



DRAFT PORT DRIVE WATERFRONT MASTER PLAN

November 10, 2017



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Port Drive Waterfront Master Plan

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1. INTRODUCTION

Nanaimo's harbour and associated waterfront offers a significant opportunity to initiate and fulfill an unprecedented mandate – the development of appropriate and complementary land uses that foster community, cultural, economic, environmental, and social well-being. Nanaimo has a chance to create a harbour and waterfront with a legacy that is celebrated for, and by, future generations.

The Port Drive Waterfront Master Plan covers a total area of 9.9 hectares (24.4 acres) and is located at the waterfront edge of Downtown Nanaimo, next to the Gabriola ferry Terminal and across from Port Place Mall.

MAP 1 - Plan Area Map

Plan Area

The Plan applies to the area shown in the Plan Area Map, which is part of the Downtown Urban Node Future Land Use Designation in Nanaimo's the Official Community Plan (OCP). The Plan considers important relationships between Nanaimo's Downtown, neighbouring areas and the waterfront location.

Purpose

The Port Drive Waterfront Master Plan (PDWMP) forms part of the City of Nanaimo Official Community Plan (OCP) and provides detailed policies to guide future development and change in the Downtown Nanaimo community over the next 25 years. It identifies a plan for land use, transportation and infrastructure that supports the community's vision for the future of the Port Drive Waterfront area.

The Plan sets a framework for more detailed planning steps that will include rezoning, subdivision, and the development of a development permit area to guide growth in this area.



Fig. 1 - Port Drive Waterfront Plan Area

PLAN PROCESS

The PDWMP process involved five phases.



Consultation specific to the PDWMP built on the South Downtown Waterfront Initiative (SDWI) and involved interviewing and collaborating with stakeholders over a number of workshops and independent meetings.

In June of 2017 the City hosted an Open House to share the options for the Plan Area, complemented by an online survey.

The survey and Open House presented the community with multiple options for future change and growth based around five theme areas:

- 1.Land Use (Residential, Tourism, Light Industrial)
- 2.Access/ Transportation/ Mobility
- 3.Residential Form and Character
- 4.Climate Change Strategy
- 5.Public Space

Key issues and opportunities that were identified throughout the planning process informed the contents of this plan, which is organized by the themes covered throughout the planning process.

GUIDING PRINCIPLES

Initially considered as part of the South Downtown Waterfront Initiative (SDWI), a high level visioning and consultation process that concluded in December 2013, the Port Drive Waterfront Master Plan aims to respect the Vision and Guiding Principles that resulted from this initiative. These are:

- 1. Promote access and connectivity to local neighbourhoods, the city, and the region.**
- 2. Support an evolving working harbour.**
- 3. Promote ecologically positive development.**
- 4. Promote bold and resilient land use.**
- 5. Embed cultural and social considerations in future decisions.**



2. CONTEXT

Historical Context

The City of Nanaimo and its partners would like to acknowledge that 1 Port Drive is on the unceded traditional territory of the Coast Salish peoples, specifically the Snuneymuxw First Nation.

Since time immemorial, the Snuneymuxw maintained large permanent settlements at Nanaimo Harbour, Departure Bay, and Gabriola Island, moving belongings and house boards between the settlements depending on the seasonal availability of resources. One of the six named Snuneymuxw groups, the Salaxal, occupied the Nanaimo Harbour village on a year-round basis and only moved from this village when the Hudson Bay Company sold the area to the

Vancouver Coal and Land Mining Company, who built a coal tramway and wharf on the site in 1862¹. Prior to coal-related development in Nanaimo Harbour, a large portion of the Plan Area was under water. Photos of Commercial Inlet in 1858 show houses, canoes and other structures on the shore. (1.Snuneymuxw First Nation web page 2005)



Fig. 2 - Historical Shore Photo

Commercial Inlet is now filled in and the original shoreline is shown on the map below.



Fig. 3 - Historical Shore Line Map

Archaeological Site Inventory

An Archaeological Site Inventory of the property was conducted after the City acquired the site. A number of historical objects were found and the site was registered on the Provincial Archaeological registry to ensure that these archaeological values are considered during any future development of the site.

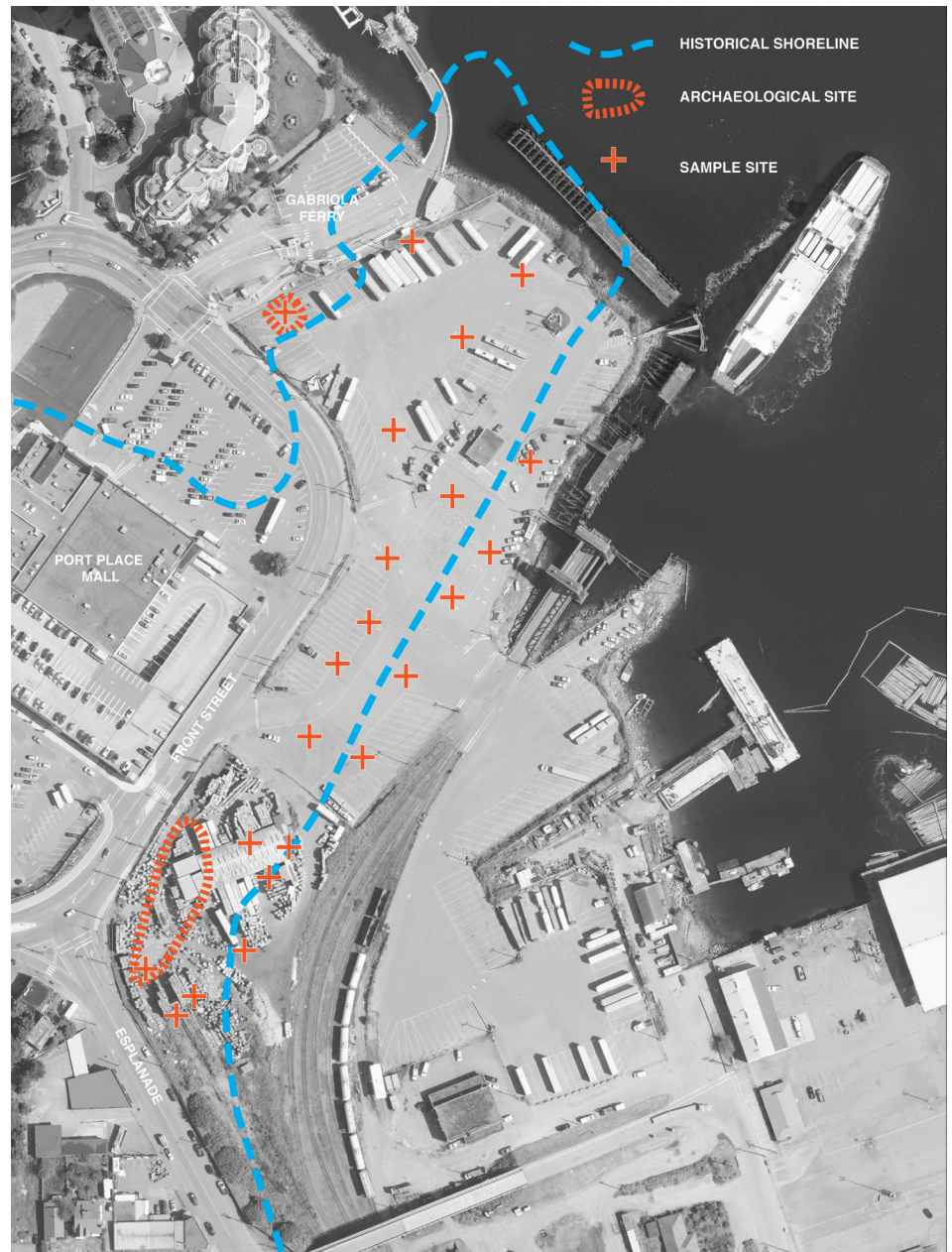


Fig. 4 - Archaeological Site Inventory

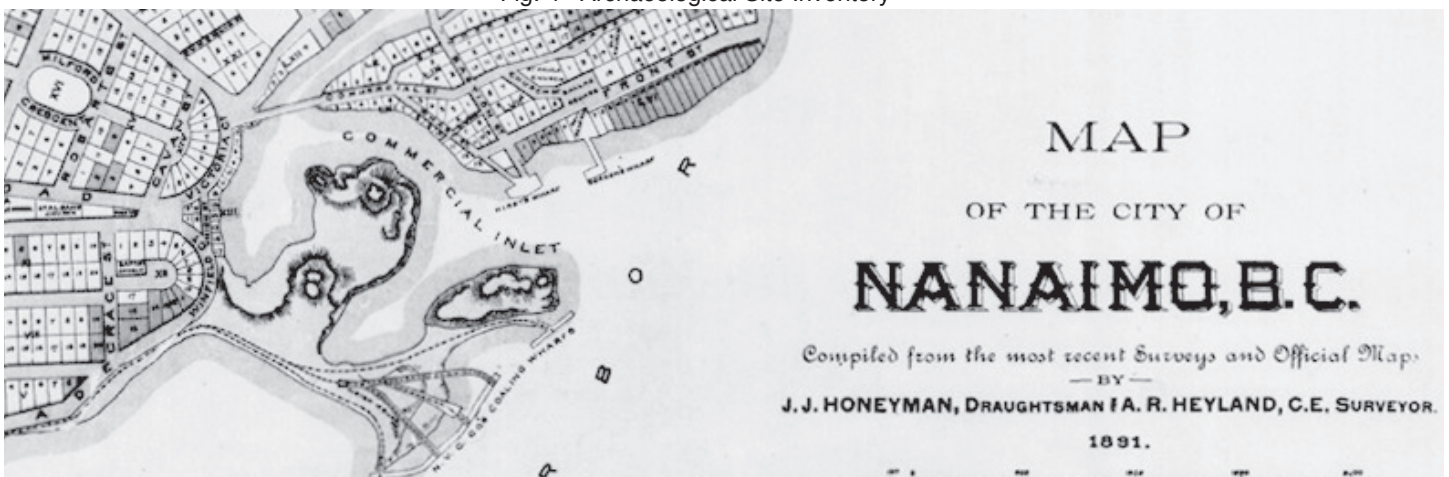


Fig. 5 - Historical Nanaimo Map

Plan Area Context

Like many industrial waterfront sites, the Plan Area has a number of legal encumbrances that dedicate portions of the site for certain uses. This includes the rail area, owned by the Island Corridor Foundation, which will continue to see rail use into the future. The rail dock is within this right-of-way (ROW) and will remain in operation as the only barge-to-rail transfer dock on the Vancouver Island.

The southern edge of the Plan Area is bound by the trestle access to the Nanaimo Port Authority (NPA) Lands. Nearing the end of its useful life, it presented a key consideration for the Master Plan. The NPA lands contain light industrial uses, an active marine industry, three deep sea berths, warehousing, a heliport and Nanaimo's Cruise Ship Terminal.

Further South, the South End Neighbourhood was once home to the majority of Nanaimo's population. This neighbourhood is predominantly residential with commercial uses at the edges nearest the PDWMP area.

On the opposite end of the Plan Area, the Northern edge of the site is bound by a parcel of land owned by the NPA. Next to this is the Gabriola Ferry Terminal. Front Street defines the eastern perimeter of the Plan Area and is the main connection to Downtown. Less than 400 metres away from commercial Street, the PDWMP area is within walking distance of Nanaimo's downtown.



Fig. 6 - Plan Area Legal Encumbrances

Policy Framework

This plan is to be read in conjunction with the following city-wide plans and policies, which guide planning, priority-setting and funding at the neighbourhood level:

- Strategic Plan Update 2016-2019
- Nanaimo's Official Community Plan, 2008
- Nanaimo Downtown Plan (Reference Document), 2002
- South Downtown Waterfront Initiative, (2013)
- Nanaimo Transportation Master Plan (2014)
- Downtown Urban Design Plan and Guidelines (2008)
- South End Neighbourhood Plan, 2010
- Nanaimo Port Authority Land Use Plan (2008)

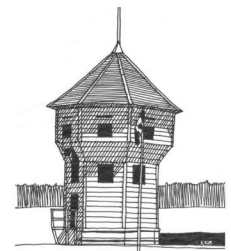
The **Strategic Plan Update 2016-2019** outlines priorities to be pursued into 2019 for Council. City Staff and the City as a whole. The update restates the City's commitment to the four values of sustainability: economic health, environmental responsibility, social equity and cultural vitality, as well as adds a fifth value for healthy lifestyle. Key to the PDWMP, the Strategic Plan prioritizes the creation of a complete community along Nanaimo's south downtown waterfront as a catalyst for our community's future health and as a key economic driver for downtown revitalization. This includes finalizing the Port Drive Waterfront Master Plan and constructing an access route to the South Downtown Waterfront lands..



Nanaimo's Official Community Plan contains city-wide objectives and specific direction for areas of growth to guide neighbourhood planning. For the PDWMP, the OCP designates this area as part of the Downtown Urban Node, one of the five urban nodes in the City. As the regional centre, this Node envisions space for arts and culture, celebrations and festivals, commercial services, civic facilities, and higher density residential, between 50-150+ units/ha and with a height up to and including high-rise buildings.



The Nanaimo Downtown Plan (NDTP) seeks to ensure that future land use decisions contribute to the achievement of the City's social, economic and environmental goals. In response to the impact on the Downtown from the sub-urbanization of Nanaimo in the late 80's, a goal of NDTP is to maintain this unique and historically important place.



'NANAIMO DOWNTOWN PLAN'
REFERENCE DOCUMENT
April 2002

The South Downtown Waterfront Initiative is a long-term, high-level consultation and visioning document that provides guidance for the transition of the entirety of the downtown Nanaimo industrial waterfront for the next 30-40 years. The Vision and Guiding Principles that resulted from the extensive community consultation within the Initiative provide a framework for the long-term development of the PDWMP area and are wholly adopted within this plan.

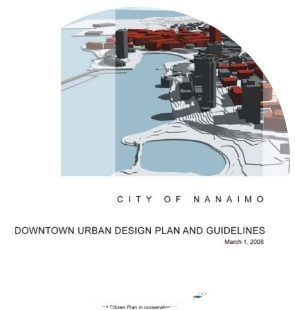


The Nanaimo Transportation Master Plan (NTMP) is a long-term multi-modal Transportation Plan that will guide transportation decision-making over the next 25 years. The overall goal of the Plan is to shift the City's transportation system from a predominantly car-oriented system to a multi-model system. To do this the NTMP encourages improved cycling and walking infrastructure, particularly along Front Street. These aspirations are coordinated within the PDWMP and, further, the PDWMP responds to the policies related to mitigating traffic impacts of the Gabriola Island ferry connection.

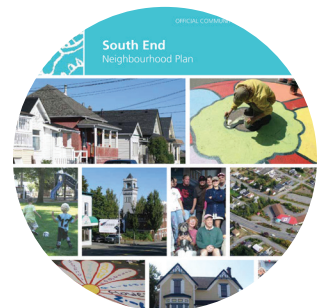


The Downtown Urban Design Plan and Guidelines provide guidance for the high quality future redevelopment of private sites, public lands and urban infrastructure in downtown Nanaimo. Specific guidelines for the PDWMP area include:

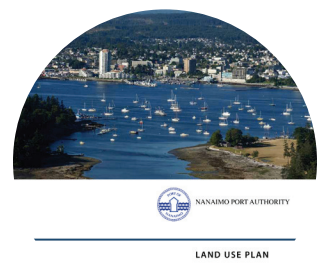
- Provide better public access to the water
- Connect the city's key cultural amenities
- Create a landscape buffer to the Gabriola ferry lands,
- Introduce buildings to the street edge along Front street
- Build for downtown residents in addition to tourist visitor considerations



The South End Neighbourhood Plan complements the OCP and provides more detail for the planning specific to this neighbourhood. Being the immediate neighbour, the PDWMP refers to this plan to help integrate its objectives, vision, and design. Where the PDWMP meets the South End Neighbourhood, the land-uses are designated as Corridor and mixed use which envisions 4-6 storey buildings while maintaining key view corridors at street ends. Pedestrian and road connections are also considered at Grace, Finlayson, Milton, and Farquhar- but do not include the redirecting of heavy truck traffic through the neighbourhood.



The Nanaimo Port Authority Land Use Plan sets out the land use directions for the Port Authority Lands. A key objective within the plan relative to the PDWMP is the support for the development of a Harbourside Walkway. The Land Use Plan sets out a clear vision to Maintain Nanaimo Harbour as the major deep sea port on Vancouver Island. This vision does not include residential land uses. However, providing greater public access to the Waterfront and improving the ability of Nanaimo Harbour to be shared by its users are two principles that further relate to the PDWMP.



An aerial photograph of a waterfront area, likely a harbor or marina, with a blue semi-transparent overlay containing text. The background shows a mix of green grass, paved roads, and rocky shorelines meeting the water. The text is organized into sections: Objectives, Access, Land Use and Density, Environment, and Context, each with descriptive paragraphs or bullet points.

OBJECTIVES

The objectives of the Master Plan were developed through the South Downtown Waterfront Initiative, consideration of the relevant policy (Corporate Strategic Plan, Nanaimo's OCP, South End Neighbourhood Plan and The Nanaimo Downtown Plan), and through meetings with key stakeholders.

The objectives fit under the key themes of: Access, Land Use and Density, Environment, and Context.

Access:

- Formalize the road network and address access through the site, including the existing trestle.
- Provide for improved public waterfront access including the extension of pedestrian and cycling networks
- Consider transit access and the establishment of a transit hub.

Land Use and Density:

- Establish a strong public realm and open space system.
- Confirm suitable land uses and their location on the property.
- Establish policy with respect to the built form.

Environment

- Promote ecological stewardship and restoration.
- Plan for resiliency for a changing climate.

Context

- Integrate adjacent land uses.
- Support a working harbour capable of evolving.

3. LAND USE AND URBAN DESIGN

The use of land and the design of new developments are critical components in moving towards the future outlined in this plan. This section provides an overview of land use directions for the Port Drive Waterfront Master Plan.

Three distinct precincts define the PDWMP and provide a transition from the Nanaimo Port Authority Lands and existing industrial uses to a more residential focus adjacent to Cameron Island.

These precincts are:

- **Residential Focus**
- **Mixed Use**
- **Light Industrial**

Stakeholder input and background studies, including a market analysis by Colliers International informed the land use plan. Supplementing the Official Community Plan (OCP), this plan is used to evaluate development applications, to guide rezoning projects, and to create development guidelines. The OCP remains the City's guiding bylaw for considering new development, and where conflicts arise, the OCP takes precedence.

3.1 General Land Use Policies

1. Support the development of a variety of new housing forms, attractive to different households and demographics.
2. Orient building massing to preserve views from adjacent neighbourhoods and the City as a whole.

3. Stagger placement of building towers on top of a consistent street wall podium level is encouraged.
4. New development should offset the impacts of added density by supporting the provision of amenities: Key amenities include the water front walkway, waterfront park, mid-block Front Street plaza and viewing/ resting areas along the waterfront walkway.
5. Generally, buildings should step back away from the waterfront with the majority of height located mid-block, and closer to downtown.

Street Wall

6. A consistent street wall shall be created along all street frontages, this includes consistent and minimal setbacks from the property line, direct access to the sidewalk, and active frontages
7. Large, blank windowless and featureless walls that are visible from the public realm are strongly discouraged
8. Building facades should be designed so that entrances for pedestrians are legible and prominent, and that vehicular entrances and doors are subordinate features.

Materials

9. Exterior building materials should be high quality, durable and capable of weathering gracefully.
10. Rich and varied architectural materials are encouraged to enhance and articulate street frontages.



Fig. 7 - Precinct Map

3.4 Residential Precinct

Located next to Gabriola Ferry, this area is envisioned as the residential focus of the master plan. Residential demand projections suggest that 3,700 new apartments and row-houses could be supported in Nanaimo by 2035, with the Plan Area capturing 25% of this demand. Buildings as high as 15 storeys are proposed, stepping down toward the waterfront. Retail and commercial uses are envisioned at the ground floor level in a consistent podium building base with minimal setback from the street property line.

3.4.1 Policies

The residential precinct contains both Low-Rise and Mid-Rise Mixed Use land use designations.

- 1. Low-Rise Mixed Use densities range from 1.2 to 2.5 FSR with building heights from 3-6 storeys (max).
- 2. Mid-Rise Mixed Use densities range from 1.5 to 4.5 FSR with building heights up to 15 storeys.
- 3. On-site Parking shall be

located underground, at the rear, or screened from the public realm (streets, parks, plazas).

- 4. Ground floor uses may be residential, or commercial/retail and should be clustered with similar uses.
- 5. A consistent street wall must be provided for all commercial/retail uses on the ground floor
- 6. Buildings shall provide a 2 storey (min) podium level.
- 7. Residential and commercial entries should be differentiated in ways that include, but are not limited to:
 - a) Setting residential entries further back from the side walk.
 - b) Elevating residential entries higher than the sidewalk height and setting commercial entries at the same grade as the sidewalk.
 - c) Providing alcoves and stoops for residential entries.
- 8. A 20m building separation (min.) between buildings shall be provided above the podium level.
- 9. Buildings should have a distinct podium, body and top
- 10. Adjacent buildings are encouraged to be staggered to maximize privacy between buildings
- 11. Developments are encouraged to be oriented to allow exposure to natural light.
- 12. Portions of a building above four storeys shall not exceed a floor plate of 650m².
- 13. For areas where mid-rise and high-rise buildings are permitted, upper levels should be stepped back to enable sunlight penetration to the street and public open spaces



Fig. 8 - Low Rise to Mid Rise Typical Building Forms

3.5 Mixed Use Precinct

Adjacent to Port Place Mall and on Front Street, the Mixed Use Precinct provides for a variety of uses including opportunities for cultural spaces, tourist attractions and an expanded on-street transit hub.

Ground floor retail is proposed for both the Residential and the Mixed Use precincts with the market analysis projections for 100,000 SF of retail/commercial by 2035, contingent on an increased downtown population.

3.5.1 Policies

Mid-Rise Mixed-Use and Special Mixed-Use Land Use Designations make up the Mixed-Use Precinct.

1. Densities of 1.2 to 2.8 FSR are envisioned for the Special Mixed Use Land Designation with buildings up to 6 Storeys.
2. Mid-Rise Mixed Use densities range from 1.5 to 4.5 FSR with building heights up to 15 storeys
3. A consistent street wall shall be provided with minimal step back from Front Street
4. The street edge is to be defined with a consistent podium level with minimum ground floor elevation of 3.6m
5. On site Parking is to be located underground, at the rear or otherwise screened.
6. Ground floor uses to be predominantly Commercial, including office, retail, public institutional and assembly, recreation and tourism-related uses.
7. Street trees are to be located at regular intervals.

8. Provide weather protection at street level with awnings, canopies and street trees

3.6 Industrial Precinct

An existing Statutory Right-of-Way, south of the rail line, dedicates this area of the PDWMP to a light industrial land use. This results in periodic closure of the Front Street extension, cutting off access to the south site and making it unsuitable for residential or commercial uses. Market projections indicate a continued demand for light industrial uses and these uses add to the vibrancy of the area.

3.6.1 Policies

1. Until a secondary access is complete, connecting the waterfront through the South End Neighbourhood, the area south of the tracks will remain as light industrial.
1. The light industrial designation provides for a broad range of employment generating uses including a mix of technology oriented research and development, warehousing,



Fig. 9 - Front St. Development Precedent

light manufacturing, and trans-loading activities associated with the current rail to barge operations.

2. Densities range from 1.2 to 2.0 FSR and building heights of 12m (max.)
3. Buildings with frontages visible to the street are encouraged to include offices or showrooms at street level, and decorative design elements.
4. Larger and longer buildings should be visually broken into human-scaled proportions. This could be achieved in a number of ways, including breaks in form, projections, balconies, bay windows, surface treatments, and building articulation.
5. Building shall be located at the street edge, with parking provided at the rear or underground.
6. Buildings shall define the street edge to mimic an urban form.



Fig.10 -Waterfront Development Precedent

MAP 1 - Land Use Map



Draft Concept Plan

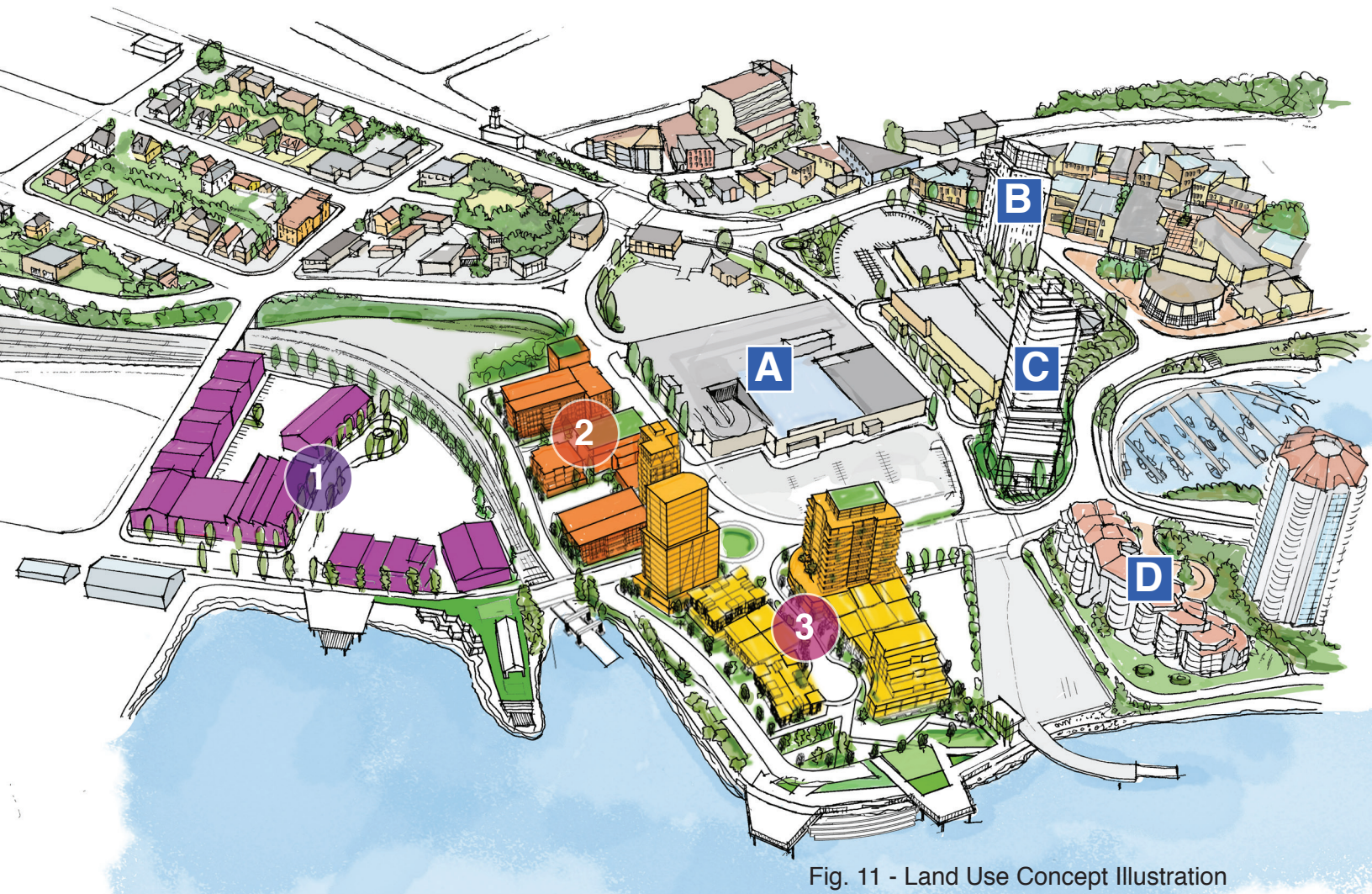


Fig. 11 - Land Use Concept Illustration

- | | | | |
|---|----------------------|---|---------------------------|
| 1 | Industrial Precinct | A | Port Place Mall |
| 2 | Mixed Use Precinct | B | Potential Future Building |
| 3 | Residential Precinct | C | Potential Future Building |
| | | D | Cameron Island |

3.7 Principles

Principle: Support an Evolving Working Harbour

How the Plan addresses this principle:

- Creates a land use gradient, from light industrial to mixed use to residential, that complements adjacent uses and buffers potential conflicts between uses
- Proposes a precinct that will maintain an industrial focus in the medium term with potential to seamlessly shift toward a more mixed use land use in the long term

Principle: Embed cultural and social considerations in future decisions

How the Plan addresses this principle:

- Reserves the highest value lands directly adjacent to the waterfront for public use

Principle: Promote Access and Connectivity to local neighbourhoods, the city and the region

How the Plan addresses this principle:

- Land uses connect and extend adjacent land uses

Principle: To promote bold and resilient land use

How the Plan Addresses this principle:

- Integrates industrial and residential land uses in a thoughtful and contemporary way
- Fosters a sense of place with distinct precincts, each capturing an aspect of the waterfront identity
- Forecasts adaptation within the precinct layouts to be resilient as demand shifts and growth patterns change
- Looks beyond the site boundaries to preserve key view corridors for adjacent neighbourhoods and the city as a whole
- Proposes scale and massing for each precinct that is respectful of existing neighbourhoods and sets a benchmark to help guide development in adjacent areas
- Considers a land use mix that can attract the largest number of people and jobs to the area without competing with adjacent areas

Principle: Promote Ecologically Positive Development

How the Plan Addresses this principle:

- Provides policy to ensure development uses leading smart practices for energy use, waste management and environmental restoration
- Proposes a variety of land uses and housing forms that support social diversity

4. TRANSPORTATION AND MOBILITY

The Transportation and Mobility network for the Port Drive Waterfront Master Plan aims to connect the City to the waterfront while promoting alternative transportation forms that encourage walking, cycling and transit mobility, and reduce greenhouse gas emissions and energy use.

A number of transportation issues and opportunities informed the Plan process and were objectives that the PDWMP set out to address. These are:

- Consideration of a primary access to the site to address the existing aging trestle
- Improved pedestrian connectivity
- The potential for expanded Transit services
- Addressing and respecting the active rail on site

Developed around the public realm, the Transportation and Mobility network makes walking and cycling safe, connected and comfortable and improves public transit servicing and connectivity to other parts of the city. Along with the comprehensive network, the transportation and mobility section focuses on integrating transit and working with the existing rail and ferry connections on and near the site.



4.1 Transportation and Mobility Network

The primary access to the site is proposed via a roundabout and an extension to Front Street. Transportation modeling and an urban design evaluations determined the optimal vehicular access to the site based on criteria such as: general accessibility, queuing traffic, site parcelization, intersection performance, safety and mobility outcomes, pedestrian interface and transit compatibility.

4.1.1 Policies

1. Provide an efficient and extensive system of walkable and bike friendly routes along trails and roads throughout the area, complemented via signage, road markings and road access improvements

between parks and open spaces, and along trails and existing streets.

2. Establish a pedestrian friendly streetscape along all streets by installing landscape, street trees, street furniture, and open spaces suitable for resting or socializing.
3. Provide continuous sidewalks within the site and connected to adjoining areas, separated from the street by a landscaped boulevard or on street parking.
4. Consider separated and off-street cycling facilities at Front Street roundabout
5. Consider additional crosswalks with flashing signals along major roads with particular focus near transit services and to connect to adjoining areas.

4.1.1 Policies (cont')

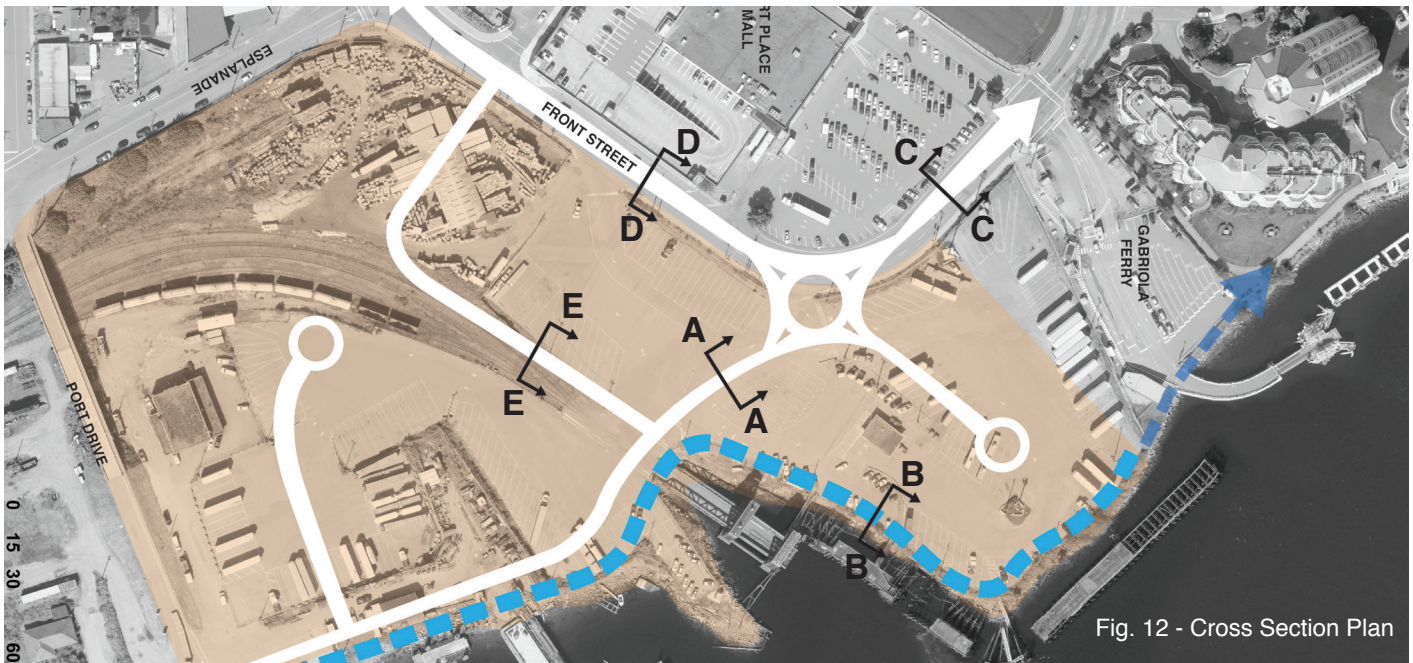
6. Provide a bike lane along the length of Front Street fronting the site to connect into the City Wide Bicycle Loop identified in the Transportation Master Plan
7. Provide a mid-block walkway on Front Street, east/west with a width of 15m (min)
8. Widen Front Street to accommodate the shared bus infrastructure, cycle lanes and

9. Extend Front Street via a roundabout at the 90 degree bend around Port Place Mall as the primary access to the site
10. Locate and align streets to extend the city street grid network, creating similar sized blocks within the site area that anticipate future land divisions and parcelization for

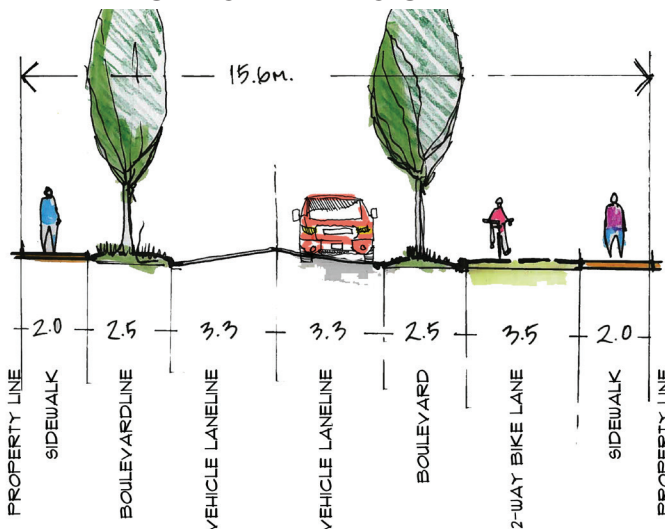
the remainder of the South Downtown Waterfront Lands.

Cross Sections

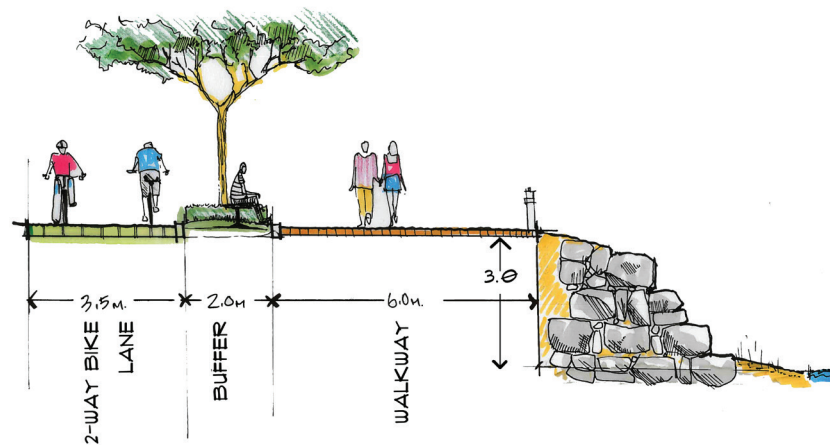
11. Provide road cross sections as shown Sections A-A to E-E and as indicated on Figure 11 (Cross Section Plan)



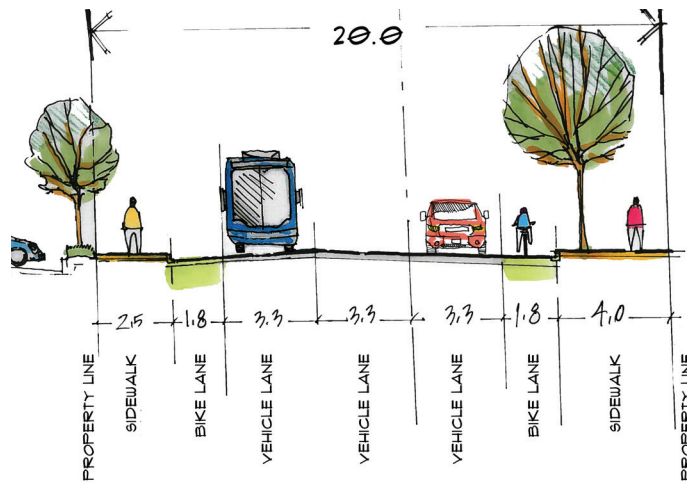
SECTION A-A
FRONT ST. EXTENSION



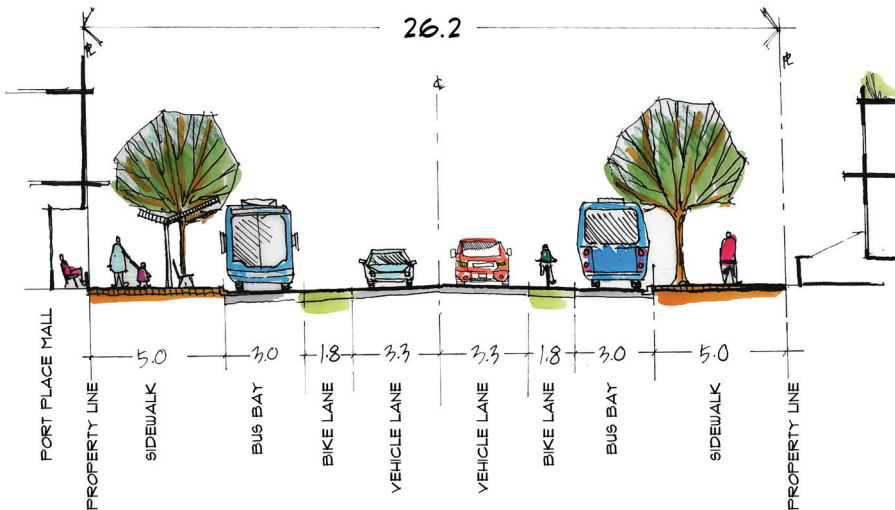
SECTION B-B
WATERFRONT WALKWAY



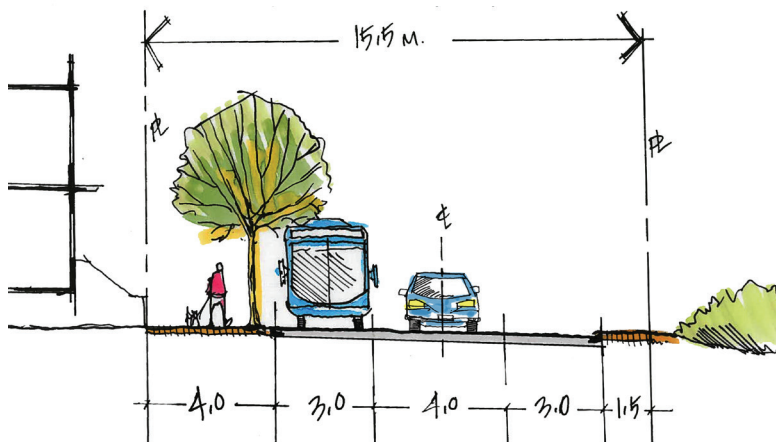
SECTION C-C FRONT ST. NORTH



SECTION D-D FRONT ST.



SECTION E-E ONE WAY ROAD



4.2 Public Transit



Providing transit services near the waterfront is a key consideration of the Master Plan process and a variety of locations and concepts were considered. After careful analysis, transit that integrates with the site and utilizes shared roads for transit circulation was the proposed approach. The

benefits of this arrangement are:

- Preserves waterfront for highest and best uses
- Integrates with road infrastructure rather than duplicating it
- Overall, creates a more pedestrian friendly environment (less space dedicated to vehicles)
- Facilitates expansion and connections to taxis and other public transportation options
- Achieves active street edge
- Preferred by the community (via consultation)

With transit integrated on-street, Front Street is proposed to be widened to support the multi modal functions anticipated, the free and convenient movement of buses and to minimize potential shared road conflicts.

4.2.1 Policies

1. Provide opportunities for on-street, integrated transit which utilizes shared infrastructure and the proposed roundabout to cycle buses.

2. Provide main bus bays along Front Street as indicated in Figure 13 - Transit Plan.
3. Ensure passenger landing pads are connected to the sidewalk and free of obstructions.
4. Provide continuous weather protection at bus bay locations
5. Consider architectural and interesting canopy design for weather protection elements, beyond typical bus shelters, that are incorporated into adjacent buildings or stand alone features.
6. Saw tooth bus bays are discouraged.
7. Lay over areas are encouraged to utilize the internal one way road.
8. Detailed bus bay design shall consider cycle lanes and pedestrian interfaces.

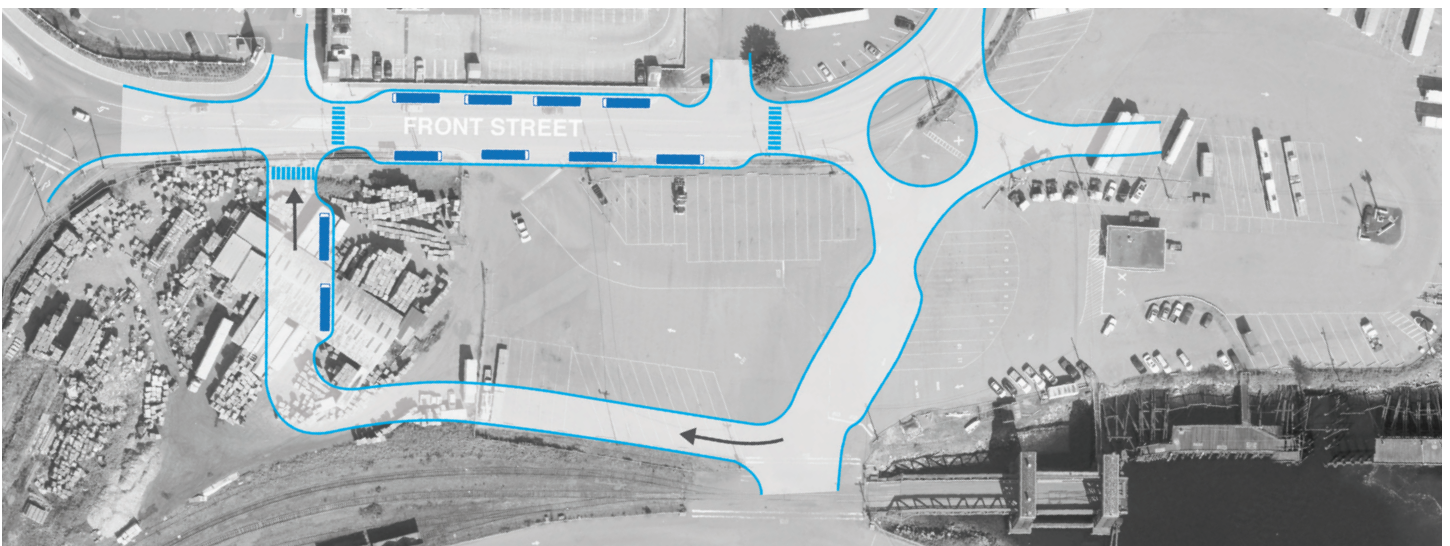


Fig. 13 - Transit Plan

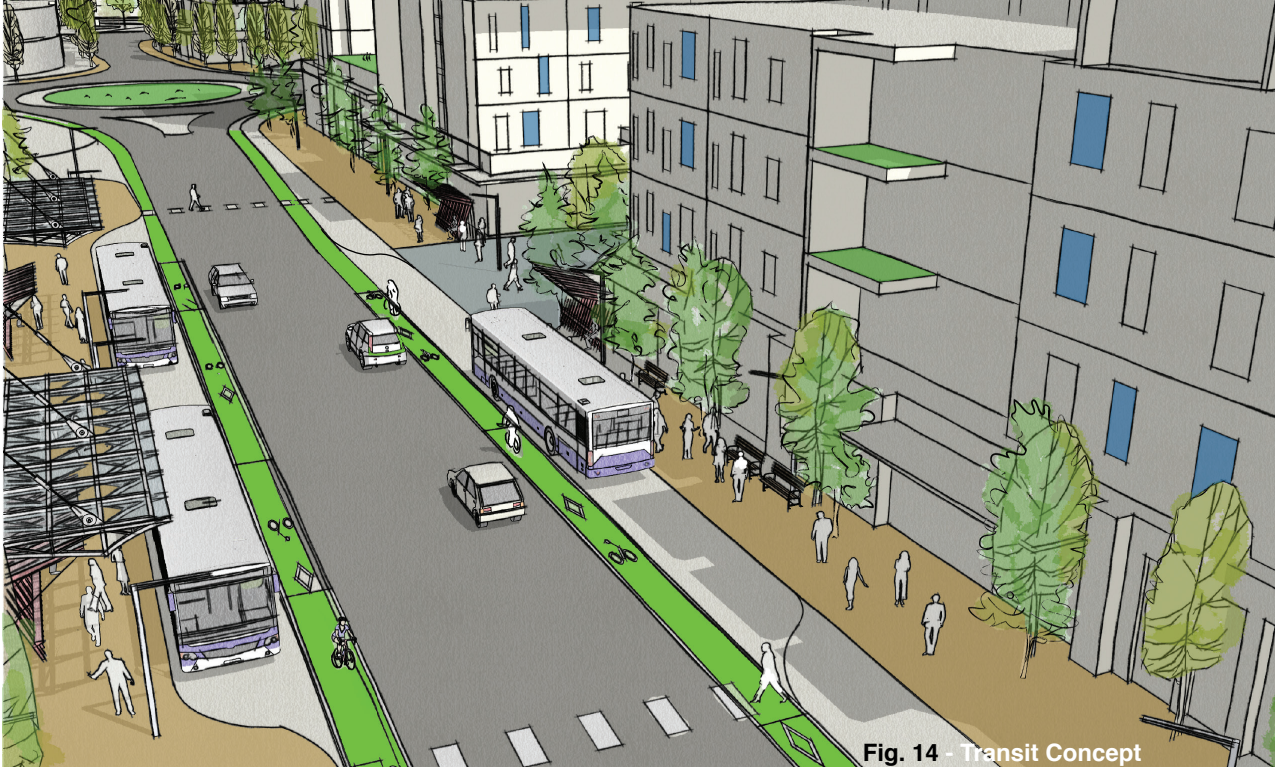


Fig. 14 - Transit Concept

4.3 Rail operations

The ongoing operation of rail within the site offers both an interesting and active land use and the potential for conflicts between noise generating uses and residential areas. Where the Front Street extension crosses the tracks offers the least conflict with the active rail line. The proposed location provides the most effective area to ensure safety and control around the active rail by minimizing the crossing distance and crossing at a perpendicular angle to maintain effective sight lines. The proposed one way road parallel to the rail also increases safety by preventing vehicles from crossing the tracks via a right hand turn, which can limit sight lines and increases the types of vehicle movements around an active rail line.

4.3.1 Policies

1. Utilize a one-way, south-bound, internal street (parallel to the train tracks) off the of the Front Street extension to cycle buses back onto Front Street nearer to Esplanade and to avoid rail conflict by preventing northbound travel taking right hand turns.
2. Provide controlled access across the rail line, designed in collaboration with the rail operator
3. Undertake a memorandum of understanding with the rail operator to secure rail operation procedures and protocols
4. Left turns off of the Front Street extension (within the site) heading west are not permitted onto the one way internal road.

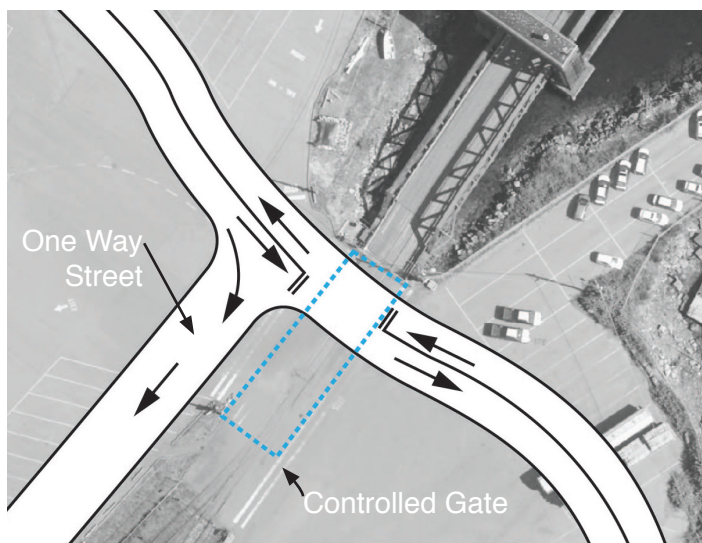


Fig. 15 - Rail Crossing Plan



Fig. 16 - Rail Crossing Photo

4.4 Principles

Principle: Embed cultural and social considerations in future decisions

How the Plan addresses this principle:

- Reserves the highest value lands directly adjacent to the waterfront for public use

Principle: Promote bold and resilient land use

How the Plan addresses this principle:

- Organizes the mobility networks around the public realm instead of the other way around
- Strives to support all modes of travel, prioritizing walking and cycling over automobile travel
- Integrates a transit hub to consider the overall pedestrian experience as well as a transit connection experience
- Anticipates potential expansion or contraction of transit by sharing road infrastructure

Principle: Promote ecologically positive development

How the Plan addresses this principle:

- Transit produces less emissions per occupant and utilizes infrastructure more efficiently than single occupant vehicle travel

Principle: Support and evolving working Harbour

How the Plan addresses this principle:

- Locates pathway connections that help to buffer adjacent uses
- Supports alternative modes of transportation to connect employees to employment areas without car parking implications
- Provides amenity to working harbour employees, adding value to attract business
- Providing a buffer land use. Transit can act to buffer working harbor functions from residential land uses
- Providing an alternative transportation mode to industrial lands for employees
- Reducing the need to utilize industrial lands with parking

Principle: Promote Access and Connectivity to local neighbourhoods, the city and the region

How the Plan addresses this principle:

- Creates physical and public linkages via streets, sidewalks, paths, and cycle routes from Front Street and the surrounding area into the formerly private industrial site and waterfront area
- Provides a strategic main access point to ensure that adjacent neighbourhoods are not adversely affected by intrusive traffic flows
- Encourages a gateway experience through the proposed road and access alignments which help to preserve view corridors and add to the sense of place.
- Provides an integrated transit hub at a central location within the site

MAP 2 - Transportation and Mobility Map





5. PARKS, TRAILS & OPEN SPACE

Access to parks and green spaces is important for human health and well being. These spaces also protect the environment and help to mitigate and adapt to the impacts of climate change. City green spaces are places for people to meet, play and enjoy nature. The parks, plazas and open spaces in the PDWMP also act as the outdoor living spaces for the new residential areas proposed in this Plan.

In addition to the pedestrian routes proposed in the Transportation and Mobility section, three key elements form the Parks, Trails, and Open Space Network. These are:

1. The Waterfront Walkway
2. The Waterfront Park
3. Front Street Mid-Block Plaza

5.1 Parks, Trail & Open Space Policies

1. Provide quality architectural landscape elements and materials, suitable for waterfront conditions.
2. Ensure safety in design: Parks and paths should be designed according to CPTED (Crime Prevention through Environmental Design) principles. Part of safety is ensuring a variety of activities that draw parks users throughout all seasons and times of day.
3. Create Parks and Trails which appeal to a wide variety of users of different ages and abilities: When designing parks and trails, incorporate features such as shaded resting areas, activities appealing to users ranging from children to seniors, access and activities for persons with disabilities, and for use year round.
4. Create attractive views and focal points; and maximize safety, comfort, and amenity, including access to sunlight, clear views to and from adjacent streets and buildings, universal accessibility, pedestrian-scale lighting, four season landscaping, seating, public art, and protection from wind and inclement weather

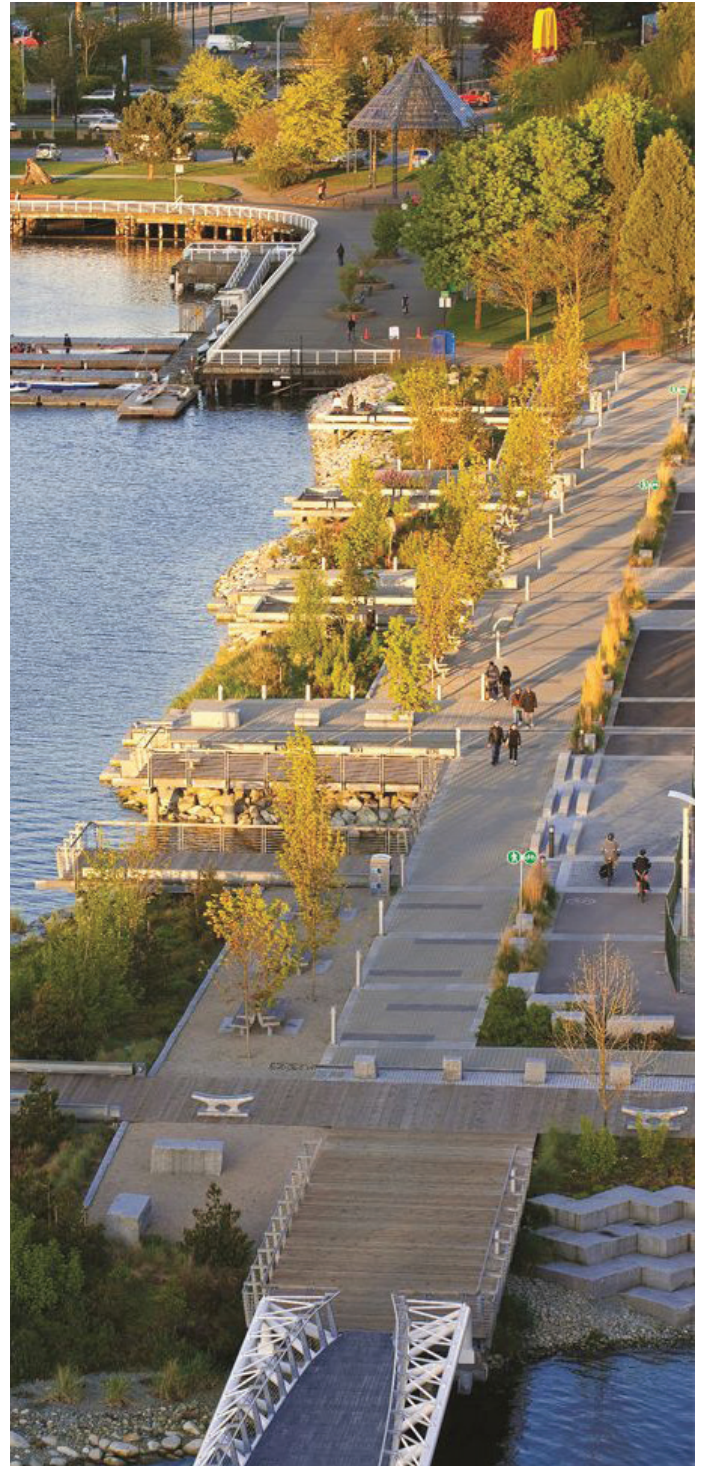


Fig. 17 - Waterfront Path Precedent - Olympic Village Vancouver

5. Parks and natural areas should contribute ecological benefits, such as purifying air and water through low impact development approaches that provide habitat, and enhance the energy performance of buildings.
6. Support urban ecological systems, wildlife habitat and stormwater management practices in all parks.
7. Engage Snuneymuxw First Nation to determine interest and appropriate recognition of sites of interest in parks, beaches and archaeological sites.
8. Encourage the animation of neighbourhood parks through arts and cultural installations, public events and interactive public art.

5.2 Waterfront Walkway

The waterfront walkway starts at the most northerly edge of the plan area and extends south, hugging the shoreline across the PDWMP eastern edge. Outside of the Plan area, the long term vision is to connect the walkway to Cameron Island, across the Gabriola Ferry lands. The Walkway provides a north/south public spine to the site and forms the backbone of the path network, with pockets of resting areas, waterfront access and viewing areas.

1

5.2.1 Policies

1. Provide a Waterfront Walkway extending the length of the plan area along the water frontage.
2. Provide opportunities for street furniture, trees, art, viewing platforms and resting areas.
3. Both bicycle and pedestrian movements are supported, separated by materials and/or grade changes.
4. Anticipate future walkway connections at both the north and south ends of the plan area with design considerations and appropriate grading.
5. Consider opportunities for water-based recreation (swimming, catch and release fishing and small boat launches).
6. Consider shoreline enhancement and aquatic habitat restoration as part of the waterfront pathway detail design.
7. Elevate the waterfront walkway and incorporate construction approaches to mitigate the effects of sea level rise and associated storm surges.
8. Focusing naturalizing shoreline efforts on the area South of the rail crossing where semi-natural shoreline areas and shallower grades exist.
9. Consider opportunities, South of the rail line to formalize the waterfront to create a consistent shoreline edge with the use of elevated walkways, bridges or infill.



Fig.18 - Waterfront Path Precedent, Waitangi Park Wellington NZ

5.3 Waterfront Park

The primary open space for the Port Drive Waterfront Master plan occurs adjacent to the Gabriola Ferry at the waterfront edge. This is the Waterfront Park. This primary area is reserved as the principal public gathering space with capacity for waterfront events, open air markets, and acts as the main community living room, providing ample outdoor space for residents of the area and the City as a whole.

5.3.1 Policies

1. Provide a Waterfront Park at the North East end of the Plan Area, suitable for hosting City wide events and designed to meet the needs of a range of abilities and ages.
2. Consideration should be given to elevating the Waterfront Park in anticipation of sea level rise. Underground parking could be provided beneath the park, with a terraced sea wall edge to provide opportunities to be closer to the water and to break up a potentially large blank façade when viewed from the water.
3. Support local food production: In collaboration with the community, consider supporting open air farmers markets by providing utility connections for this use and considering loading and space needs.
4. Incorporate a combination of hard and soft surfaces, suitable for all weather use and long term durability.



Fig. 19 - Waterfront Park Concept Plan and Precedent Images

5.5 Front Street Mid-Block Plaza

The Front Street Mid-Block Plaza provides an East/West link that completes the open space network. It further provides for public area adjacent to transit services to help activate this area and provide amenity to waiting transit users. Proposed across from Port Place Mall, the mid-block plaza anticipates future development on site and provides a fine grained pedestrian realm, suitable to a waterfront site and this key City building block.

5.5.1 Policies

1. Enhance public access to the waterfront and waterfront views with a mid-block plaza along Front Street, across from Port Place Mall.
2. Incorporate weather protection, trees, vegetation, seating and lighting.
3. Ensure that adjacent buildings are designed to provide street-level, active commercial uses such as restaurants, cafés and retail stores, with direct access to the plaza.
4. Ensure parks, plazas and open spaces are well-designed attractive, functional and integrated with both the Pedestrian Network and the Transit Services.

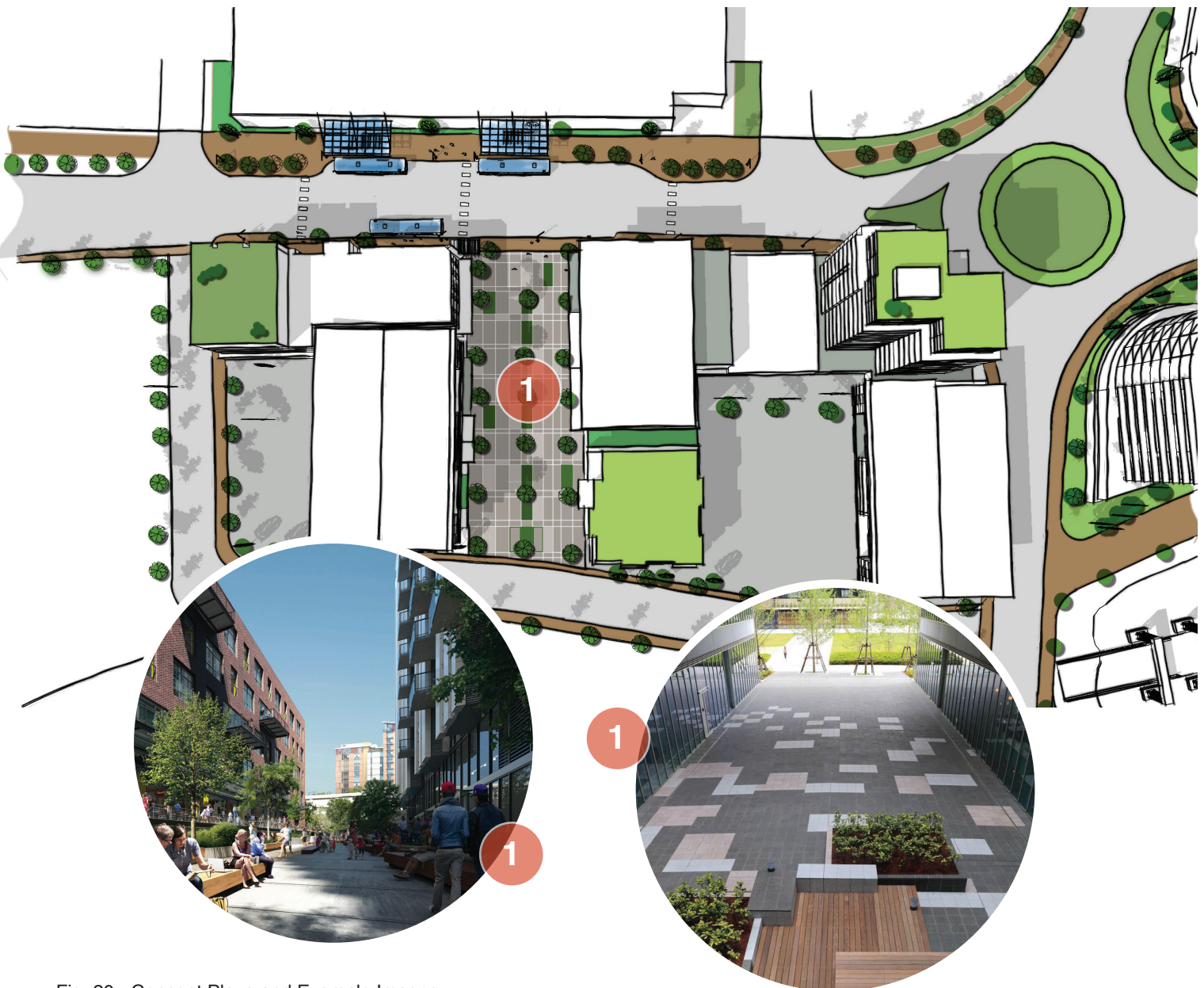


Fig. 20 - Concept Plaza and Example Images

MAP 3 - Parks, Trails and Open Space Map



5.6 Principles

Principle: Promote Access and Connectivity to local neighbourhoods, the city and the region

How the Plan addresses this principle:

- Provides a missing piece to a Regional amenity
- Creates a physical pedestrian connection that links neighbourhoods and provides a destination to encourage linkages beyond

Principle: Promote ecologically positive development

How the Plan addresses this principle:

- Supports alternative travel options
- Provides green space and vegetation, mitigating negative development effects
- Creates opportunities for shoreline restoration

Principle: Embed cultural and social considerations in future decisions

How the Plan addresses this principle:

- Provides flexibility and indeterminate space to accommodate future decisions.
- Utilizes the public realm as the principle showpiece for cultural and social considerations.

Principle: Promote bold and resilient land use

How the Plan addresses this principle:

- Incorporates resiliency into the design and policy for key waterfront elements

Principle: Support and evolving working Harbour

How the Plan addresses this principle:

- Locates park space and paths as buffers to industrial uses.
- Supports industrial employees with a public realm for their use.

6. INFRASTRUCTURE

A vital aspect to any plan is to forecast infrastructure demands and ensure proposed land use changes can be accommodated in a sustainable manner.

The site contains existing sanitary and storm sewers throughout, that serve the surrounding Nanaimo area. The re-routing of these services is likely required due to the conflict their alignments have with potential land uses. Both Storm and Sanitary sewers cross the site diagonally, constricting development areas. An evaluation to re-route these services was carried out by the City and it was determined that new alignments are feasible in conjunction with development of the site.

Stormwater

Stormwater runoff in this area currently flows across impervious surfaces and enters the ocean with little or no treatment. This, along with certain land use practices can have a negative impact on the health of the waterways, in the form of elevated metals, suspended solids, turbidity, polycyclic aromatic hydrocarbons and coliform counts.

Sanitary Sewer

New service lines connecting future development to the RDN trunk line, in conjunction with lift stations will service the majority of development on site. The initial sanitary sewer considerations should go toward relocating the trunk line with future development.

6.1 Policies

1. The realignment of the existing sanitary and storm sewers shall be considered with development applications and in conjunction with site works
2. Reduce the amount of impervious areas.
3. Treat stormwater prior to entering a waterway and the promote stormwater management practices on private property.

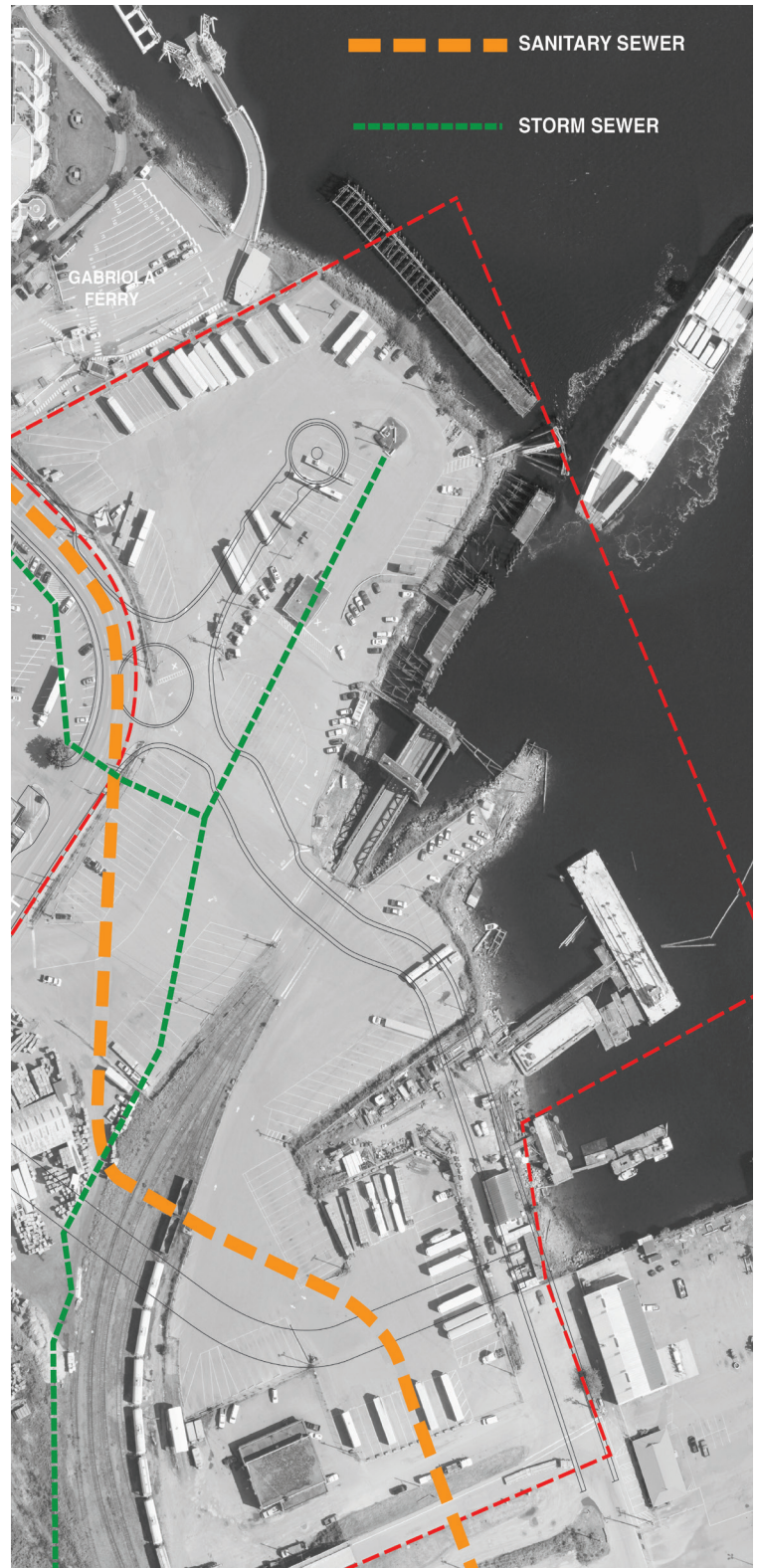


Fig. 21 - Existing Infrastructure Plan

6.1 Policies Con't

4. Development proposals shall incorporate greenspace at the shore, incorporate surface stormwater treatment (e.g. rain garden) or include retention and filtration systems before runoff makes it way to adjacent water bodies.
5. Consider integrating green stormwater infrastructure or “green streets” in the area as streets are improved and developed.
6. Consider the capacity of utility networks, including water distribution, sanitary sewer and storm drainage, in reviewing development applications and other land use changes.
7. Work with property owners and institutions to identify options for mitigating stormwater impacts on sites with high impervious cover, and thereby reducing the stormwater utility costs for these properties.
8. Identify opportunities for stormwater management as part of public development projects or improvement on City-owned lands.

7. ECOLOGICAL STEWARDSHIP & RESTORATION

Working toward a more sustainable city is the overarching principle of the City's Official Community Plan. For the PDWMP, the basic concepts of sustainability recognize the need to use land more efficiently by increasing residential densities and in turn use less energy, and support local services and transit. Supporting a pedestrian environment, within close proximity to services and amenities, also adds to the environmental stewardship in the Plan.

Specific to the PDWMP, sea level rise is expected to be up to 1.0 metre in Nanaimo by 2100, with even greater storm surges. Coupled with the effects of rising and more frequent “king tides”, the effects of climate change are a critical issue for the PDWMP. As a former industrial site, the existing soils conditions and site contamination also inform the Ecological and Restoration Plan approach.



Fig. 22 - Ecological Restoration Examples



7.1 Site Contamination

The majority of land considered part of the Master Plan sits on placed fill that dates back to early coal mining activity, and the development of forestry-related industrial infrastructure. An environmental assessment of the site identified a number of affected areas and site conditions that have informed the Plan.

7.1.1 Policies

1. Remediate soils where possible.
2. Where full site remediation is not possible, cap contaminated fill areas with underground parking, imported clean fill, or other methods acceptable to the Ministry of the Environment.
3. Provide underground parking beneath all residential areas or a ground floor for commercial or retail use with suitable vapour barriers to prevent the spread of contaminants.

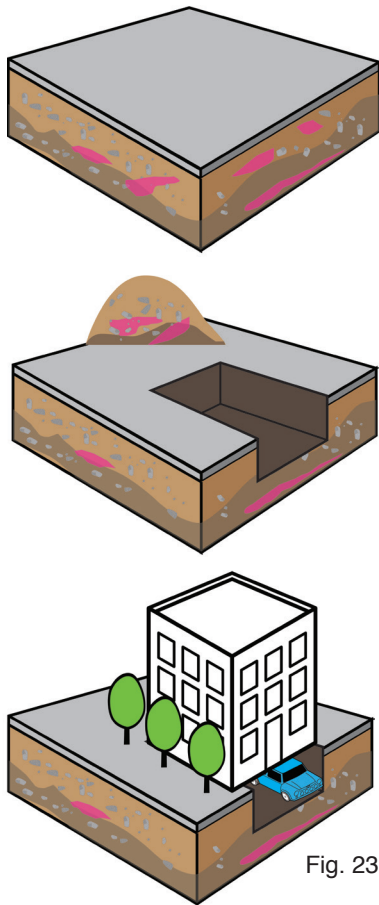


Fig. 23- Contamination Development Approach



Fig. 24- Site Contamination Plan

7.2 Climate Resiliency

The changing climate means planning for the future must address changing environmental and weather conditions. Any plans for waterfront development must ensure that sea level rise and rising storm surges are considered.

Two key approaches are utilized in the master plan to address sea level rise:

- A raised waterfront Walkway to act as a dike,
- Raised finished floor levels, 2.0 m (min) above projected storm surge high water levels.

7.2.1 Policies

1. Provide a waterfront walkway to act as a dike and work with developers to create a continuous path that adequately protects upland areas.
2. Consider flood control around the existing lower rail line until a complete dike is possible.
3. Ensure developments respect minimum finished floor levels to mitigate against the effects of sea level rise, with mechanical equipment placed on elevated storeys.
4. Opportunities to restore marine and estuarine functions along the shoreline, and further increase the waterfront's resilience to climate change impacts, should be actively pursued.
5. Consider the adoption of incentives for energy efficiency in new buildings.
6. Recognize the goals and objectives of the Nanaimo Estuary Management Plan and support the shared management being taken by the Nanaimo Estuary Management Committee.

RAISED WATERFRONT WALKWAY

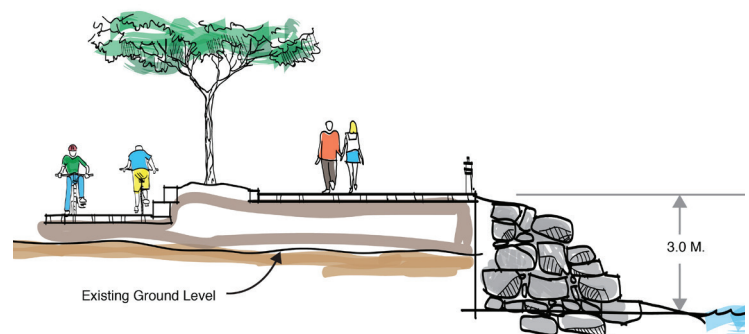


Fig. 25 - Raised Waterfront Walkway

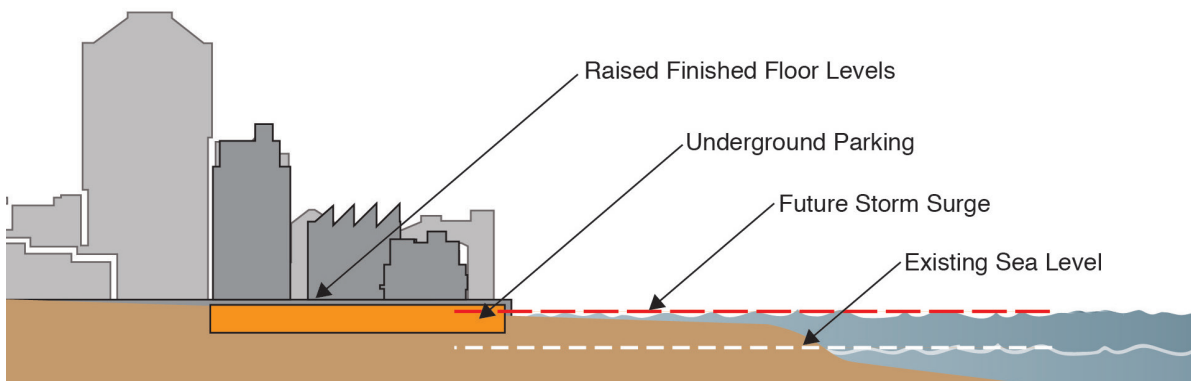


Fig. 26- Raised Finished Floor Levels



7.3 Principles

Principle: Promote ecologically positive development

How the Plan addresses this principle:

- Supports alternative travel options
- Provides green space and vegetation, mitigating negative development effects
- Creates opportunities for shoreline restoration
- Provides a site contamination mitigation approach
- Encourages efficient and low energy land uses

Principle: Promote bold and resilient land use

How the Plan addresses this principle:

- Incorporates resiliency into the design and policy for key waterfront elements
- Provides a climate adaptation approach
- Anticipates sea level rise with design

8. HERITAGE, ARTS & CULTURE

Over time, the waterfront has been a major Snuneymuxw village site, with associated marine and land resource harvesting, heavy industrial use and, more recently, a marine transportation site. The site will continue to change and in recognition of this evolution the policies below are proposed in order to maintain and strengthen that legacy. The City undertook the heritage registration of the site to ensure that the archaeological values are considered during any future development of the site.

The Waterfront area has the potential to host important city-wide events, including music festivals, farmers markets, and public gatherings. Enhancing performance spaces will support future programming and the vibrancy of the area and Nanaimo as a whole. Public art can also play an important role in placemaking, cultural enrichment, and interpretation of the natural and cultural history of this area for current and future residents.

8.1 Policies

1. The City will work cooperatively with the Snuneymuxw First Nation to develop and place interactive, public art in parks and open spaces throughout the area under the City's Volunteers in Park Program in order to reinforce and commemorate the area's unique history and sense of place.
2. The City will work with the Snuneymuxw First Nation to create street and special place names located in the area.
3. Public interpretation of the area's mining and Snuneymuxw First Nation history through signage, architectural design, landscaping, public art and educational programming will be supported.
4. Consider performance spaces at Waterfront Park.
5. Introduce public art into urban village areas and Industrial Arts areas as part of streetscape improvements.
6. Incorporate public art into the design of waterfront trails and parks spaces.
7. Develop murals throughout the neighbourhood,

taking advantage of opportunities on private or public property. An initial project should focus on the Waterfront Park, honouring First Nations history.

8. Engage the arts community and non-profit groups in identifying opportunities, incentives and partnerships to create an incubator space including affordable gallery, studio, and business incubation spaces and space for the co-location of non-profit organizations.
9. Engage creative businesses, micro-enterprise, the Arts community and non-profit groups in identifying opportunities for affordable artists' housing co-located with studio and gallery space.
10. Stewardship of cultural, human, and natural resources should be a central tenet for future development considerations.



9. PHASING & IMPLEMENTATION RECOMMENDATIONS

The Port Drive Waterfront Master Plan will be implemented through a variety of measures, ranging from the development of new bylaws, the direct involvement of citizens, landowners and stakeholders and in collaboration with developers.

Certain measures are to be implemented immediately; others may commence with interim measures and most will require months or years to complete.

The proposed implementation plan is presented as sequential phases, but should be viewed as an integrated and adaptive approach. Comments are provided with each implementation action to take advantage of opportunities when they arise and to be proactive when challenges are encountered.

All proposed changes to this Plan must follow the amendment procedures outlined in the Local

Government Act. The Implementation Strategy for the PDWMP identifies actions, timing, and responsibilities of the City and other agencies of various governments, organizations and groups. Plan implementation is the responsibility of both the City of Nanaimo and partners of the City, recognizing that certain issues require the involvement of residents, businesses interests, and/or other stakeholders. The following table outlines key implementation actions.

The timing of implementation actions is broken down into three time-frames:

1. Short term (to be completed within 5 years);
2. Medium term (to be completed within 5 to 10 years); and
3. Long term (to be completed over 10 to 25 years).

9.1 Short Term

Implementation Action	Description	Comment
Rezoning	The rezoning of the Port Drive Waterfront area will follow the adoption of this Plan.	
Interim Front Street Extension	The interim Front Street extension provides access to the site and the NPA lands beyond. It also involves implementing the rail control gates and infrastructure to protect the rail operations and public safety.	Anticipate the final build out of the full Front Street extension and provide suitable services and infrastructure.
Interim Waterfront Walkway Extension	The interim Walkway provides access to the waterfront via a public path. While it will not include the full design of the envisioned Walkway, it enables the public immediate waterfront access.	Anticipate future walkway design details and seek out opportunities to prepare for the full build out of the Walkway
Secondary Access Study	Determining the secondary access, south of the Plan area, is key to unlocking the full development potential of the waterfront area. This involves community consultation and continued coordination among adjacent land owners and property users.	Not only will a secondary access open up the site, but it is also a necessary provision for any development as a fundamental planning principle.

9.1 Short Term con't

Implementation Action	Description	Comment
Industrial Land Use	The City has an existing Memorandum of Understanding with Southern Rail and Seaspan for the continued operation of rail, trans-loading and barge activities on the light industrial designated lands.	The road layout and distribution of buildings should follow an urban form as described in the Plan. This will ensure that the area remains flexible for future land uses.
Subdivision	Subdivision involves the parcelization of land into smaller blocks to permit development. This includes providing services and utilities to each parcel and meeting environmental requirements for each parcel's development.	Working with development partners, the City can tailor the subdivision of land and partner on parcel preparation.
Transit Service Detail Design	The detail design of Transit services provides information for the alignment and widening of Front St. and will inform the subdivision of adjacent parcels.	Concept designs have been provided for transit services to ensure workability, however, the detail design includes the realignment of Front street which informs the developable edge of the Plan area.

9.2 Medium Term

Implementation Action	Description	Comment
Complete Roundabout Intersection	The Front St. roundabout is a key infrastructure element that provides for subsequent cycling and pedestrian networks, transit movements and creates a gateway for the site.	Re-evaluate roundabout performance criteria in conjunction with the secondary access plan and revised site demand projections. Over-building the roundabout can be detrimental to the pedestrian focused goals of the waterfront.
Front Street Transit	On-street transit service utilizes shared road infrastructure and preserves the pedestrian realm. Front St. is to be widened to accommodate buses and portions of the Front Street Mid-block walkway can form part of the transit services.	The transit services and Front St. widening fundamentally determine the parcelization of adjacent areas. These items must commence in advance of development along front street, OR the design of these elements must be complete to appropriately parcel adjacent areas.
Cycling and pedestrian network completion	The interim Walkway provides access to the waterfront via a public path. While it will not include the full design of the envisioned Walkway, it enables the public immediate waterfront access.	Implementation should anticipate future walkway design details and seek out opportunities to prepare for the full build out of the Walkway.
North End and Front Street site development	Following the subdivision of the site, development is anticipated to first occur at the North end of the site. Initial projects may include taller building forms and public areas next to Front Street. The mid-block walkway on Front St. should be considered in this phase.	Development should follow a logical sequence, commencing with Front Street locations, first, and moving toward the water in latter phases. This sequencing permits key public amenities to benefit from development cost charges on earlier phases and lessons learned.

9.2 Medium Term con't

Implementation Action	Description	Comment
Waterfront Walkway formalization	Formalizing the Walkway design involves implementing finished surfaces, lookouts, resting areas, lighting, shore restoration, and art. This will occur, first, at the north end of the site and in conjunction with adjacent development.	Opportunities to implement the Walkway with adjacent development should be sought out, with an aim to elevate the walkway to realize the climate resiliency objectives in the Plan.
Waterfront Park Detail Design	The detailed design of the Waterfront Park includes identifying shoreline restoration opportunities, formalizing sea level rise mitigation measures, and a full landscape design for the area.	In unison with the Waterfront Walkway formalization, the Waterfront Park detail design should aim to work in conjunction with adjacent development, seeking out opportunities to combine its development with concurrent proposals.

9.3 Long Term

Implementation Action	Description	Comment
Waterfront Park	The implementation of the Waterfront Park, implements the design provided in the previous phase.	As part of the implementation, opportunities to meet concurrent development objectives should be explored (i.e. combined underground parking, building access, sea level rise mitigation).
Finalization of Waterfront Walkway	As the site is built out, opportunities to formalize, restore and integrate the South portions of the shore will enable the full realization of the Waterfront Walkway	Opportunities to take advantage of the shallow water and semi-natural shoreline exist with this phase.
Front Street Extension Finalization	Build out the full envisioned cross section for Front Street for its entire length.	Coordinate construction with the Waterfront Walkway
Sewer and storm trunk relocation	In collaboration with development, seek out realignment opportunities for the sewer and storm services that underlay the site area.	Opportunities to realignment these services may come earlier.
Development south of train tracks	The area south of the train tracks will eventually transition into a more mixed use area once the secondary access is in place.	A continued working harbour is envisioned for the overall area, and opportunities to reevaluate what this means will come