

PROJECT BACKGROUND

• Volunteer Park is the site of a historical stream that was covered when the city was developed. A small section of the stream still exists in Tatlow Park. The stream enters a culvert at Point Grey Road and discharges into English Bay via underground pipes.

• In 2003, the City commissioned an engineering firm to study the feasibility of daylighting Tatlow Creek. Findings showed that the restoration of the stream is feasible however, it is unlikely for the stream to be functional for fish habitat.



TATLOW CREEK WATERSHED



SITE CONTEXT

WATERSHED CONTEXT

• The historical Tatlow Creek, previously known as First Creek, flowed through the west of Tatlow Park and Volunteer Park before entering English Bay. Groundwater in the area supplied the stream with a steady flow of water year round.

• Due to urban development, the original Tatlow Creek was diverted and buried underground, and the natural watershed was replaced by underground pipes. This has resulted in a deeper water table and altered hydrological processes.

• Currently the watershed is comprised of residential and commercial areas, with a high percentage of impervious surfaces such as roofs and parking lots. The storm water runoff from these surfaces is directed by underground sewer pipes to the Iona Wastewater Treatment Plant, partly as a combined sewer system and partly as a separate sewer system.



1 VIEW OF THE EXISTING FORESHORE

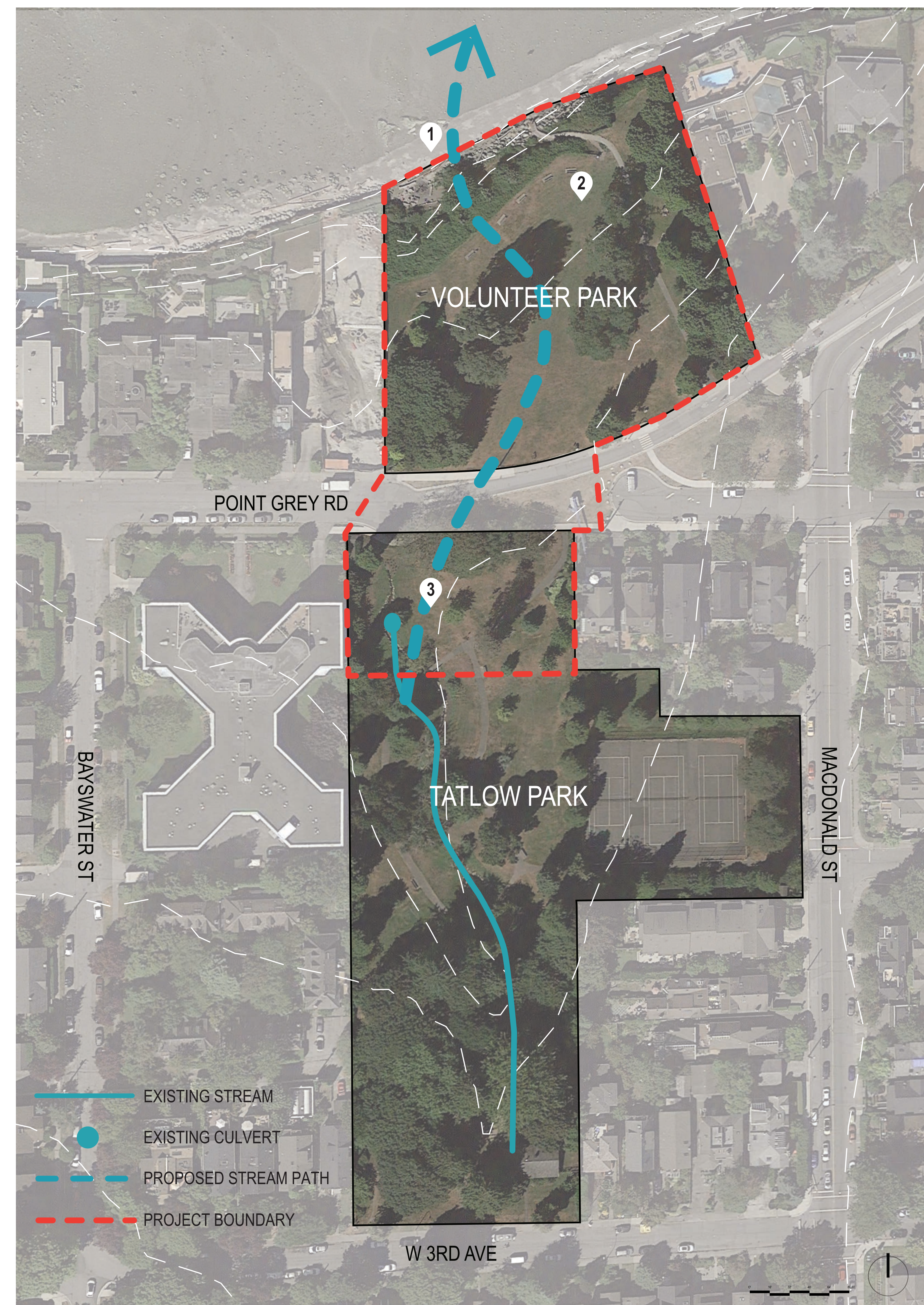


2 VIEW LOOKING SOUTH TOWARD VOLUNTEER PARK



3 VIEW LOOKING SOUTH TOWARD TATLOW PARK

PHOTOS OF EXISTING SITE CONDITIONS



PROJECT SITE AND BOUNDARIES

2

SITE OPPORTUNITIES AND CONSTRAINTS

VOLUNTEER AND TATLOW PARKS OPEN HOUSE | MARCH 8, 2017 | VANCOUVER, BC

OPPORTUNITIES

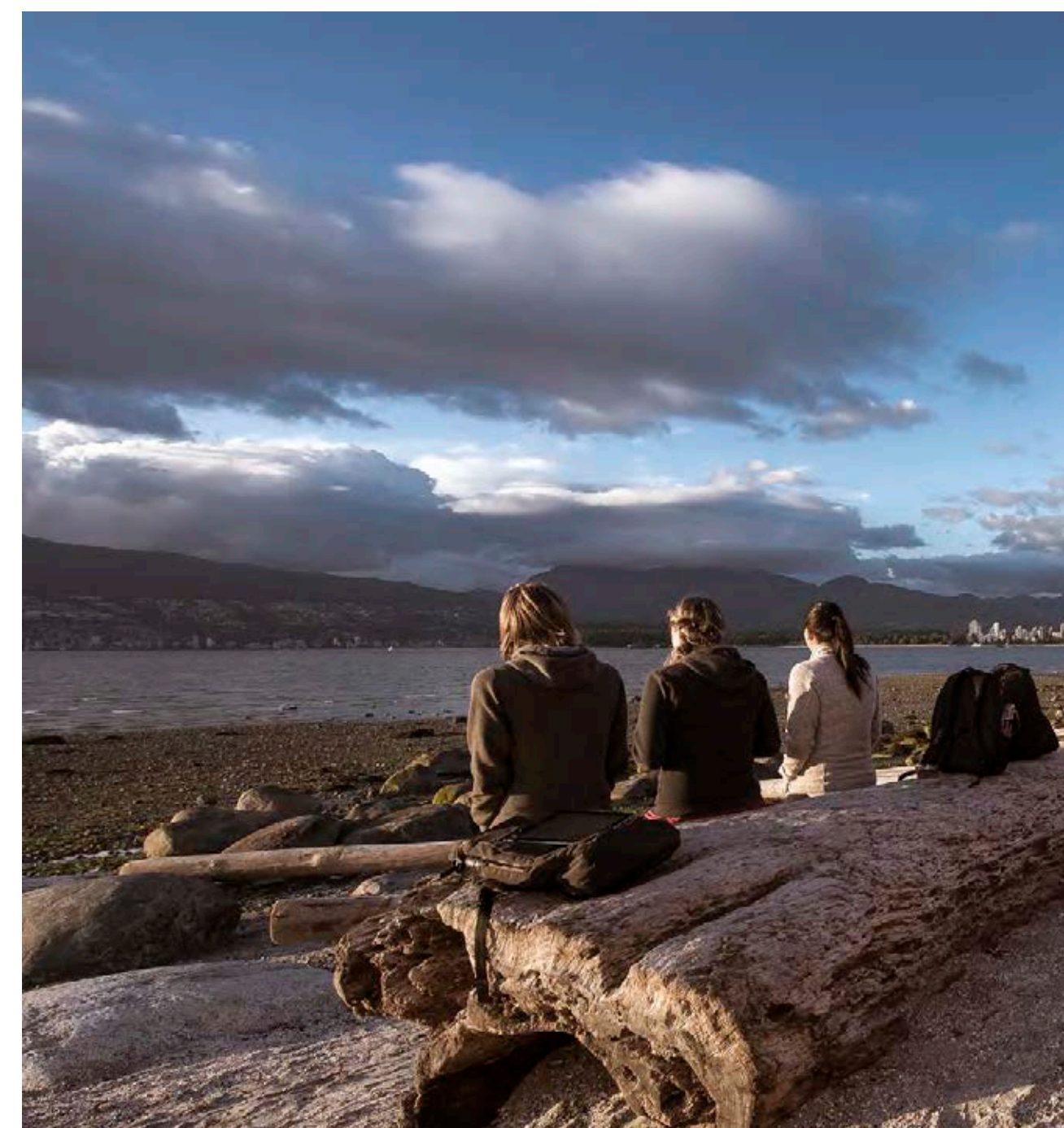
- Scenic views to ocean, mountains, and downtown.
- Natural site topography which facilitates creek layout
- Public access to foreshore and beach
- Large open space
- Naturalized foreshore
- Proximity to large park system



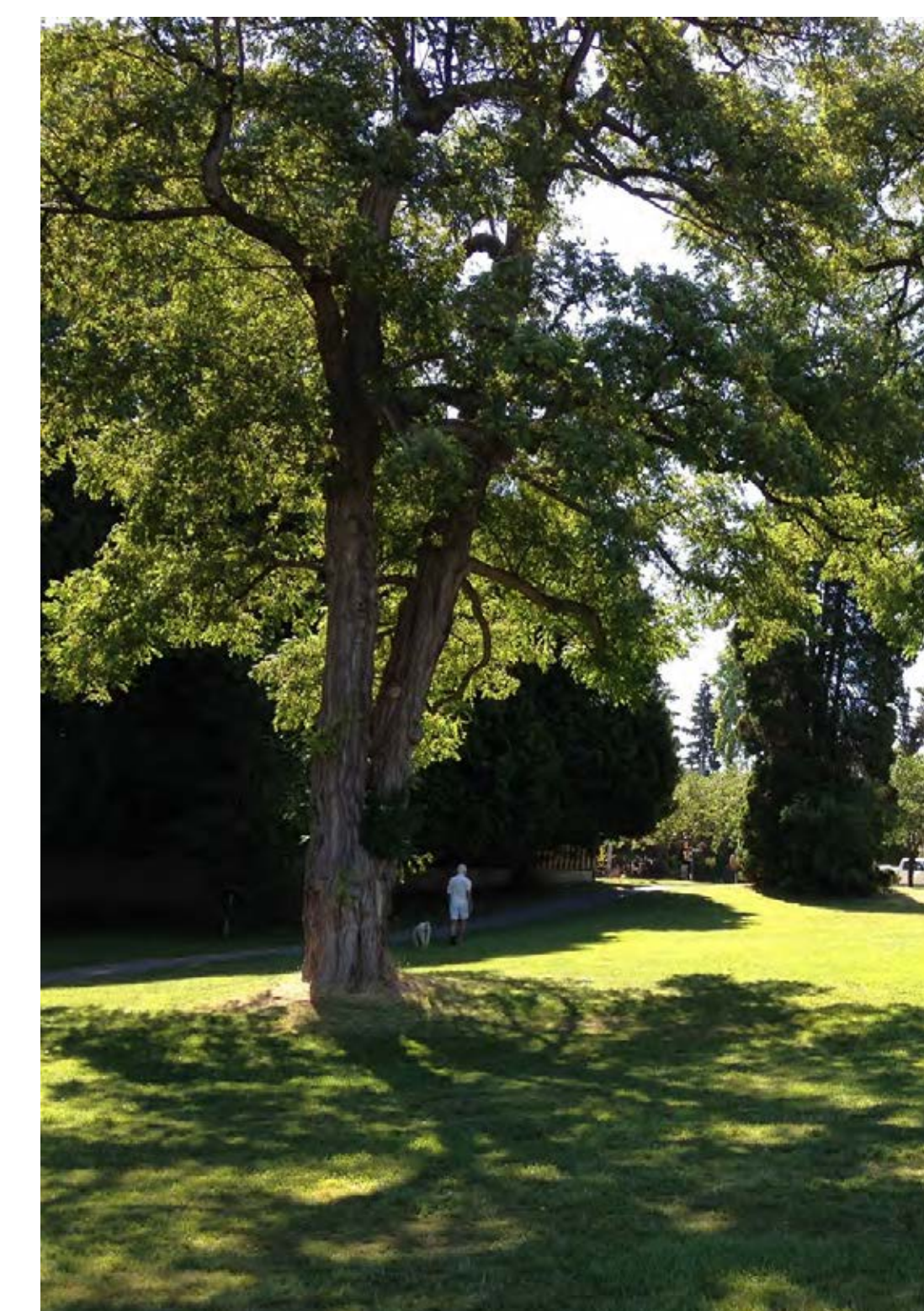
SCENIC VIEWS



SUPPORTIVE TOPOGRAPHY



PUBLIC BEACH ACCESS



LARGE OPEN SPACE



NATURALIZED FORESHORE

CONSTRAINTS

- Steep elevation change from park to shore
- Large existing trees in the park
- Existing utilities under Point Grey Road that must be avoided
- Fluctuations in water flow in stream and tidal variations on the shore
- Urban water quality
- No ramped access to shore
- Disconnect between park and beach



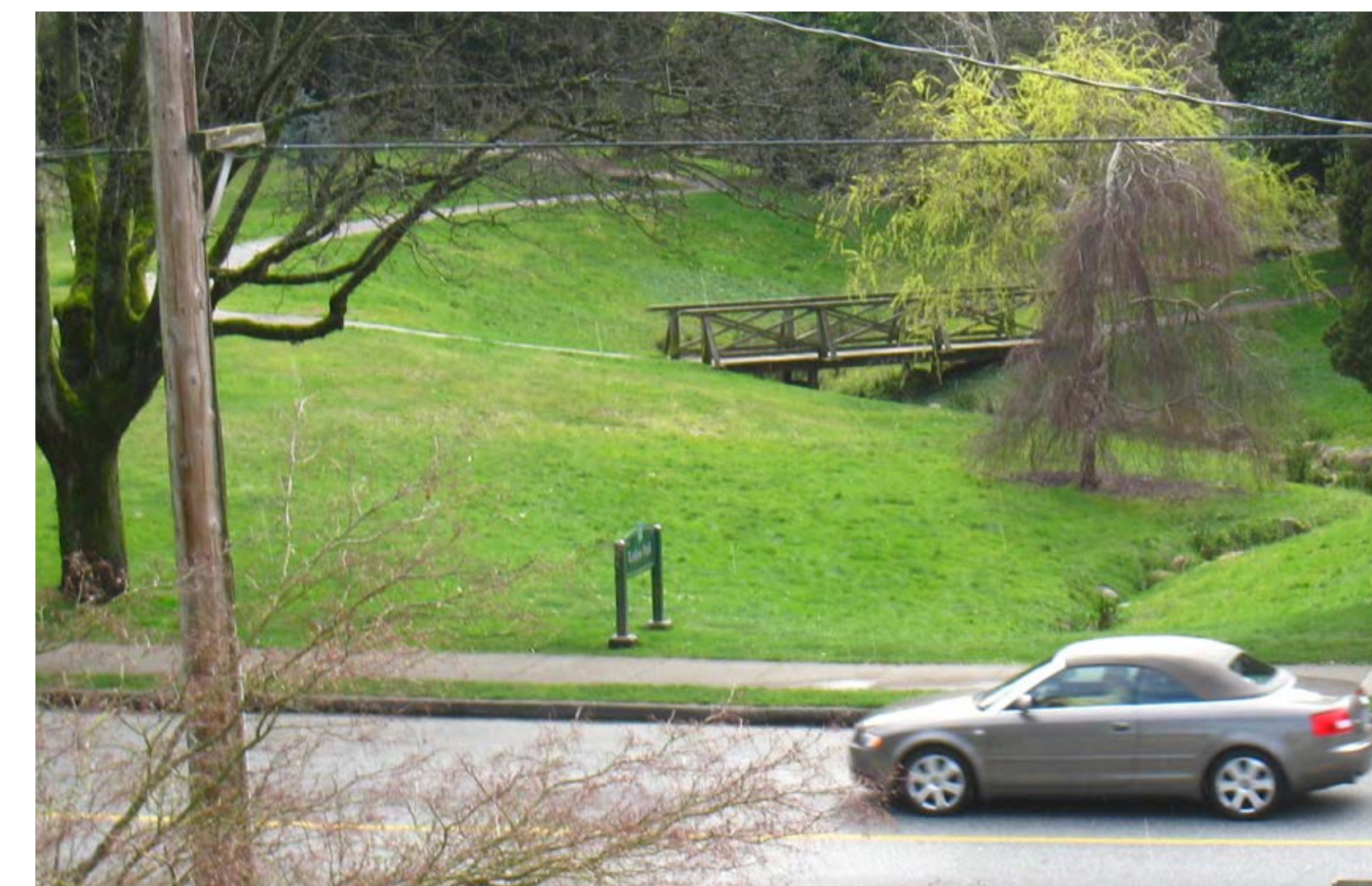
EXISTING PLANTED AREAS



LOW WATER FLOW AT TIMES



HIGH TIDES



EXISTING STREAM AND ROAD GRADES



LARGE EXISTING TREES



INVASIVE SPECIES



SHADED AREAS



POINT GREY ROAD + INFRASTRUCTURE BELOW



STEEP AND INACCESSIBLE GRADE CHANGE TO BEACH

3

DESIGN GOALS AND INTENTIONS

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PROJECT GOALS

- This project involves restoring the stream through the north end of Tatlow Park and Volunteer Park to re-connect it with English Bay.
- The restored stream will be fed with stormwater runoff from the adjacent catchment, which will be cleansed and filtered through a series of pools along the stream before draining into English Bay. Native planting along the stream will create riparian habitat for birds and pollinator species.
- The project will also include improvements to Volunteer Park to create an ecologically diverse green space and accessible waterfront access for pedestrians.
- The project supports the Vancouver Park Board's 'Biodiversity Strategy' as well as the City of Vancouver's Greenest City Action Goal 'Access to Nature' through native planting, reduced mowed lawn area, and the creation of habitat for bird and pollinator species.

PROJECT SCOPE

- Connect the existing stream in Tatlow Park to English Bay through Volunteer Park.
- Implement sustainable storm water management strategies.
- Improve the quality of water entering English Bay.
- Improve accessible pedestrian access to the shore.
- Increase biodiversity through the planting of native plants.
- Restore and enhance riparian and shoreline habitat.
- Providing educational opportunities for the community.
- Improve amenities including landscaping, pathways, benches, and picnicking areas.



5. OUTPUTS



4. RIPARIAN + DEPOSITION



3. AERATION



2. CLEANSING + FILTERING

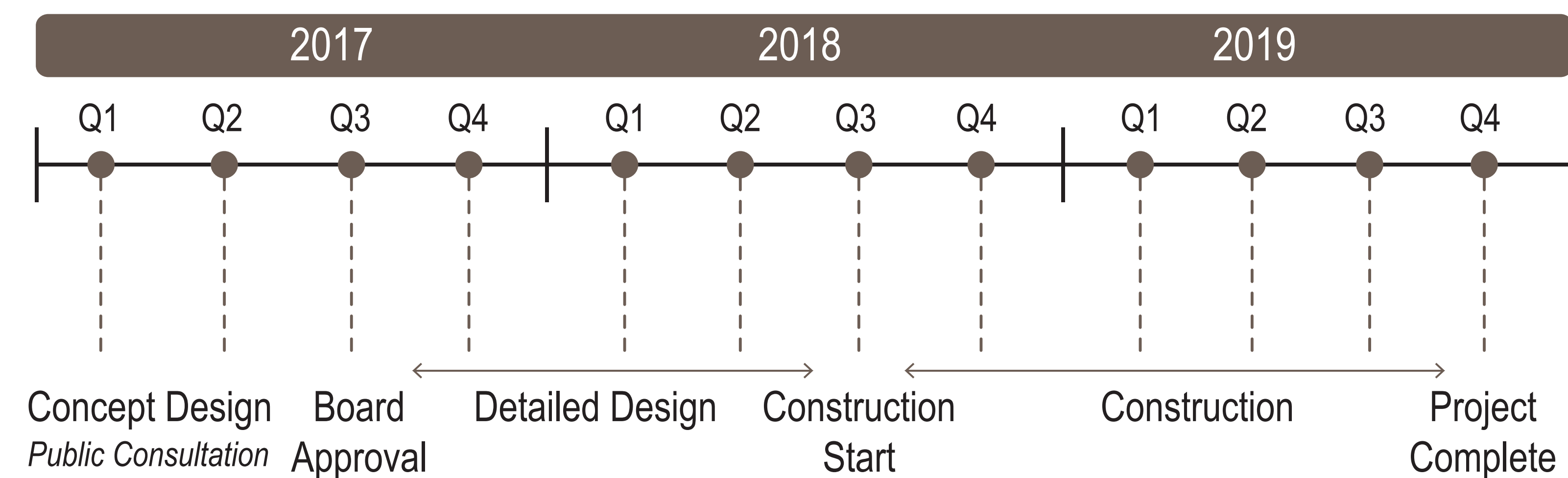


1. AERATION + SEDIMENTATION

STORMWATER FILTRATION PROCESS



TYPICAL CROSS-SECTION THROUGH STREAM



PROJECT TIMELINE

Contact: tatlowcreek@vancouver.ca

www.vancouver.ca/tatlow-stream-restoration

UNIQUE FEATURES

1. Daylighting of the stream starts at the wooden bridge in the north end of Tatlow Park.
2. Faux bridge element with stream culverted under the existing road.
3. Pathway runs along the east side of the stream.
4. Informal stream crossings (stepping stones).
5. Extensive native riparian planting near the stream.
6. Large grass play area.
7. Large natural meadow on the west side of the stream.
8. Interpretive signage.
9. Wooden bridge to connect both sides of the park and provide a lookout point.
10. Existing stairs to beach.
11. Bench seating looking out over the beach.
12. Naturalized public beach.
13. Slope re-graded for more gradual incline to beach.



CONCEPT A MASTERPLAN



CONCEPT A SITE SECTION



ENHANCED FORESHORE



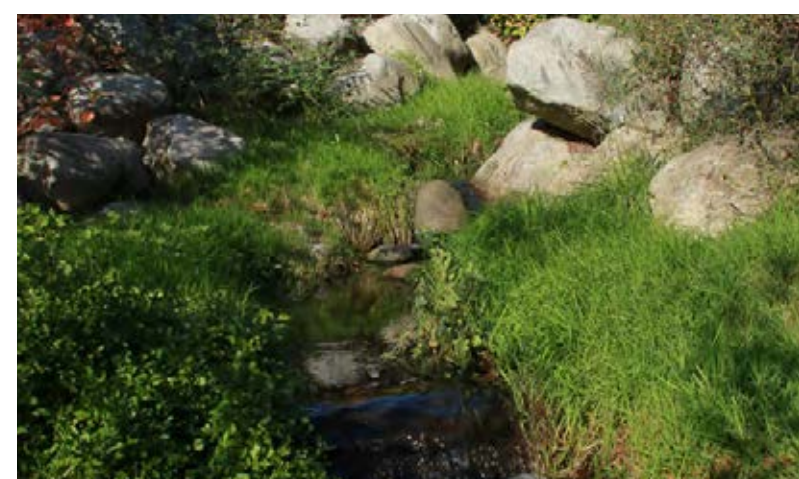
INFORMAL STREAM CROSSINGS



NATURAL MEADOW



BRIDGE LOOK-OUT



EXTENSIVE RIPARIAN PLANTING



INTERPRETIVE SIGNAGE



ENHANCED FORESHORE



RESTORED OCEAN VIEWS



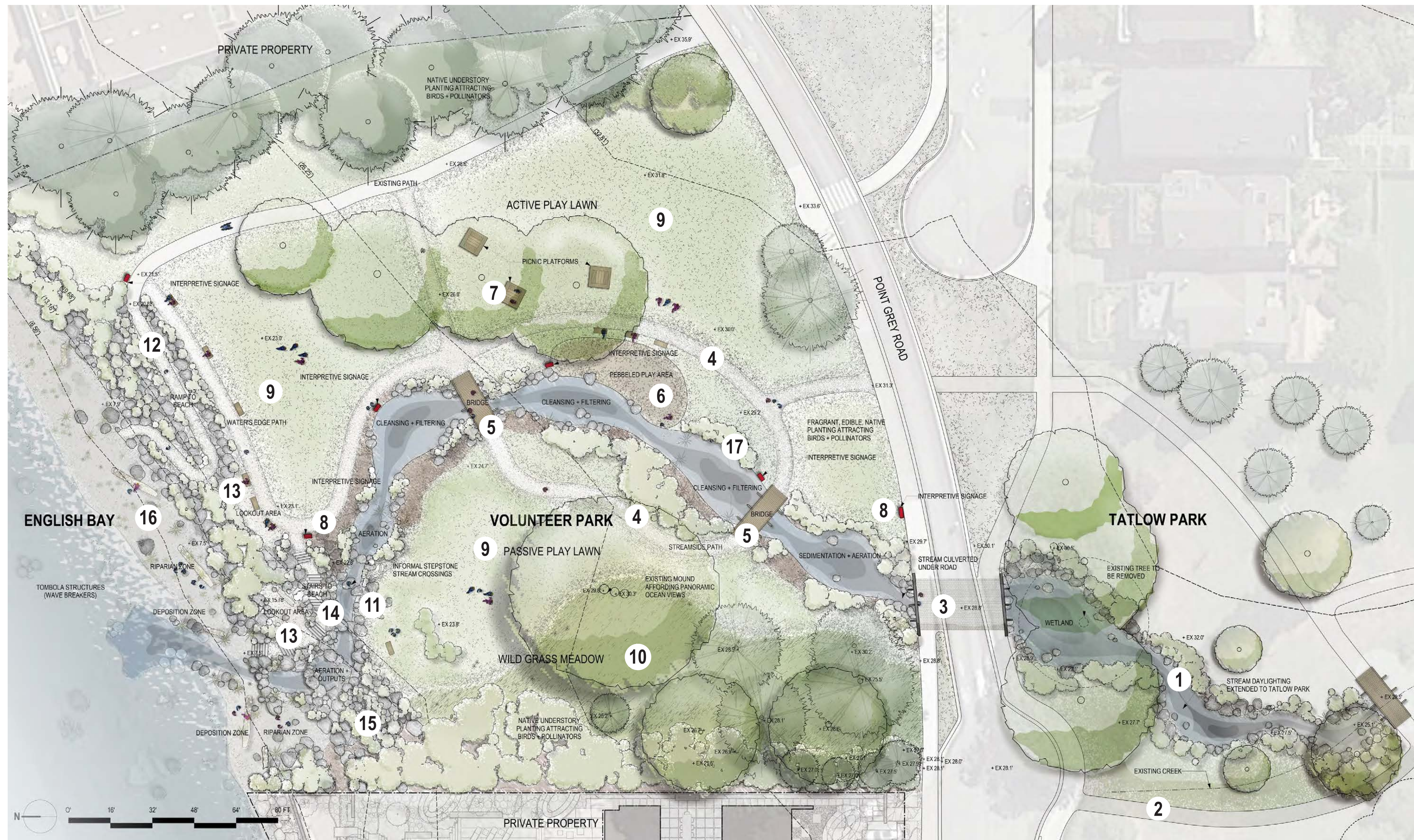
GATHERING SPACES

PERSPECTIVES

Contact: tatlowcreek@vancouver.cawww.vancouver.ca/tatlow-stream-restoration

UNIQUE FEATURES

1. Daylighting of Tatlow Creek starts at the wooden bridge in the north end of Tatlow Park.
2. New path in Tatlow Park on the west side of the stream for improved circulation.
3. Faux bridge element with stream culverted under the existing road.
4. Large network of pathways through the park on both the east and west sides of the stream.
5. Formal stream crossings (wooden bridges to connect both sides of the park).
6. Pebbled play area along stream for kids.
7. Picnic platforms under shade of existing trees with views to the north and west.
8. Interpretive signage.
9. Large grass play areas on the east and west sides of the stream.
10. Natural meadow under grove of existing trees only.
11. Informal stream crossing (stepping stones).
12. Existing stairs to beach replaced with an accessible ramp.
13. Formal lookout areas.
14. Stair access to the beach along the stream.
15. Slope from park to beach re-graded for a more gradual incline to the beach.
16. Naturalized public beach.
17. Selective native riparian planting along the stream.



CONCEPT B MASTERPLAN



CONCEPT B SITE SECTION

STAIR ACCESS +
BOULDERED SLOPEFORMAL LOOKOUT
AREASACTIVE + PASSIVE SPACES ALONG STREAM WITH
FORMAL BRIDGE CROSSINGS + PEBBLED PLAY AREAPATHWAY ALONG BOTH SIDES
OF STREAMBOX CULVERT
UNDER BRIDGE

CONCRETE PAVERS



CONCRETE INLAYS



PAINTED PATTERNS ON CONCRETE

SURFACE OPTIONS FOR POINT GREY ROAD BRIDGE



STONE STEPS TO SHORE



LAWN AREAS NEAR STREAM



MEADOW AND LAWN



PEBBLED PLAY AREA



PICNIC PLATFORMS



BOX CULVERT