

DATE OF MEETING July 26, 2021

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SUBJECT WATERFRONT WALKWAY – DEPARTURE BAY UPDATE

OVERVIEW

Purpose of Report:

To provide Council with background information on the Departure Bay Waterfront Walkway project and to present a summary of the online engagement completed in June 2021.

BACKGROUND

The Waterfront Walkway Project is a Council priority and has been identified in each of the last three Strategic Plans. The 2019-2022 Strategic Plan identifies the feasibility work and conceptual plan for an on-beach option for the Departure Bay waterfront walkway as a priority under the Economic Health Pillar. The November 2020 report from the Mayor's Task Force on Recovery and Resilience noted the project as a priority for Strategic Investment.

In 2017, the City completed an overall Waterfront Walkway Implementation Plan that built on the goal of creating a continuous waterfront walkway from Departure Bay to the Nanaimo River Estuary. In that plan, the Departure Bay and Newcastle Channel sections of the waterfront walkway were identified as priorities. In 2018, a functional design was completed for an elevated walkway along a portion of Departure Bay. After a Value Engineering Assessment of the project, it was recommended Council consider an on-beach option to reduce project costs.

At the 2019-APR-08 Council meeting, a Staff report was presented to Council outlining the steps required to examine the viability of an on-beach walkway for a section of the waterfront walkway from Battersea Road to the BC Ferries Departure Bay Terminal.

Council, at their 2019-MAR-18 meeting, allocated \$400,000 from the 2018 general surplus to fund the Departure Bay waterfront walkway feasibility study and functional design. The goal of the assignment is to provide Council with the associated costs, impacts, and benefits of the project, which will aid Council in making a decision to advance the project.

Staff issued a Request for Statement of Qualifications on 2019-APR-24 for a consultant team to undertake the assignment. The work was awarded to a team led by McElhanney Ltd. The respective roles included:

- *McElhanney Ltd.* – project management, civil engineering, geotechnical engineering, and land surveying.
- *Lanarc* – landscape architecture, waterfront walkway and trail design, environmental design, 3D modelling, and visualization.

- *Northwest Hydraulics Consultants Ltd.* – coastal engineering, geomorphology, and computational modelling.
- *Aquaparian Environmental Consulting Ltd.* – terrestrial and marine water assessment.
- *Drdul Community Transportation Planning* – active transportation planning.
- *RB Engineering Ltd.* – electrical engineering.
- *Golder Associates Ltd.* – archaeological assessment.

DISCUSSION

The project was separated into two phases. The first phase tasked the consultant team with determining if the construction of an on-beach waterfront walkway in Departure Bay was technically feasible. The second phase involved developing a functional design for the project to aid in future permitting and tendering.

The feasibility study included extensive data collection and modelling to better understand the technical challenges and potential design opportunities that could be employed to address those challenges. The study area included both the foreshore and adjacent lands within Departure Bay.

The table below summarizes the key findings from the data collection:

| Technical Challenge | Issue | Design Opportunity/Consideration |
|---|---|--|
| Wind, Current, and Wave Modeling | The project needs to account for storm surge, storm wave run up, and freeboard. Modelling of Departure Bay shows impacts during various weather events. | Raise the walkway to account for wave action. Use a gradual slope to reduce wave action. Use headlands/reefs to break wave action |
| Sea Level Rise | Local sea level rise is predicted to be 0.60m in 50 years. Sea level rise was incorporated into the wave modelling. | Incorporate sea level rise into project for 50-year horizon. Design with ability to adjust the height when trail needs to be resurfaced. |
| Geotechnical Concern with Cilaire Bluff | There is slope instability in certain areas along the Cilaire Bluff that could result in slumping and vegetation falling. | Mitigate the erosion of the toe of slope and adjust the alignment to minimize the risk of debris from slope failure in select locations. |
| Environmental Values of Shoreline | Work on the foreshore will impact existing habitat. Most of foreshore is considered low-value habitat. | Must design the walkway to ensure no net loss of habitat. The project should be designed to ensure a net gain of habitat. |
| Archaeological | A known archaeological site (low significance as defined by the project archeologist) could be impacted by the project. | A site alteration permit will be required. Ensure early involvement from Snuneymuxw First Nation. |

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| Permitting | Construction of the walkway on the foreshore will require permits from Department of Fisheries and Oceans (DFO) and a lease/licence/right-of-way from the Province of BC. Approvals also required from BC Ferries, Transport Canada, and the Regional District of Nanaimo. | Permitting requires detailed design work to be completed. Both DFO and the Province will require consultation with local first nations and preferable consent from Snuneymuxw First Nation. |
| Riparian Rights | There are 30 private property owners along the Cilaire Bluff that have riparian rights. Construction of the on-beach option requires each homeowner to provide consent for the project. | The City should undertake an acquisition program to acquire the riparian rights from the property owners, in advance of permitting. |

Upon completion of the data collection, the consultant team prepared a functional design that incorporated pedestrian and cycling facilities within the walkway, as prescribed in the Waterfront Walkway Implementation Plan. This includes, at a minimum, a separate 3m-wide path for pedestrians and a 3m-wide path for cyclists, with beach restoration following green shores principles.

Other critical design direction included:

- Set the walkway elevation to provide flood protection for the 50-year event, based on historic conditions, with allowance for future sea level rise;
- Design the walkway to be resilient under flooding conditions;
- Make allowance for future upgrades, as warranted, to accommodate sea level rise;
- Design a structure to protect the public from minor slide events and allow for clean up after minor slide events;
- Risks associated with extreme storm events that flood the walkway will be addressed through operational procedures that may include temporary closures until the storm subsides (this event could occur once every five years); and
- Design the works on Crown Land, where possible, to avoid impact on adjacent private property.

Cost Estimate and Funding

The total value of the project is estimated in the order of \$25,000,000 to \$30,000,000, including property acquisition and bonding requirements with the Department of Fisheries and Oceans.

The 2021-2026 Financial Plan identifies the project as being funded through borrowing. Staff would also apply for grants to help reduce the overall cost to Nanaimo taxpayers. Borrowing for the project would require approval of the electorate.

Online Engagement Summary

Council directed Staff to provide the public with an update on the project using the City's online engagement platform. A project website was created using www.getinvolvednanaimo.ca, which provided background information on the project, videos, and a survey to capture feedback on the project.

The survey was open from 2021-JUN-11 to 2021-JUN-30. A total of 2,541 responses were received during the period.

The findings of the survey are contained in Attachment A.

The key messages from the survey were as follows:

Survey Distribution

- Good response to the survey from across the city, with 1039 responses from the broader Departure Bay area.
- 123 immediate neighbours to the project responded to the survey.
- Relatively even age distribution to the survey from age 30 to 80.

Previous Involvement in Waterfront Walkway Project

- The majority of the participants (1,756) had not been involved with the previous Waterfront Walkway Implementation Plan engagement.

Use of Proposed Walkway

- Respondents noted a range of reasons they would use the Departure Bay waterfront walkway, including for exercise, access to the beach, wildlife viewing, to walk/cycle to shops/restaurants outside Departure Bay, and to socialize.

Important Design Elements

- The following design elements solicited the most support from the public: greenery, including trees and plantings; access to the waterfront; separation of cycling and walking users; design for all ages/abilities; lighting that avoids light spill; and seating/picnic areas.

Elements of Concern

- The top elements of concern include: protection of existing riparian and shoreline areas, operations and maintenance, active transportation enhancements, considerations for climate change (sea level rise, high tides, storm water), and waterfront access.

Project Support

- 79.9% of respondents strongly support or support the project; 15% of respondents do not support the project or strongly do not support the project.

Funding Options

- Survey participants were asked which funding options they agree with most. Exploring opportunities for grants showed strong support. Around half of participants supported the use of reserve funds and borrowing.

Future Council Decision Points

The following next steps are anticipated in advancing the project:

- Fall of 2021: The project will be presented with other key capital projects in the community. Council will then be in a position to evaluate the major capital investments envisioned for the community in the coming years and explore funding opportunities and prioritization.
- Fall of 2022/Spring of 2023: If Council wishes to proceed with the project, Council will be asked to hold a referendum to secure public support to fund the project via a borrowing bylaw. The cost of the referendum is approximately \$150,000. Council may wish to hold the referendum during the election in October 2022 to not incur the costs of the referendum.
- Spring 2023: The project would proceed if approved by the electors. Next steps would include:
 - property acquisition program;
 - completion of detailed design; and
 - submission of permit, land tenure, and grant applications, which may take upwards of 18 months for approval.
- Spring/Fall 2024: Tendering and construction of project (18 – 24 months to complete construction).

If Council wishes to proceed with the project, Staff recommend that additional consultation be held with the community on specific design elements, and property owners adjacent to the project are engaged by the project team in advance of the approval of the electorate. The use of an E-Town Hall might be another option for Council to consider for broader engagement.

CONCLUSION

The feasibility study and the draft functional design for the on-beach waterfront walkway in Departure Bay has shown the concept is viable and can be constructed in a manner that will have a net-positive benefit to the marine habitat and environment.

Online engagement completed in June 2021 for the project has shown strong support from the general public, with concerns raised by immediate property owners to the project.

Staff will return to a future Council meeting in the fall of 2021 to present this project with other major capital projects for Council's consideration and direction on next steps. |

SUMMARY POINTS

- The Waterfront Walkway Project is a Council priority and has been identified in each of the last three Strategic Plans.
- The 2019-2022 Strategic Plan identifies the feasibility work and conceptual plan for an on-beach option for the Departure Bay waterfront walkway as a priority under the Economic Health Pillar.
- A functional design for the Departure Bay Waterfront Walkway project would include both pedestrian and cycling facilities and new access points to Departure Bay beach.
- The project is estimated to cost \$25,000,000 to \$30,000,000.
- The City's public engagement platform was used to solicit feedback and interest in the project in June of 2021. A total of 2,541 responses were received to the survey.
- There is still strong support for the project by the general public, but concerns have been raised by the immediate property owners.
- The Departure Bay Waterfront Walkway project will be presented with other key capital projects in the fall of 2021 for Council's consideration.
- If Council wishes to proceed with this project, it will require the approval of the electorate through either a referendum or alternative approval process.

ATTACHMENTS

ATTACHMENT A: 2021 Online Engagement Summary |

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