

JERICHO PUMP STATION REPLACEMENT PROJECT IN JERICHO BEACH PARK

Park Board Committee Meeting Monday, July 18, 2022

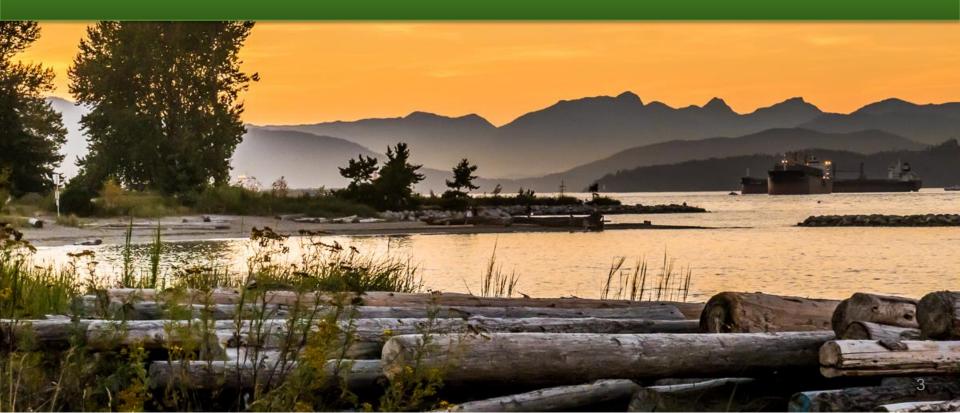


Purpose of Presentation



The purpose of the presentation is to inform the Park Board on the replacement of the below ground Jericho Pump Station and seek decision on the recommendations.

Jericho Pump Station



Existing Conditions of Jericho Pump Station



- Located on the east side of Jericho Beach Park at W 2nd Avenue.
- The existing pump station is an underground pump station.
- The Pump Station has reached the end of its useful service live and needs to be replaced.



Existing Conditions of Jericho Pump Station





Why Replace?



Reasons for replacement the existing Pump Station:

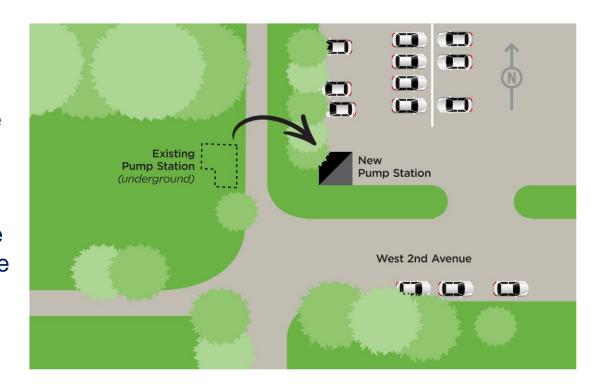
- **Exceeded service life:** Built in 1977, the existing pump station is 45 years old and has reached the end of its useful service life.
- **Pump Station Failure:** Replacement of the pump station will minimize the risk of sewage spills into the Burrard Inlet and impacts to the local environment.
- **Health and Safety:** The pump station at its current state does not meet WorkSafeBC requirements (Confined Space Regulations).
- Repair difficulties and long lead time for replacement components: The current pump station is a Smith & Loveless type station with non-standard, proprietary components, and will be difficult to repair when components fail.
- **Resilience:** Replacing the station is an important part of ensuring Vancouver's infrastructure is well-managed and resilient (i.e. Improved resiliency including seismic design, back-up generator, and flood protection).

Construction Considerations – New Location



The new above ground pump station will be constructed at the southwest corner of the Jericho Beach East parking lot.

Impacts to the park green space will be reduced and more flexible usage of the space will be provided for the public.



Construction Steps



The Jericho Pump Station project includes:

- Removal of one Red Alder tree in fair condition near the southwest corner of the Jericho Beach East parking lot.
- Removal of 10 to 13 parking stalls in Jericho Beach East parking lot:
 - 6 to 8 permanent removals
 - 4 to 5 temporary removals during pump station construction
- Temporary bypass pumping installation.
- Deconstruction of the existing pump station.
- Construction of a new above ground pump station

A traffic management plan will be prepared by the contractor and approved by the City of Vancouver before commencement of work to address and minimize the traffic impact during construction.

The Contractor will maintain the parking lot entrance from W 2nd Avenue for the public.

Public Benefit



- Park green space: Impacts to the park green space will be reduced and more flexible usage of the space will be provided for the public.
- Architectural design & Proposed public features: The aesthetics of the new above ground pump station will be designed to integrate and fit in with the surrounding environment.
- Sustainability and storm water management: Possible additions may include a bio-retention garden to capture runoff from the building and from the parking lot. Additions have been relayed to the project consultant to determine feasibility.

Public Benefit



Proposed public features:

- An educational panel on the building, similar to the installation at Glen Pump Station in China Creek Park North.
- A \$50,000 financial contribution towards improvements to the Seaside Greenway termination in Jericho Beach Park. The Seaside Greenway improvement will be managed separately by Park Board staff.
- Electric vehicle charging stations, subject to overcoming technical electrical and pump station resiliency concerns. If incorporating the charging stations proves unfeasible, the Engineering project team will work with Park Board staff to deliver alternate public benefit additions of equivalent value.

First Nations





- Project team presented project to Musqueam, Squamish and Tsleil-Waututh (MST) on February 18, 2020.
- Progress reports submitted to MST on September 9, 2020, June 9, 2021, and April 21, 2022.
- The First Nations has not expressed any major concerns.
- The Project Team is in continuous communication with First Nations Representative to monitor feedback from First Nations.

Community Engagement



- Notification letter distributed to local residents on March 31, 2022. The active engagement with the residents closed on May 13, 2022. The notification letter included 3 blocks (Alma St and W 4th Ave)
- No major concerns were identified through the notification process
- The project team will relay their recommendations to the Consultant and will continue to monitor comments from the residents.

Next Steps



Preliminary Schedule

The Jericho Pump Station construction will take approximately 18-20 months.

- Construction to start in Q2 2023 until end of Q3 2024
- Total completion in Q4 2024

2022				2023				2024			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Design				Procurement	Construction						Restoration

Recommendation



- A. THAT the Board approve the replacement of the below ground Jericho Pump Station with a new above ground pump station and building in Jericho Beach Park as described in this report; and
- B. FURTHER THAT the Board authorize the establishment of a right of way agreement for the development and operations of the new pump station facility and other sewage infrastructure in form and content satisfactory to the Park Board General Manager, City Engineer, and Director of Legal Services.

