GREATER VANCOUVER
WATER DISTRICT'S
STANLEY PARK WATER
SUPPLY TUNNEL PROJECT Agreements

Park Board Committee Meeting Monday, July 17, 2023





Purpose of Presentation



- To seek the Vancouver Board of Parks and Recreation (the "Park Board")
 delegation of the Park Board's authority to negotiate and execute the Park Board
 Land Use Agreements to the General Manager of Parks & Recreation.
- To seek the Park Board's consent to the City executing the City Land Use Agreements and the Compensation Agreement.
- To seek the delegation of the Park Board's authority to draft and send any letters on behalf of the Park Board regarding the Park Board's consent to GVWD constructing the Project, including to the other parties that must consent in order for GVWD to construct the Project.
- To seek the Park Board's consent to the construction of the Project, subject to the conditions listed in Recommendation B.

Stanley Park Significance



- 405-hectare natural West Coast rainforest that receives an estimated 18-20M visits a year. It is one of the largest urban parks in North America, with boundaries defined by natural and built elements, including the iconic Stanley Park seawall.
- Stanley Park accounts for 70% of Vancouver's remaining natural area, which accounts for only 4% of the overall land in Vancouver. Combined with its significant coastline and foreshore areas, the park is the most significant contributor of habitat and biodiversity for the entire city.
- The park has historical and ancestral significance to the Nations whose territories overlap this important space. The park has been home to host First Nation settlements, congregations, ceremonies, governance and food systems with family lineages going back over millennia.

Stanley Park Significance





Background



- Greater Vancouver Water District's ("GVWD") is seeking the Park Board's and the City's consent to the Project
- The Project involves:
 - Construction of a tunnel under Stanley Park
 - Installation of a new water main within the tunnel
- New water main will carry water from Capilano Reservoir in North Vancouver to Vancouver, Richmond, other neighbouring municipalities and First Nations communities.



CAP 5 Key Project Statistics



- Park Board (VPBR) is in facilitating role for GVWD led project in Stanley Park.
- Existing Capilano 4 water main is around 90 years old, a major leak occurred in 2016, at end of serviceable lifespan
- New water main: Capilano 5 regionally important for growing population
- 2.6m diameter, 1.4 km long, 35-50m underground, seismically resilient
- Three main construction sites using a total of 1.8 hectares of park land for the duration of the construction project
- 5+ years of construction and restoration, \$340M estimated GVWD capital cost

Cap5 Project Location





Impacts and Mitigation Measures



- The construction of CA5 will result in a number of impacts to the Subject Lands, including the removal of: trees, park amenities, biofiltration area, the dis-used former animal hospital and realignment of the Stanley Park Works Yard entry with the last two impacts as benefits to the park.
- Additionally there will be temporary closure and/or modification of existing pathways and trails, active transportation routes and traffic flow changes, parking lot closures during the project, and increased use and wear of parking lots, roads, the entry roundabout and other accommodating infrastructure.
- Staff worked with GVWD to address project impacts and a detailed list of impacts and mitigation measures is found the report, including: project-wide measures; archaeological /cultural resource measures; noise mitigation measures; environmental measures and traffic management measures.

Next Steps



- Pending Park Board and City Council decisions, construction start is anticipated late 2024 for a duration of 5 years.
- At construction completion GVWD will undertake a basic restoration of each construction site. Park Board final restoration planning will begin approximately two years prior to the completion.
- Park Board staff will be engaging with the host First Nations, Stake Holders and the public for the final restoration of the construction sites.
- Final restoration will be governed by the Park Board's commitment to reconciliation and decolonization, and in alignment with approved policies and strategies.

Conclusion



- The construction of CA5 is necessary for the resilient supply of water to Vancouver and surrounding region and staff have undertaken due diligence in facilitating the project with GVWD.
- The statutory rights-of-way and temporary work spaces will result in loss of access to portions of the park for the duration of the Project and installation of permanent infrastructure will place limitations on future park use, though this infrastructure will be sited in locations where there is existing infrastructure to minimize impact.
- The statutory rights-of-way, S 219 covenants, short- and long-term licenses will result in loss of access to portions of the park for the duration of the construction of the Project, and will place permanent limitations on the Park Board's ability to redesign portions of the Subject Lands.
- Given the impacts of the construction project and the permanent encumbrances, the compensation that GVWD has agreed to pay the Park Board is considered reasonable, and the Acting General Manager of the Parks Board recommends approval.

Recommendation



- A. THAT the Vancouver Board of Parks and Recreation (the "Park Board"):
 - (i) authorize the General Manager of Parks & Recreation to negotiate and execute the land use agreements for the Greater Vancouver Water District's ("GVWD") Stanley Park Water Tunnel Project (the "Project") that are described in Part A of Appendix 4 of this Report (the "Park Board Land Use Agreements") for the properties that are described in Table 1 of Appendix 1 (the "Subject Lands") generally upon the terms and conditions that are described in this Report and upon the terms and conditions that satisfy the General Manager of Parks & Recreation, the City of Vancouver's General Manager of Real Estate & Facilities Management, and the City of Vancouver's Director of Legal Services;
 - (ii) consent to the City of Vancouver (the "City") negotiating and executing the land use agreements for the Project that are described in Part B of Appendix 4 of this Report (the "City Land Use Agreements" and, together with the Park Board Land Use Agreements, the "Land Use Agreements") for the Subject Lands generally upon the terms and conditions that are described in this Report and upon the terms and conditions that satisfy the General Manager of Parks & Recreation, the City's General Manager of Real Estate & Facilities Management, and the City's Director of Legal Services; and
 - (iii) authorize the General Manager of Parks & Recreation to negotiate and execute the compensation agreement for the Project that are described in Part A of Appendix 4 of this Report (the "Compensation Agreement") generally upon the terms and conditions that are described in this Report and upon the terms and conditions that satisfy the General Manager of Parks & Recreation, the City's General Manager of Real Estate & Facilities Management, and the City's Director of Legal Services.
- B. THAT the Park Board consent to GVWD constructing the Project underneath the Subject Lands, subject to the following conditions:
 - (i) GVWD, the City, and the Park Board execute the Land Use Agreements;
 - (ii) GVWD and the Park Board execute the Compensation Agreement; and
 - (iii) GVWD paying the Park Board the compensation under the Compensation Agreement.
- C. THAT the Park Board authorize the General Manager of Parks & Recreation to execute any agreements that are ancillary to the Park Board Land Use Agreements or the Compensation Agreement, to draft and send any letters on behalf of the Park Board regarding the Park Board's consent to GVWD constructing the Project, including to the other parties that must consent in order for GVWD to construct the Project, and to perform any related actions that the General Manager of Parks & Recreation considers desirable to effect such consent of the Park Board.
- D. THAT no legal rights or obligations will be created or arise as a result of the Park Board approving Recommendations A, B, and C unless and until GVWD and the Park Board execute the Park Board Land Use Agreements, GVWD and the City execute the City Land Use Agreements, and GVWD and the City execute the Compensation Agreement.





Appendix 3: Project Impacts and Mitigation Measures – Project Wide



- Minimizing surface impacts to Stanley Park and Lost Lagoon by using a tunnelling construction methodology and limiting the number of excavation areas to only what is needed to complete the work
- Wherever possible, locating new excavations and infrastructure in areas of Stanley Park that been previously disturbed, to reduce impacts to natural areas
- Requiring excavation of the tunnel from the centre shaft to minimize impacts at the Burrard and Chilco Street shaft sites, which are more sensitive from an archaeologic and social impact perspective

Appendix 3: Project Impacts and Mitigation Measures – Archeology



- Developing a Project-specific chance find protocol and ancestral remains policy
- Requiring the use of First Nations monitors for ground disturbance activities
- Minimizing site footprints at Burrard Inlet and Chilco Street shafts sites
- Committing to develop a cultural awareness training video that will be viewed by Project staff
- Working with First Nations to support their cultural resources studies ahead of construction
- Developing engagement agreements with host First Nations

Appendix 3: Project Impacts and Mitigation Measures - Noise



- Conducted noise demonstration at the centre shaft site to provide an indication of the noise levels and extent that will occur during construction, allowing for early discussions on potential noise management measures
- Developing and implementing a Noise and Vibration Management Plan that considers proximity of the construction sites to wildlife and residents
- Excavating the tunnel from a central shaft to minimize noise impacts at Chilco Street
- Adhering to the City of Vancouver's noise bylaw requirements or approved variances to limit work in early mornings, evenings, weekends, and holidays
- Temporarily opening the Chilco Street cul-de-sac during construction so trucks can drive through the site and reduce the need for noisy back up alarms
- Performing continuous noise monitoring at the Chilco Street shaft site so noise management can occur in real time
- Requiring the construction contractor to turn equipment off when not in use and maintain equipment properly
- Constructing a sound barrier at the Chilco Street shaft site and the centre shaft site

Appendix 3: Project Impacts and Mitigation Measures - Environmental



- Conducting an arboricultural assessment and taking inventory of existing trees to ensure that trees, especially large and old coniferous trees situated in the area, are protected wherever possible
- Ensuring an arborist is on site to supervise any project work in or near tree protection zones
- Requiring a larger tree protection zone to be used than is required by VPB standards (12 times diameter at breast height), increasing the amount of arborist oversight during construction
- Constructing the centre shaft site and Burrard Inlet shaft site on top of previously disturbed areas of the park to minimize the number of tree removals
- Implementing an Invasive Species Management Plan to prevent the spread of these species
- Developing and implementing a Wildlife Management Plan and undertake a bioenvironmental impact assessment to ensure that wildlife in the area are protected

Appendix 3: Project Impacts and Mitigation Measures - Environmental



- Completing an Environmental Lighting Demonstration prior to proceeding with evening work at the Centre shaft site to confirm night lighting is in line with the Dark Sky Preserves requirements (from the Royal Astronomical Society of Canada)
- Considering migratory patterns, roosting and breeding seasons, along with the movements and paths of animals that reside inside the park when developing construction schedules
- Developing and implementing an Air Quality Management Plan that will comply with Metro Vancouver's air quality management bylaws
- Watering and sweeping the streets to help control dust and mitigate construction impacts
- Employing a third party Environmental Monitor to perform independent quality assurance checks on the effectiveness of environmental mitigation measures throughout construction

Appendix 3: Project Impacts and Mitigation Measures - Traffic



- Developing and implementing a Traffic Management Plan that will ensure that trucks accessing the shaft site work areas will enter and exit the area safely
- Ensuring that trucks enter the work areas via designated COV trucking routes
- Confirming all trucking routes in residential areas and Stanley Park with members of the COV and VPB ahead of engaging a contractor
- Confirmation of how the construction schedule will overlap with key Stanley Park events so appropriate guidance can be given to the contractor related to trucking restrictions and requirements for additional traffic control personnel

Burrard Shaft Site







Where: Central Shaft Area











Central Shaft Site Post-Construction Restoration Plan





Chilco Shaft Site











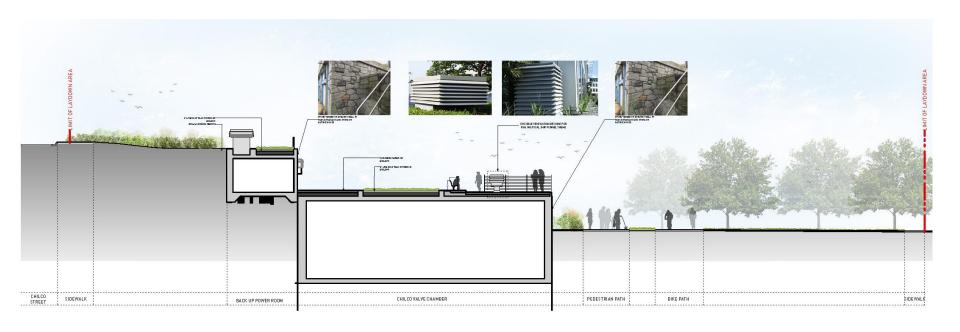
Chilco Site Post Construction Restoration Plan





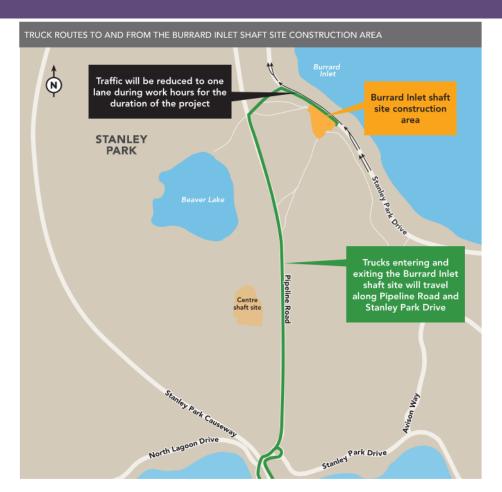
Chilco Site Section





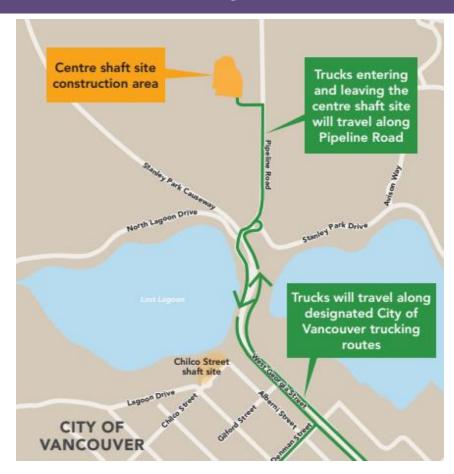
Burrard Site Traffic Pattern





Where: Central Shaft Area Traffic Management





Where: Chilco Shaft Area Traffic Management



