Waterfront Development Master Plan

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Prepared by:



Port of Vancouver t Master Plan FINAL November 13, 2015

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1.1. Study Purpose

The Port of Vancouver (POV) proposes to develop a 10.14-acre site on the Vancouver waterfront, adjacent to the Columbia River in Vancouver, Washington. The POV intends to develop the site to include a mixed use waterfront development that may include:

- Multi-tenant offices with ground floor retail and services
- Hotel and hospitality
- Adaptive reuse and/or re-purposed Terminal 1 Building as a flexible retail marketplace, incubator and/or innovation center
- Multi-purpose community building that may accommodate a visitor and/or cultural interpretive center and/or performance space
- Residential uses such as apartments and/or live-work uses
- Outdoor plaza and pier viewing areas
- Parking areas and
- Continued "low dock" use for small boat moorage.

The Waterfront Development Master Plan (Master Plan) defines the vision and master plan goals and objectives to develop the POV waterfront as part of the ongoing efforts to improve and revitalize the Columbia River waterfront in Vancouver, Washington.

1.1.1 Site Description

The POV waterfront property is located in the Columbia West Renaissance subarea of the downtown City Central Use District (CX). The project site is bounded by the Columbia River on the south, Columbia Street on the east, Esther Street on the west, and the Burlington Northern Santa Fe (BNSF) Railroad on the north. The project area is in a portion of the Amos Short Donation Land Claim, situated in the SW¹/₄ of Section 27, T2N, R1E, W.M.

The waterfront development will be served by public street access, public transit, an extension of the Columbia River Renaissance Trail and vehicle parking facilities. The public realm will be pedestrianfocused with specific attention to amenities such as civic plazas, urban landscape improvements, interpretive signage, wayfinding, public art, natural shoreline and habitat enhancements.

A phased implementation program will define all site improvements including the public realm and infrastructure improvements, structural pier enhancements and/or replacement, building development and requisite parking. The subject site currently provides an existing Red Lion Hotel (which includes the Terminal 1 Building), the Columbia Shores Business Center and the pier structure that supports the Red Lion/Terminal 1 Building and an outdoor amphitheater use. The subject property is comprised of four blocks (Blocks A, B, C, and D) a short distance west of Interstate 5 and south of the downtown Vancouver City Center. Two additional blocks (Blocks 1 and 2) located directly adjacent to the site are owned by the Port and leased to the Columbia Waterfront, LLC (CWLLC). CWLLC owns the 32 acres immediately west of the POV property and is proceeding with a phased, mixed-use development which will include office, residential, retail and accessory parking uses.

"This is a time of opportunity for Vancouver to create a vision for the rediscovery of its waterfront and the rebirth of its historic connection with the Columbia River."



Figure 1.1 Regional Vicinity

Port of Vancouver FINAL Waterfront Development Master Plan



- Columbia River Renaissance Master Plan, 1992



1.2. Background

1.2.1 Port of Vancouver Overview

The Port of Vancouver USA is a 103-year-old independent public agency with the mission of providing economic benefit to the community through leadership, stewardship and partnership in marine and industrial development. Today, the Port manages and develops approximately 2,100 acres of public property with the primary purpose of marine and industrial development.

The Port of Vancouver plays a key role in the local, regional and national economy through investments in facilities and leveraging improvements with private investment and other funding to attract jobs and development in Vancouver. The Port facilities are leased to customers and tenants that generate jobs, infuse business into the economy, contribute to state and local taxes and provide the region with access to the global marketplace.

Port property is home to more than 50 businesses that employ over 3,200 employees. Port employees work each day directly for Port businesses, earning nearly \$160 million in total annual personal income for over 300 port-related business. These are local jobs, with 75 percent of employees living in Clark County. The Port hopes to add thousands of jobs within the next 15-20 years as additional maritime and industrial land is developed.

More than 20,000 jobs in this region are related to maritime and industrial activities at the Port. Some jobs are created by manufacturers sited on the port's industrial property. Others are related to the maritime and shipping industries. It is estimated that Port activities inject \$1.1 billion into Clark County business revenue annually, with a total economic impact of \$2.9 billion to our local and regional economy.

1.2.2 Historic and Cultural Overview

Gravels deposited by the Missoula Floods ending around 13,000 years ago constitute the baseline for prehistoric archaeology in the Portland-Vancouver Basin. The master plan property is situated between two areas along the Washington shore of the Columbia River (HBC Fort Vancouver upstream and Vancouver Lake downstream) where concentrations of prehistoric artifacts have been reported. The earliest detailed accounts of the Chinookan peoples who occupied the shores of the Lower Columbia River in the Portland-Vancouver area were recorded by Lewis and Clark in 1805-1806. Previous archaeological investigations in Vancouver have mostly recovered evidence related to activity in the historic period. The archaeological record of the HBC fur trade post at Fort Vancouver (established 1829) and the U.S. Army at Vancouver Barracks (established 1849) on the east side of I-5 is different in many ways from that of the civilian community in Old Vancouver, which emerged beginning in the 1850s and 1860s immediately west of the U.S. Military Reserve. Urban archaeology in the city postdates the HBC occupation and is generally coterminous with the U.S. Army occupation at Vancouver Barracks.

The master plan site likely contains an archaeological record different from these other areas in being primarily related to the history of industrial development. Sanborn fire insurance maps (1890, 1907, 1928, 1949) and USGS maps published in 1905 and 1940 confirm the separation of the site for industrial uses southwest of the commercial and residential districts in Vancouver. As these historic maps indicate, as well as previous archaeological investigations on the Vancouver waterfront, there is a high likelihood that archaeological resources will be encountered during developmentrelated construction.

The site is at the southern gateway into the City of Vancouver and for generations, its prominent position has welcomed visitors to the

city and the community. Historically, the waterfront provided prime location for trade along the Columbia River, establishing Vancouver as a vibrant city that was instrumental in the development of the west. This site played an important role in the City's maritime history as the original home of the Port of Vancouver (Terminal 1 Building, see Figure 1.4), making this location a landmark in the City's rich history.

A portion of the current Inn at the Quay, operated by Red Lion Hotels, was built upon the wood pier and incorporated the Terminal 1 Building. This structure, the first building to be developed by the Port, was erected following the transfer of the municipal dock from the City of Vancouver in 1925. The piers and dock represent the single oldest surviving elements of the Port's effort to develop the waterfront for shipping and industry, and should be considered potentially eligible for listing on the National Register of Historic Places under Criterion A for their association with the development of the Port of Vancouver.

Similarly, the Inn at the Quay, and to a lesser extent, the Red Lion Hotel and convention facilities associated with it, should be considered potentially eligible for listing on the National Register under Criterion A for their association with the commercial development of Vancouver. The Inn at the Quay Restaurant, forming a portion of that complex, may have additional significance under National Register Criterion C, for its design and architecture.



Figure 1.4 Terminal 1 Building, circa 1955 (south & east facades)



Figure 1.5 Red Lion Hotel, 2015 (east facade)

Port of Vancouver FINAL Waterfront Development Master Plan



Additional research is needed to further understand the relationship between the remaining piers, the Terminal 1 warehouse superstructure, and its remodeling into the Inn at the Quay in 1959-1960 and afterwards.

Industrial uses occupied much of the Port site throughout the 20th century, including a welding works, an asphalt plant and a wooden shipyard. Railroad spurs crossed the site, connecting the Terminal 1 Building to the main line, west of the property.



Figure 1.7 Waterfront Site, 1968



Figure 1.6 The Inn at the Quay, circa 1965 (north facade)

Port of Vancouver FINAL Waterfront Development Master Plan



Figure 1.8 Red Lion Hotel at the Quay, 2015 (north facade)



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Figure 1.9 Waterfront Site, 1991

1.3. Guiding Principles

The Waterfront Development Master Plan will define a vision for the Columbia River waterfront that is consistent with the Port's mission to provide economic benefit to the community through leadership, stewardship and partnership in maritime related development. The Master Plan process will serve to attain the necessary entitlements with the City in order to prepare the site for future development.

The Port intends all site development to be guided by the following principles:

- Provide public access to the Columbia River waterfront;
- Develop public assets in a financially responsible manner;
- Utilize sustainable development practices;
- Interpret the Port's history as an economic development engine for Southwest Washington; and
- Create a development that supports the community through economic growth and job creation.



Figure 1.10 Waterfront Development Master Plan Site (with 2015 Google aerial)

Port of Vancouver USA

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1.4. Study Process

The POV initiated an interactive Waterfront Development Master Plan process in April, 2015. The 7-month planning effort includes the Port Commission, Port staff, the City of Vancouver, community stakeholders and the general public. The initial process included an information gathering effort to analyze the site conditions, assess potential uses and envision possible program elements. Stakeholder interviews were conducted to solicit ideas, community values and opportunities for the waterfront development. On May 26th a Port Commissioner Visioning Workshop was held to explore aspirational ideas and values for the future development. The Visioning Workshop included an open discussion among Commissioners and members of the public in attendance.

The information gathered at the Visioning exercise helped to inform a range of possible development alternatives. A series of ten alternative concepts were presented to the Commission and the general public in mid-June. The input received helped to identify the strengths and weaknesses of each alternative.

On July 15th, three preliminary concepts were made available to the public as part of a Community Open House event. Over 100 participants attended the Open House to provide feedback on the master plan progress to-date. The information gathered from the Open House was then presented to the Port Commission on August 11th to help define an initial preferred concept.

A preferred concept plan was presented to the Port Commission on September 8th, 2015. Input received from the Port Commission and staff resulted in the Draft Master Plan reflecting the preferred plan and present vision. The Draft Master Plan was then documented to reflect the project vision and objectives and a preferred development plan. The Draft Master Plan was presented to the Port Commission for their approval on September 22nd.







1.5. Public Outreach

The Port Commission meetings are publicly announced and open to the community. Five Commission sessions were held specifically for the Waterfront Development Master Plan and public comment periods were conducted.

As a part of the initial data collection effort, the planning team conducted several stakeholder interviews to explore potential opportunities and constraints for the Master Plan. The identified stakeholders represented a range of public and private organizations who have an interest in the Vancouver area. The following entities participated in the stakeholder interview process:

- Vancouver Chamber of Commerce
- Visit Vancouver
- Columbia River Economic Development Council
- Vancouver Downtown Association
- Vancouver Farmers Market
- City Center Redevelopment Authority
- Local Native American Tribes
- Local Business Representatives
- HMS Global Maritime (American Empress)
- C-Tran
- Columbia Waterfront, LLC
- Local Developers

The Port also facilitated an online survey to gather input from interested members of the public from the greater Clark County area. The invitation to participate in the survey was broadcasted from the POV website, e-mail blasts, advertisement in the local newspaper, The Columbian, and neighborhood-based, online discussion groups.

On July 15th, a Community Open House event was held at the Port amphitheater site. The event was held from 5:00-8:00 pm and was well attended, with more than 100 community members participating. The outdoor event served to engage participants interested in the master plan effort. The planning team shared background information and the alternative development concepts. The public was encouraged to provide written comments and tablet computers were available to participate in the online survey as well.

Figure 1.16 introduces the discussion and analysis of downtown characteristics. The "figure ground study" reflects existing built structures and urban development patterns in the downtown Vancouver vicinity.

Figure 1.14 Community Open House Discussion







Figure 1.12 Alternatives Workshop

Port of Vancouver FINAL Waterfront Development Master Plan



Figure 1.13 Community Open House Tents





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1.6. Existing Conditions: Downtown Characteristics

1.6.1 Zoning

The POV waterfront property is zoned City Center Mixed-Use (CX) and is located in the Columbia West Renaissance sub-district. The CX designation is intended to promote a mix of uses in a dense urban neighborhood. The CX zoning prohibits industrial uses and encourages primarily office, service, mixed-use and single use residential buildings and accessory parking, with limitations on surface lots. As part of downtown Vancouver's "city center", the property was included in the area studied and documented in 2009, the Vancouver City Center Vision Plan (VCCV). The VCCV identified opportunities to better connect the Columbia River to the downtown, including extending the city street grid into the waterfront properties and finding multiple pedestrian connection points under or possibly, above the railroad viaduct.

The site is also included in the Columbia River Shoreline Enhancement Plan District, which requires a master plan prior to development.

The shoreline area along the Columbia River, measured as the first 200' inland from the ordinary high water mark (OHWM), is designated as Urban High Intensity in the Vancouver Shoreline Master Program (SMP). This designation prioritizes water dependent, water related and/or water enjoyment uses, with varying height and setback standards depending on the proposed use.





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1.6.2 Land Use

The predominant land uses in the City Center are mixed-use and single use commercial (office, retail, service), residential, civic and parking. Civic uses are distributed throughout the downtown, including the City Hall government complex, Esther Short Park, and the Historic National Park Service Fort of Vancouver east of Interstate-5. Commercialindustrial uses dominate the west edge of downtown, where railroad and other manufacturing businesses are located. A concentration of multifamily residential uses as well as single family residential and small scale commercial uses using converted residential structures are distributed throughout the downtown and continues into the neighborhoods to the north and east of the project site. The Burlington Northern Santa Fe (BNSF) Railroad is located to the north of the Project site and bisects the downtown from the proposed waterfront site. In addition, the I-5 corridor and Columbia River Bridge is located east of the project site.



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1.6.3 Land Ownership

Figure 1.20 illustrates the largest land owners in Downtown Vancouver. The Port of Vancouver is the sole land owner of the proposed project site. The Port also owns, leases and operates land located in the industrial use area west of the City Center. Columbia Waterfront, LLC owns the largest contiguous parcels located immediately adjacent to the POV site. The City of Vancouver is also a major land owner in the area, owning several parcels of various sizes throughout the downtown. The BNSF Railroad owns the rail corridor immediately north of the project site. A number of other development ownership parcels are noted in the legend.



Figure 1.19 Downtown Major Land Ownership



1.6.4 Development

Recently completed projects, and proposed projects anticipated to begin construction within the year are illustrated in Figure 1.21. There has been significant investment in downtown Vancouver in the past year, primarily in the construction of multi-family housing. The public library adjacent to I-5 is a major project which was recently completed.

The increase in office and multi-family residential construction in the past few years has resulted in a growing market in the Downtown, which will add to the success and vibrancy of the future development on the Port of Vancouver's site.

The Columbia Waterfront LLC (CWLLC) planned development immediately adjacent to the POV site is a major project planned downtown. The CWLLC site is discussed on the following page.



Figure 1.20 Current & Proposed Downtown Development



1.6.5 Columbia Waterfront, LLC

Columbia Waterfront LLC is planning a 32-acre mixed-use development, including an additional 4 acres on Blocks 1 and 2 owned by the Port and leased to CWLLC. Figure 1.21 illustrates the proposed block structure and initial projects. New extensions of Grant and Esther Streets under the railroad have been completed and Columbia Way has been constructed from Grant to Columbia Street.

The areas highlighted in orange represent the proposed phase 1 development of the CWLLC project. At the time of this research, the program planned for these blocks included a hotel, restaurants, apartments, retail space and condominiums. The 7.3 acre Waterfront Park is also proposed for near-term construction, which will connect to the Port of Vancouver site, including the extension of the Columbia River Renaissance River Trail. It is anticipated that parking for Phase 1 of the Columbia Waterfront will be supported by a combination of surface and structured (below and above grade) parking.



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Figure 1.21 Columbia Waterfront, LLC: Proposed Phasing

1.6.6 Historic & Cultural Resources

At the time of historic contact, the shores of the Columbia River were occupied by Chinookan peoples, whose territory extended from the Pacific Coast more than 200 miles upstream to The Dalles.

Archaeological evidence collected during previous investigations in Vancouver found evidence of occupation, beginning with the Hudson's Bay Company (HBC) and U.S. Army establishments, and continuing with the emergence of the historic city of Vancouver to the west.

HBC Fort Vancouver was originally established in 1825 and relocated in 1829 to the present site. An extensive multi-cultural settlement known historically as Kanaka Village, where the majority of the HBC employees lived, emerged along the south and west side of the fort. In 1849, the U.S. Army established Camp Vancouver on the upper plain above the HBC stockade.

The City of Vancouver emerged beginning in the 1850s and 1860s immediately west of the U.S. Military Reserve and was incorporated as a city in 1857. The earliest settlement and development began on the bank of the Columbia River and generally spread northward along Main Street and the adjacent streets to the east (Broadway) and west (Washington and Columbia). Over time, development continued to spread northward, with the historic area extending from West Reserve Street on the east to the Union Pacific Railroad tracks and depot on the west.

The Terminal 1 Building, estimated to have been constructed in the early 1920s was the first terminal structure built to support a long-standing history of commercial trade in the Vancouver area. Large portions of the Vancouver riverfront properties were used for industrial purposes throughout the 20th century. The Boise Cascade Mill on site was demolished in 2011 in preparation for the development of the Columbia Waterfront, LLC project.



Figure 1.22 Downtown Buildings of Historic Significance

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1.6.7 Access & Circulation

Downtown Vancouver is served by a range of active transportation options, including designated pedestrian and bicycle facilities, and several C-TRAN bus service routes. The project site currently benefits from several routes on Columbia Street:

- City Center Route 3 Circulator
- Routes 4, 41, 44, 47 and 105

These modes also connect the site to East Vancouver, along the waterfront. A planned Bus Rapid Transit (BRT) line will connect Downtown Vancouver with East Vancouver, specifically the Vancouver Mall Transit Center. At this time, the BRT line is planned to terminate at the 7th Street Station, just a few blocks north of the Port site. With this increased capacity and connectivity in the transit network, City Center and East Vancouver residents will be able to quickly access downtown and the waterfront development using a variety of travel modes.

The walk buffer overlay illustrates a quarter mile distance from the centers of the Project site and Esther Short Park (centers identified with red dots). This quarter mile radius includes the majority of downtown in all directions. A quarter mile is generally referenced as a relatively effortless walking distance when accessing a transit stop or neighborhood amenity such as a restaurant or coffee shop. The travelshed also illustrates that portions of the network of the pedestrian, transit, and bicycle network are accessible within a quarter mile walk from the center of the Port site. The planned BRT line falls beyond the quarter mile, but is still within relatively easy walking distance.



Figure 1.23 Downtown Access & Circulation



1.6.8 Environment: Parks, Open Space, & Trails

The downtown Vancouver area has a number of parks, open space and trails in proximity to the POV site. The most significant public spaces include Esther Short Park, located in the heart of the City Center, the Columbia River Renaissance Trail that traverses the Columbia River waterfront, and the Fort Vancouver National Historic Landmark site.

The current Columbia Renaissance Trail has been greatly improved to the east and now provides a wonderful recreational resource to the community, connecting many of Vancouver's parks, open spaces and cultural and historical sites. Challenges currently relate to providing a welcoming connection under the I-5 bridge and establishing a viable and accessible link through the Port property.

Planned improvements throughout the downtown would improve pedestrian connections along Mill Plain Boulevard and south/ southeast to the Columbia Renaissance Trail. In addition, the *Vancouver City Center Vision Plan* identified the creation of Daniel's Way as a north-south pedestrian path from Esther Short Park under (or above) the railroad viaduct to the waterfront. The first segment of Daniel's Way currently connects City Hall and the Convention Center south to an unimproved alley and Phil Arnold Way.

The proposed Columbia Waterfront Park located west of the project site and adjacent to the Columbia Waterfront development is currently being designed. When completed, this 7.3-acre waterfront park will provide a valuable open space and an extension of the Columbia River Renaissance Trail. Details on how to connect the trail through the Port property will be part of this Waterfront Development Master Plan. Creating a thoughtful trail connection through the site will be an important feature of the project. Once this connection is established, the trail should bring a substantial number of visitors to the site.



Figure 1.24 Downtown Parks, Open Space & Trails



1.6.9 Livability Index

The master plan of the Port's waterfront site should consider the existing uses available across downtown Vancouver. The distribution of various commercial and community service uses is mapped in Figures 1.26 through 1.28.

These maps illustrate the individual density of restaurant/ bars, commercial store/ community services, and corner store/ grocery stores. There is a strong density of services along Main Street, with small clusters west of Main Street. It is apparent that there is a greater density of both restaurants/ bars and commercial stores/ community services than there is of corner stores/ grocery stores downtown.

This comparison illustrates that there are few corner stores/ grocery resources in the Downtown area. Additionally, the three locations identified are all corner, convenience markets with a limited selection, as opposed to a fully stocked grocery store.



Figure 1.25 Restaurant/ Bar Locations

Figure 1.26 Commercial Store/ Community Service Locations



Figure 1.27 Corner Store/ Grocery Locations

1.6.10 Livability Index: Service Density

Vibrant, livable downtowns are typically characterized by the density and successful mix of uses to create an active, interesting environment throughout the day and early evening, seven days per week. Figure 1.29 identifies existing downtown buildings and the degree to which multiple uses are included in different levels of each building. The exhibit highlights a mix of ground level uses that typically help active pedestrian streets and sidewalks, such as coffee shops, restaurants, retail stores, and dry cleaners. These retailers and services attract customers and urban activity; when several such uses are located in close proximity, shoppers can achieve multiple errands in a single trip. The convenient destinations often characterize areas that encourage shorter walks or bicycle trips and typically offer a variety of uses and a high level of walkability.

This Density Livability Map indicates the current pattern of mixed-use buildings, combined with active, ground level uses are particularly concentrated along Main Street, northeast of the POV master plan site. It is anticipated that future uses in the waterfront development will begin to create new patterns of uses along both Columbia and Esther Streets to help encourage pedestrian traffic to the waterfront.



Figure 1.28 Density Livability Map



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1.7. Existing Conditions

Figure 1.29 Existing Site Aerial (Google, 2015)









1.7. Existing Conditions: Site Characteristics

1.7.1 Red Lion Hotel & Columbia Business Center

The project site is dominated by the 2-story Red Lion Hotel, a highly visible local landmark along the Columbia River waterfront in Vancouver. The 55,000 SF hotel provides rooms, banquet rooms, swimming pool and a 30,000 SF restaurant/bar. The original 1926 Terminal 1 Building is incorporated into the Red Lion Hotel. Portions of the Terminal 1 Building are visible as part of the current restaurant use. While the hotel has been a destination for decades, its popularity has declined over time and the structure has deteriorated. The hotel covers the majority of the pier structure at the east end, so the only visual connection to the river presently is from the hotel's restaurant or from a small patio space just east of the pier.

The Columbia Business Center is a 2-story office building owned by the Port and leased to multiple tenants. This existing structure provides 8,000 SF.



Figure 1.30 Red Lion Hotel at the Quay (north facade)



Figure 1.31 Columbia Shores Business Center (north and west facades)



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The concrete amphitheater space is under utilized and uninviting. The

1.7.2 Amphitheater

amphitheater steps down away from the upland and Terminal One Pier, limiting site lines into the space. This lack of visibility, combined with the current state of disrepair makes the space feel unsafe and unwelcoming for visitors. The existing amphitheater is further impacted by the sound coming from the adjacent I-5 and passing ships. In its current configuration and given the audio impacts, it will be difficult to rehabilitate the space to make it viable for performance.

1.7.3 Columbia Way

The new Columbia Way street improvements on site are nearing completion. Columbia Way will provide the principal access to the site and well as serve as an access easement for utilities service the site and the Columbia Waterfront development to the West. As part of the redevelopment of the site, a variety of demolition and site preparation activities will be required. The primary upland demolition will include removal of designated building structures, including the Red Lion at the Quay, the Columbia Business Center and existing site improvements not incorporated into the final site plan such as paving, curbing, utilities, landscaping, and other existing site features.

Figure 1.32 POV Site with Downtown in Background (looking north)

Table 1.1 Study Area Calculations

Item	SF	Acres
Land Area	361,548	8.30
Street ROWs	61,855	1.42
Developable Block Area		6.31
Shoreline Vegetative Edge (west)	19,166	0.44
Shoreline Vegetative Edge (east)	5,663	0.13
Over Water Pier Structure	80,350	1.84
Wood Pier/ Piling System	59,000	1.35
Steel/ Concrete Amphitheater & Ramp System	18,600	0.43
Small Boat Moorage/ Gangway	2,750	0.06
TOTAL STUDY AREA	441,698	10.14
Shoreline Area	LF	%
Open Shoreline Edge	1,065	
Shoreline Under Pier	690	65%
Structures		
Red Lion at the Quay	85,000	
Columbia Business Center	+/- 8,000	
Parking	Quantity	
Vehicle Spaces		
	318	
ADA	318	
ADA Total	318	
ADA Total Road ROW	318 61,855	1.42
ADA Total Road ROW Columbia Way	318 61,855 49,223	1.42 1.13



Figure 1.33 Waterfront Development Master Plan Property (with 2015 Google aerial)



1.7.4 Site Topography & Soil

Figure 1.34 illustrates the existing slope and site contour (2 foot interval) conditions prior to Columbia Way construction. The project site is relatively flat with the exception of the BNSF railroad viaduct/ berm and the slope to the Columbia River. The normal water elevation of the Columbia River is approximately 30 feet below the developable site. The BNSF railroad viaduct/ berm is approximately 25–30 feet above the grade of the Port's development site.

The existing soil type for the site will be determined at the time a geotechnical analysis is completed.

The proposed site development will require a grading plan. The primary constraints of potential grading will be the existing adjacent and onsite features that are to remain, in particular the roadways, railroad berm and existing pier structure. Roadways include Columbia Street to the east, Esther Street to the west, and the newly constructed Columbia Way through the center of the project site. The new Columbia Way has grades of approximately 1.5% with high points near the proposed access roads. The existing site is generally flat with less than one half percent slope across the entire site from east to west and a flat slope from north to south. The existing conditions of the shoreline and bulkheads are discussed further in the inwater section of the report.

Given the limited existing infrastructure and relatively flat slope of the site, and the new Columbia Way, the extent of the upland demolition and grading for redevelopment of the site should be straightforward. Incorporation of standard design and construction practices such as Best Management Practices for control and handling of demolition debris and control of sediment will be important for the regulatory and implementation process.



Figure 1.34 Existing Topography & Soil Conditions (Source: City of Vancouver)



1.7.5 Vegetation

Vegetation on the upland portion of the POV site is dominated by old parking areas, street pavement and dated landscaping and perimeter plantings around existing structures. The site contains a variety of trees and shrubs that range in size and type. A significant, mature Black Walnut tree dominates the parking lot tree canopy, in the area proposed as Block "C".

A heavily vegetated shoreline edge consists of canopy trees and understory shrubs on either side of the constructed pier structure that dominates the site's shoreline edge condition.

Most of the existing trees located on the study site are not significant contributors and will likely be removed as new construction unfolds. However, a comprehensive inventory of existing vegetation should be considered to document the quantity and quality of pre-existing vegetation as a part of the project development.



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1.7.6 Shoreline Conditions

The Columbia River is a dynamic water way characterized by many as a fast moving and unfriendly river. The deepest portion of the river channel is within several hundred feet of the north river bank, near the project site. While being beneficial to commercial river traffic, the current bank configuration and shipping channel location results in a river environment that is not ideal for small boat, light watercraft use or recreational swimming along the banks of the river.

Given the swift current, variable water fluctuations and construction pier system that covers much of the shoreline in this area, developing high quality habitat areas will be challenging. As a result of the constructed pier system, bank restoration opportunities intended to mitigate against invasive plant species along the river are limited.

Figure 1.36 illustrates the 100 and 500 year floodplain coverage of the site. The 500 year floodplain predicts the area a significant flood would inundate, or where there is a 0.2% chance there will be a flood each year. The 100 year floodplain predicts the area a flood might impact, or where there is a 1% chance there will be a flood each year. The floodplain areas will be taken into account during alternative review.

The ordinary high water (OHWM) mark shows the highest area at which it is common for the river level to hit the shore. The 100 foot and 200 foot buffers from the OHWM are regulatory definitions, overseen by the Vancouver *Shoreline Management Plan* (SMP). These areas have increased regulations to be considered for development, including lower height limits and preference for water-dependent and water-related uses that need proximity to the river.



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Figure 1.36 Floodplain & Shoreline Buffer (Source: City of Vancouver)

1.7.7 Pier

The Port's "high dock" pier is an important asset in that it provides a large boat tie up area. Continuing to enable the American Empress and other tour boats to dock at the Terminal 1 Pier will draw visitors, generate activity, and subsequently be beneficial to the site and to the City. The pier provides an opportunity for a public, urban waterfront experience currently unavailable in the city of Vancouver. The combination concrete and wood structure is in contrast to the majority of green waterfront parks and wood deck structures along the Columbia. The Port's pier allows visitors to get out over the water on an accessible structure and to enjoy the views up and down the river corridor.

The structure of the older wood pier and piling system has been compromised over the years. Improvements will be needed as functional uses on the pier continue in the future. Having a structurally sound pier in place is a benefit to the Port given how difficult to would be to permit such as structure today. Removal or modifications of the pier should be carefully considered so as not to lose the use or limit the activities that may occur at the pier.

1.7.8 Transient Moorage

The current transient moorage is good condition and is used on a regular basis. Given its benefit to the site and its original funding source, it should be retained and utilized to energize the site. Consideration may be given to relocating or reconfiguring the moorage access, but its use should remain in close proximity to the pier.



Figure 1.37 Columbia River Harbor & Shipping Channel



1.7.9 Prevailing Winds

Wind patterns along the Columbia River vary throughout the year with periods of increased intensity and directional flow based on changing seasons. The predominant wind patterns generally correspond with winter and summer seasons. During the summer season wind speeds can average 10-12 miles per hours in an east to west direction of Columbia Way. Winter winds are characterized as slightly less average speeds than summer months and blowing from the west to the east.

Wind speeds and character will have an impact on the quality of outdoor uses due to the impact on comfort as well as sound impacts. To mitigate the wind, considerations should be given to providing sheltered spaces and oriented buildings to take advantage of prevailing wind patterns and as an energy conservation measure.

1.7.10 Solar Conditions

The site is oriented to a full southern exposure which will enable the developed and open spaces to be optimized for winter and summer solar conditions. Summer solar gain will directly warm the majority of the site over the course of the day, as illustrated by the top line in Figure 1.39. Winter sun angle and exposure is significantly limited in the Pacific Northwest. The winter solar trajectory results in longer shadows and short daylight hours. New structures should be oriented to minimize long north facing building facades that project shadows in areas that are intended to be high quality pedestrian spaces and corridors.

1.7.11 Wildlife Habitat

The shoreline edge of the POV site and adjacent inland area is designated as a riparian habitat conservation area, as illustrated in purple in Figure 1.40. All structures which would be permitted under current zoning is permitted within the riparian habitat conservation area, however mitigation features such as additional setbacks, increased landscaping, or additional shoreline improvement measures may be required.



Figure 1.38 Prevailing Winds

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1.7.12 Noise Conditions

Ambient noise from adjacent land uses is prevalent on all sides of the POV site, including the I-5 bridge to the east, the BNSF railroad line immediately north and boat traffic on the south. In addition, the subject property is within two flight paths, from the adjacent Pearson Field Airport to the east and the Portland International Airport, further south.

The sound from the I-5 Bridge immediately to the east is of most significance due to the proximity of the bridge and the persistent vehicle traffic. The resulting noise levels will have an impact on outdoor activities, especially those located in close proximity to the bridge. Past proposals to replace the bridge with a new structure considered an alignment that was higher, but closer to the POV property. The I-5 Columbia River Crossing project was terminated, however the Master Plan should anticipate that a new bridge alignment will be proposed and not preclude such a possibility.

The site is located within an urban downtown and subject to vehicular traffic noise on adjacent streets.

The BNSF railroad runs parallel to the northern site boundary. Although this portion of the line has been double railed to help mitigate noise, regular train traffic contributes to the noise levels on site. To the south of the site, boats traveling through the navigation channel can be relatively noisy. This is especially true when vessels signal to bridge operators to raised the bridge structure for passage. Seasonal recreational boat activity contributes to noise levels as well during the summer months.

The POV site is located within the City's Noise Overlay Area (VMC 20.520), which requires new development to incorporate materials and construction practices to insulate against noise.







1.7.13 Viewsheds & River Access

The Waterfront development site is relatively hidden from view from the downtown area because of the existing railroad berm, which is raised over 20 feet above the lowest part of the site. Two at-grade roadway structures provide limited view access under the BNSF Railroad, on Columbia Street and the new connection at Esther Street. Existing tree canopy along the sidewalks for these street corridors limit long distance views to the River from the north of the railroad berm. Because the water level of the Columbia River is significantly lower than the upland elevation, views of the actual water are limited to the shoreline edge only.

From the POV site itself, there are significant views of the Columbia River, the I-5 bridge, and Hayden Island in Oregon. These vantage points are illustrated in yellow in Figure 1.42.

The green arrow represents the only public access point to the Columbia River within the Downtown. This low dock is used for short-term boat moorage and sun bathing.





Figure 1.42 Water Access & Viewsheds


1.7.14 Vehicular Traffic

The downtown Vancouver street network provides an orthogonal grid of local streets with block sizes varying in length from 200 feet to 400-450 feet. Columbia Street is the predominant north-south commercial collector that connects the Downtown to the Columbia River waterfront and the POV site. The Columbia Street corridor serves as a principal connection to the Columbia River Renaissance Trail and the Downtown. A vehicular and pedestrian underpass structure is located on Columbia Street at the BNSF Railroad. The City, in conjunction with Columbia Waterfront LLC, has recently developed new vehicular and pedestrian underpasses at Esther Street, immediately west of the project site, and at Grant Street, three blocks further west.

The project site is accessed by Columbia Street and the new Columbia Way, a two-way commercial collector corridor with 1 shared vehicle/ bicycle lane and on-street parking in each direction. Columbia Way is designed to accommodate 8,000-10,000 average daily trips (ADTs) and will include new traffic signals at the Columbia Street and Esther Street intersections. The new Columbia Way rightof-way can accommodate future transit access with either fixed route bus service or possibly an extension of the planned BRT at some time in the future.

The planned street layout also includes a proposed low-volume access street (1,100-1,500 ADTs) that will parallel the BNSF Railroad and provide ingress and egress to the site and future planned parking and service areas.

Internal north-south local streets ("access roads 5 & 6") will be designed where necessary to accommodate new development. Exact locations for these streets (or pedestrian corridors) will subdivide Blocks A/C and Blocks B/D as well as Blocks C/1 and Blocks D/2. Previous planning assumes these intersections with Columbia Way will be controlled with stop signs.



Figure 1.43 Site Circulation & Turning Movements (source: Kittelson & Associates, Inc.)





1.7.15 Utilities

The existing utility systems on-site are a mixture of limited, older infrastructure and new infrastructure installed as part of the Columbia Way construction. The following preliminary planning information is based on review of in-progress drawings of the Columbia Way project. The actual utility sizes, locations, and details for recently installed utility systems should be confirmed with the record drawings for Columbia Way prior to the design phase for new utility systems to support redevelopment of the parcels. The utility systems must be designed, constructed, and inspected per City of Vancouver Building Permit requirements.

1.7.16 Potable Water & Fire Protection

In review of the previous planning work, the intent was to have a looped, potable water main system around all perimeters of the redeveloped parcels. This is an appropriate concept and should be implemented for the redevelopment plan. The proposed water and fire protection system design will be required to meet City of Vancouver requirements including Vancouver Fire Department approval as well as Washington Department of Health system design requirements.



Figure 1.44 Concrete/Steel Pier Structure (west end, looking northeast)



Figure 1.45 Columbia Way Construction, near Red Lion Hotel

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Figure 1.46 Pier Load Limits, Steel, Wood Pilings



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Figure 1.47 Existing Seating near Amphitheater (looking northwest)

Older water mains on the project site include looped and dead end systems around the Red Lion Hotel and Columbia Business Center buildings. New water mains and fire hydrants were installed in portions of Columbia Way as part of the recent construction. A water main connects to the existing water system in Columbia Street and extends to the nearest proposed access road (Access Road 6). New service lines extend from the newly installed main water line at the proposed Access Road 6 location to an existing connection serving the Red Lion Hotel. A portion of a new potable water main line was also installed in the right-of-way for the proposed Access Road 5 and in Esther Street, as illustrated in Figure 1.48.

It appears that a potable water main line was not installed between the proposed Access Road 6 and Esther Street in the new Columbia Way. This should be verified with the record drawings from Columbia Way prior to design of utilities for the redevelopment.

The design for the redevelopment should include a new looped water main system around each development parcel that connects to the water main sections installed in Columbia Way. The design may require replacement and rerouting of the ten-inch water main that runs around the waterfront parcel the Columbia Business Center building which is located on as well as the lines at the Red Lion Hotel building. The design may also require a new water main along the edge of the parcels adjacent to the railroad berm.



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1.7.17 Stormwater System

The new development will require stormwater treatment and routing systems. Exact information on the existing stormwater collection system on the site consists of limited catch basins in parking areas and is discharged through piped systems to outfalls. New stormwater systems have been installed in portions of Columbia Way. These include two new catch basins and discharge lines at the intersection of Columbia Way and Columbia Street, and catch basins and discharge piping between Esther Street and the proposed Access Road 5, as illustrated in Figure 1.49. A new main stormwater outfall for the stormwater collection system from Esther Street is at the shoreline at the foot of Esther Street. The new stormwater piping system was connected to and discharges through the older existing 18 inch outfall at the base of Esther Street.

The stormwater system will meet requirements of the 2015 City of Vancouver Stormwater Management Plan and associated documents, in particular Section S5 C4 Controlling Runoff From Development and Construction Sites. The City will review the proposed plans as part of the building permit process to assure that the proposed system meets the City and State requirements.

Since the site discharges directly to Columbia River, stormwater detention facilities are likely not required, however stormwater runoff treatment facilities will be required as part of the Port's new development. The City is adopting Low Impact Development (LID) standards and requirements in 2016. LID systems should be incorporated into the stormwater system design as much as feasible. These systems could include infiltration, rain gardens, and other LID measures. LID measures will need to be balanced against the overall use and operations of the site and related site development and their effectiveness. The effective use of infiltration systems will also depend on a variety of design factors including available space, flow rates, and soil characteristics.



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Figure 1.49 Existing Utilities: Stormwater

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Another consideration for the stormwater system

design is the limited slope on the site. Larger pipes with flatter slopes may be required to limit the elevation of outfalls. Depending on the stormwater piping collection route, the outfall systems may be below the OHWM in order to have enough buried depth of piping and sufficient slope to route stormwater runoff from the site. New outfalls must be designed appropriately to address scour, debris impact, and other design factors at the shoreline. Any outfalls under the pier structures should be designed to prevent scour of the bulkhead and pile foundations by use of diffusers or other methods. As much as feasible, existing storm drainage outfalls should be utilized. New stormwater outfalls into the Columbia River will require permit approval from the Corps of Engineers and State agencies.

1.7.18 Sanitary Sewer

The redevelopment of the site will also require new sanitary sewer services. The existing on site sanitary sewer system includes older systems that serve the Red Lion and the Columbia Shores Business Center buildings that discharge through piping to Columbia Street sanitary sewer systems. This existing system is a combination of gravity and force main services. A new sanitary sewer main has also been installed in the entire section of Columbia Way. Side sewer services have been installed at various locations along Columbia Way, see Figure 1.50.

As much as feasible, these new side sewer service lines should be utilized for new sanitary connections to avoid reconstruction in the completed Columbia Way corridor. Gravity systems are preferable, but pumped sanitary sewer force mains may be required depending on building foundation and design and overall elevations of sanitary systems exiting the proposed buildings and depth of connection points.



Figure 1.50 Existing Utilities: Sanitary Sewer & Other Utilities

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1.7.19 Other Utilities

Other utility systems will be required for the redevelopment. These will include electrical, lighting, and telecommunications systems. These may also include natural gas. Various old and new electrical, lighting, and gas infrastructure is present on the site. A new electrical trench was installed along the south side of Columbia Way extending from Columbia Street to Esther Street for future low voltage system routing, as illustrated in Figure 1.51.



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1.8. Inwater Infrastructure

1.8.1 Terminal 1 Wharf Structure

Terminal 1 Wharf is a timber dock structure that was constructed in 1918 and acquired and expanded by the Port in 1925. The timber wharf structure is approximately 510 feet long and 102 feet wide, or a total of 52,020 square feet. Approximately 200 feet of the eastern portion of the structure is covered by the Terminal 1 warehouse structure that currently house a restaurant and portions of the hotel services. Approximately 230 feet of the middle of the structure supports the Red Lion Hotel at the Quay building. An open, service area is located on the western 80 feet of the wharf structure, where the timber deck has been covered (or replaced) with concrete decking on the wharf structure.

A concrete bulkhead serves as the landward support for the timber wharf structure. The structure consists of approximately 780 timber pier piling and 50 timber fender piling. There are 52 rows of piling running in the long shore direction, approximately ten feet on center. There are twelve (west end) to fourteen rows (east end) of piling extending from the bulkhead towards the waterward face of the wharf at various spacing. The structure of the pier generally consists of vertical timber piling with a 12" x 12" timber pile cap, 4' x 12" timber stringers, and timber decking. There is horizontal and diagonal timber bracing in select locations under the wharf structure, primarily on the waterward half of the structure. There are also lower pile caps (lower caps) approximately 27 feet below the deck level, at random locations near the waterward face of the wharf structure.

The ground slopes from the bulkhead to the Columbia River channel. The slope under the nearshore section of the wharf is stabilized with rip rap. The mudline at the face of the wharf is at elevation -23 below elevation 0.00 Columbia River datum. The overall water depth from the 100-year flood elevation to the mudline is approximately 50 feet at the face of the wharf.

Various repairs have been done to the wharf structure throughout the years. Around 2001, a condition survey and repair project was completed for the wharf structure. The repair project addressed erosion under the wharf and areas of structural deterioration on the timber structure. The erosion repair included placement of a mat revetment system. The timber structural repair included replacement of some of the lower caps, repair of approximately 15 piling by cutting out a damaged portion and installing a pile filler post, and minor repairs to some lower caps, bracing, and hardware connections at limited select locations on the structure. The current condition of the wharf structure is not known. A condition survey of the structure was not completed as part of this planning level analysis. In general, based on visual observation of the upper sections of the piling, the piling appear to be in relatively good condition for a 100-year old structure. It is not unusual for timber piling in fresh water that are not subject to marine borers, impacts from significant floating debris, and heavy cyclic loading to last well over 100 years. As part of the initial design phase for any modifications to the buildings and uses on the wharf structure, however, an updated condition assessment should be conducted to determine the necessary repairs and estimate the remaining life span for the structure.

The existing wharf structure is designed for heavy warehouse and commercial use. Due to the relative uniformity and repetitive nature of the wharf substructure, it would be feasible to modify the structure by removing portions of the structure, if desired, for the redevelopment of the project site.



Figure 1.52 Simplified Wharf Structure Diagram



Figure 1.53 Pier Structure, Concrete Bulkhead Detail (looking west)



Figure 1.54 Pier Structure, Timber Pilings (looking south)



1.8.2 Amphitheater & Access Ramp Structure

Immediately adjacent to the west side of the Terminal 1 Wharf is the public amphitheater and access ramp. This structure is newer than the Terminal 1 Wharf and was likely built in the 1990s or earlier. Construction plans for the structure were not available. The structure is approximately 150 feet long east to west and approximately 100 feet wide from the shore to the waterward edge of the structure. The structure consists of steel pipe piling, steel I-beam pile caps, and precast concrete deck panels. There are four rows of piling extending from the rip rap shoreline to the face of the structure, and an outer row of steel fender piling. There are eight rows of piling along shore, for a total of approximately 32 vertical pier piling, and 8 or more fender piling. There are also a few batter (angled) piling near the outer face of the structure that provide lateral resistance for mooring loads for vessels moored along the pier face.

The pier structure is used for larger tour vessels accessing the waterfront at the project site. A fender system with rubber fendering, fender pile, and battered mooring pile dolphins is integrated into the pier structure. Mooring bollards are located at the deck level for mooring of larger vessels. Removable railings are located at various increments along the face of the pier to allow space for gangways from the vessels to shore to load and unload passengers.

The concrete walkway that leads along the shore, down to the lower section of the amphitheater is also a concrete deck panel structure built on steel pipe piling, as seen in Figure 1.57. The steel piling were installed on the rip rap slope of the shoreline. This walkway is approximately 130 feet long by 15 feet wide.

The current condition of the pier structure is not known. A condition survey of the structure was not completed as part of this planning level analysis. In general, based on visual observation of the upper sections of the piling and superstructure, the structure appears to be in fair condition. The piling and steel pile caps do have some corrosion but no significant section loss was noted in the general visual review of the structure. As part of the initial design phase for any modifications to the structure, an updated condition assessment should be conducted to determine necessary repairs and estimate the structure's remaining life span. It may be feasible to modify this pier structure by removal of some of the decking to open up the area to the water. Because of the greater spacing of the piling and structural system of this pier however, there is not as much flexibility in changing this pier configuration as there is with the Terminal 1 Wharf structure.



Figure 1.55 Amphitheater



Figure 1.56 Pier Structure, Transition from Steel to Timber Pilings (looking west)







Figure 1.57 Shoreline Edge & Access Ramp (looking north from low dock)

1.8.3 Floating Dock & Access

The floating guest dock consists of an aluminum gangway leading to a concrete float anchored by ten steel pipe piling adjacent to the Public Amphitheater. The floating guest dock facility was completed in February 1994, with funding provided by the Washington State Recreation and Conservation Office (RCO). RCO grants have specific requirements that funded projects must remain in service for the public. Any changes to the guest moorage facility would require adherence to the RCO contract. Changes can likely be made to the facility as long as the equivalent or better public guest moorage access is provided.

The guest dock is oriented parallel to the river channel, which is important both for reducing the impact from currents and floating debris on the structure and improved mooring operations for boats using the facility. Any reconfigurations or expansions of this guest moorage facility should be carefully designed to provide safe, accessible moorage. Given the higher current flow rates and adjacent shipping channel, this location is not ideal for launching and retrieval of small, hand-carried vessels. A condition assessment of the guest dock facility was not conducted as part of this planning study. These types of facilities typically have forty to fifty year life cycles if they are not subject to significant damage by impact loads from large vessels or debris during flood events. Operational issues such as the current flow in the river and adjacent shipping channel activity should be considered for any modifications of the facility to maintain or improve the use of the facility for guest boaters.



Figure 1.58 Low Dock (looking west)



Figure 1.59 Low Dock & Terminal 1 Wharf (looking east)



1.8.4 Inwater Regulatory Issues and Processes

Regulatory Boundaries

Additional descriptions related to SEPA, shoreline impacts, in-water, Harbor Line jurisdictional requirements will be developed as required.

Federal Permits

The U.S. Army Corps of Engineers (COE) has jurisdiction in the Columbia River to the Ordinary High Water Line. The COE is responsible for issuing a Section 10 Permit from the Rivers and Harbor Act, a Section 404 Permit from the Clean Water Act, and for historical preservation under Section 106 of the Historic Preservation Act. The COE is also responsible for enforcing the Endangered Species Act (ESA) and cannot issue a permit for a project that will cause harm to an Endangered or Threatened Species. The Corps will consult with the U.S. Fish and Wildlife and the National Marine Fisheries Services on the project and will not issue the permits until these agencies have concurred that the project does not impact ESA listed species. The COE will also issue a Public Notice for the projects to obtain public comment.

There are a variety of elements that the COE will be reviewing in permit application for modifications of the facilities at the project site. For the Section 10 Permit, the COE will be reviewing the project elements to assure that there is no impact to navigation in the river including both within and outside the navigation channel. Any new or modified in-water structures, dredging and fill, and other inwater modifications will be reviewed to prevent impact to navigation in the river. As long as work is not done out in the channel, is behind the outer harbor line, and is designed to either provide safe moorage or to not impact the ability to navigate on the river, Section 10 permit requirements can likely be met.

For the COE process, the Section 404 and ESA requirements will have the biggest impacts on the ability to permit modifications to the shoreline and structures at the project site.

In order to protect the water quality and ESA listed species, the COE will be looking for no net impacts of the project. The COE and other regulatory agencies prefer that negative impacts be avoided, minimized, and mitigated in that order. Key issues for the project will include minimizing the overall footprint of new or modified structures

in the water to reduce overwater coverage and shading impacts, the use of inert materials in the water, improving habitat conditions, and addressing any flood or river flow modification concerns. In general, removing structures, fill, or other inwater infrastructure is seen as a benefit for the environment. Approval for dredging will also require additional analysis and review and approval by the COE for removal and disposal of the dredge material.

It will also be important to address appropriate best management practices to be incorporated during the construction of any project to prevent debris from entering the water and eliminate any discharges that would impact water quality, and to avoid or mitigate any impacts to important habitat features such as wetlands and nearshore areas. The means and methods of any pile installation are also critical to determine to avoid impacts to juvenile fish from sound pressure waves during pile installation. These BMPs and construction methods will need to be identified in the design and permitting process to facilitate the approval of the permits.

The Port has a designated COE Regulatory staff member that reviews and processes permits for the Port projects through the Portland Branch of the COE. This staff person will coordinate with and incorporate COE concerns into the design of the project for the permitting process with the COE. The COE, as lead agency will coordinate with local Tribal interests since the COE will not issue a Section 10/404 Permit without consensus of the local Tribes.

State Permits

There are a variety of State agencies that will be involved with permitting of work in the Shoreline and below the Ordinary High Water mark. These include the following:

- Washington Department of Fish and Wildlife
- Washington Department of Ecology
- Washington Department of Natural Resources

A Hydraulic Project Approval (HPA) will be required from the Washington State Department of Fish and Wildlife (WDFW) to determine a projects impacts on over water structures and habitat below the Ordinary High Water mark. This agency will have many of the same considerations stated above as the COE for projects impacts.

The Washington Department of Ecology (DOE) will be involved in a number of levels with shoreline and inwater permitting at the project sites. DOE will review and comment on the SEPA process.

In addition, DOE will issue a 401 Temporary Exceedance of Water Quality Certification and a Coastal Zone Management (CZM) Consistency Determination for the various projects at the site depending on the projects. The projects must incorporate BMPs to address water quality impacts and be consistent with CZM policy to facilitate these processes with DOE.

All work will occur in the Port's Management Agreement (PMA) area with the Washington Department of Natural Resources (DNR). As such, no additional approvals or lease agreements will be required with the DNR.

Permit Process

- Early identification of the need for technical studies such as habitat evaluations or geotechnical studies.

include:

- Documentation
- Biological Evaluation (Habitat Study)
- Historical Property Inventory
- Hydrological Analysis (if required)
- Mitigation plan (if required)
- Permit level drawings
- SEPA Check Lists





Key elements of successful permitting include:

- Preparation of clear descriptions and documentation of project elements from the beginning of a project.
- Conduct site visits and visits to all agencies (such as US Coast Guard) and Native American tribes.
- Communication with all agencies and parties of interest.

Key deliverables expected from a typical in-water permitting project

• Joint Aquatic Resource Permit Application (JARPA)

1.8.5 Terminal 1 Building

The Terminal 1 Building was designed as a simple shed structure, 100' north-south and 320' east-west, or a total of 32,000 SF. The outer bays were originally 35' wide and 18' tall, minimum height, while the central 30' wide bay measured approximately 22' tall.

Siting of Terminal 1 allowed easy access around the entire perimeter, to facilitate freight movement. The building was located 22' off the southern edge of the pier and a minimum of 10' west of the eastern edge. Rail spurs allowed rail access on both the long sides of the warehouse building.

As previously described, the Terminal 1 Building was later incorporated into the future Red Lion Hotel structure, which built to the edge of the pier. It is unclear what, if any, portions of the original building remain. At one point, the eastern most portion of the structure was removed for installation of the I-5 bridge. Careful deconstruction of the existing facility will be necessary to uncover what may still be present within the current building use and configuration.



Figure 1.60 Terminal 1 Building, 1928

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Figure 1.61 Terminal 1 Building Plan & South Elevation



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1.9. Zoning Analysis

Development on the POV site must meet the requirements detailed in several chapters of the *Vancouver Municipal Code* (VMC), including the following:

- 20.260 Planned Developments (includes the list of required elements for a "master plan")
- 20.265 Design Review Downtown Design Guidelines
- 20.430 Commercial & Mixed Use Districts
- 20.520 Noise Impact Overlay District
- 20.570 Airport Height Overlay District (includes height limitations from FAA)
- 20.620 Columbia River Shoreline Enhancement District
- 20.630 Downtown District (including City Center Waterfront District)
- 20.945 Parking

In addition, the Master Plan must consider the findings of the *Vancouver City Center Vision Plan,* the *Final Supplemental Environmental Impact Statement* completed assessing the VCCV and the *Vancouver Comprehensive Plan.* Development within the shoreline district (the area within 200' of the OHWM) must also comply with the *Shoreline Master Program*; dimensional standards are summarized in Table 1.2.

The CX zoning encourages a mix of uses for a vibrant, livable downtown Vancouver. Relevant requirements outside the shoreline area include the following dimensional standards:

- No minimum lot dimensions
- 100% maximum lot coverage
- No setback requirements in this location
- No minimum landscape requirements
- Artisan & specialty goods production limited to 10,000 SF
- Northeast corner of Block A: building must be sited to zero setback or "building lines" on Columbia Street, provide rain protection and avoid blank walls (VMC Figures 20.630.01, 02 and 03)





USA

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/ater Related / r Enjoyment Uses	Non-Water Related Uses
Permitted.	Conditional.
25'	100'
35'	n/a
45'	25'
Permitted.	Permitted.
50'	100'
unlimited	n/a
unlimited	35'
Permitted.	Conditional.
25'	100'
45'	n/a
60'	35'
Permitted.	Permitted.
50'	50'
35'	35'
35'	35'
Permitted.	Conditional.
20'	100'
35'	n/a
35'	25'
Permitted.	
35'	
35'	
35'	

1.9.1 Height Limits

Maximum building height limits in Downtown Vancouver vary from 35' minimum (along the shoreline), to 300' along I-5. This range of allowable heights reflects the City's intent to create a smooth transition between high density downtown, neighboring single family neighborhoods, shoreline viewsheds and air traffic safety regulations established by the Federal Aviation Administration (FAA). The "envelope" or potential height profile of downtown blocks would create a buffer along I-5 and account for incoming and outgoing air traffic from Pearson Field Airport to the east.

Building height limits on the project site vary from 35' to 160'. The most restrictive, 35' limit corresponds to the City's shoreline regulations within the first 100' horizontal distance inland of the OHWM. The next 100' within the shoreline district allows an increase to 45' maximum building height. (Note that the City of Vancouver includes roof-top appurtenances within the defined height allowances.) Figure 1.63 illustrates the maximum height allowances in three dimensions to model the potential massing for the project site.

VMC 20.630.050.C identifies a critical footnote that needs to be addressed in this Master Plan: the lower height (60' or 80') indicated in the ranges is the maximum building height permissible outright; the higher height (120' or 160') is conditional:

- 1. Up to 50% increase (to 90' or 120') is allowed outright, provided the increase complies with FAA regulation, Part 77 and will not impact safe air navigation.
- 2. Over 50% and up to the maximum (120' or 160') may be allowed by the Planning Official through the site plan review process, if:
 - a. Height increase receives an issuance of a determination of no hazard to air navigation; and
 - b. The gross floor area of the building at each floor above 90' or 120' is less than or equal to 12,000 SF.

Floor plates limited to 12,000 SF are typically residential or hotel uses. Depending on the market conditions, taller buildings may be appropriate for office, residential and/or hotel uses, however office floor plates limited to 12,000 SF are very inefficient and hard to lease. The Port should discuss achieving a variance through the Planned Development process to avoid this restriction on floor plates and therefore, taller building uses.

New construction on the water side of the OHWM (i.e., on the pier) is no longer allowed, which emphasizes the potential value of the existing Red Lion Hotel/ Terminal 1 structure since it could be renovated but not built in its present location per today's codes. New development is also precluded within the first 25' landward of the OHWM, unless the proposed use is dependent upon proximity to the river.







Figure 1.63 Theoretical Building Massing (looking north)



Figure 1.62 City of Vancouver Maximum Building Height Map (Source: VMC Figure 20.630.04)

1.10. City Requirements: Concept Plan Submittal

1.10.1 City of Vancouver Master Development Plan Approval **Process**

The proposed POV Waterfront Development project is located within the Columbia River Shoreline Enhancement Plan District (VMC 20.620). VMC 20.620.030 states:

An applicant who proposes any development within the Columbia River Shoreline Enhancement Plan District shall submit a master development plan per the requirements of Chapter 20.260 VMC, Planned Developments or 20.268 VMC, Public Facilities Master Plans, as appropriate for the proposed use(s). For the purposes of this chapter, compliance with Chapter 20.268 VMC, Public Facilities Master Plans is required, not voluntary where appropriate for the proposed use(s).

The location of the subject site within the Columbia River Shoreline Enhancement Plan District (VMC 20.620), therefore requires a master plan submittal. Since the development is not a public facility as defined in the City's Development Code (VMC 20.268.030), the Planned Development process is being used to process the application. The submittal requirements for a conceptual plan are outlined in VMC 20.260.070 and for a detailed plan in VMC 20.260.080. The approval criteria are those outlined in VMC 20.260.050.

A new planned development concept plan shall be processed by means of a Type IV review, per 20.210 VMC. Since the Port's 10.14-acre site falls under the category of planned developments 25 acres or less, the Hearings Examiner shall be the initial review authority and shall issue a recommendation to the City Council. The City Council shall be the final authority for planned developments.

If the development is conceptual, the subsequent detailed site plan, and phases thereof, shall be reviewed by means of a Site Plan Review under 20.270 VMC, to ensure that it is substantially in compliance with the approved concept development plan.

1.10.2 Applications

- Master Plan Approval Type IV (Hearing with Hearings) Examiner who makes a recommendation to City Council)
- Shoreline Substantial Development Permit/ Shoreline Conditional Use Permit and Shoreline Variance (critical areas are looked at as part of the shoreline permit) – the type is dependent on what is being requested. Processed concurrently with the master plan approval
- Preliminary Plat Approval if requested, processed concurrently with the master plan approval
- Design Review
- Others as may be needed additional applications may be warranted once the City staff are able to review the preapplication submittal.

1.10.3 Process

Preapplication Process

- Submit preapplication request
- Preapplication meetings are held on Thursdays, approximately three weeks after the submittal date

Development Application Review Process

Submittal/Fully Complete Review

- Submit application
- 28 day application completeness review

Notice/ Staff Report

- If complete, notice of application and public hearing issued within 14 days of the application being deemed complete
- Notices issued for a 30 day comment period
- At the end of the comment period, approximately two weeks to write the staff report unless there are extensive issues or comments that come up during the comment period. The staff report needs to be issued 21 days in advance of the hearing



Hearings Examiner Hearing

- submittal)
- **City Council**

City Council Hearing

- - hearing)
 - Court

Department of Ecology

- Department of Ecology

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If the Port requests a conceptual master plan approval only, submit for site plan review. If detailed master plan approval given and if building plans reviewed, building permits can be issued.

The time lines listed above can fluctuate depending on when the application is submitted and the timing of the hearings before the Hearings Examiner and City Council.

• Hearing – HE hearings held the first Thursday of the month (best case scenario is approximately 107 days from application

Hearings Examiner has up to 10 days to issue recommendation to

Hearings Examiner issues decision

• Schedule hearing. Since the master plan is approved by ordinance, a first and second reading is required by City Council. City Council hearings are the 1st and 3rd Mondays of the month with the first reading the Monday before the hearing.

 Approximately two weeks to write staff report which needs to be completed at least 14 days prior to first reading

Notice of City Council hearing issued 10 days prior to the hearing

City Council first reading (consent agenda)

 City Council Hearing (second reading) a week after first reading (best case scenario is approximately 45 days from scheduling to

City Council decision has a 14 day appeal period to Superior

• If no appeal, per shoreline procedures, City sends decision to

• If a substantial development permit then DOE has 21 days from the date they receive the notice to appeal the decision

• If a shoreline variance or shoreline conditional use permit, DOE has up to 30 days to make a decision on the project which is followed by a 21 day appeal period

1.11. Opportunities & Constraints

All the analyses of existing conditions of both downtown Vancouver and the project site can be summarized in terms of the opportunities presented and the potential constraints impacting development.

Opportunities

- Reconnect the waterfront and City Center, physically and visually
- Create a unique identity
- Define a new vibrant, authentic urban mixed-use waterfront community with 24/7 activity
- Repurpose the outdated, outdoor amphitheater and entertainment space
- Connect the Columbia River Renaissance Trail along the waterfront to the Fort Vancouver National Historic Site
- Provide direct waterfront access (visual and physical connection)
- Reflect the Port history and culture
- Create a regional attraction
- Provide flexible, adaptive workplaces

Constraints

- Capital cost required to repurpose Terminal 1 Building and pier structure
- Visual/ physical disconnection to the City Center
- Perception of railroad berm as a visual impact and safety concern
- Noise impacts
- Competing programming of events and activities with the City Center
- Future Columbia River Bridge impacts







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1.12. Design Precepts

The following exhibits were presented at the Commission Workshop and the Community Open House to share ideas that will help influence the development of alternative concepts.





Commissioner & Stakeholder Input / Design Precepts

Enhance waterfront access, encourage innovation, create a healthy environment, build a community experience

ENVIRONMENT Embrace and enhance the natural and urban setting	CULTURE Create a place that reflects the Port's mission & brand and what is uniquely Vancouver	CHARACTER Be authentic	ECONOMIC DEVELOPMENT Retain and grow the Port's role as an economic driver
WATERFRONT - CITY CENTER INTEGRATION Reconnect the waterfront to the city center through high quality urban design strategies	CELEBRATE THE PORT'S HISTORY Investigate and evoke the Port's history; rehabilitate and re-purpose Terminal 1 Bldg.	MIXED-USE Promote a range of year round uses from retail, office, hospitality, employment, educational and entertainment	URBAN FOCUS Create a new signature urban waterfront community that reflects the Port's values
PUBLIC ACCESS Design should bring people to the water's edge, be welcoming and serve as a positive addition to the city center	REFLECT/ CELEBRATE CULTURAL INFLUENCES Tell the whole story of past and present cultures (Native inhabitants, settlement and other periods)	ACTIVE STREETS AND PUBLIC REALM Promote a 'messy vitality', serve all active modes of travel; design with intent and include some surprises	RIVER AS ECONOMIC DRIVER Promote community building and tourism by including uses that add value and build the waterfront as amenity (e.g. visitor center, marina)
SMART SUSTAINABILITY Seek innovative, cost-effective sustainable solutions; consider both built forms and infrastructure systems design	PORT AS CIVIC STIMULUS Envision the Port's role as a community member with shared amenities and community space	FRESH AIR, ACTIVE LIVING Provide indoor and outdoor spaces, natural ventilation & optimize views & daylighting	FLEXIBILITY / ADAPTABILITY Design and plan buildings that will flex with varying demands & changes in technology and market forces
EXTEND WATERFRONT PARK Extend the park as a catalyst investment to the waterfront development; connect to the Columbia River Renaissance Trail and upland areas	BUILD COMMUNITY Extend the Vancouver community to the waterfront neighborhood through high quality design, uses and seamless access	ENCOURAGE GROUND LEVEL RETAIL Activate the street level w/retail; separate retail & secure work environments	FUNCTIONAL SPACES Focus on new Port corporate use & needs; strive for efficient space utilization; Allow for future adaptations to the waterfront and building systems over time
PROGRAMMED OPEN SPACE Create meaningful & usable waterfront open space; provide shared public & employee outdoor gathering spaces	INNOVATION / DIVERSITY Cultivate a place that embraces diversity and character; embrace and attract the next generation of Vancouver residents and employees	CREATE A VIBRANT MARKET PLACE AND ACTIVITY CORE Include local and regional influences, traditional and cutting edge entertainment experiences	PUBLIC / PRIVATE PARTNERSHIP OPPORTUNITIES Encourage multiple partners and event types; off- set operating and maintenance costs
SHORELINE HABITAT PROTECTION Protect sensitive bio-habitat areas along/ in the river; improve water quality and shoreline areas; Seek bird-friendly and other ecological designs	ENTREPRENEURSHIP Encourage initiative & fresh thinking; create opportunities for serendipitous encounters	BUILDING FORM Develop simple building forms and solutions Use regionally appropriate and durable building materials	COLLABORATION / SHARED SUCCESS Partner with the City, Columbia Waterfront LLC and other agencies for the greater public benefit; seek solutions that "raise the bar"
MITIGATE IMPACTS Consider acoustical impacts of the Columbia River Bridge (existing and future) and rail lines and seek bird-friendly and other ecological destinations	WATER AND RAIL TRANSPORT Recognize that many people enjoy watching water vessels and trains; support viewing opportunities of trade and goods movement along the river	GATEWAY TO THE STATE Orient visitors to Vancouver and the waterfront	TALENT ATTRACTION Create spaces and attractions that entice new talent to locate to SW Washington
VIEWSHEDS Optimize viewsheds from the City Center to the river, the waterfront development site and within the planned development	RIVER AS LIFELINE Find Vancouver's place in the story of the Columbia River (culturally, economically, environmentally); consider water access options intended to activate the waterfront development site	REGIONAL ATTRACTION Create an experience that attracts visitors from all over the Pacific NW and beyond	SHARED FLEXIBLE PARKING Create a parking management plan; transition to emphasis public transit options





1.13. Building Typologies

Precedents / Potential Program Elements

Enhance waterfront access, encourage innovation, create a healthy environment, build a community experience

LOCAL BUILDING TYPOLOGY

Office

Residential

Retail

Open Space























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Port of Vancouver USA

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Enhance waterfront access, encourage innovation, create a healthy environment, build a community experience

LOCAL OPEN SPACE TYPOLOGY

Public Art

ROW/ Streetscapes

















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Enhance waterfront access, encourage innovation, create a healthy environment, build a community experience

BUILDING TYPE/ USE

LOW DENSITY



Any combination of commercial office, groundlevel retail, residential (apartment, workforce housing, live-work) multi-purpose community gathering and entertainment, cultural interpretive and educational uses.



Commercial Office

Stand alone or mixed-use office building that may support a range of commercial office user needs, including commercial corporate office, biotech, innovation start-ups, research, technology-based and maritime uses.

























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BUILDING TYPE/ USE

LOW DENSITY

Mixed-Use Residential

A combination of market rate and/or workforce residential apartments, flexible live-work w/ ground-level office workspace studio and limited commercial services and uses (e.g. design services, architecture studios, graphic arts and small-scale artist production space).













Multi-Purpose Center

Stand alone or mixed-use multi-purpose market and exhibit halls, community meeting space, artisan and craft production and retail, performance, interpretive and museum uses, flexible open floor plan, open air or closed environment.





















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BUILDING TYPE/ USE

LOW DENSITY



Stand alone or mixed-use special use building that may include cultural and interpretive museum and/or performance space. Specialty use buildings are intended as iconic and unique built forms representative of the unique waterfront development.





Stand alone or mixed-use hotel accommodations w/small meeting room space, mixed with restaurant and/or retail, multi-purpose community and entertainment spaces linking to the outdoor private and public realm programmed spaces.









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BUILDING TYPE/ USE

Adaptive Reuse

Renovation of a historic industrial structure for 21st century uses, including but not limited to marketplace, incubator office, etc.











"Pop-up Retail"

Temporary use and/or development to spur pedestrian activity and new uses. Could be replaced with long-term new construction at later date.















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BUILDING TYPE/ USE

LOW DENSITY



Single and/or multi-tenant office campus integrated into city grid with public open space and active ground floor uses











Urban "Big Box"

Single use or mixed-use that may accommodate retail or grocery store uses and/or other neighborhood supportive and community waterfront services.























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BUILDING TYPE/ USE

LOW DENSITY

Live-Work

Verticle, mixed-use structures that function as both residential and office or studio space. Space typically for artists or other creative professionals. Creates 24 hour energy in a neighborhood.









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BUILDING TYPE/ USE

Parking Structure

Stand alone single-use parking structure (above grade) or mixed-use wrapped parking structure that may accommodate commercial office, retail and/or residential supportive uses.













Belvederes/ Gateways

Belvedere: Vertical structures to mark the Port site and welcome visitors to the Columbia River waterfront, possibly providing higher views of downtown and/or river.

Gateway: signage, art, and/or wayfinding opportunities to encourage movement from downtown and Fort Vancouver area into Columbia River Renaissance neighborhood.



















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OPEN SPACE TYPE/ USE

Waterfront

Multiple experiences including naturalized banks and edges, as well as urban piers and docks with views along the river.



Plazas and Promenades

Sizing and design of the plaza space should allow for a variety of activities, both active and passive. Elements such as seating and water features may provide attractors when events are not being held at the water's edge. Multimodal transportation should be accommodated so as not to impact the plaza activities.

















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OPEN SPACE TYPE/ USE

Tunnels and Gateways

Pedestrian tunnels and gateways can become identifiers for the district, incorporating framed views with art and lighting.













Alleys and Urban Streets

Narrow alleys and urban streets should all be designed with the pedestrian experience in mind. Wide, tree-lined walks, shared streets, stormwater and active edges should be considered.































2.1. Design Framework

The Port of Vancouver waterfront is a envisioned as a 24-hour, active mixed-use district integrating office, retail, residential and hotel uses organizing around the central Terminal 1 Building "Marketplace" and waterfront pier. The mix of uses work in harmony: attracting residents as well as visitors to Vancouver city center, downtown and the Columbia River. The vibrant waterfront development provides universal access, encouraging innovation, while promoting a sustainable and healthy environment, and the rich cultural and community values in the area.

The waterfront urban design and public spaces encourages a safe, pedestrian experience, with recreation opportunities along the Columbia River Renaissance Trail.

The waterfront district is an integral part of downtown, even at Phase 1, before the site is fully developed.

Through discussions with Port and City leadership, as well as surveys with the public, design precepts were identified for the waterfront development, as described in Chapter I. Established by the Port Commission, the project "Guiding Principles" for the proposed Port of Vancouver waterfront development are outlined on the following page.



Figure 2.2 Precedent: Public Art Framing Waterfront Views



Figure 2.1 Precedent: Flexible, Event Space



Figure 2.3 Precedent: Active Sidewalks with Retail, Amenities



Figure 2.4 Precedent: Pedestrian Bridge

2.2. Guiding Principles

2.3. Evaluation Criteria

Enhance waterfront access, encourage innovation, create a healthy environment, build a community experience

PUBLIC ACCESS TO THE COLUMBIA RIVER WATERFRONT

The Waterfront Development is intended to attract people to the waterfront and ensure connections between the city center, waterfront and Columbia River Waterfront Park

FINANCIAL RESPONSIBILITY

The Waterfront Development shall integrate existing public infrastructure investments (pier structure, small boat dock, utilities, and Columbia Way) with minimal additional cost

SUSTAINABLE DEVELOPMENT PRACTICES

The Waterfront Development shall reflect the Port's policies and standards by promoting sustainable development best practices and long-term economic development sustainability objectives?

PORT AS AN ECONOMIC DEVELOPMENT ENGINE FOR SOUTHWEST WASHINGTON

The Waterfront Development shall integrate the history and culture of the Port as an important regional and national job producer; and embrace the physical presence of the Port through design and adaptive reuse and re-purposing of the Terminal 1 Building as an active public use.

SUPPORT THE COMMUNITY THROUGH ECONOMIC GROWTH AND JOB CREATION

The Waterfront Development shall support the broader City and regional efforts to create job growth and economic vitality.

VISUAL & PHYSICAL CONNECTIONS TO THE WATERFRONT

Does the concept maximize views to and through the site from the Downtown City Center (Columbia & Esther Streets)? I-5 Bridge? Along the Columbia River? Does the concept promote movement through the site in a legible and safe manner?

MIX OF USES

Does the concept adequately combine the Phase I program requirements in a way that activates the waterfront - for visitors, employment, shopping and cultural and educational uses? Does the concept promote an active, 24/7 use?

HISTORIC/ CULTURAL CONTEXT

Does the concept integrate an adaptive reuse/ re-purposing of the Terminal 1 Building? Does it provide opportunities for a possible Visitor Center and interpretive uses, cultural and educational amenities and uses?

COMPLEMENTARY

Does the concept complement the proposed uses at the Columbia Waterfront development, as well as the existing uses and activities in downtown?

PHASED IMPLEMENTATION

Does the concept allows for Phase I implementation while not precluding future phases (or jeopardizing initial phase tenants living through future construction)?

INFRASTRUCTURE COST

Does the concept create unwarranted additional infrastructure costs that may negatively impact a return on investment (e.g. are upfront infrastructure costs unreasonable)? Will initial costs impact the Port's ability to achieve long-term financial success with the development?

FLEXIBILITY AND ADAPTABILITY

Does the concept allow for flexibility and adaptability over time by combining both large and small buildable parcels? Does it encourage a range of diverse/ complementary uses intended to create jobs and activate the waterfront?

UNIQUELY VANCOUVER

Does the concept represent the possibility of creating a unique and special place that defines the Port of Vancouver and the City of Vancouver as a regional destination?





2.4. Proposed Development Program

As part of the Alternatives Analysis process, the design team developed a proposed program and initial phasing strategy used to inform the development of ten (10) preliminary concepts. The proposed program as outlined in Tables 2.1 and 2.2 was used to guide each alternative and help evaluate how the critical Phase 1 program may be achieved.

Table 2.1
Potential Development Program: Phase

	Recommended Amount			
Development Type	Low	High	Units	Notes
Public Open Space	TBD	TBD	acres	Streets, ped and value fo Terminal 1 B
Terminal 1 Renovation, "Marketplace"	16,000	32,000	SF	Building reha
Multi-Tenant Office Building	60,000	100,000	SF	Anticipated t well as other
Retail	2,000	12,000	SF	Ground floor
Hotel	125	150	rooms	Upscale, ext Complement
Residential: Market rate rental apartment / workforce housing	150	150	units	1 - 5 stories units

Table 2.2Potential Development Program: Future Phases

	Recommended Amount			
Development Type	Low	High	Units	Notes
Public Open Space	TBD	TBD	acres	Additional o phases.
Multi-Purpose Center	15,000	30,000	SF	Flexible com
Multi-Tenant Office Building(s)	60,000	100,000	SF	Potential ba
Retail	2,000	12,000	SF	Ground floo
Residential: Market rate rental apartment / workforce housing	150	250	units	1 - 5 stories units; 250 to determined
Parking				As required to be provide lots and / or



e 1

destrian and bike paths, plazas create a great place or the Port property. "Market plaza" adjacent to Building.

abilitation for public market: unique, local, artisinal beverage, gourmet lifestyle and other vendors

to include Port headquarters (20,000 - 45,000 SF) as r speculative office tenants.

r retail (20 - 40' deep) in Phase 1 buildings.

tended stay hotel with dining and conference space. Its Hilton Conference Center.

of apartments over ground floor retail and/or walk-up

ppen space and amenities to be developed with future

nmunity space for indoor gatherings, including e space; size to be determined.

sed on market demands

or retail (20 - 40' deep) in future phases

s of apartments over ground floor retail and/or walk-up otal units maximum on Port site, number (if any) to be by phase 1 development.

by City of Vancouver and / or negotiated standards; led in combination of on-street and off-street parking r structures

2.5. Potential Parking Strategies

Parking requirements for the City of Vancouver were compared with downtown standards for other regional cities, including Portland and Seattle, as well as a recent urban initiative in California (proposed as Bill AB 904). These standards are itemized in Tables 2.3 and 2.4 for the initial and future phases of development.

The Port will explore the most appropriate and cost-effective parking strategies to support the developed uses on the site. This may include a variety of solutions, including on-street parking and above-grade and / or underground parking structures. Per the City of Vancouver standards, surface parking lots will be avoided other than as interim, temporary parking solutions. Where possible, the Port will partner with the City of Vancouver, the Columbia Waterfront development and other local landowners to provide a district-wide parking solution. Multi-modal transportation strategies will also be designed for and prioritized, including bike lanes, transit supportive plazas and pedestrian sidewalks.

The draft preliminary alternatives illustrated on the following pages considered distribution of land uses across the site, circulation patterns, public open space and renovation of the Terminal 1 Building. All options assumed the connection of the Columbia Renaissance trail across the property and opportunities for wayfinding and signage.

		Parking Stalls as Required by:			
	Proposed Maximum SF	City of Vancouver Municipal Code	California Bill AB 904	Downtown Seattle	Downtown Portland
Terminal 1 Renovation, "Marketplace"	32,000	32	64	32	32
Multi-Tenant Office Building (Office portion)	100,000	100	200	100	70
Retail	12,000	12	24	12	12
Hotel - average 600 square foot rooms, restaurant, lobby area, small meeting rooms	90,000	150	150	37.5	150
Residential: Apartment /Workforce Housing - 200 units (average 850 SF/unit)	170,000	200	200	200	270

Table 2.3 **Comparison of Parking Standards: Phase 1**

Table 2.4 **Comparison of Parking Standards: Future Phases**

		Parking Stalls as Required by:			
	Proposed Maximum SF	City of Vancouver Municipal Code	California Bill AB 904	Downtown Seattle	Downtown Portland
Multi-Purpose Center	30,000	30	60	30	8
Multi-Tenant Office Building(s) (Office portion)	100,000	100	200	100	70
Retail	12,000	12	24	12	12
Future Phases Subtotal		142 stalls	284	142	90
Build-out Total		636 stalls	922	524	624
Including 20% Reduction of Par per Code (Non-reside	king Stalls ential uses)	549 stalls		<u>.</u>	





2.6. Draft Preliminary Alternatives

The Draft Preliminary Alternatives illustrated on the following pages considered distribution of specific Phase I programmed uses across the site, as well as circulation patterns, public open space and renovation and repurposing of the Terminal 1 Building. All options assumed the restoration of the existing wood Pier and Terminal 1 Building, connection of the Columbia River Renaissance Trail across the property and the need for parking and other site development amenities.



Figure 2.5 Alternative A "Baseline"



Figure 2.6 Alternative B "Terraces"

Alternative A "Baseline"

- Street grid and block configuration remain as is
- Existing wood pier structure remains
- Terminal I Building restored in place with potential addition
- Improve / reprogram Amphitheater space
- Possible boat launch modifications

Alternative B "Terraces"

- Development parcels are configured to create a terraced effect
- Larger parcels to the back, with building step down to create "green roof" areas
- Port, hotel parcels are interchangeable
- Columbia Way remains as is
- Amphitheater and boat launch modified

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Draft Preliminary Alternatives, cont.



Figure 2.7 Alternative C "Columbia Way Campus"



Figure 2.9 Alternative E "Greenbelt"

Alternative C "Columbia Way Campus"

- Merge Blocks 'A' and 'C' and Blocks 'B' and 'D' to create larger, super-blocks for greater flexibility
- Port HQ and other office tenants are integrated as part of the north parcel

Alternative E "Greenbelt"

- Columbia River Renaissance Trail "greenbelt" is extended up into the development
- Port, hotel parcels are interchangeable
- Columbia Way remains as is
- Amphitheater and boat launch modified



Figure 2.8 Alternative D "Marketplace"



Figure 2.10 Alternative F "Innovation Center"

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Alternative D " Marketplace"

- Specialized retail market created to complement Terminal 1 program space
- Columbia Way remains as is
- Grand plaza space
- Block configuration
 modification
- Existing wood pier structure remains
- Amphitheater and boat launch modified
- Centralized underground and above ground parking located as part of north parcels

Alternative F "Innovation Center"

- Columbia Way modified as a "woonerf" trafficcalm corridor
- Parcels and buildings are oriented in northsouth orientation
- Increased public plaza opportunities
- Existing wood pier structure remains
- Renovated Amphitheater

Draft Preliminary Alternatives, cont.



Figure 2.11 Alternative G "Central View Corridor"

 Image: marked sector sector

Figure 2.13 Alternative I "The Cove"

Alternative G "Central View Corridor"

- Strengthens access / connection to the City Center
- Terminal I Building relocated/restored to align with new central corridor
- Columbia Way remains as is
- Flexibility with block configuration (Blocks A/C & B/D can remain or be expanded)
- Existing wood pier structure remains

Alternative I "The Cove"

- Shoreline alignment modified w/ promenade structure
- Columbia Way remains as is
- Existing wood pier structure remains
- Terminal I Building remains or is relocated/ restored



Figure 2.12 Alternative H "The Circle"



Figure 2.14 Alternative J "Mixed-Use Tech Campus"

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Alternative H "The Circle"

- Columbia Way is modified to create public open space as part of the grand circle
- Access to the City Center is enhanced via Daniel's Way connection
- Port HQ and hotel uses are clustered
- Terminal 1 Building remains in current location

Alternative J "Mixed-Use Tech Campus"

- Amphitheater is removed, natural shoreline is restored
- New natural cove area is created
- Columbia Way may be removed, shared mall corridor
- Merge Blocks 'A', 'B', 'C' and 'D' to create large mixed-use technology campus
- Port HQ and hotel uses are integrated into the technology campus
- Terminal 1 Building remains in current location

2.7. Preliminary Preferred Concepts

The ten (10) Preliminary Alternatives were presented to the Port Commission and the public for review and comment. Four concepts (or combinations of the preliminary schemes) emerged as worthy of further development. The four preliminary concepts included:

- **Concept 1 ("Baseline")** retains the current street grid and block configuration, restores the Terminal 1 building to its original length, replaces the public amphitheater with a terraced lawn and creates new open spaces along the high piers.
- Concept 2 ("Grid Shift") modifies the street grid and block configuration and creates "woonerf" plaza spaces. It also removes the current amphitheater and replaces it with a new cove and returns Terminal 1 to its original size.
- Concept 3 ("Daniels Way") extends Daniels Way to the site through a pedestrian underpass and relocates the Terminal 1 building. It also removes the current amphitheater and replaces it with a terraced shoreline and adds a wooden pier for river views.
- **Concept 4 (Dock Restoration)** provides an opportunity to fully stabilize and restore the existing wood dock and piling system by raising the existing Red Lion Hotel and disassembling the remnant Terminal 1 Building structure to allow for the restoration of the wood dock structure.

The following pages summarize the physical layout of each concept in terms of the configuration of streets and blocks; the public open space concept; the distribution of program (uses); and the parking strategy employed. Phased development was assumed for all four preliminary preferred concepts however the illustrations focus on the build-out, or final conditions.



Figure 2.15 June Design Workshop



Figure 2.16 Workshop Feedback



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Concept 1: "Baseline"

Table 2.5 Concept 1 Details

Conceptual Totals	
Total Block Area:	180, 607 SF 4.1 acres
Proposed Development	
Phase 1 Development: <u>Phase 2 Development:</u> Total Proposed:	224,000 SF <u>240,000 SF</u> 464,000 SF
Parking Required (COV) Phase 1: <u>Phase 2:</u> Total Stalls Required:	284 stalls <u>237 stalls</u> 521 stalls
Total Stalls Provided:	570 stalls +49



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Figure 2.18 Concept 1 Illustrative Plan

STREETS & BLOCKS

- Street grid and block configuration remain as planned. •
- Existing wood pier structure remains. •
- Terminal I Building restored in place to original length. •
- Improve / reprogram amphitheater space. •
- Connect trail through site, north of Terminal I Building.

PUBLIC SPACE

- Replace amphitheater with terraced lawn area. •
- Extend planted open space areas toward wooden pier. •
- Create outdoor terraces / patios adjacent to buildings.

PROGRAM (BUILD OUT)

- Marketplace & retail hub focused around central open space along the pier.
- Hotel on block B creates connection with Columbia St. and the Convention Center to the north while also connecting to the pier and waterfront.
- Office, residential & retail synergy on blocks A & C creates a "24 hour place"
- Multipurpose space on block D connects to adjacent CWLLC development and creates potential outdoor spill out space on the pier.
- Office and residential space located on higher allowable height blocks with views of the Columbia River.

PARKING (BUILD OUT)

Concept 1 provides the following parking stalls:

80 above ground 490 below ground 570 total spaces



Figure 2.19 Concept 1 Open Space Diagram

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Figure 2.20 Concept 1 Program Distribution

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• Inexpensive above ground parking is wrapped with retail for an improved pedestrian experience.

• Ample underground parking is provided on every block.



Figure 2.21 Concept 1 Parking Strategy

Concept 2: "Grid Shift"

Tabl	e	2.6
Concept	2	Details

Conceptual Totals	
Total Block Area:	195,140 SF 4.5 acres
Proposed Development	
Phase 1 Development: Phase 2 Development: Total Proposed:	224,000 SF <u>240,000 SF</u> 464,000 SF
Parking Required (COV) Phase 1: <u>Phase 2:</u> Total Stalls Required:	284 stalls <u>237 stalls</u> 521 stalls
Total Stalls Provided:	410 stalls -111



Figure 2.22 Concept 2 Illustrative Plan





STREETS & BLOCKS

- Street grid and block configuration modified slightly by internal cross-roads: radial side street creates equal Blocks A & C and Blocks B & D.
- Cross-roads become shared street, 'woonerf' plaza spaces.
- Terminal I Building restored in place to original length.
- Connect trail through site, along Columbia Way.
- Shift location of existing lower dock slightly east. •

PUBLIC SPACE

- Remove amphitheater structure and create natural shoreline cove, reducing over-water coverage.
- Provide plaza spaces on Columbia Way to connect internal blocks to shoreline through hardscape/ plantings.
- Create outdoor terraces / patios adjacent to buildings.

PROGRAM (BUILD OUT)

- Multi-purpose space connects the trail to the property.
- Prime hotel location on the waterfront naturalized shoreline.
- Retail space creates activity along north-south street in the center of the site.
- Office and residential space located on higher allowable height blocks with views of the Columbia River.

PARKING (BUILD OUT)

Concept 2 provides the following parking stalls:

- 410 total spaces
- Parking entrances along the north side of blocks C & A
- Parking on the north two blocks of the property enhances the pedestrian priority experience along adjacent streets.
- Hotel parking provided under north two blocks
- Inexpensive above ground parking is wrapped with retail for an improved pedestrian experience.



Figure 2.23 Concept 2 Open Space Diagram

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Figure 2.24 Concept 2 Program Distribution

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160 above ground 250 below ground

Concept 3: "Daniel's Way"

Та	ble	2.	7	
Conce	pt :	3 D	etai	ls

Conceptual Totals	
Total Block Area:	181,773 SF 4.2 acres
Proposed Development	
Phase 1 Development:	224,000 SF
Phase 2 Development:	<u>240,000 SF</u>
Total Proposed:	464,000 SF
Parking Required (COV)	
Phase 1:	284 stalls
Phase 2:	237 stalls
Total Stalls Required:	521 stalls
Total Stalls Provided:	700 stalls
	+179



Figure 2.26 Concept 3 Illustrative Plan





STREETS & BLOCKS

- Extend Daniel's Way to site and Columbia River. Pedestrian underpass completes Daniel's Way.
- Relocate / renovate Terminal I Building (northwest) to allow greater access to water's edge, protect it from potential new bridge structure.
- Pedestrian trail follows edge of pier. ٠

PUBLIC SPACE

- Replace amphitheater with terraced shoreline access.
- Build new pedestrian bridge over water. •
- Expose wooden pier edge for river views and pedestrian trail.

PROGRAM (BUILD OUT)

- Hotel located on block with easiest access to downtown; very close to convention center.
- Marketplace location near Esther Street creates a connection with Sunday farmers market to the north.
- Residential frames the site on either edge to create a 24-hour community throughout the site.
- Central retail creates an internal synergy and central gathering space within the site.
- Pedestrian connection to downtown creates an exclusively • pedestrian shopping zone that connects to downtown.

PARKING (BUILD OUT)

Concept 3 provides the following parking stalls:

300 above ground 400 below ground 700 total spaces

- increase efficiency.



Figure 2.27 Concept 3 Open Space Diagram

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Parking entrances along the north side of blocks C & A

• Parking on the north two blocks of the property enhances the pedestrian priority experience along adjacent streets.

• Inexpensive above ground parking is wrapped with retail for an improved pedestrian experience.

Western most parking is shared with CWLLC development to

Concept 4: "Pier First Restoration"

Table 2.8

Concept 4	Details
Conceptual Totals	
Total Block Area:	184,064 SF 4.2 acres
Proposed Development	
Phase 1 Development:	224,000 SF
Phase 2 Development:	<u>240,000 SF</u>
Total Proposed:	464,000 SF
Parking Required (COV)	
Phase 1:	284 stalls
Phase 2:	<u>237 stalls</u>
Total Stalls Required:	521 stalls
Total Stalls Provided:	460 stalls
	-61



Figure 2.30 Concept 4 Illustrative Plan



STREETS & BLOCKS

- Street grid and block configuration remain as planned
- Largest block areas on blocks A & B
- "Woonerf" style street scape on the water's edge of the north-• south streets

PUBLIC SPACE

- Deconstruct Terminal 1 Building to fully stabilize and restore the existing wood dock and piling system
- Expanded marina •
- Increase access to the water's edge
- Overwater pedestrian and bicycle bridges to increase views and directness of path
- Central plaza space between the pier and intersection between blocks D & B

PROGRAM (BUILD OUT)

- Terminal 1 Building is relocated to the north edge of the pier, to stabilize dock and create closer relationship between marketplace in Terminal 1 and the marina.
- Multi-purpose space located on block B creates a strong connection with the existing trail network and downtown.
- Hotel on prime waterfront spot on block D.
- Office and residential space located on higher allowable height ٠ blocks with views of the Columbia River.

PARKING (BUILD OUT)

Concept 4 provides the following parking stalls:



Figure 2.31 Concept 4 Open Space Diagram

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Figure 2.32 Concept 4 Program Distribution

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150 above ground 250 below ground 400 total spaces

Parking entrances along the north side of blocks C & A

• Parking on the north two blocks of the property enhances the pedestrian priority experience along adjacent streets.

• Inexpensive above ground parking is wrapped with retail for an improved pedestrian experience.



Figure 2.33 Concept 4 Parking Strategy

2.8. Comparative Evaluation Matrix

On August 11, 2015, the Port Commission reviewed the four (4) Preliminary Concepts in detail and provided guidance on preferences (Likes and Dislikes) of each Concept. The design team processed the input from the Commission and created the Preferred Concept Development Matrix to represent the input as received.

The Concept Matrix on the next page illustrates the four Concepts and the highlighted (red box) attributes and values that the Port Commission felt strongly about. The Matrix served as a visual tool to document the Commission direction to develop a "Draft Preferred Concept Plan" that combines elements of Concept 2 and Concept 4 (see highlighted red boxes) and several different alternative strategies regarding: Table 2.9 Concepts Matrix illustrates for four (4) Preliminary Concepts (right column) and the review criteria used to evaluate each Concept. The red highlighted boxes indicates the Concept and criteria that Port Commission felt most comfortable with. This decision matrix helped the Commission and Port staff to refine the four Concepts into one Preferred Concept.

- Restoration of Terminal 1 Building
- Pier Structure
- Amphitheater
- Shoreline
- Phase 1 Office
- Hotel
- Live / Work Residential
- Dainiel's Way Extension
- Parking
- Columbia River Renaissance Trail
- Block Design



					Con	cepts Matrix						
Enha enco a hea com	ance waterfront access, burage innovation, create althy environment, build a munity experience.	Restoration of Terminal 1 Building	Pier Structure	Amphi- theater	Shoreline	Phase 1 Office	Hotel	Live / Work Residential	Daniel's Way Extension	Parking Strategy	Renais- sance Trail Location	Block Design
"BASELINE"		In-place 28,000 SF Market- place	Restore as needed	Renovate amphithe- ater as terraced lawn area	No changes	Block A 90-100k SF + future building	Block B 150 keys + future building	Blocks B & C # units TBD Phase 1 & future	Not precluded	Self- parked blocks include structured parking for each use	Along north edge of pier & through Block B	No changes; Largest block areas on Blocks A & B
"GRID SHIFT"	2	In-place 32,000 SF Market- place	Restore as needed Remove steel pier	Remove amphithe- ater	Natural shoreline cove restoration near Block D	Block C 90-100k SF	Block D 150 keys	Block A # units TBD future phase	Not precluded	Phase 1 under- ground parking on Block A + shared structure on Blocks A & C	On Columbia Way	Access roads as woonerfs w/raised intersection; Radial alignment; Equal blocks
"DANIEL'S WAY"	3	Relocated 32,000 SF Multi- Purpose Center	Restore as needed; Remove steel pier; Shorten east pier for shoreline restoration	Remove amphithe- ater	Build terraced shoreline edge near Block D	Block B 90-100k SF + future building	Block A 150 keys	Block B # units TBD future phase?	Connects to the river	Phase 1 under- ground parking on Block A + shared structure on Blocks C & 1	Along new pedestrian bridge & north edge of pier New pedestrian bridge	Access roads as woonerfs; Largest block areas on A & B
"PIER FIRST"	4	Relocated 22,000 SF Market- place	Restore as needed; Infill steel pier area for Terminal 1 site	Infill / level amphithe- ater for Terminal 1 site	No changes	Block A 90-100k SF	Block D 150 keys	Block B # units TBD future phase?	Connects to the river	Shared parking structures on Blocks A & C	Along new pedestrian bridges & north edge of pier Two new pedestrian bridges	Access roads as woonerfs; Largest block areas on A & B

Table 2.9

Port of Vancouver FINAL Waterfront Development Master Plan



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Vision Statement:

The Port of Vancouver's waterfront development will represent our community's aspirations, rich history and culture.

As a gateway to Washington State and a vibrant urban waterfront, the port's mix of commercial, residential and civic development will welcome the public to the banks of the Columbia.

It will contribute to the region's economic prosperity and promote a healthful, sustainable space where the community feels a sense of pride and ownership.







3.1. Preferred Concept Plan

The Preferred Concept was approved by the Port Commission on October 13, 2015. The following pages illustrates the current existing conditions, organizing framework, development program, proposed uses by zone and parking options for the Port of Vancouver Waterfront Development.

Table 3.1
Preferred Concept Master Plan Details

Conceptual Totals (Build Out)	SF	Acres
TOTAL DEVELOPABLE AREA:		
Block A [.]	441,698	10.14
Block Di	47,268	1.09
DIOCK B.	36,650	.84
Block C:	38,700	.89
Block D:	35 586	82
Block E:	07.005	.02
Pier:	27,635	.63
	80,350	1.84

Proposed shoreline, boat moorage, pier modifications and public enhancements will require federal, state and local

envrionmental and regulatory review and

approvals prior to plan implementation.

Note:



Figure 3.1 Preferred Concept Illustrative Plan



This graphic shows existing conditions as introduced in Chapter 1. Existing parcel lines and road right-of-way were taken into account during the development of the preferred concept on the preceeding page.

A city process to re-plat the parcels in the study area will be necessary to reflect the proposed updated street and block network.

Table 3.2Study Area Calculations

Item	SF	Acres
Land Area	361,548	8.30
Street ROWs	61,855	1.42
Developable Block Area		6.31
Shoreline Vegetative Edge	25,047	0.57
Over Water Pier Structure	80,350	1.84
Wood Pier/ Piling System	59,000	1.35
Steel/ Concrete Amphitheater & Ramp System	18,600	0.43
Small Boat Moorage/ Gangway	2,750	0.06
TOTAL STUDY AREA	441,698	10.14
Shoreline Area	LF	%
Open Shoreline Edge	1,065	
Shoreline Under Pier	690	65%
Structures		
Red Lion at the Quay		
Columbia Business Center	+/- 8,000	
Parking	Quantity	
Vehicle Spaces	318	
ADA		
On Street Parking	34	
Total		
Road ROW	61,855	1.42
Columbia Way	49,223	1.13
Proposed Access Road	12,632	.29



Figure 3.2 Existing Conditions



3.1.1 Land Use Development Framework

The types and distribution of land uses recommended as part of the Waterfront Development is organized around four zones, as illustrated in Figure 3.2.

- Zone 1 Mixed Use
 - Office
 - Retail
 - Residential
 - Parking
- Zone 2 Hospitality
 - Hotel
 - Restaurant
- Zone 3 Multi-Purpose
 - Multi-use Performance
 - Civic / Community Gathering
 - Office
 - Residential
 - Retail
- Zone 4 Waterfront
 - Terminal 1 'Marketplace'
 - Retail / Office
 - High Dock Pier
 - Visitor Center
 - Outdoor Civic Gathering Space
 - Lower Floating Dock Improvements
 - Raised Pedestrian Bridges
 - Waterfront Trail & Park Connections
 - Public Gathering Space

Suggested building massing and mix of uses are intended to include both a horizontal and vertical mix of uses with taller structures oriented toward the north portion of the site (Zone 1) and lower buildings fronting the Columbia River edge (Zone 4).



Figure 3.3 Preferred Land Use Framework



New development at the Port of Vancouver waterfront site will be constructed in at least two phases. Table 3.3 identifies the programmatic uses that are proposed and their distribution across the site, in terms of the zones (as illustrated in Figure 3.3) and the potential block locations (see Figure 3.4).



Figure 3.4 Block Key

	Recom	mended A	mount		
Development Type	Low	High	Units	Zone	B
Public Open Space	TBD	TBD	acres	all	А,
Terminal 1 Renovation, "Marketplace"	16,000	32,000	SF	4	
Multi-Tenant Office Buildings	60,000	100,000	SF	1,3,4	Þ
Retail	2,000	12,000	SF	all	A
Hotel	125	150	rooms	2	
Residential: Workforce Housing / Apartments	150	250	units	1	
Parking	550	655	stalls	1,2	
TOTAL MASTER PLAN PROGRAM	315,000	- 595,000	SF	1	





Block(s)	Notes
,B,C,D,E	Phase 1 to include plazas/ streetscapes adjacent to development and connection of Columbia River Renaissance Trail. Future phases will develop additional open spaces.
Pier	Marketplace concept anticipated to include retail uses and artisanal food and/ or product development. Note that city code limits artisan and specialty goods production to 10,000 SF [in the CX zone].
A,B,C,E	Block A may include Port of Vancouver offices and/or shared conference room space, up to 45,000 SF. Second office/ mixed use building anticipated on Block C. Offices assumed with Multi-Purpose Center (Block B) and with retail (Block E).
A,C,D,E	Ground floor retail uses will be included in mixed-use buildings and hospitality.
D	Hotel assumed to be 3-star or 4-star quality, with restaurant, meeting space included.
A,C	Residential development is assumed to be rental product only, targeted at workforce housing to increase options for Vancouver residents to live and work in-City.
A,C,D	Parking should be provided in structures and on the same block as destination, where possible. Zone 1 expected to supply the majority of the site parking.

City of Vancouver parking requirements, as identified in Section II, were applied to the proposed maximum program areas. The Port will work with City staff to take advantage of non-residential parking reductions.

OPTION A

Description: A combination of underground and above-ground parking on Block A and Block C and underground parking at Block D hospitality uses. At build-out, underground parking at Block B would support new employment uses.

Initial Phase 1 provides more parking than is required (+201)

Overall parking supply exceeds parking requirement (+42) stalls

OPTION B

Description: A combination of interim surface at-grade parking and above-ground parking. At build-out, all off-street parking is above ground parking on Block A and Block C. No underground parking.

(+202)

build-out (-2) stalls



Figure 3.4 (duplicate) Block Key

OPTION C

Description: A combination of underground and above-ground parking. Above-ground parking on Blocks A and C supports both interim and build-out district-wide uses. Underground parking on Block B supports future mixed use employment uses and Block D hospitality uses.

Initial Phase 1 provides more parking than required (+426)

Overall parking supply exceeds parking requirement (+63) stalls

OPTION D

Description: Off-street parking is provided in a district funded above-ground parking structure combining Block C and Block 1. Limited parking is provided on Block A. No underground parking. The district funded parking structure is a required first phase capital investment.

(+133)

Overall parking supply is under parking requirement at build-out (-233); will require additional parking levels on Blcok C, or 1, or other parking on-site (Block B or D underground)





Initial Phase 1 provides more parking than is required

Overall overall parking supply meets requirement at

Initial Phase 1 provides more parking than is required



Figure 3.5 Isometric View, looking Northeast

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Figure 3.6 Isometric View, looking North

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Figures 3.7 and 3.8 illustrate the proposed building masses in white and the potential height "building envelope" in blue, which indicates the allowable heights as dictated by City of Vancouver zoning. The proposed building heights are labeled in black; maximum zoning height allowances are labeled in blue.

Allowable building heights increase from the river's edge north and from east to west. The shoreline zone (the first 100' and 200' from the edge of the Columbia River) allow limited heights of 35' and 45'. Beyond this zone, City height limits would allow buildings up to 60-120' tall on the eastern edge of the site, or Blocks A and B. The tallest buildings could be located on the western portion of the Port property (Block C and the northern edge of Blocks D and E), with a height allowance of 80-160'. New structures are not allowed overwater, or beyond the existing shoreline, although a renovation of the existing Terminal 1 Building is allowed.

The buildings proposed as part of the Port of Vancouver Waterfront Development Master Plan are well within the code allowances, as illustrated here and in the following site sections.



Figure 3.7 Proposed Building Massing Comparison to Allowable Building Heights, looking Northwest



Figure 3.8 Proposed Building Massing Comparison to Allowable Building Heights, looking North





Figure 3.9 Proposed Site Section: Blocks C & A (northern), looking North

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Figure 3.10 Proposed Site Section: Blocks C & A (southern), looking North

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Figure 3.11 Proposed Site Section: Blocks A & B, looking East

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Figure 3.12 Proposed Site Section: Blocks D, E & B, looking North

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Pedestrian Connections

- Concentrated pedestrian crossings along Columbia Way at Daniel's Way and Access 5.
- A future pedestrian connection along the Daniels way alignment connecting the riverfront development to Esther Short Park. This will be accomplished with either a pedestrian underpass that cuts through the railroad berm, or a pedestrian bridge.
- Signalized crosswalks will be provided on Columbia Way at the intersections of Columbia Street and Esther Street.
- The proposed woonerf area at Daniel's Way may lend itself to application of crossing treatments such as use of pedestrian-activated crossing beacons or other mid-block features that alert vehicle drivers to pedestrians.
- The intersection of Columbia Way and Daniel's Way is meant to indicate a change of material (pavers or stamped concrete as opposed to AC paving) coupled with a traffic table and flush curbs with sidewalk bollards or rolled curbs to provide traffic calming and enhance pedestrian connectivity.



Figure 3.14 Proposed Access & Circulation





- A full raised intersection at Columbia Way & Daniel's Way shall be designed to accommodate transit and other vehicle movement throughout the intersection.
- The hotel loading area shall accommodate pedestrian walking along the south side of Columbia Way.

Bicycle Connections

- Sharrow pavement markings along Columbia Way.
- Renaissance Trail will serve as a primary bicycle and pedestrian route.

Transit Connections

- Existing transit connections will continue along Columbia Street.
- Future BRT planned to East Vancouver would greatly benefit the Waterfront Development and Downtown Vancouver if extended through the site along Columbia Way.

Vehicular Connections

- Columbia Way will serve as a multi-modal gateway to the waterfront area and is expected to be a popular vehicular travel route. The Columbia Way / Columbia Street intersection is signalized and will be a key connection to the I-5 corridor.
- Eastbound vehicular queuing along Columbia Way can be expected to extend west of the office buildings on Block A during morning and evening peak conditions.

Port of Vancouver FINAL Waterfront Development Master Plan

- Separate left-and right-turn lanes are provided eastbound on Columbia Way at Columbia Street, effectively eliminating onstreet parking opportunities for the roadway segment closest to Columbia Street.
- It will be important to guide inbound traffic to the frontage road along the north side of the development (closest to the BNSF rail line) in order to manage queuing and travel demand along Columbia Way.
- Turn movements at the access road connection to Columbia Street are likely to be limited to left-in and right-in/right-out turns only.
- The single lane (one lane eastbound and one lane westbound) configuration of Columbia Way supports a desire to limit vehicular turn movement demand at the mid-site woonerf intersection in order to avoid undue delay to through movement traffic.
- The hotel loading area will need to be of sufficient size such that all customer loading and queuing occurs on-site. Queues from the hotel loading area extending onto Columbia Way could quickly block the roadway and impede both pedestrian and motor vehicle travel east-west.
- Operating the hotel loading area as a one-way movement counter-clockwise appears desirable.
- The tree-lined area along the hotel loading will need to be configured in a manner that preserves adequate sight distance at the driveways.





The proposed Service Access and Loading Zones are intended to be located away from Columbia Way with access to service areas and loading zones off of adjacent streets. Off-street public parking access is provided via Columbia Way to Access North. Unless otherwise designated, all public parking will be accessed from the North Access corridor along the BNSF Railroad right-of-way. The exception may be the Block D Hospitality use if parking is required on-site for this use.

Service and off-street parking access will be strategically placed away from pedestrian oriented spaces. Service vehicle access for trash refuse and loading zones are intended to be accessed through parking structures on Block A and C (and Block D if applicable). Other designated service areas and loading zones are delineated in Figure 3.14



Figure 3.15 Proposed Service Access & Loading Zones



The Landscape Program is organized to highlight the public realm, pedestrian use areas and outdoor civic uses as part of the Waterfront Development. The following figures illustrate the landscape concept emphasizing street rights-of-way, the Columbia River Renaissance Trail, natural and constructed shoreline areas, pedestrian bridges, civic open spaces and pier improvements.

The proposed planting plans and ameniites (seating, wayfinding, signage, lighting, and specialty uses) will enhance each program area, providing interest, color and material expression throughout the development.



Figure 3.16 Landscape Program Areas

50' 100'





SECTION A-A': CURBLESS STREET



SECTION B-B': CURBLESS PEDESTRIAN STREET

Figure 3.17 Streetscape Sections

Port of Vancouver FINAL Waterfront Development Master Plan



0' 2' 4'







SECTION C-C': COLUMBIA WAY



SECTION D-D': BIOSWALE

Figure 3.18 Columbia Way Section

Port of Vancouver FINAL Waterfront Development Master Plan









Figure 3.19 Street Tree (& Pier) Planting Plan (common names)



BANK AND RIVERFRONT PLANTING SUMMARY

Planting Concept

The City of Vancouver is set within the lush environment of the pacific northwest, and these surroundings should be reflected in the plant selections for the Port of Vancouver development to give this place a unique identity. The landscape design and planting for the development should seek to heal the natural environment, encourage sustainability through the use of native and adaptive plant selections, and create welcoming urban spaces for the tenants, workers and visitors who come to this place.

The Riverbank

The intent of the bank and riverfront planting areas are to create habitat, maintain river views, and to encourage sustainability through the use of native and adaptive plant species that require limited water and supplements for survival.









NORTHERN MAIDENHAIR FERN - ADIANTUM PEDATUM

Figure 3.20 Planting Materials



OREGON ASH - FRAXINUS LATIFOLIA



VERONICA AMERICANA

BROOKLIME

WESTERN SWORD FERN - POLYSTICHUM MUNITUM







VINE MAPLE - ACER CIRCINATUM



SNOWBERRY - SYMPHORICARPOS ALBUS

















CLUSTER ROSE - ROSA PISOCARPA



ILETED HAIRGRASS - DESCHAMPSIA CESPITOS



SAL MONBERRY



DWARF OREGON GRAPE - MAHONIA NERVOSA
BANK AND RIVERFRONT PLANTING SUMMARY

Upland Plantings

The urban upland zones should blend some of the native plant species seen on the riverbank with adaptive plants that provide architectural form and interest, and can thrive in the urban environment. This is a portion of the site where heavy pedestrian use will occur, so plantings should be kept low to maintain views, and tree selections should provide seasonal interest.













DWARF MAIDEN GRASS - MISCANTHUS SINENSIS 'ADAGIO'



EDDIE'S WHITI





SALVIA SPATHACEA







Figure 3.21 Planting Materials: Upland Plantings & Swales









LACKGUM - NYSSA



BLUE OAT GRASS - HELICTOTRICHON SEMPERVIRENS









JUNCUS PATENS

Four specific public art recommendations:

- Establish a Policy that defines the way that the Port of Vancouver will establish and manage public art in their waterfront development.
- Establish a Cultural Oversight Administrator tasked with establishing the process for site selection, artist selection, art development process and review. This should include establishing a public art committee that has the power to make decisions, not just a recommending body.
- Establish a specific means for funding art process and purchase either as a specific fund or as a percentage of capital improvement.
- Establish a long term fund for the maintenance of the art that is acquired as part of the Port's collection of public art.

Figures 3.21 and 3.22 indicate opportunity locations for public art and examples of public artworks that help reinforce the identity and placemaking of urban settings.

Site A. This location is a key site for artist involvement either for a lead designer or part of a collaborative team. Kinetic movement might be something to consider.

Site B. The Visitor Center is the portal for the river cruise passengers visiting Vancouver. The structure itself should be artful and inviting. It could be a glowing glass canopy, potentially reflecting the Port's history.



Figure 3.22 Potential Locations for Public Art

Port of Vancouver FINAL Waterfront Development Master Plan





3.1.13 Public Art & Wayfinding

Site C. A pergola entrance is imagined at the entry to Terminal 1. This entrance to the Marketplace is an opportunity to welcome and engage visitors.

Site D. The Marketplace interior has many opportunities for an artist to help relate the history of the Port and the story of the River as a Lifeline/ Economic Driver.

Site E. The Multi-Purpose Center venue is an excellent opportunity for artists to engage their fellow citizens and visitors.

Site F. An iconic and artful structure at this location will mark a key destination and meeting point. Artist-made street furniture is an additional opportunity in this location.

Site G. The flyover Pedestrian Bridge is an opportunity for artist and designer collaboration.

Site H. The Seat Wall at The Cove is an opportunity for artist and designer collaboration.

Site I. The entrance Gate to the Floating Dock could combine function with artistic innovation.



Figure 3.23 Collage of Public Art Examples

Figure 3.22 Collage of Public Art Examples

Port of Vancouver FINAL Waterfront Development Master Plan







Figure 3.24 Pier Program / Detail



Adaptive Reuse 'Marketplace'



3.2. Phasing Strategies

3.2.1 Phase 1 Concept Plan

The Port of Vancouver Waterfront Development Master Plan defines a framework for advancing a mixed use waterfront development. A series of Phasing options are centered around key land uses and parking options as described in the following pages.

Phase I Development Program includes:

PROPOSED USE	AREA
Office w/Retail	90,000 sq. ft.
Residential (Workforce/Attainable Ren	20,000 sq. ft. tal)
Hospitality	125-150 keys
Terminal 1 Building	30,000 sq.ft.

The Phase I Concept Plan anticipates development of key site infrastructure improvements, such as; overlot site grading and utilities, stormwater improvements, street rights-of-way (Daniel's Way 'woonerf'), Columbia River Renaissance Trail, Shoreline Cove, plaza and Pier improvements.

The Phasing of the Port owned property and designated tenant development sties is based on the projected program needs and the logistics of construction phasing. See Figure 3.28: Public Infrastructure Phasing Plan (page 30).



Figure 3.25 Phase I Illustrative Plan





City of Vancouver parking requirements, as identified in Section II, were applied to the proposed maximum program areas. Four potential parking options were identified as part of a Parking Analysis (see Appendix B: Parking Analysis).

This Parking Analysis overview will help to inform the next Concept Development Plan (CDP) process following the Master Plan. As part of the CDP, the Port will work with City of Vancouver to define specific parking requirements and parking credits to take advantage of nonresidential parking reductions as possible.



Figure 3.26 Phase 1 Parking Plan

OPTION A

Description: A combination of underground and above-ground parking on Block A and Block C and underground parking at Block D hospitality uses. At build-out, underground parking at Block B would support the future employment uses.

Phase I Program Parking Required		254,100 sq. ft. 311
Less 17% credit	258	459
Bike Parking	133	-00 500 100 s s #
Parking Required		503,100 sq. π. 571
Less 17% credit Parking Provided	474	516
Bike Parking	200	

Initial Phase 1 provides more parking than is required (+201)

Overall parking supply exceeds parking requirement (+42) stalls

OPTION C

Description: A combination of underground and above-ground parking. Above-ground parking on Blocks A and C support both interim and build-out uses. Underground parking on Block B supports future employment uses and Block D hospitality uses.

	216,700 sq. ft. 263
219	
110	426
110	437.700 sq. ft.
	505
419	400
177	482
	219 118 419 177

Initial Phase 1 provides more parking than required (+207)

Overall parking supply exceeds parking requirement (+63) stalls

OPTION B

Description: A combination of at-grade parking and above-ground parking on Block A and Block C. At build-out, all off-street parking is located on Block A and Block C. No underground parking.

Phase I Proc

Parking Re Less 17 Parking Pr Bike Par **Build-Out Pr** Parking Re Less 17 Parking Pr Bike Par

Initial Phase 1 provides more parking than is required (+202)

Overall parking supply meets requirement at build-out (-2) stalls

OPTION D

Description: All off-street parking is provided in an above-ground parking structure combining Block C and Block 1. Limited parking is provided on Block A at ground level. No underground parking.

Phase I Prog

Parking Re Less 179 Parking Pro Bike Park **Build-Out Pro** Parking Re Less 179 Parking Pro Bike Parl

Initial Phase 1 provides less parking than is required (-143)

Overall parking supply is under parking requirement at build-out (-233): will require additional parking levels above on Block C, or 1, underground parking or other parking on-site (Block B or D underground)





nbbi

g ram equired		229,700 sq. ft. 285
% credit	237	130
rking	124	409
rogram equired		464,700 sq. ft. 571
% credit	474	516
rking	200	010

ram quired		624,200 sq. ft. 710
% credit	589	116
king	205	440
o gram auired		733,000 sq. ft. 818
% credit	679	446
king	286	440

OPTION A

Description: A combination of underground and above-ground parking on Block A and Block C and underground parking at Block D hospitality uses. At build-out, underground parking at Block B would support new employment uses and replacement of interim surface parking.

Pros:

- No agreement required with CW LLC to advance a parking strategy
- All parking requirements/needs are provided on Port controlled blocks
- Limited interim surface parking accommodates early phase development parking needs and events
- Block D hospitality use controls access to on-site parking operations
- Disperses parking throughout the development
- Above-ground parking at build-out can be phased in overtime

Cons:

- Unknown construction costs increase associated with underground parking
- Increase cost for parking on hospitality use
- If future underground parking for Block B is prohibitive, additional parking will be required on Block A and Block C

OPTION B

Description: A combination of interim surface at-grade parking and above-ground parking. At build-out, all off-street parking is above ground parking on Block A and Block C. No underground parking.

Pros:

- No agreement required with CW LLC to advance a parking strategy
- All parking requirements are provided on Blocks A and C
- No underground parking
- 15% express ramps allow for level garage floor plates

Cons:

- Construction cost in-efficiency due to parking structure layout (square configuration)
 Garages for Block A and C extend over the
- Garages for Block A and C extend over the North Access Road requiring easement and/or review approval if upper level cantilever option is considered. This design may present aesthetic impacts and safety considerations wit BNSF RR
- All parking structure costs may be the responsibility of the Port of Vancouver
- Three levels on Block A and 4 level of Block C impacts ability to maximize revenue-generating program uses on these blocks due to parking needs/use
- Garage at Block C extends to west property line, eliminating opportunity for street level program

OPTION C

Description: A combination of underground and above-ground parking. Above-ground parking on Blocks A and C supports both interim and build-out district-wide uses. Underground parking on Block B supports future mixed use employment uses and Block D hospitality uses.

Pros:

 No agreement required with CW LLC to advance a parking strategy Underground parking at Block B is optional (stalls not required to meet overall parking requirement)

Cons:

- Unknown construction costs increase associated with underground parking
- Increase cost for parking on hospitality use
- If future underground parking for Block B is prohibitive, additional parking will be required on Block A and Block C









OPTION D

Description: Off-street parking is provided in a district funded above-ground parking structure combining Block C and Block 1. Limited parking is provided on Block A. No underground parking. The district funded parking structure is a required first phase capital investment.

Pros:

- Improved construction cost efficiency due to parking structure layout on Block C and Block 1 (ret angular configuration)
- Shared parking construction cost between the Port and CW LLC
- Parking district formation addresses long-term parking facility maintenance and operations
- Provides more flexibility for revenue-generating programmatic uses on Block A
- Concentrates all parking on back blocks away from other uses and construction staging
- Accommodates hospitality parking needs in close proximity to hotel use (Block D)

Cons:

- Requires agreements between the Port and CW LLC and/or formation of district parking program possibly with the City of Vancouver
- Upfront capital cost associated with parking structure
- Three levels of above grade parking at Blocks 1 and C reduce available revenue generating program area



The Port of Vancouver Waterfront will be implemented by both the Port and select developers for various phases and building projects.

PHASE

1. Pier / Terminal 1 Building Preconstruction Structural Assessments

2. Pier / Terminal 1 Building Historic / Cultural Assessment

3. Refurbish/ Restore Pier and/or Terminal1 Building Substructure

4. Design Implementation: Site Infrastructure Improvements:

- Public Realm
- Columbia River Renaissance Trail
- Dainiel's Way Woonerf Improvements

5. Construct Terminal 1 Building Marketplace / Pier Improvements

6. Complete Shoreline / Cove Enhancements

7. Obtain Grant Funding / Implementation Future Pedestrian Bridge Connections

- West (near Block D)
- East (near Terminal 1)

8. Daniel's Way Pedestrian Underpass

Table 3.7 on the following page itemizes the potential costs by project (2015 dollars) and responsible party. Figures 3.29 through 3.35 on the subsequent pages provide graphic references for the areas described in the cost estimates.



Figure 3.27 Public Infrastructure Phasing Plan



3.3. Cost Estimating

Table 3.4 **Preliminary Construction Cost Estimates**

Development Option / Phasing	Construction Cost Today	Project Cost Today	Construction Cost Escalated	Project Cost Escalated
Option A - Phase 1 Construction Mid-Point			Nov-17	Nov-17
Hotel + Multi-Purp + Office + Residential + Retail	\$65,084,927	\$89,958,831.6	\$70,352,611	\$97,239,700
290,269 GSF Cost per GSF	\$224	\$310	\$242	\$335
Structured Parking	\$24 816 297	\$33,333,250	\$26 824 818	\$36 031 095
203.162 GSF	\$122	\$164	\$132	\$177
Site	\$9,602,097	\$12,753,505	\$10,379,248	\$13,785,717
Total Construction Phase 1	\$99,503,320	\$136,045,587	\$107,556,677	\$147,056,512
Ontion A - Phase 2 Construction Mid-Point			Nov-19	Nov-19
Hotel + Multi-Purp + Office + Residential + Retail	\$53 103 446	\$73 253 890	\$58 174 858	\$80 261 805
248.832 GSF Cost per GSF	\$213	\$294	\$234	\$323
	¢=.•	¢_0 /	¢=• ·	¢0=0
Structured Parking	\$2,730,561	\$3,667,690	\$2,988,519	\$4,014,178
19,969 GSF	\$137	\$184	\$150	\$201
-	•		•	
Site	\$579,002	\$659,020	\$579,002	\$633,700
Total Construction Phase 2	\$20,413,009	\$77,560,599	۵ ۵۱,742,379	\$04,909,004
Option A - Total Build Out Construction Mid-Point			Nov-19	Nov-19
Hotel + Multi-Purp + Office + Residential + Retail	\$118.188.373	\$163.212.721	\$128.527.469	\$177.501.504
539,101 GSF Cost per GSF	\$219	\$303	\$238	\$329
Structured Parking	\$27,546,858	\$37,000,940	\$29,813,337	\$40,045,274
223,131 GSF	\$123	\$166	\$134	\$179
Site	\$10 181 099	\$13 412 525	\$10,958,250	\$14 419 417
Total Construction Option A	\$155 916 329	\$213 626 186	\$169 299 056	\$231 966 196
Option A - Phase 1 Additive Alternate Structured Parking \$8,633,530 \$11,596,558 \$9,332,290 \$12,535,132 \$12,535,132 \$12,535,132 \$12,535,132 \$12,535,132				
	\$100	\$1.10	<i><i>v</i>¹¹¹</i>	\$101
Site	\$2,243,808	\$2,980,226	\$2,425,412	\$3,221,432
Total Construction	\$10,877,338	\$14,576,784	\$11,757,702	\$15,756,564
Total Construction Option A . Alternate	\$400 TOO 000	\$000 000 c=c	\$404 0F0	A0 17 700
Total Construction Option A + Alternate	\$166.793.668	\$228.202.970	\$181.056.757	\$247.722.760

Refer to Appendix B: Parking Analysis for a full detailed project development cost estimate.

Development Option / Phasing	Construction Cost Today	Project Cost Today	Construction Cost Escalated	Project Cost Escalated
Option B - Phase 1 Construction Mid-Point			Nov-17	Nov-17
Hotel + Multi-Purp + Office + Residential + Retail	\$61,491,694	\$85,007,669	\$66,468,558	\$91,887,812
272,372 GSF Cost per GSF	\$226	\$312	\$244	\$337
Structured Parking	\$15.183.730	\$20.394.787	\$16.412.634	\$22.045.450
191,679 GSF	\$79	\$106	\$86	\$115
Site	\$9,602,300	\$12,753,775	\$10,379,468	\$13,786,009
Total Construction Phase 1	\$86,277,725	\$118,156,231	\$93,260,660	\$127,719,271
Ontion B - Phase 2 Construction Mid-Point			Nov-19	Nov-19
Hotel + Multi-Purp + Office + Residential + Retail	\$43,136,564	\$59,409,454	\$47,211,700	\$65.021.900
234,827 GSF Cost per GSF	\$184	\$253	\$201	\$277
Structure d Derking	¢o	¢.	¢0.	¢o
0 GSF	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
				<i>P</i> -
Site	\$578,849	\$658,846	\$633,533	\$721,088
Total Construction Phase 2	\$43,715,413	\$60,068,300	\$47,845,233	\$65,742,987
Option B - Total Built Out Construction Mid-Point			Nov-19	Nov-19
Hotel + Multi-Purp + Office + Residential + Retail	\$104,628,258	\$144,417,123	\$113,680,259	\$156,909,712
507,199 GSF Cost per GSF	\$206	\$285	\$224	\$309
Structured Parking	\$15 183 730	\$20 394 787	\$16 412 634	\$22 045 450
191,679 GSF	\$79	\$106	\$86	\$115
-	• • • • • • • •		.	• • • • • • • • •
Site	\$10,181,149	\$13,412,621	\$11,013,001	\$14,507,097
Total Construction Option B	\$129,993,138	\$178,224,531	\$141,105,894	\$193,462,259





	Construction	Project	Construction	Project
Development Option / Phasing	Cost	Cost	Cost	Cost
	Today	Today	Escalated	Escalated
Option C - Phase 1 Construction Mid-Point			Nov-17	Nov-17
Hotel + Multi-Purp + Office + Residential + Retail	\$57.747.569	\$79.843.528	\$62,421,401	\$86.305.709
252.922 GSF Cost per GSF	\$228	\$316	\$247	\$341
Structured Parking	\$16,113,743	\$21,643,979	\$17,417,917	\$23,395,747
186,440 GSF	\$86	\$116	\$93	\$125
Site	\$9,602,300	\$12,617,170	\$10,379,468	\$13,638,348
Total Construction Phase 1	\$83,463,612	\$114,104,677	\$90,218,786	\$123,339,803
Option C - Phase 2 Construction Mid-Point			Nov-19	Nov-19
Hotel + Multi-Purp + Office + Residential + Retail	\$48,026,374	\$66,201,596	\$52,563,454	\$72,455,699
220,810 GSF Cost per GSF	\$218	\$300	\$238	\$328
Structured Parking	\$2,730,561	\$3,667,690	\$2,988,519	\$4,014,178
19,969 GSF	\$137	\$184	\$150	\$201
Site	¢570.040	¢650.046	¢600 500	¢704.000
Site	¢510,049	¢70,509 €70 €29 €20	\$033,333 \$56 195 506	\$721,000
Total Construction Fliase 2	φJ1,333,704	φ 10,320,132	φ 30,103,300	φ <i>11</i> ,190,903
Ontion C - Total Built Out Construction Mid-Point			Nov-19	Nov-19
Hotel + Multi-Purn + Office + Residential + Retail	\$105 773 943	\$146 045 125	\$114 984 854	\$158 761 408
473 732 GSE Cost ner GSE	\$223	\$308	\$243	\$130,701,400 \$335
	ΨΖΖΟ	\$500	φ240	ψ000
Structured Parking	\$18,844,304	\$25,311,669	\$20,406,436	\$27,409,925
206.409 GSF	\$91	\$123	\$99	\$133
,	C .	_ .		Ţ, ŪŪ
Site	\$10,181,149	\$13,276,016	\$11,013,001	\$14,359,435
Total Construction Option C	\$134,799,396	\$184,632,809	\$146,404,291	\$200,530,768

Refer to Appendix B: Parking Analysis for a full detailed project development cost estimate.

Development Option / Phasing	Construction Cost Today	Project Cost Today	Construction Cost Escalated	Project Cost Escalated
Option D - Phase 1 Construction Mid-Point			Nov-17	Nov-17
Hotel + Multi-Purp + Office + Residential + Retail 660,364 GSF Cost per GSF	\$137,467,253 \$208	\$189,456,957 \$287	\$148,593,241 \$225	\$204,790,761 <i>\$310</i>
Structured Parking 159,593 GSF	\$12,518,475 \$78	\$16,814,816 <i>\$105</i>	\$13,531,665 <i>\$85</i>	\$18,175,732 \$ <i>114</i>
Site	\$13,687,634	\$17,985,190	\$14,795,450	\$19,440,832
Total Construction Phase 1	\$163,673,362	\$224,256,963	\$176,920,356	\$242,407,325
Option D - Phase 2Construction Mid-PointHotel + Multi-Purp + Office + Residential + Retail197,650GSFCost per GSF	\$43,727,547 \$221	\$60,248,533 \$305	Jan-00 \$47,858,513 \$242	Jan-00 \$65,940,247 \$334
Structured Parking - Not Indicated 0 GSF	\$0 \$ <i>0</i>	\$0 \$0	\$0 <i>\$0</i>	\$0 <i>\$0</i>
Site	\$652.612	\$742.803	\$714.265	\$812.976
Total Construction Phase 2	\$44,380,159	\$60,991,336	\$48,572,778	\$66,753,223
Option D - Total Built OutConstruction Mid-PointHotel + Multi-Purp + Office + Residential + Retail858,014GSFCost per GSF	\$181,194,800 <i>\$211</i>	\$249,705,490 \$29 <i>1</i>	<i>Jan-00</i> \$196,451,755 <i>\$229</i>	<i>Jan-00</i> \$270,731,008 \$316
Structured Parking 159,593 GSF	\$12,518,475 \$78	\$16,814,816 <i>\$10</i> 5	\$13,531,665 <i>\$85</i>	\$18,175,732 <i>\$114</i>
Site	\$14,340,246	\$18,727,994	\$15,509,715	\$20,253,808
Total Construction Option D	\$208,053,520	\$285,248,299	\$225,493,134	\$309,160,548







Figure 3.28 Cost Estimating Plan: Site Development Areas





Figure 3.29 Cost Estimating Plan: Landscape Improvements



Figure 3.30 Cost Estimating Plan: Demolition Areas





Figure 3.31 Cost Estimating Plan: Earthwork Areas





Figure 3.32 Cost Estimating Plan: Paving Plan Areas



Figure 3.33 Cost Estimating Plan: Utilities







Figure 3.34 Cost Estimating Plan: Waterfront Facilities Plan

3.4. Next Steps

With the completion of the Port of Vancouver Waterfront Development Master Plan, the Port will proceed with the next Phase II of the development to advance the Concept Development Plan Application submittal to the City of Vancouver. In order to advance the Concept Development Plan (CDP), a number of key tasks will be required that are currently not addressed in the Master Plan (see below)

A goal of the CDP is to obtain formal vesting and entitlements for the mixed use waterfront development. The preliminary design development of site infrastructure improvements and review and permitting of federal, state, and local permitting agencies for in-water and shoreline work and above water elements of the project will be developed to a sufficient design level to allow for preparation and submittal of the permit applications to the U.S. Army Corps of Engineers and State agencies such as the Washington Department of Fish and Wildlife, the Department of Ecology and historic resources agencies. The environmental review process (State Environmental Policy Act or SEPA) and the shoreline permit application and process will also be conducted under this phase.

Phase II may also include the design development for a proposed parking structure, and design bid documents, and permitting for the Phase I demolition of the existing Red Lion Hotel structure. The Port of Vancouver will proceed with the project CDP to include:

- Site Geotechnical Analysis
- Traffic Impact / Parking Study
- Site Boundary / Topo Survey
- Pier / Terminal 1 Building Structural Assessment
- Historic / Cultural Assessment MOA / Permitting
- Urban Design, Wayfinding, Signage, and Lighting Standards
- Site Infrastructure, Utility, Stormwater Concept Plans
- Sustainable Development Framework Plan
- SEPA Process and Permitting
- Construction Documents for Red Lion Demolition (Phase I only)
- Conceptual Parking Structural Analysis
- Project Development Agreement



Figure 3.35 Project Development Review Process





Figure 3.38 Artist Rendering: View Looking North

Port of Vancouver FINAL Waterfront Development Master Plan







Figure 3.39 Artist Rendering: Columbia Way and Daniels Way Intersection







Figure 3.40 Artist Rendering: View Looking Northeast from the Columbia River



