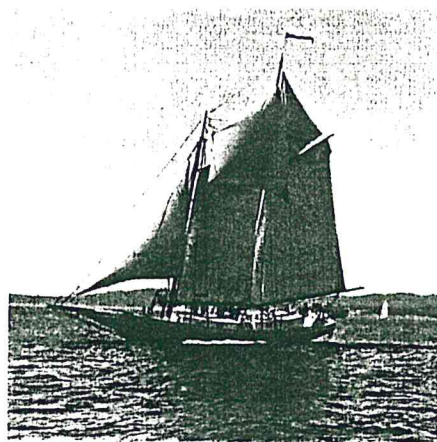
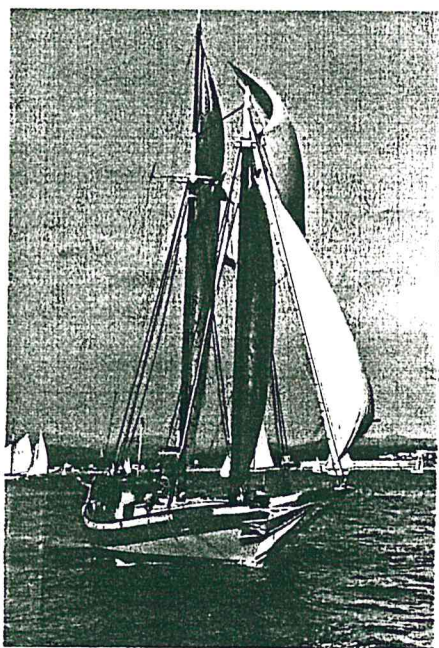
SOFT LANDSCAPING

Flowers offering colour and variety, ground cover, shrubs and low trees as appropriate. Care must be given to ensure trees do not hamper views over the inner harbour as viewed from Wharf Street.



APPENDIX B

PROGRAMME - MARITIME MUSEUM



No.	Function	Requirement	
<u>Reception</u>			
01	. Lobby	2300	214
02	. Washrooms	<u>1000</u>	<u>93</u>
	Sub-Total	3300 sf	307 m ²
<u>Programs</u>			
03	. AV Show/Theatre	2500	232
04	. Traditional Craft Demonstration	1750	163
05	. Discovery Rooms/Education Class	1200	111
06	. Library/Archive Reading Room	<u>250</u>	<u>23</u>
	Sub-Total	5700 sf	529 m ²
<u>Permanent Exhibition</u>			
07	. Main Permanent Exhibition Gallery	12000	1115
08	. Visible Artifact Collection Storage	2500	232
09	. Exhibition Theatrette	<u>200</u>	<u>18.6</u>
	Sub-Total	14700 sf	1365.6 ²
<u>Temporary Exhibition</u>			
10	. Temporary Exhibition Gallery	2000	186
11	. Exhibit Preparation Area	<u>1500</u>	<u>139</u>
	Sub-Total	3500 sf	325 m ²
<u>Showcase of Technology</u>			
12	. Working Space	750	70
13	. Technological Showcase	3000	279
14	. Shipping/Receiving	1500	139
15	. Darkroom	<u>350</u>	<u>32.5</u>
	Sub-Total	5600 sf	520.5 m ²
<u>Administration</u>			
16	. Staff Offices	2000	186
17	. Equipment Storage	750	70
18	. Meeting Space	600	56
19	. Elevator	<u>600</u>	<u>56</u>
	Sub-Total	3950 sf	368 m ²
<u>Retail</u>			
20	. Retail Gift Shop	1000	93
21	. Retail Shop Stock Room	250	23
22	. Mail Order Shipping	<u>250</u>	<u>23</u>
	Sub-Total	1500 sf	139 m ²

<u>Social</u>			
23	. Member's Lounge	2250	209
24	. Visitor's Rest/Viewing Area	250	23
25	. Staff Galley/Lounge	250	23
26	. Chair Storage	<u>100</u>	<u>9</u>
	Sub-Total	2850 sf	264 m ²
<u>Collections</u>			
27	. Closed Artifact Storage	2500	232
28	. Fumigation Chamber	100	9
29	. Curatorial Preparation Area	1000	93
30	. Maritime Reference Library/Archive	<u>2000</u>	<u>186</u>
	Sub-Total	5600 sf	520 m ²
<u>General</u>			
31	. Custodial Closets	400	37
32	. Service Mechanical Space	3000	279
	. Circulation Misc.	<u>1000</u>	<u>93</u>
	Sub-Total	4400 sf	409 m ²
TOTAL		51,100 sf	<u>4747</u> m ²

LOBBY 01

Users/Activity

General admission visitors, shoppers, invitees.
Admissions desk
Coatroom (self-serve)

Size:

Foyer	1500 sq. ft.
Reception	400 sq. ft.
Entrance	100 sq. ft.
Admission desk	50 sq. ft.
Model Yacht basin	250 sq. ft.

Total 2300 sq. ft.

Special Requirements:

- On main level
- Adjacent program, collection, shop, office area.
- Sight line from admissions desk to include gift shop, entrances to gallery and entrance/exit.
- Natural and artificial light.

WASHROOMS 02

Users/Activity

Public visitors and staff. One handicapped stall in each washroom. Up to 30 staff and 200 visitors at peak loading.

Size

1000 square feet.

Requirements

- Adjacent to coat racks.
- Close to public and office areas.

AV SHOW THEATRE 03

Users/Activity

250 visitors. Audio visual high impact show, "The Pacific Maritime Heritage Experience". At other times, used for special programmes, talks, meetings. Possibility of IMAX.

Size

2500 square feet.

Special Requirements

- Access from lobby.
- Night access separate for public to use separate from gallery.
- Access from shipping/receiving with 10 sq. ft. opening.
- Theatrical lighting tracks with dimmers.
- Acoustically designed to facilitate musical performance.
- Projection booth with intercom to stage.
- Stage raised 2', level floor, permanent theatre seating.

TRADITIONAL CRAFT DEMONSTRATION AREA 04

Users

One craftsman and several volunteers/apprentices. Crafts related to boat building, rigging, carving, blacksmithing, sailfittings, sailmaking.

Size

1750 ft. minimum at main floor. Second floor gallery could surround shipwell on 3 sides providing combined exhibition space, sail/canvas/rigging loft and ropewalk.

Special Requirements

- Public access into workshop at second level.
- Seaward windows with views of activity for pedestrians on causeway/Wharf.
- Doors at seaward side 14' wide x 16' high.
- Lumber/material access from loading dock.
- Drawing desk space.
- Supplies/storage along rear wall.
- Removal of vessels by trailer.
- Acoustically isolated from remainder of building.
- Naturally heated.
- Viewing gallery or public access point (window).
- Workbenches, storage cabinets, steamboxes with electrical generators.

DISCOVERY ROOM/EDUCATION CLASS AREA 05

Users

Classes of students from secondary schools - up to 30 students/1 staff. Formal/informal education programmes during the day. Informal programmes in the evening.

Size

Formal education: 600 sq. ft.
Informal education: 600 sq. ft.

Special Requirements

- Coat racks, Tables/Chairs, Bulletin boards.
- Close to main entrance.
- Access to main gallery.
- Separate entrance.

LIBRARY/ARCHIVE READING ROOM 06

Users

Up to 2 staff members at peak times. Up to six members and public using reading desks at same time.

Size

250 sq. ft.

Special Requirements

- Reading desks, computer terminals, work stations.
- Librarian's desk.
- Public access to reading room.
- Individual desk and workstation lighting.
- Noise transmission within room to be minimized.
- Clear visibility to doorway and reading desks to prevent pilferage.

MAIN PERMANENT EXHIBITION GALLERY 07

Users

visitors in excess of 200,000 per year. Display of two and three dimensional exhibits in and out of display cases.

Size

12000 sq. ft. distributed on two levels.

Special Requirements

- Electrical grid on ceiling, walls, and floors.
- Adjacent to main entrance and curatorial work area.
- Natural light areas to be capable of becoming opaque, i.e. if windows, apply venetian blinds.
- No UV light sources greater than 75 u-watts/lumen radiation.
- maximum 50 lux on light sensitive objects.
- Acoustics - non-reflecting walls and ceilings.
- Structural considerations for support of large artifacts such as steam engine.
- No sunlight.

VISIBLE ARTIFACT COLLECTIONS STORAGE 08

Users

Public visitors in excess of 200,000 per year. Storage of artifacts in clear display cases.

Size

2500 sq. ft.

Special Requirements

- Adjacent permanent exhibition area and curatorial work area.
- Natural light openings capable of becoming opaque.
- No UV light sources greater than 75 u-watts/lumen radiation.
- Maximum 50 lux on light sensitive objects.
- Acoustics - non-reflecting walls and ceilings.
- Structural considerations for support of large artifacts such as the steam engine.
- No sunlight.

EXHIBIT THEATRETTE 09

Users

Visitors in excess of 200,000 per year. As an integral part of the permanent exhibition a short (3 - 5 minute) AV show will be presented. Visitors funnel through the show which automatically recycles.

Size

200 sq. ft.

Special Requirements

- Equipment undetermined.
- Integrated into permanent exhibition gallery.
- Visitors exit from show into main gallery.
- Track lighting.
- Acoustical treatment.

TEMPORARY EXHIBITION GALLERY 10

Users

Up to 250 people seated attending a special lecture, or typically 50 people per hour attending an exhibition.

Temporary display of exhibitions, i.e. books, artifacts, paintings and documents.

Size

2000 sq. ft.

Special Requirements

- Close to main lobby.
- Possible secondary exterior entrance.
- No natural light.
- Individual manual lighting control of fluorescent tubes to produce lowest ambient level possible.

EXHIBIT PREPARATION AREA 11

Users

Technical staff up to 4 users at peak times. Assembling fine tuning and repair of exhibits.

Size

1500 ft.²

Special Requirements

- Close to freight elevator and shipping.
- Workbenches, fume hood.
- No natural light.

WORKING SPACE 12

Users

Public visitors up to 200,000 per year and marine specialists in marine technology. Marine technologists will demonstrate their crafts and products in full view of visitors through a viewing port.

Size

750 ft.²

Special Requirements

- Workbenches, tool storage.
- Adjacent main exhibition gallery Showcase of Technology.
- No natural light.
- Individual manual lighting control.

TECHNOLOGICAL SHOWCASE 13

Users

Visitors up to 200,000 per year. Changing exhibitions of display materials and live workshop demonstrations.

Size

3,000 ft.²

Special Requirements

- Electrical grid on floor, walls, and ceiling.
- Adjacent to main entrance and curatorial work areas.
- Natural light openings must be capable of becoming opaque.
- Maximum 50 lux on light sensitive objects.
- Acoustical treatment - non-reflecting walls and ceiling.
- Structural allowance of floors to carry heavy artifacts.

SHIPPING/RECEIVING 14

Users

Three to five deliveries per day (minimum) of exhibit and display material. Shipping and receiving goods.

Size

- Ceiling minimum 12'.
- Entranceway 6' wide x 8' high.
- 500 ft.² loading dock with 10' x 10' door and canopy over. Supplementary heating at the door.
- Allow for adjacent storage and space for handling of crates.

Special Requirements

- Security system.
- Hydraulic lifting ramp.
- Stairs to ground level.
- Close to access roads.
- Chain link security fence capable of surrounding detached semi-trailer in security compound outside for overnight storage.
- Soundproofed from rest of building.
- Clear and direct access routes to all storage, handling and exhibition areas.

DARKROOM 15

Users

2 - 3 technical staff. Copying of documents and pictures. Photographing artifacts. Processing film and prints.

Size

350 ft.²

Special Requirements

- Benches, sink, chemical trap.

STAFF OFFICES 16

Users

Up to 16 staff in open landscaped and closed offices to include:

Director
Assistant Director - Collections and Programmes
Assistant Director - Museum Services
Assistant Director - Administration
Marketing and Promotion Specialist
Finance and Administration Offices
Administration Clerk/Typist
Secretary/Receptionist and Waiting Area
Education Coordinator
Interpretation and Extension Officer
Advertising and Promotion Offices
Fundraising Offices
Publication Offices
Curator Public Programs
Curator Collections and Research
Senior Designer

Size

2,000 ft.²

Special Requirements

- Movable wall system.
- Close to board room and staff lounge.
- Blinds/sun control on windows.

EQUIPMENT STORAGE 17

Users

One or two individuals per day. Access by authorized staff only for issue of equipment. Office supplies, stationery, brochures.

Size

750 ft.²

Special Requirements

- Adjacent administration work space.

MEETING SPACE 18

Users

Up to 50 persons. Staff meetings, Board and Committee Meetings, meetings of allied organizations, special events.

Size

600 ft.²

Special Requirements

- Meeting table and chairs.
- Front projection screen.
- Adjacent to staff gallery room, separated by movable wall.

ELEVATOR 19

Users

Disabled public visitors and staff; technicians moving heavy objects. Up to 6 at one time.

Size

600 ft.²

RETAIL GIFT SHOP 20

Users

Visitors up to 200,000 per year. Commercial retail space, taking paid admissions.

Size

1,000 ft.²

Special Requirements

- Shelving for books, souvenirs, crafts.
- Desk w/cash register positioned to function as admissions desk.
- At entranceway to museum, with access to stockroom.
- Separately accessible from foyer when galleries are closed.
- Glazing for exterior views.
- Admissions desk to have view of whole gift shop entrances to galleries, and museum entry/exit.

RETAIL SHOP STOCK ROOM & MAIL ORDER SHIPPING 21, 22

Users

Limited users with tight security. No volunteers access. Receiving of stock, pricing, distribution and storage of stock, Working area for shop manager.

Size

Stock Room - 250 ft.²

Mail Order Shipping - 250 ft.²

Special Requirements

- Large worktable, open/closed shelving.
- Entrance through shop washrooms and staff areas adjacent.
- Access from one door only.
- Two-way mirror into shop.

MEMBERS LOUNGE 23

Users

Membership use (approximately 5000 estimated by 1995). Casual social activity, meetings of members, special events, talks, lectures, fundraising events.

Size

Social licenced space - 2000 ft.²
Social unlicenced space - 250 ft.²
2250 ft.²

Special Requirements

- Tables, chairs, wet bar.

VISITORS REST/VIEWING AREA 24

Users

Visitors up to 200,000 per year. Area for visitors to rest and quietly reflect the experiences they have been having in the gallery. A view of harbour activity.

Size

250 ft.²

Special Requirements

- Comfortable seating.
- Free telescope for distant viewing.

STAFF GALLEY/LOUNGE 25

Users

For staff as lunchroom - preparation of snacks and warming of food.

Size

250 ft.²

Special Requirements

- Connected by movable wall, to the staff meeting room.

CHAIR STORAGE 26

Users

1 - 2 staff. Storage of nesting chairs for office and public spaces.

Size

100 ft.²

Special Requirements

- Access to elevator.
- Transport dollies.

CLOSED ARTIFACT STORAGE 27

Users

Specialized staff - 3 authorized curatorial individuals. Secure storage for 3 dimensional artifacts valued in excess of 10 million.

Size

2500 ft.²

Special Requirements

- Metal shelving, cabinets, drawer systems.
- Hanger space for garments.
- Close to curatorial area and exhibit preparation spaces.
- Access via hallways to loading area.
- Individual manual lighting control of each lighting fixture.
- No sunlight.
- Special security - alarms, electronic locks.

FUMIGATION CHAMBER 28

Users

1 - 2 technical staff. Fumigation of incoming artifacts to prevent spread of vermin, infestation or other biological pest.

Size

100 ft.²

Special Requirements

- Immediately adjacent shipping dock.
- Exhaust ventilation to exterior.

CURATORIAL PREPARATION AREA 29

Users

Up to 4 technical staff cataloguing, researching and conservation surveying of artifacts, office workspace for curator.

Size

1000 ft.²

Special Requirements

- Working surfaces, drawers for tools/equipment.
- No natural light.
- Security of entryway.

MARITIME REFERENCE LIBRARY & ARCHIVE 30

Users

Two staff members. Up to 6 public and staff using reading desks at same time.

Size

2000 ft.²

Special Requirements

- Adjacent to librarian's desk in reading room.
- Public access to reading room only.
- Rolling compact shelf space, map drawers, filing cabinets.
- No natural light in stock area. Tack lighting in reading room.
- Building services design noise criterion of NR 24.
- Noise transmission within room to be minimized.
- Clear visibility to doorway and reading desks to prevent pilferage.

CUSTODIAL CLOSET 31

Users

Janitors, possibly a contract cleaning service. Storage of cleaning supplies and tools.

Size

400 ft.²

Special Requirements

- Large sink, cupboard with shelves, slop sink.
- Adjacent washrooms.
- One on each floor.

SERVICE/MECHANICAL SPACE 32

Users

Maintenance staff.

Size

3000 ft.²

Special Requirements

- Heating and cooling equipment.
- Electrical switchboard and panel.

APPENDIX C

PROGRAMME - PASSENGER TERMINAL

<u>Function</u>	<u>Requirement</u>	
Clipper Operation		
Sales Manager Office	100 ft. ²	9.3 m ²
Terminal Manager Office	100	9.3
Ticket station 6modules @ 25 ft. ²	150	14.0
Counter area 2 m deep x 10 m long	215	20.0
Staff Room	170	16.0
Staff W/C	30	2.8
Storage Room	100	9.3
Baggage Preparation Room	400	36.0
	1265 ft. ²	117 m ²

BC Air Operation		
Tickets (incl. counter)	150	14.0
Baggage Make-up	110	10.0
Cargo Reception (incl. counter)	150	14.0
Office	100	9.3
Staff Room	120	11.0
Staff W/C	30	2.8
	660 ft. ²	61.3 m ²

Lake Union Air		
Tickets (incl. counter)	100	9.3
Baggage Make-up	100	9.3
Cargo Reception	100	9.3
Office	80	7.4
	380 ft. ²	35.3 m ²

Additional Independent Operators (2)

Assume a "module" size equivalent to Lake Union Air. Allow for 2 such modules @ 380 ft. ² each.	380	35.3
	380	35.3
	760ft ²	70.6m ²

Public Spaces

Lobby and Seating	3000 ft. ²	279.0 m ²
Washrooms (to code)	1000	93.0
Custodial Closets 2 @ 50 ft. ²	100	9.3
	4100 ft. ²	381.3 m ²

Canada Customs

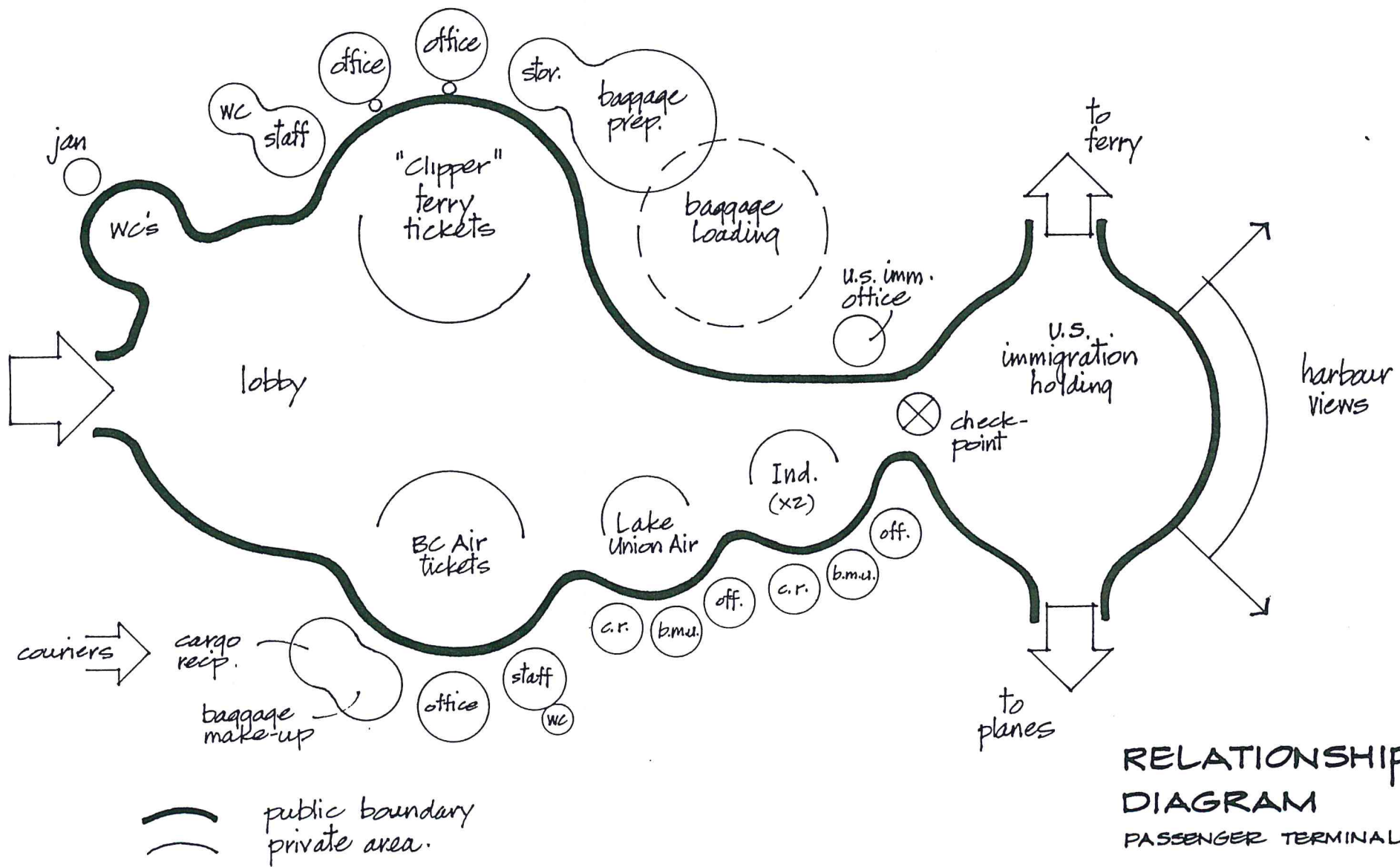
PrePIL waiting/queueing @ 1.0 m ² /pax (1)	2150 ft. ²	200.0 m ²
PIL area - 4 modules @ 14.6 m ²	630	58.5
PrePIL Washrooms (1 male, 1 female)	270	25.0
Baggage Claim area @ 1.4 m ² /pax (1)	3000	280.0
Baggage Storage Rooms (2)	200	18.6
Secondary Immigration Waiting Area	100	9.3
Secondary Immigration	130	12.0
Secondary Immigration Office	100	9.3
General Office, Cashier, & Documentation	390	36.0
Baggage Inspection Waiting	750	70.0
Baggage Inspection Modules 2 @ 14.5 m ²	312	29.0
Search and Seizure Rooms 2 @ 9.3 m ²	200	18.6
Staff Washrooms (1 male, 1 female)	60	5.6
	8292 ft. ²	770.0 m ²

US Immigration

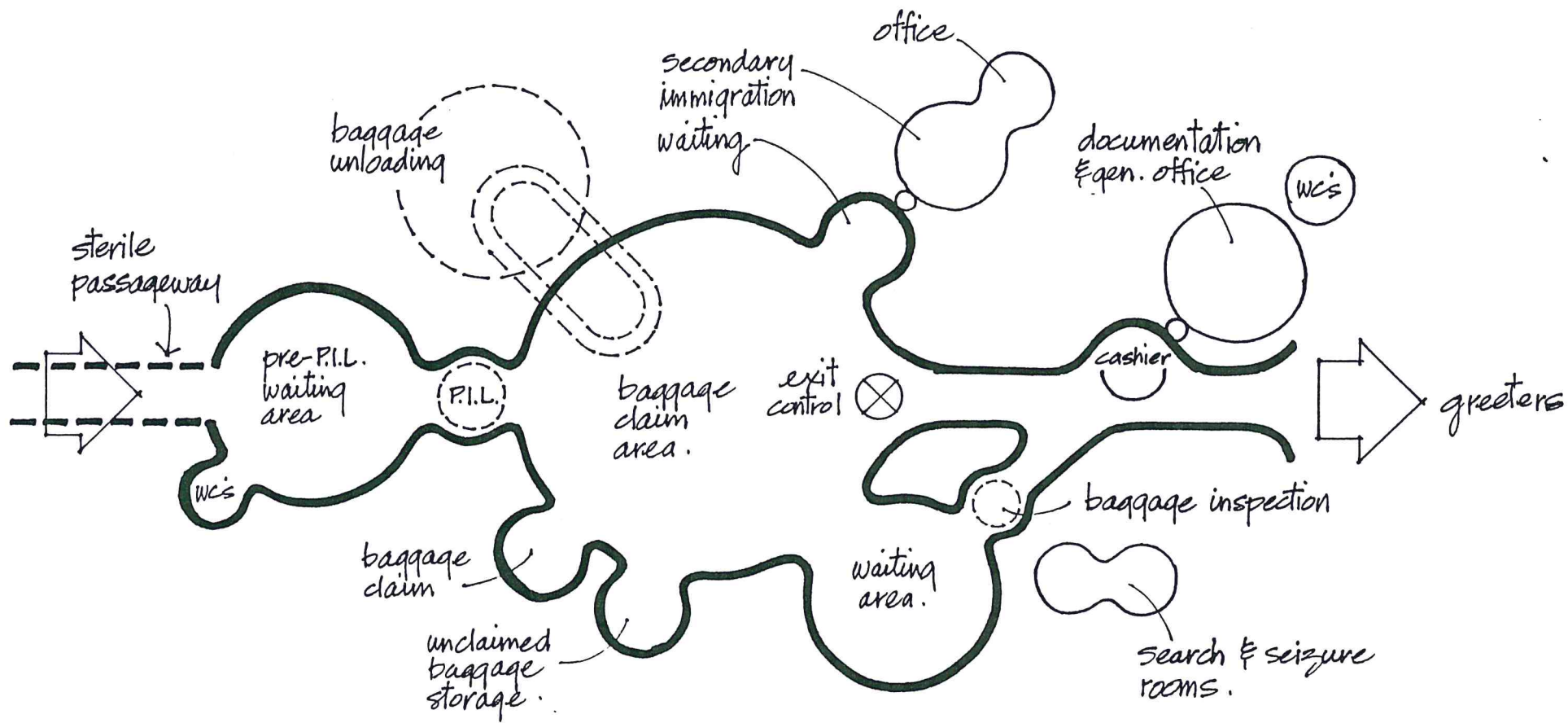
US Immigration Office	100	9.3
US Immigration Holding	2500	232.0
	2600 ft. ²	241.3 m ²

General

Mechanical Rooms	1000	93.0
Circulation, Stairs, Elevator	2300	213.0
	3300 ft. ²	306 m ²



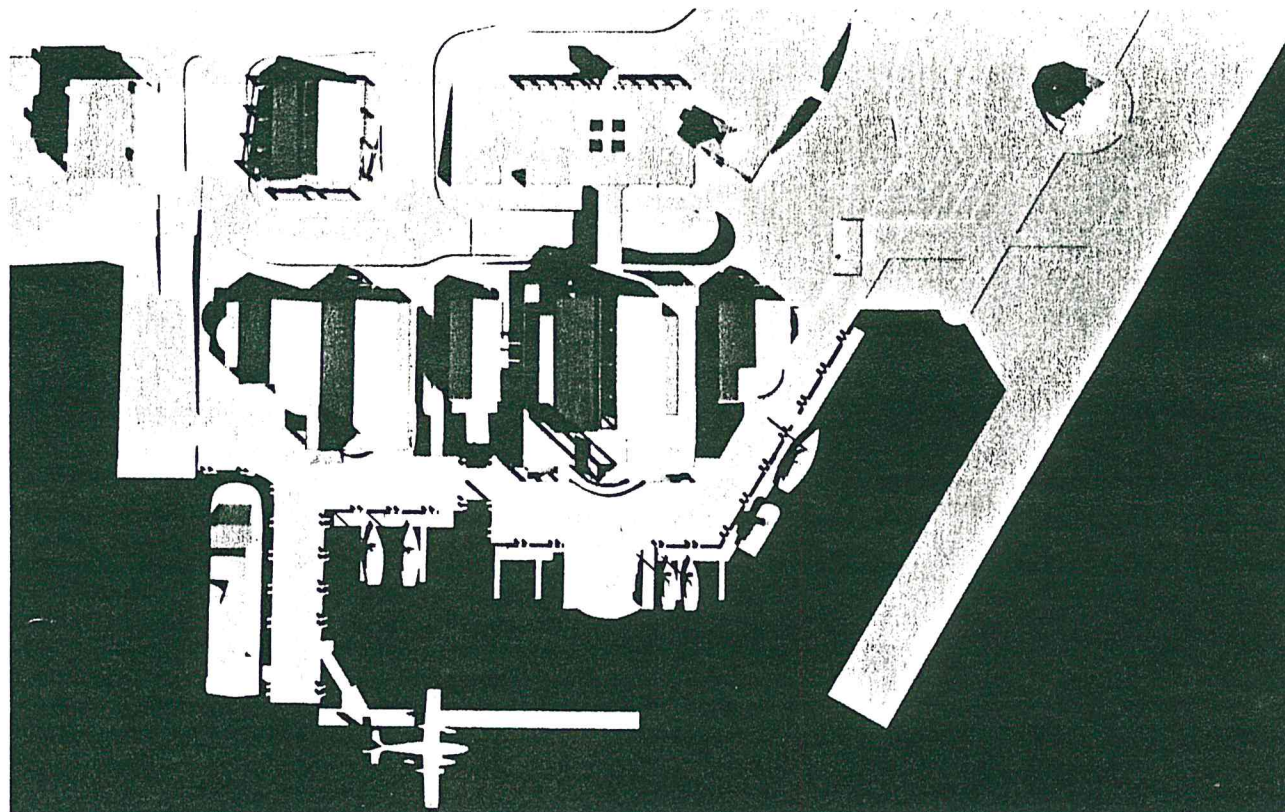
**RELATIONSHIP
DIAGRAM**
PASSENGER TERMINAL



legend

- public boundary.
- private area.
- P.I.L. - passenger inspection lines

RELATIONSHIP
DIAGRAM
CANADA CUSTOMS



SHIP'S POINT DEVELOPMENT

RAIC SYLLABUS THESIS PROJECT • ALAN R. ROY

