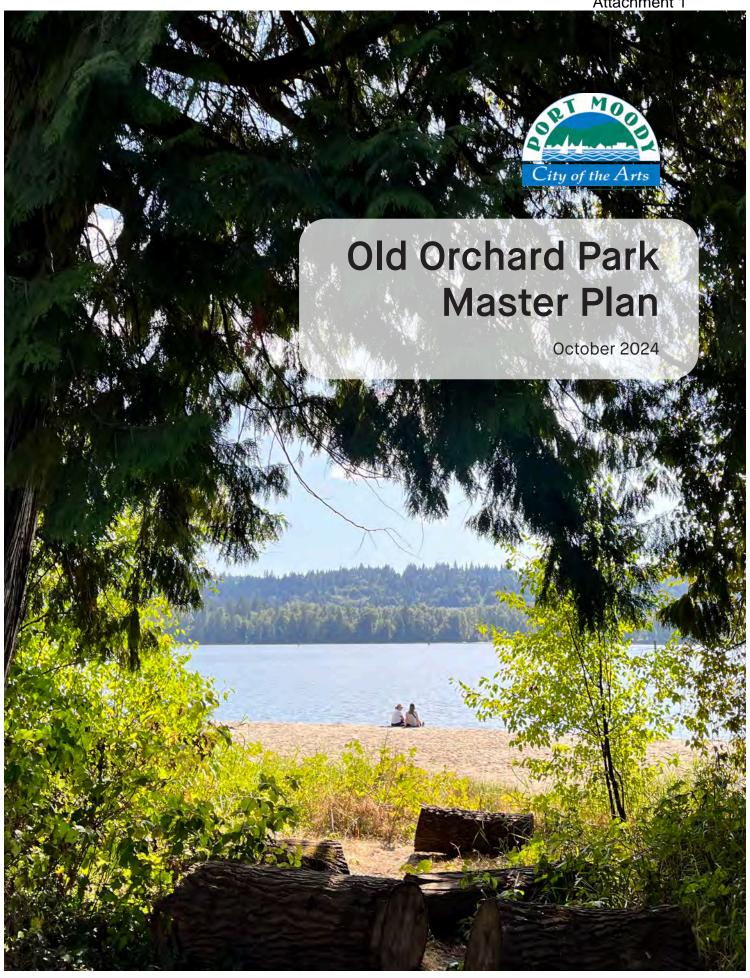
Attachment 1







Prepared for:

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HAPA **COLLABORATIVE**

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Climate Action Committee
Seniors Focus Committee
Youth Focus Committee
IDEA Committee
Transportation Committee
Tourism and Economic Development Committee
Old Orchard Hall
Vancouver Port Authority

Community Needs and Programming Groups

Resident Caretaker
Port Moody Foundation
Disability Alliance BC
kinder Kampus at Old Orchard Park
TORCA

Neighbourhood Groups

TROPICA
Pleasantside Community Association
Glenayre Community Association

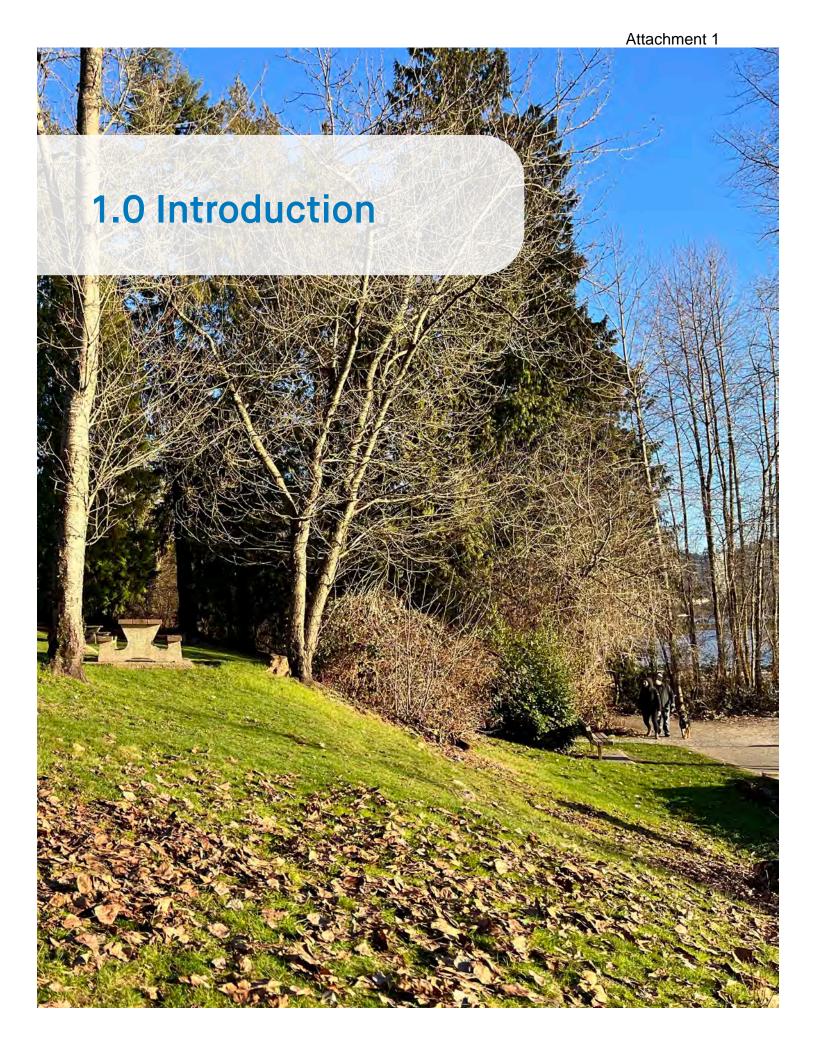
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Salish Sea Research and Education Society

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1.1 Plan Purpose

1.1.1 The Need for a Master Plan

Port Moody's waterfront park system is a 'String of Gems' along Burrard Inlet that provides an immersive inter-tidal edge and a varied collection of active and passive green spaces for all to enjoy. In recent years, the waterfront has seen increased usage due to the impacts of COVID-19 and the region's population growth. This has strained infrastructure, amenities and the natural environment, making it challenging to accommodate the community's needs and desires within the limited park spaces.

Old Orchard Park is one of only two programmed waterfront parks in the City, and the only one with a swimming beach. Recognizing its significance, the City initiated a master planning process to enhance and upgrade this park. Due to aging infrastructure, environmental degradation, and poor accessibility, revitalizing Old Orchard Park is a top priority for the City's parkland improvement plans over the next 10 years. The new Master Plan will guide park infrastructure enhancements while preserving the unique charm and character of the waterfront.









1.1.2 What is a Master Plan?

- A strategic and living document, continuously reviewed throughout its life span.
- A framework that guides future planning and decision-making around park facilities, trails and open spaces.
- A master plan sets out a unified vision for the character of the park and highlights priorities and longer term aspirations.
- It explores and overlays a series of information layers into a cohesive vision.
- It also sets out a clear phasing and implementation plan to initiate change.

	_
Circulation	
Open Space	
Ecology	
Hydrology	
Facilities	
Program and Education	
Placemaking and Storytelling	
Wayfinding	
Sustainability	
Health and Wellbeing	
Safety and Security	

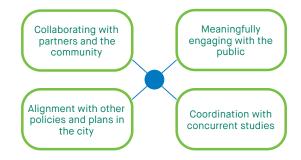
Sample layers of a park master plan

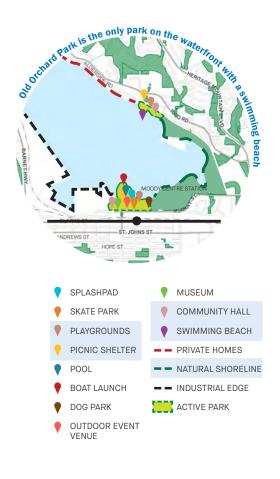
1.2 Project Overview

1.2.1 Project Goals

- Guide the city on a future vision for the park that is beneficial and achievable through a 'strategic' implementation plan;
- Provide an appropriate response to improved programming and facilities while protecting natural assets of the park;
- Understand the community's needs and desires through a meaningful engagement process where the public feels heard;
- Improve access and usability of the park, with safety and comfort in mind;
- Enhance the ecological network and habitats in and around the park, with consideration of climate change adaptation and with particular attention to the shoreline in the context of sea level adaptation.

1.2.2 Project Approach

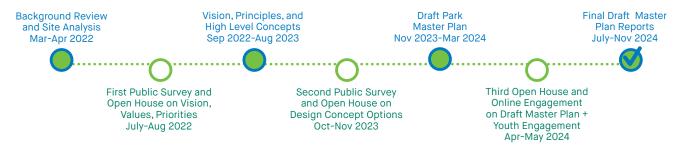


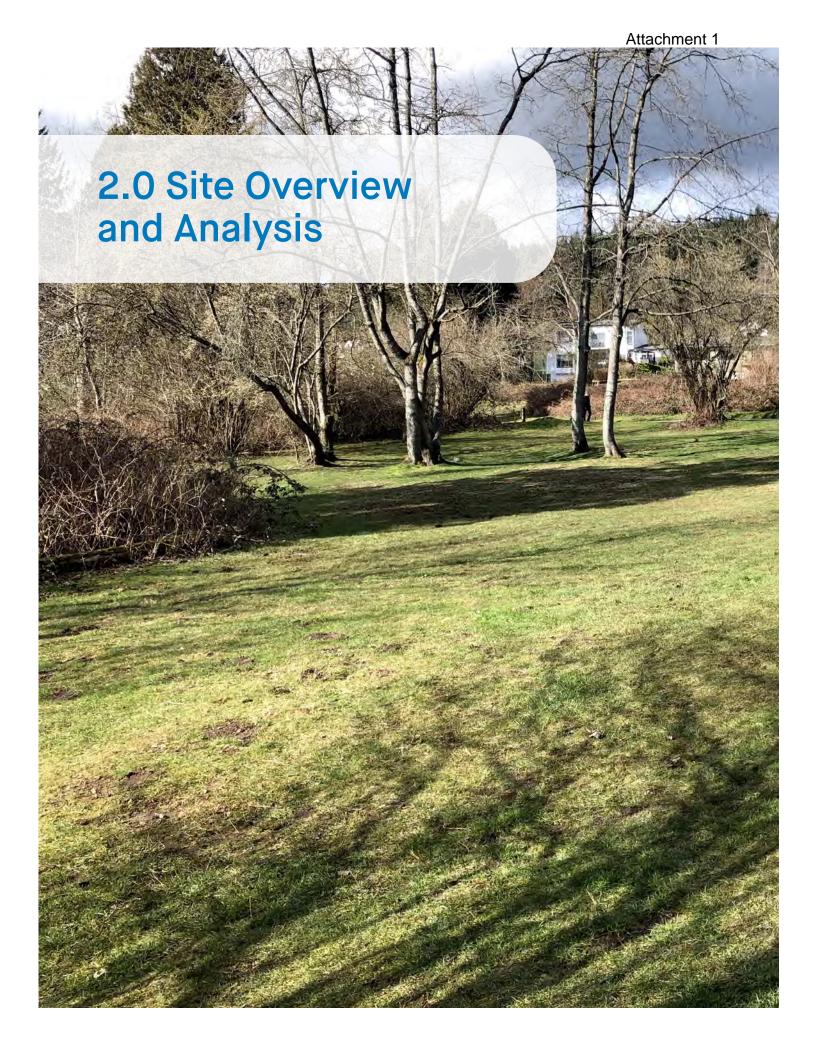


1.2.3 Project Process

The master plan for Old Orchard Park was developed over a 2 year time frame starting in spring of 2022. A proportion of the work and engagement events were undertaken concurrently with the development of a master plan for Rocky Point Park on the opposite

side of the inlet. The two parks are interconnected through ecology, hydrology, and a multi-use trail and evaluating them in tandem, was beneficial in offering Port Moody a cohesive network of waterfront amenities.

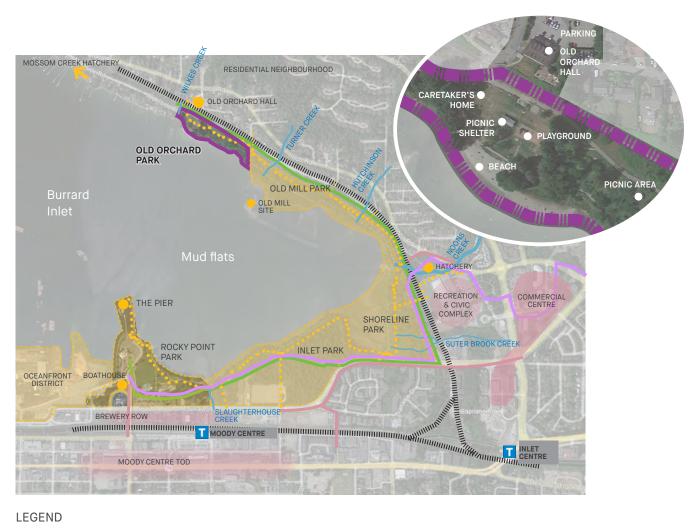




2.1 Site Location and Context

Old Orchard Park is located on the north side of Port Moody's waterfront along the Burrard Inlet. It is loved by many for it's neighbourhood feel and the quieter setting in contrast to Rocky Point Park, which is larger and more programmed. It is set on a steep south facing slope in a low density residential neighbourhood, and within a short distance from the City's recreational and civic complex on loco Road. An amenity building for weddings and other community gatherings with washroom facilities and a parking lot reside just north of the programmed park space, somewhat divided by the CPKC rail tracks.

Old Orchard Park is 1.2 hectares in size and offers a combination of open lawn space for picnics, dedicated recreational spaces including picnic shelter, playground and swimming beach, as well as wildlife viewing and walking and cycling trails in the beautiful natural surroundings. The beach front at the water's edge, permitting swimming activity, is a key feature of the park enjoyed by many all year round. Some of the park's amenities, including a seasonal washroom that used to exist at the top of the slope, have naturally aged over time. The picnic shelter is nearing the end of its life and the last upgrade to the playground was completed in 2001. The intention of this master plan is to help guide future improvements with a cohesive vision, while maintaining the park's beloved character.



Multi-Use Path

Trans Canada Trail

(accessible)



Project Boundary

Area of Influence

Creek

Connecting

Bike Routes

A Photographic Inventory



A rest stop (used to be the site of a seasonal washroom) along the Shoreline Trail at the top of the park



Boardwalk adjacent to the beach



The beach with picnic tables



The picnic shelter at the top of the hill



The playground and path up to it



Meadow and orchard trees

2.2 Policy Context

The following policies and projects are relevant to the master planning process for Old Orchard Park. They have guided the development of the Vision and Principles for the park's future plan.



Policies & Projects

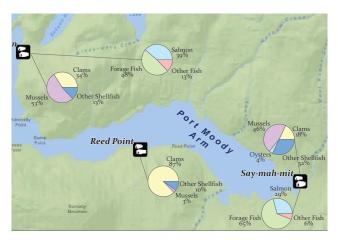
- Climate Action Plan (2020)
- Urban Forest Management Strategy (2023)
- What Swims Beneath project
- Existing ESA(2003)
- OCP's Natural Environment Chapter and Parks, Open Spaces and Recreation Chapter
- Lifecycle considerations of park assets
- Parkland Strategy (underway)
- · Operational challenges
- House Post Project (underway)
- The Art in Public Spaces Master Plan (2021)
- Master Transportation Plan update (underway)
- Trail Network Plan (underway)
- Trail upgrades (various; concurrent)
- Accessibility review



Saymahmit house post, by Squamish artist and carver James Harry, speaks of the shared and sacred responsibility to care for the health and well-being of Coast Salish Lands and Waters.

2.3 Indigenous Heritage and Culture

It's essential to honor the deep historical and cultural ties that Indigenous communities have with the land. The lands where Rocky Point Park is situated were traditionally covered with native forests and rich ecosystems, integral to the Coast Salish Peoples, including the selilwitulh (Tsleil Waututh), x^wməθk^wəyəm (Musqueam), skwxwú7mesh (Squamish), qicəy (Katzie), kwikwəð,əm (Kwikwetlem), q'wa:nλ'ən (Kwantlen), qiqéyt (Qayqayt), and the Stó:lō Peoples. These Nations lived and thrived in the area for millennia, with permanent and seasonal village sites along the shoreline and local streams, such as Say-mah-mit at Noons Creek. Indigenous communities practiced hunting, harvesting, and gathering, particularly fish and shellfish, which were crucial for their sustenance and cultural practices. Protecting and preserving archaeological sites, such as Middens found at Noons Creek, is vital to maintaining the historical and cultural integrity of the area. These sites are not just remnants of the past but are living connections to the ancestors and traditions of the Coast Salish Peoples. The integration of traditional knowledge and practices into the







Historically, the area served as seasonal camp grounds for various nations - for the purpose of hunting and gathering shellfish and fish. Middens found at the mouth of Noons Creek further suggest this.

park's design and management should be prioritized. This could include the revitalization of native plant species, traditional ecological knowledge, and cultural practices related to the land.

Indigenous culture should be prominently featured in the park through art, signage, and educational materials that tell the stories of the Coast Salish Peoples. The ongoing projects, such as the installation of house posts curated by Coast Salish artists are excellent examples of how Indigenous presence can be reasserted in public spaces. Events like National Indigenous Peoples Day, with traditional dancing, singing, and ceremonial dragon boat paddles, are crucial for the cultural revitalization and recognition of Indigenous traditions. These events should be supported and expanded to foster greater understanding and appreciation of Indigenous culture among the broader community.

Acknowledge the historical displacement, loss of sovereignty, and erosion of culture that Indigenous communities faced following the arrival of settlers. This history is essential for understanding the current context and the need for ongoing reconciliation efforts. The City of Port Moody's commitment to reconciliation, including the critical reflection of its historical relationship with Indigenous peoples, is an important step toward healing. Initiatives like the Burrard Inlet Action Plan, led by Tsleil-Waututh Nation, and local stewardship programs at Noons Creek and Mossom Creek hatcheries, are examples of how cultural and ecological restoration can go hand-in-hand.

The park should serve as a living classroom where visitors can learn about the Indigenous history and ongoing cultural practices related to the land. This could be facilitated through partnerships with local Indigenous communities to run educational programs and stewardship activities. Supporting the restoration of fish habitats and other ecological initiatives not only benefits the environment but also aligns with Indigenous cultural values and practices, which emphasize the interconnectedness of all life and the need to care for the land and waters. By embedding these principles into the Rocky Point Park Master Plan, Port Moody can create a space that honors Indigenous heritage and culture, fosters reconciliation, and strengthens the relationship between the City and local First Nations.

2.4 History of the Inlet and Waterfront Parkland

Coast Salish Peoples

A lot of development and investment happened in Port Moody in anticipation for the Canadian Pacific Railway (CPR) line but economic and social growth stagnated when Vancouver became the new terminus of the line.



Arrival of the CPR and Gold Rush Era

1858 - 1864 TThe gold rush on the Fraser River and in the Cariboo region brought thousands of people to the Inlet.

Coast Salish Peoples have inhabited these lands since time immemorial. Historically, the area served as seasonal camp grounds for First Nations, used for hunting, gathering and fishing including shellfish

Old Orchard Park was built. It has trails, a timber playground, the caretakers home, a covered shelter and an orchard.

2001 Old Orchard Park upgrades to trails and playground.



1950-2000

Park Creation and Re-naturalization

Logging and urban sprawl impacted the diversity and resilience of this waterfront. Over the years, residents, the City, and non-profits have worked hard to daylight streams leading into the inlet, and restoring habitats. Late 1970s Two Port Moody residents began to improve fish habitat on a section of Noons Creek. Their project was expanded by the Port Moody Ecological Society who operate a hatchery near Noons Creek.



Early 80s The concept of a park that encompassed the head of Burrard Inlet began with much public consultation. The result of this major effort was the 1986 report "A String of Gems" that laid the groundwork for a park planning system.

1879 The town of Port Moody is announced as the terminus of CPR in 1879, the town grows exponentially as a result.

Industrial Era



1913 Port Moody is incorporated as a city



1886 The first passenger train arrives. Rocky Point Park hosts the Golden Spike Days festival every July to commemorate the completion of the Canadian Pacific Railway.

With access to the sea and a rail link to the rest of North America, Port Moody becomes a location for various industries. 1905 J.S. Emerson builds a sawmill for cutting cedar. The mills were the landing pad for new immigrants from countries like China and India at the time. 1915 Imperial Oil Company development starts along with several other oil refineries. Many other industries followed. The Shoreline Park area was used as access to the water for a number of commercial enterprises and industry.

lvy Peers, a First Nations dancer and singer from Alert Bay, performs at National Indigenous Day ceremonies at Port Moody's Rocky Point



Local to Regional

In the new millennium, population growth, climate change, the COVID 19 pandemic and overall competing needs for various amenities have increased the demand and pressure on public parks.



Reconciliation efforts continue with new celebrations and initiatives to teach about Indigenous traditions and culture.



2020 The global Covid 19 Pandemic brought drastically increased usage of Port Moody's waterfront park system. The value of parks to urban communities is more acutely understood than ever.



Master Plan for Old Orchard Park

The Next 10 Years? This Master Plan will guide any changes to Old Orchard park for the next 10 years. It creates a solid foundation for the park to navigate this new era and its challenges.



Shoreline Multi-use Pathway Gravel pathway Boardwalk Gravel Steps Parking Contours Streams

2.5 Circulation and Access

The park is well connected and integrated with the community and surrounding environment. It is a 5-minute drive to the civic and recreational complex of Port Moody, well served by transit and is directly connected to the shoreline trail which is a multiuse path leading all the way to Rocky Point Park and downtown Port Moody. The park itself however has accessibility challenges down to the beach and to the different features of the park, including playground and picnic area.

- Improve accessibility throughout the park, prioritizing beachfront access.
- Improve the arrival experience for the park and the entrance to the Shoreline Trail.
- Improve vehicular drop off area at park entrance.







2.6 Programming

The park is not a highly active or programmed park, mostly providing a calm place to enjoy the beach and nature. Public engagement showed that many people did not want to add any new elements to the park which would add to the activity level. Children's play, picnicking, paddling, swimming, informal recreation and relaxing are the main activities. Improvements can be made to support these activities.

- Build a new and improved playground that utilizes the slope effectively as a key feature of the park design.
- Improve the open lawn area to support picnicking and small events.
- Improve and enhance the sandy beach area.



LEGEND

(1)

Caretaker's Cabin

Covered Picnic Area Old Orchard Hall and Washrooms



Benches



Picnic Tables

2.7 Infrastructure

Site furnishings and structures in the park consist of picnic tables, benches and a picnic shelter. Benches and picnic tables are well used and in demand. The picnic shelter is well used but takes up a very prominent place in the park, limiting views to the water from the upper park.

There is a washroom and changeroom facility at Old Orchard Hall. The washroom is not easily accessed from the beach due to the steep hill. A caretaker's cottage is located near the entrance to the site.

- Add washroom facilities closer to the beach.
- Relocate and/or add to picnicking and seating facilities
- Relocate picnic shelter



Picnic shelter and pathways and stairways



Caretaker's home



Old Orchard Hall and washrooms

Naturalized Area (including forest)

Stream outflows

Beach

Mudflats
Contour Lines
Streams



2.8 Site Ecology and Habitat

Old Orchard Park is a small park within a larger system of natural parkland. The waterfront is a unique ecological area with high biodiversity. The system includes remnant intertidal marshes, a tidal mudflat and a coastal western hemlock forest. The Port Moody Arm of Burrard Inlet is internationally recognized as an Important Bird Area. A Wildlife Inventory for the Shoreline park System, conducted by Burke Mountain Naturalists in 1994 indicates that the system supports:

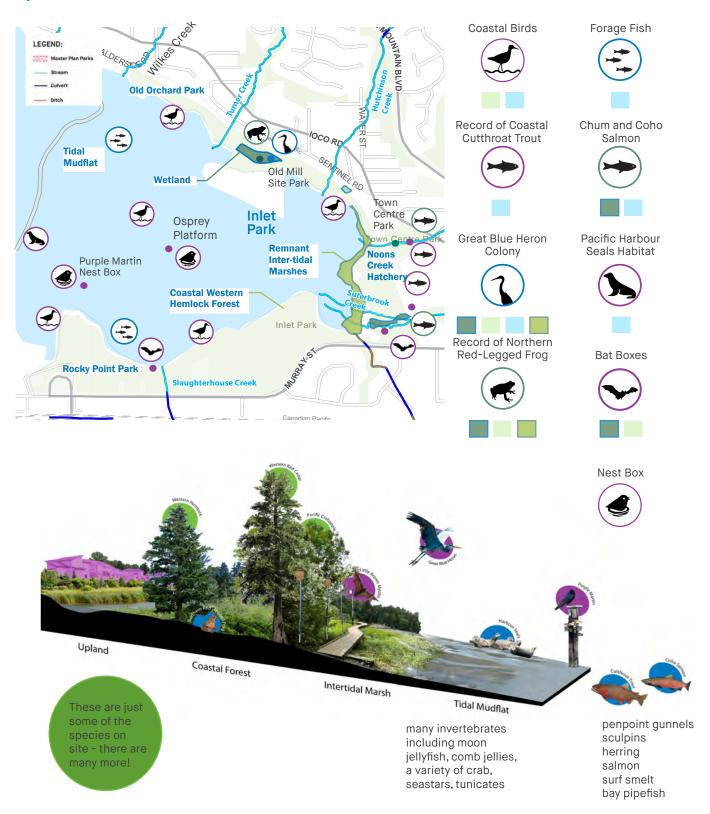
- 116 Species of Birds
- 270 Species of Plants
- 48 Species of Fish

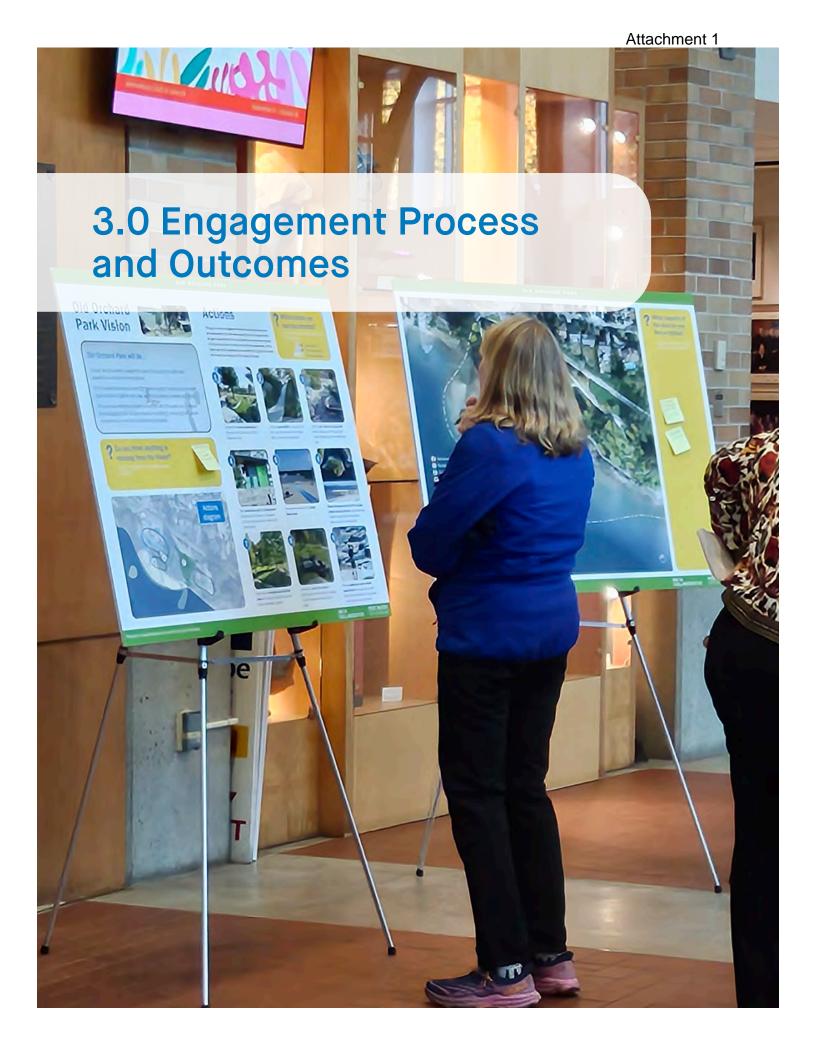
Although appearing barren, mudflats are species rich and productive ecosystems that provide important habitat for invertebrates, coastal water birds, and fish. Thus, this landscape is part of a larger process

of erosion and sediment accumulation that is connected to upstream ecosystems and impacted by upstream development. The relationship with Old Orchard Park's beachfront and stream habitats are of particular note and influencial for design decisions.

- Protect the beach and park from coastal erosion and sea level rise, while enhancing habitat.
- Improve the ecological and habitat value of the park through forest and creek restoration projects.

Species in the Inlet





3.1 Engagement Process

3.1.1 Overview and Approach

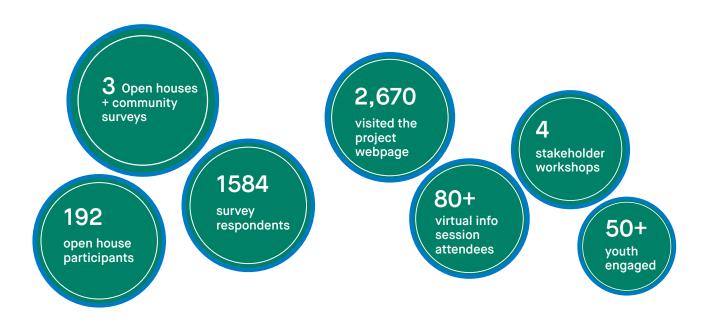
The engagement process for Old Orchard Park master planning included three phases of events, and reached out to both interested parties and the public at large. City staff were also consulted through meetings and workshops at key milestone moments in the project. Engagement opportunities for the Old Orchard Park master planning project ran concurrently with the master planning project for Rocky Point Park for efficiency and to limit engagement burnout. The project page on the City's online public engagement hub, Engage Port Moody, was the public's source of information for both master planning projects.

The consultation approach was to reach out to a broad audience and be inclusive of various age and cultural groups. Targeted engagement was conducted with seniors, youth, and various community groups in the City.

The main objectives of engagement were to:

- Raise awareness about the master planning process and the key elements that will inform the design concept;
- Understand community needs and desires for the park and ensure participants feel they were heard throughout the process; and
- Gather quality feedback on opportunities, considerations, values, and support for the park design concept.

The following section summarizes the engagement opportunities that were hosted, including objectives and key outcomes for each. Full engagement summary reports are available through the project website.



3.1.2 Who We Engaged With

The project engaged with the following audiences:

- · Park users
- Broader Port Moody community
- · Community Associations
 - · School Districts
 - · Nearby residents
 - · Local and regional park users
- · Internal staff working groups by department
- Steering Committee
- First Nations
- Parks and Environment Committee (previously PRC and EPC)
- · Youth Focus Committee
- · Seniors Focus Committee
- Transportation Committee
- Mayor and Council
- External stakeholder groups
 - · Environment & stewardship groups
 - · Business owners & recreation groups
 - Community groups & programming organizers
 - · Youth groups





3.2 Engagement Opportunities

3.2.1 Engagement Phase 1

The first phase of engagement focused on raising awareness about the project, educating the community on site history and assets, and exploring project opportunities by asking participants how they use the park today and what their needs are for the park in the future.

Engagement took place between May and August 2022. Feedback from participants informed the development of a vision and guiding principles for Old Orchard Park, and helped inform the development of draft design concept options.

Interested Parties Workshops (May-June 2022)

Group conversations were hosted through four workshop sessions. Workshops were hosted with environmental stewardship groups, community needs and programming groups, commercial businesses and recreational groups and Civic Committees.

Community Survey & Open House (June-July 2022)

An online community survey and two in-person open house opportunities were hosted, one in Rocky Point Park and one in Old Orchard Park. These events were open to the public and were advertised on social media and through the project website. Paper copies of the survey were also available at select civic building locations. The open house events hosted a series of interactive display boards to provide comments on sticky notes and a craft activity for children.

3.2.2 Engagement Phase 2

The goal for the second phase of engagement was to identify if anything was missing from the vision and guiding principles and to gain feedback on design preferences of different components of the draft design concepts presented.

Engagement opportunities took place between November 2022 and July 2023. Feedback from interested parties' workshops, various City Committees and public participants informed the direction for the recommended design concept for the Old Orchard park.

Staff and Interested Parties Workshops

The following workshops were hosted by the consultant team to solicit iterative feedback on the design concept development:

- Youth Focus Committee Workshop Nov. 9, 2022 virtual presentation and discussion session.
- Staff Workshop Nov. 23, 2022 presentation and small group brainstorming and discussion session.
- Parks and Environment Committee Meeting July 17, 2023 - presentation and discussion session.

Community Survey and Open House (October 2023)

An online community survey was launched with key questions around preferences in components of the draft design concept for the park. A virtual presentation and discussion session as well as an in-person open house were held to solicit similar feedback as in the survey but to give an alternative hands-on participation option. It was also an opportunity to meet project staff and consultants face to face.

3.2.3 Engagement Phase 3

The final phase of engagement had a goal of informing on how input received over the course of the project shaped the recommended design concept. There was opportunity to rate level of satisfaction with the recommended design concept and submit any final comments.

Engagement opportunities included meetings with various interested parties and a community open house and community survey through the months of April and May 2024.

Interested Parties Meetings and Events

Meetings were held throughout April and May of 2024 to share the recommended design concept with various interested parties including: Fraser Health, School District 43, Port Authority, and Parks and Environment Committee. Port Moody's youth were also invited to an evening of activities on the topic of park and trail improvements in the City and were given the opportunity to share their thoughts on the Old Orchard Park Plan. Additionally, during the development of the draft Park Mater Plan, meetings were held with the IDEA Committee and Seniors Focus Committee to review the final park design

concept. A presentation of the draft Park Master Plan was shared with the Parks and Environment Committee for feedback.

Community Survey and Information Session (May 2024)

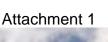
In May 2024, an information session was held at the Civic Hall, with display boards of the recommended design concept for the park. A presentation was also given by the consultant to describe the elements of the design concept and the process that was undertaken to achieve it. Community members were given the opportunity to ask questions and were encouraged to provide feedback through an online community survey that was also available to everyone who could not attend in person.

3.3 Local First Nations Engagement

Through the project process, the project team has shared several updates with local First Nations. They have also had the opportunity to meet with kwikwəλəm (Kwikwetlem) First Nation and səlilwəta4 (TsleilWaututh) Nation to provide further details and answer questions.

Feedback indicated that project information was well received and the planning process was supported overall. The following activities were conducted with First Nations through Phases 2 and 3:

- Project Updates December 15th, 2022; February 9th, 2023
- Team meeting with kwikwəñam (Kwikwetlem) First Nation- March 29th, 2023
- Team meeting with səlilwəta4 (Tsleil-Waututh) Nation- April 21st, 2023
- Field visit with k^wik^wəÅəm (Kwikwetlem) First Nation- May 24th, 2023
- Project Update- July 31st, 2023
- Field visit with səlilwəta4 (Tsleil-Waututh) Nation-September 14th, 2023
- Project updates shared with Tsleil Waututh, Kwikwetlem, Squamish and Musqueam First Nations via email in June 2024.



4.0 Vision and Guiding Principles

4.1 Vision

Old Orchard Park will be...

A local, family-oriented, beachfront park that supports a calm and peaceful environment for its visitors.

It will be well connected to the City's park and trail network and provide opportunities to gather and play, and enjoy picnics, sunsets and more.

The park will embrace a close connection with the water and preserve the ecologically rich natural areas surrounding it, ensuring the coastal ecosystem and sensitive habitat are protected.

4.2 Guiding Principles



Steward Healthy & Resilient Ecosystems.

...by protecting sensitive habitats while raising awareness of the biodiversity in the park by designing climate resilient spaces.



Enhance Connection with the Waterfront

...by maintaining views of, and defining access to natural areas, beach, and waterfront for park visitors.



Maintain a Quality Park Experience

...to accommodate our growing community with durable, well-designed park elements and support existing uses without impacting the tranquility which people love about the park.



Contribute to the City's Work on Truth and Reconciliation

...by strengthening partnerships with local Nations to apply an Indigenous lens to the designs, programming, and uses of park spaces.



Support Network Connectivity

...by supporting diverse transportation options to access Port Moody's waterfront, including walking, wheel chair users, and cycling.



Ensure Park Accessibility and Inclusivity

...by designing spaces that cater to all ages and abilities, while addressing barriers for people with mobility challenges, thus strengthening equitable access to park amenities.

5.0 Master Plan Concept





5.1 Old Orchard Concept Plan

- 1 Park Arrival
- 2 The Meander Path accessible route to beach
- 3 New Playground
- 4 Small Washroom + New Picnic Shelter
- 5 Habitat Islands
- 6 The Lounge Deck
- 7 The "Meadow"
- 8 Viewing Platforms
- 9 Improved Drop Off/Loading
- 10 Old Orchard Swimming Beach
- 11 Old Orchard Hall (with Washroom)
- Caretaker's Cottage

*Location of future housepost will be determined and integrated into the design for the park

Key

— 1m Contour Lines

Accessible Route

--- Port Owned Property Line

Outdoor Shower

Picnic Table

Kayak and SUP storage rack

Conceptual Rendering





5.2 Design Features and Guidelines

Through our various engagement events and early analysis work, we have learned a lot. We have learned about new opportunities for park improvements that would benefit the various user groups in the community and improve the overall park experience. All the ideas have been expressed through elements of the plan that support the Vision for the park and respond to the Guiding Principles.



Meander Path

The meander path's purpose is to create a universally accessible gradually sloped route from the Shoreline Trail to the beach. As it traverses the slope it unites the park's other features along the route. The path integrates into the slope with pockets of natural planting as well as a 'short cut' stair which provides a more direct route through the park.

Design Guidelines:

- The path design will be an integrated into the different spaces throught the park, linking them from the Shoreline Trail to the beach and the washroom facility in between.
- The path is ideally to be designed with no more than 5% slope to meet BC Building Code recommendations for accessible pathways without handrails and landings. If required, accessible ramps with no more than 8.33% slopes can be integrated into the path of travel.
- Pathway material should be a smooth, durable surface which is comfortable for wheels. CIP Concrete is a recommended material but others may be considered.
- The path is to connect from the entrance of the park and the Shoreline Trail to the beach, and incorporate a beach mat at the end for wheelchairs to be able to access the sandy part of the beach.
- A quicker stair route is shown to provide an alternate means of traversing the slope.



New Washroom/Changeroom and Picnic Shelter

A small washroom/changeroom facility is proposed at a mid-level point, a location which is more accessible from the beach and playground than the existing facility at Old Orchard Hall. The discreet building is embedded into the slope and integrates a new picnic shelter on it's 'roof', which also acts as a viewing deck, looking out to the inlet.

Design Guidelines:

- The washroom facility design will require consultation with city staff to confirm maintenance and CPTED requirements. Considerations will include: how many facilities are included (at least one fully accessible facility) and how the building is locked and unlocked.
- The finishes of the building should be easy to clean and repair.
- The washroom building must be insulated.
- The architecture of this structure will be customized to integrate seamlessly and elegantly into the site's sloped landscape.
- The picnic shelter will be targeted to have the same capacity as the existing facility, as shown in the concept plan.
- Explore opportunities to incorporate additional signage, interpretive elements or art into building and landscape design.
- The proposed location of the washroom will require a sanitary line to be pumped to the main line at the shoreline trail. Though this introduces some complexity and cost, placing a washroom at the level of the sanitary sewer would drastically reduce it's usefulness for beach users.



Lounge Deck and Shower

A small deck acts as a porch for the new washroom building and is connected to a larger beach-level deck through stepping benches. The larger deck at the beach will integrate lounge seating and tables to facilitate gathering and resting. An outdoor shower is suggested on or adjacent to the deck to allow for washing up after the beach.

Design Guidelines:

- The lounge deck should be constructed of sustainably harvested wood, ideally from local sources along with materials chosen for safety and anti-slip.
- The deck should be detailed to be long lasting and simple to repair, using large format timbers and simple construction.
- The deck material should also consider thermal comfort for the user.
- The shower facility should be designed in consideration for sand accumulation and ease of maintenance.
- The design should integrate stormwater management, particularly addressing the current pooling water at the base of the slope. This area presents an opportunity for habitat enhancement and education by converting it into a wetland or rain garden feature.
- Misting poles and loung chairs should be incorporated.



New Playground

The existing playground has reached the end of its life cycle and will be replaced. Public engagement indicated that people feel the playground should stay roughly the same size as it is today. The concept proposes that the play area make use of the slope through hill slides and climbing features. A natural look and theme for the play area is indicated, to blend with the park context and setting.

Design Guidelines:

- The new playground will be integrated into the slope, including elements such as hill slides and climbers.
- Natural materials are preferred for play equipment.
- All equipment and layout will be designed to meet CSA safety codes for play equipment.
- Materials and surfacing will be durable and long lasting, and easily repaired as needed.
- Because the beach already provides ample sand play and play sand has some maintenance implications, it is recommended that the play surfaces be made of fibar for flat areas and rubber surfacing for hillsides, if appropriate to the design.
- Opportunities to include play elements with themes of nature and the inlet are encouraged.
- Because the playground is not a large destination playground, it is recommended that the play elements target a range of 2-8 year olds. Though different elements will be designed for different ages, the playground is not large enough to demand fully separate age zones.
- Waterplay elements can be considered as additional features to contribute to heat reprieve opportunities.



The Meadow

The opening in the tree canopy south of the main park, commonly known as "The Meadow" will retain its character and use as a picnic area and flexible greenspace to support small ceremonies. A more gradual pathway will be built connecting the upper and lower pathways, and the land will be re-shaped to create more usable small lawns tucked into steeper natural meadows. The existing cherry trees on the western side will be removed due to declining health, expanding useable space even more.

Design Guidelines:

- The meadow will not significantly change in character but re-graded strategically in order to create more usable spaces along the slope.
- It may not be feasible to create a pathway with less than 5% slope from Shoreline Trail to the lower trail, however the design should attempt to create better accessibilty to the meadow through either pathways or gently sloped lawn.
- Additional areas of pollinator meadow and pollinator friendly trees can be added into the slope.
- All areas which require mowing should not exceed 3:1 slope.
- The overall area for the lawn can be increased when cherry trees are removed and invasive species are cleaned out along the area's perimeter.



Habitat Islands and Swimming Beach

The concept proposes the integration of habitat islands, or 'tombolos' (islands connected to the mainland during low tide). Building small landforms in the mudflats could help to reduce negative impacts of sea level rise on the beach – effectively reducing the need for beach nourishment by naturally preventing sand from being washed away gradually, or through wave action during storms. The landforms would be designed to appear natural and to provide habitat enhancement for local species. The design for this feature will need further study to determine exact locations, target species and habitat types.

Design Guidelines:

- The idea to subtly alter the shoreline and mudflats for habitat and beach nourishment purposes is an opportunity to be further explored. The feasibility of this technique and the design response will first require studying the inlet hydrology.
- If habitat islands are introduced, they should be designed to look natural and fitting with the environmental context and support local species, providing habitat diversity and connectivity.
- The habitat islands should incorporate access for research, monitoring and public education in mind, while minimizing human disturbance to wildlife.
- Incorporate signage and an appropriate design response to deter visitors from accessing the habitat islands.
- Consider visual aesthetics as well as function integration.
- Ensure desigs adhere to regulatory and permitting prequiremetns.

Additional Considerations

Paddling storage facility

- Temporary kayak and stand up paddle board storage is proposed for the park.
- Further consultation with stakeholders and the City of Port Moody should be undertaken to determine the details and location of this facility.

Safety and security

- The park should be designed to CPTED standards with further consultation with Port Moody Police and ensure access and visibility is provided as much as possible.
- Because the park is a natural setting it is not suggested that it include lighting after dark.

Parking and park access:

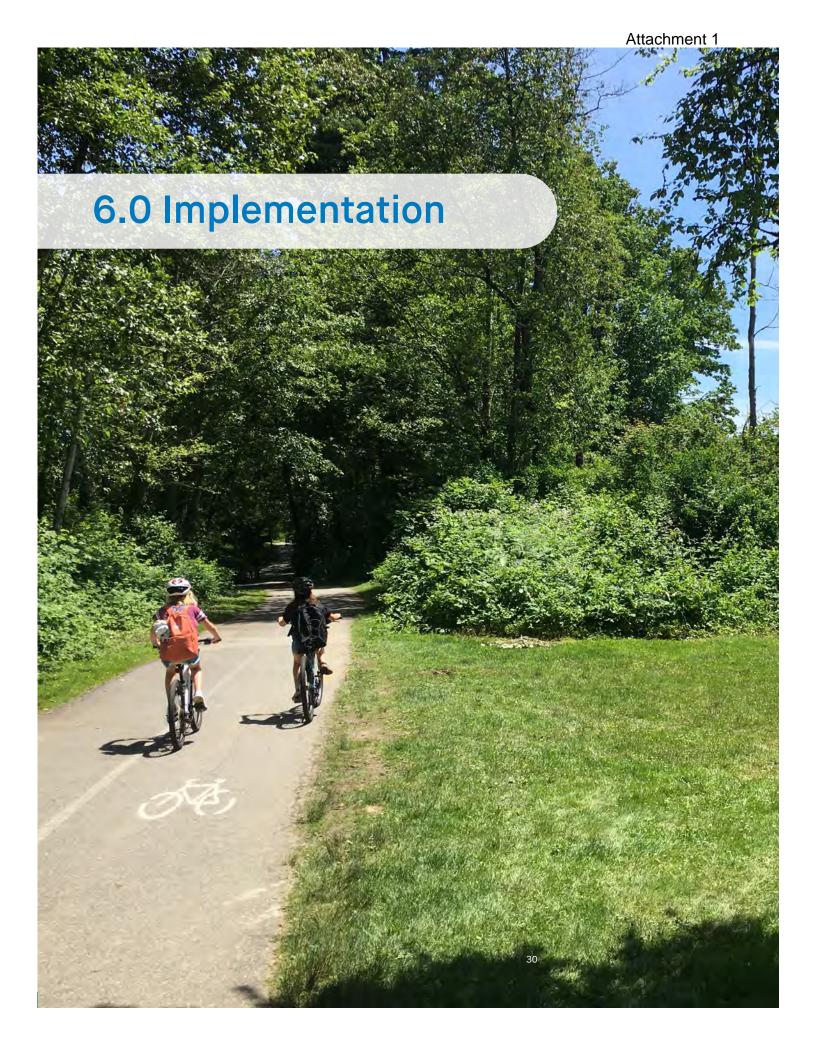
- To address the demand for more parking, a parking management strategy is to be developed through further traffic studies, taking into consideration opportunities for new lots in proximity to the park through land acquisition, as well as promotion of alternative modes of travel to vehicles.
- Improve the accessible drop-off area at the gateway as part of park improvements. Include 2 accessible stalls.

Management of invasive species

- The city should continue efforts to contain the spread of invasive species such as the Himalayan blackberry, and prepare a restoration plan.
- Old Orchard Park should have a slightly higher level of maintenance than the neighbouring forest, but it remains a natural park and it is not recommended that it be maintained in a very formal or manicured style.

Climate Adaptation

- Incorporate misting station(s) and water fountain(s) or water bottle filling station(s)
- · Incorporate shade features where possible.
- · Retain healthy mature trees as a priority.
- Plan new trees in appropriate locations considering view corridors and sight lines, to support canopy coverage targets and provide shade for visitors.



6.1 Considerations

The improvements shown in the Old Orchard Park Master Plan Concept are recommended to be completed in one phase of design and construction. Because all of the design elements are well integrated into the park it will be more time and cost efficient to design and build them this way.

Building in one phase also reduces the disruption to the park, limiting the time the park will be closed as well as avoiding the scenario of disturbing the site and having to repair more than once, during subsequent phases of construction.

Timing of construction should take into account the sensitive environment of the park and reduce disturbance to habitat as much as possible.

Old Orchard Park will also need to consider and address archaeological work which will add cost and schedule implications to the project.





A cross section of Old Orchard Park's concept plan demonstrating the integration of lounge decks and washroom facility into the steep slope of the park's hillside.

6.2 Cost Range

6.2.1 Preliminary Opinion of Project Cost

These costs were based on previous experience in park design. As part of a master plan, they have not been developed based on a detailed design package or verified by quantity surveyor, or other specialized consultants and engineers.

Full costing exercise should be undertaken as part of the detail design process prior to tendering the project to provide better assurance that project budgets will be met.

Though the project is intended to be built in one phase, should costing challenge this, it is possible that the shoreline restoration work could be approached as a seprate project. That work is not intricately connected to the design of the park and would require expertise from specialized engineering and ecological restoration consultants. This work may also require additional studies which could impact the schedule of the park construction so that separating the two scopes of work may expedite the main park project.

Exclusions:

Environmental Approvals/sediment control monitoring Inflation

Probable Cost Range

				Probable C	ost Range	
Item	Action	Approximate Size	Unit	Low	High	
Meander Path and Stair	Build durable paved pathway at no more than 5% grade from top to bottom of park.	280	Metres long	\$100,000	\$200,000	
New Playground	Install new playground integrated into slope. Possibly using custom natural playground structures. Built in hillslide and other hill climbing structures. Poured Rubber surfacing (\$550 pm2)	500	Square Metres	\$550,000	\$750,000	
The Meadow	Slight re-grading of meadow area, re- seeding lawns, informal pathway, small outlook deck structure at lower trail.	1100	Square Metres	\$75,000	\$120,000	
Architecture and Associated Structures	Construction of custom washroom building set into hillside, integrated picnic shelter, retaining wall, and outdoor shower. Build two levels of deck on grade connected by seat steps.	14 m ² washroom, 75 m ² picnic shelter	Square Metres	\$300,000	\$400,000	
Forest Restoration Planting	Restoration planting in and around the edges of the park.	700	Square Metres	\$25,000	\$50,000	
Hillside Lawns and Meadows	Lawns and pollinator meadows in the main sloped areas of the park.	1575	Square Metres	\$50,000	\$75,000	
Signage, Furnishings, Other	Interpretive signage, tables, benches, bike racks, drinking fountain, trash receptacles etc	NA	LS	\$50,000	\$75,000	
General Requirements	Bonds, Insurance, Mobilization and Demobilization, Shop Drawings, Surveying, etc	NA	LS	\$100,000	\$200,000	
Demolition and Site Preparation	Demolition, Site Preparation, Grading and Fine Grading	NA	LS	\$50,000	\$75,000	
Utilities	Utilites to washroom building.	NA	LS	\$150,000	\$200,000	
Shoreline Restoration Habitat Island Creation (Not Included in Total)	Shoreline restoration project in the mudflats, to improve resilience to sea level rise and create habitat.	3500	Square Metres	\$600,000	\$750,000	

Totals Including Shoreline Restoration

25% Soft Costs	Professional Consultant Fees, Permitting, Owner's Costs, Etc	NA	LS	\$512,500	\$723,750
20% Contingency (Design and Construction)		NA	LS	\$492,500	\$683,750
4% Construction Cost Escalation to 2026		NA	LS	\$192,400	\$268,200

Total \$3,247,400 \$4,570,700

Totals Excluding Shoreline Restoration

25% Soft Costs	Professional Consultant Fees, Permitting, Owner's Costs, Etc	NA	LS	\$362,500	\$536,250
20% Contingency (Design and Construction)		NA	LS	\$342,500	\$496,250
4% Construction Cost Escalation to 2026		NA	LS	\$120,400	\$178,200

Total \$2,275,400 \$3,355,700

6.2.2 Methodology for Predicting Cost Range

In order to check our cost exercise against real world examples, the costs of other parks of varying complexity and size have been compared.

Parks were ideally selected due to their comparable elements to this project. Waterfronts, complex topography, small park buildings, and beaches. Three of the comparisons are based in the same market, two in Toronto, and one in Vancouver Washington.

They vary from very urban, New Westminster Pier Park, to very natural, New Brighton Salt Marsh. Costs per acre were derived from total construction costs (which were all adjusted for inflation and currency to 2024).

Sheffield Park in Coquitlam was considered to have the most similar qualities given that it is located on a very steep slope and includes a small washroom building set into a hillside and new playground. That park is however a new park and is not based in an environmentally sensitive context. Though this makes some things easier, Old Orchard Park may be finished in a less manicured and more naturalized manner.

Through this method, a target budget per square acre was estimated for Old Orchard Park, considering the relative complexity and park type.



Old Orchard Park area being costed: 2.1 Acres (area where improvements are planned)

Recommended total budget range

\$3,150,000-\$6,300,000 Recommended budget range per square acre

\$1,500,000-\$3,000,000

This exercise resulted in a higher cost range than our itemized cost opinion.

We can consider that the total budgets for parks, shown in this analysis, include the acknowledged exclusions as well as many hidden or unexpected costs that would result in a final total cost that exceeds what was originally estimated.

The two exercises are helpful in that they come to conclusions that are not too dissimilar through different methods.

Precedent Park Budget Comparisons *all costs adjusted for currency and inflation/construction escalation to 2024



New Westminster Pier Park (Urban Waterfront, Complex, Remediation) 7.3 Acres

Total Budget

\$54,800,000

Cost Per Acre

\$7,500,000



Vancouver WA Waterfront (Urban Waterfront, Natural Shore, Varied) 8.9 Acres

\$44,570,000

\$5,008,000



HTO Park, Toronto (Urban Waterfront, Lawn, Pathways, Beach)

\$20,000,000

\$3,510,000



Corktown Common, Toronto (Urban, Natural, Pavilion, Play, Wetlands) 8.9 Acres

\$43,500,000

\$4,888,000



Sheffield Park, Coquitlam (Neighbourhood Park, Steep Slopes, Play, Water) 2 Acres

\$4,260,000

\$2,130,000



New Brighton Salt Marsh (Shoreline Restoration) 4.9 Acres

\$5,000,000

\$1,020,400