DETERMINATION OF NON-SIGNIFICANCE

Description:

Lowman Beach Park Shoreline Restoration - Seattle Parks and Recreation is proposing to remove the failing seawall along the shoreline of the north half of the park. Once the seawall is removed, the shoreline will be restored to a beach to match the work that was done in 1995. The remnant of Pelly Creek that flows through the park in an 18-inch diameter pipe will be daylighted as part of the project. The existing tennis court that was constructed in the 1930s with funds from the WPA will be removed as part of the restoration project. Six (6) small trees along the shoreline will be removed and seven (7) new trees will be planted. Approximately

2,000 cubic yards of grading is proposed.

Proponent:

Seattle Parks and Recreation

Location:

Lowman Beach Park, 7017 Beach Drive SW, Seattle, WA 98136

Lead agency: Seattle Parks and Recreation

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

	There is no comment period for this DNS.
X	This DNS is issued under 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date of publication (September 12, 2019).
	Written comments must be submitted by

Responsible official: Jesús Aguirre

Position/title:

Superintendent, Seattle Parks and Recreation

Phone:

206-684-8022

Address:

100 Dexter Avenue North, Seattle, WA 98109

Signature:

Please contact: David Graves, Strategic Advisor, Seattle Parks and Recreation if you have questions or comments about this determination. Phone: (206) 684-7048; Fax: (206) 233-3949; or, e-mail: david.graves@seattle.gov. You may appeal this determination to Office of the Hearing Examiner at PO Box 94729, Seattle, WA 98124-4729 or 700 Fifth Avenue, Suite 4000, Seattle, WA 98104 no later than 5:00 pm on _ Octuber 3, Zoig by Appeal Letter and \$85.00 fee. You should be prepared to make specific factual objection. Contact the Seattle Examiner to read or ask about the procedures for SEPA appeals

City of Seattle

ANALYSIS AND DECISION OF THE SUPERINTENDENT OF SEATTLE PARKS AND RECREATION

Proposal Name: Lowman Beach Park Shoreline Restoration

Address of Proposal: Lowman Beach Park, 7017 Beach Drive SW, Seattle, WA 98136

SUMMARY OF PROPOSED ACTION

Seattle Parks and Recreation is proposing to remove the failing seawall along the shoreline of the north half of the park. Once the seawall is removed, the shoreline will be restored to a beach to match the work that was done in 1995. The remnant of Pelly Creek that flows through the park in an 18-inch diameter pipe will be daylighted as part of the project. The existing tennis court that was constructed in the 1930s with funds from the WPA will be removed as part of the restoration project. Six (6) small trees along the shoreline will be removed and seven (7) new trees will be planted. Approximately 2,000 cubic yards of grading is proposed.

SEPA DETERMINATION: Determination of Non-Significance (DNS)

BACKGROUND DATA

Lowman Beach Park is located on Puget Sound in the Morgan Junction neighborhood in West Seattle, just to the north of Lincoln Park on Puget Sound. The approximately 1.5-acre park is bordered to the north and south by private residential properties and the east by Beach Drive. The approximately 300 feet of park shoreline is characterized by a 140-foot long concrete seawall at its north end, with the remainder of the shoreline composed of a gravel beach and vegetated backshore. Major initial improvements to the park were completed by 1936, funded by the WPA, and included a comfort station (demolished in late 1980s), tennis court (remains), and stone-and-mortar seawall that extended along the entire shoreline. The north end of the original seawall failed and was replaced in 1951 with the existing concrete seawall; the southern end failed and was removed in 1995 and replaced with a gravel beach and retaining wall that extends landward (return wall).

A remnant of Pelly Creek flows under the park through an 18-inch diameter pipe and daylights in the failing seawall. There is also a 66-inch diameter storm drainage pipe that flows under the park and the seawall that discharges out in deep water. More storm drainage facilities associated with King County's Murry CSO are located in and under the southerly portion of the park. The park currently supports a range of active and passive recreation activities including tennis, beach exploring, sunset watching, picnicking, walking, swimming, windsurfing, nature viewing, stand up paddle boarding, and kayaking among others.

Lowman Beach Park contains identified Environmentally Critical Areas (ECAs) – Liquefaction and Flood Prone areas associated with the shoreline and upland area adjacent to the shoreline; Riparian Corridor associated with Pelly Creek.

PROPOSAL DESCRIPTION

Seattle Parks and Recreation (SPR) is proposing to address the failing seawall and restore the beach in that area. The north half of the original seawall failed in the 1950s and was replaced; the south half of the seawall failed in 1994 and was removed. The remaining segment began to fail in 2015 due to erosion at the seawall face. Nearby neighbors to the north have seen their seawalls lose material at the face and neighbors to the south have seen the deposition of additional material at their seawall face. The bulk of the shoreline in this area is armored which limits the amount of beach renourishment material available for movement up and down the shoreline. This current restoration project is designed to add additional beach materials that will move along the shoreline and add beneficial sands and gravels in the nearshore to the north of the park. The shoreline restoration project includes:

- Removing the existing seawall along the Puget Sound Shoreline that is failing and the accompanying retaining wall;
- Constructing a new seawall return near the northern boundary of the park;
- Restoring the backshore beach with native materials in place of the seawall and adding additional materials to mirror the natural processes that existed before the shorelines were armored;
- Removing the tennis court, grading and adding native shoreline plantings while maintaining access and recreation;
- Daylighting Pelly Creek through the park; and,
- Constructing ADA-accessible paths and landscaping in the upland portion of the park.

Construction would occur during typical daytime construction hours and would last for approximately 3 months during the summer/early fall. Construction access would be provided by the existing gravel paths. Construction activities include excavation and grading, demolition of the tennis court, removal of the seawall, and auguring piles for the new seawall. Construction equipment would likely include trucks, excavators, dozers, hydraulic hammer, air compressor, large mobile crane, drill rig and pile driving hammer. Work will be done from land; no barges are anticipated. All the applicable BMP's for construction site management will be applied to the areas where the work will take place. No areas of native vegetation will be disturbed; areas that are currently damaged or will be damaged during construction activities will be repaired and restored.

ANALYSIS - SEPA

Initial disclosure of potential impacts from this project was made in the applicant's environmental checklist, dated March 30, 2019. The basis for this analysis and decision is formed from information in the checklist, graphics and exhibits attached to it and the lead agency's familiarity with the site and experience with review of similar projects.

The SEPA Overview Policy (SMC 23.05.665) discusses the relationship between the City's code/policies and environmental review. The Overview Policy states, in part, "[w]here City regulations have been adopted to address an environmental impact; it shall be presumed that such regulations are adequate to achieve sufficient mitigation". The Policies also discuss in SMC 23.05.665 D1-7, that in certain circumstances it may be appropriate to deny or mitigate a project based on adverse environmental impacts. This may be specified otherwise in the policies for specific elements of the environment found in SMC 25.05.675. In consideration of these policies, a more detailed discussion of some of the potential impacts is appropriate.

Short Term Impacts

The following temporary or construction-related impacts are expected: hydrocarbon emissions from construction vehicles and equipment; increased dust caused by construction activities; potential soil erosion and potential disturbance to subsurface soils during site work; increased traffic from construction equipment and personnel; increased noise and displaced recreational

Several adopted codes and/or ordinances provide mitigation for some of the identified impacts. The Stormwater, Grading and Drainage Control Code requires that soil erosion control techniques be initiated for the duration of construction. Erosion will be prevented by implementation of a required Temporary Erosion Control and Sedimentation Plan. Best Management Practices, such as mulching and seeding will be implemented at the site to minimize erosion during construction. Puget Sound Clean Air Agency regulations require control of fugitive dust to protect air quality. The Building Code provides for construction measures and life safety issues. The Noise Ordinance regulates the time and amount of construction noise that is permitted in the city. Compliance with these codes and/or ordinances will lessen the environmental impacts of the proposed project. While there will be a short-term increase in greenhouse gas emissions during construction, overall usage of the park will not change.

The impacts associated with the construction are expected to be minor and of relatively short duration. Compliance with the above applicable codes and ordinances will reduce or eliminate most adverse short-term impacts to the environment. However, impacts to existing recreational uses, construction traffic, and construction noise warrant further discussion.

Recreation

During construction, a large portion of the park will be closed to the public. Park users will be directed to the area kept open during construction; the existing beach area will be accessible during the construction. There may be a short window of time when the entire park is closed, likely when heavy equipment and materials are being brought in and when the seawall is being demolished and removed. Park users will be notified of the construction impacts and any short-term closure(s) of the park. Lincoln Park is a short distance to the south and park users will be directed there as an alternate site. No significant short-term adverse recreation impacts are anticipated, and no mitigation is warranted or necessary.

Construction Traffic

There are adequate areas on-site for the construction crews and equipment. The site is adjacent to an arterial which provides convenient truck access consistent with the requirements of the Street Use Ordinance. As noted in the checklist, approximately 2,000 cubic yards of material would be excavated and stockpiled on site. If the excavated material meets the required specifications, up to 950 cubic yards of the stockpile material would be reused for beach nourishment and site grading. The rest of the material will be removed from the site and taken to an approved, offsite location. There will be limited construction traffic beyond equipment and construction workers entering and leaving the site such as material deliveries. Traffic associated with the construction is not anticipated to be significant and thus no conditioning is necessary or warranted.

Noise

Construction activities will be confined to weekdays. Hours of construction are limited by the Seattle Noise Ordinance, SMC ch. 25.08, to 7:00 a.m. and ten 10:00 p.m. on weekdays (SMC 25.08.425). The reality of the local construction industry is that contractors typically work from 7

a.m. to 4 p.m.; the likelihood that any construction activities will occur up to 10 p.m. is slight. The Noise Ordinance also regulates the loudness (dB) of construction activities, measured fifty (50) feet from the subject activity or device. The City has dedicated noise inspectors to monitor construction activities and respond to construction complaints. Compliance with the City's Noise Ordinance will prevent any significant adverse short-term noise impacts and thus no further conditioning is necessary or warranted.

Compliance with applicable codes, ordinances and regulations will be adequate to achieve sufficient mitigation.

Long Term Impacts

Recreation

Beach restoration activities include the permanent removal of the existing tennis court which is used predominantly by the neighbors. There are six (6) lit tennis courts located at Solstice Park, approximately ½ mile to the east. SPR is also looking to replace the tennis function in another area of the park, possibly the southeast corner although there may not be enough room for a full size court. Lincoln Park also has two tennis courts which have fallen into disrepair and are currently used by SPR crews for material storage. One of these courts could also be restored to replace the tennis function in the area. Given the other existing courts in the vicinity and the opportunity to potentially increase the capacity, no significant long term adverse recreation impacts are anticipated, and no mitigation is warranted or necessary.

Historic Preservation

As noted in the description the tennis court was constructed in the 1930s with funding from the WPA. The tennis court is the last remaining feature at the park that is associated with the WPA. The comfort station, seawall and swing set have all been removed and/or replaced. There is nothing particularly unique about a concrete tennis court and the method used to construct it. The court's construction as part of the historic funding and development of the park will be noted on the park website so the history of the park is not lost. The park is situated at an historic point and creek mouth, which raises the potential that the area may have been used by Native peoples. During the geotechnical investigation, a limited cultural resource survey was undertaken and no artifacts were found. SPR has inadvertent discovery protocols that will be incorporated into the bid specs so the contractor is made aware of the potential for discovering Native artifacts and what to do if this happens. No significant adverse Historic preservation impacts are anticipated and thus no mitigation is warranted or necessary.

Traffic & Parking

No change in the park operation is proposed. No significant adverse traffic and/or parking impacts are anticipated and thus no mitigation is warranted or necessary.

Upon completion of the project, no long term adverse environmental impacts are anticipated and thus no conditioning is necessary or warranted.

DECISION

This decision was made after the responsible official, on behalf of the lead agency, reviewed a completed environmental checklist and other information on file with the responsible department. This constitutes the Threshold Determination and final decision on application of SEPA's substantive authority and mitigation provisions. The intent of this declaration is to satisfy the requirement of the State Environmental Policy Act (RCW 43.21.C), including the requirement to inform the public of agency decisions pursuant to SEPA.

- (X) Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21C.030(2)(C).
- () Determination of Significance. This proposal has or may have a significant adverse impact upon the environment. AN EIS is required under RCW 43.21C.030(2)(C).

Signature:

David Graves, AICP

Strategic Advisor, Planning and Development Division

Seattle Parks and Recreation

Date: August 20, 2019

Lowman Beach Park Shoreline RestorationSEPA Checklist

June 27, 2019

PREPARED FOR:

SEATTLE PARKS AND RECREATION 100 DEXTER AVENUE NORTH SEATTLE, WASHINGTON 98109

PREPARED BY:

ESA 5309 SHILSHOLE AVENUE NW STE. 200 SEATTLE, WA 98107

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ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of the proposed project, if applicable:

Lowman Beach Park Shoreline Restoration

2. Name of Applicant:

Seattle Parks and Recreation

3. Address and phone number of applicant and contact person:

David Graves
Strategic Advisor, Seattle Parks & Recreation
800 Maynard Avenue South, 3rd Floor
Seattle, Washington 98134
206-684-7048

4. Date checklist prepared:

March 30, 2019, updated June 27, 2019

5. Agency requesting checklist:

Seattle Parks & Recreation (SPR)

6. Proposed timing or schedule (including phasing, if applicable):

Construction would take approximately 3 months during the summer of 2020.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No future additions, expansions, or activities are connected with this proposal.

- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
 - Lowman Beach Park Feasibility Study Report, ESA, December 2017 (ESA, 2017).
 - Geotechnical Engineering Report, Robinson Noble, July 2018 (Robinson Noble, 2018).
 - Historic and Cultural Preservation Technical Memo, ESA, February 2019 (included as Appendix A).
- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

May 2019 Page 1

No applications are pending for governmental approvals of other proposals directly affect the property (SDCI, 2019).

10. List any governmental approvals or permits that will be needed for your proposal, if known:

The following permits would likely be needed for the proposal:

- Grading Permit (City of Seattle)
- Environmentally Critical Areas Review (City of Seattle)
- State Shoreline Management Act Shoreline Substantial Development Permit (City of Seattle)
- Tree and Vegetation Removal Permit (City of Seattle)
- Coastal Zone Management Consistency Certification (Ecology)
- Hydraulic Project Approval (WDFW)
- Section 404 Nationwide Permit 27 (USACE)
- Section 401 Water Quality Certification (Ecology)
- National Historic Preservation Act Section 106 consultation (DAHP)
- Endangered Species Act Section 7 consultation (NMFS)

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

Lowman Beach Park is located on Puget Sound in the Morgan Junction neighborhood in West Seattle, immediately to the north of Lincoln Park. The approximately 1.5-acre park is bordered to the north and south by private residential properties and to the east by Beach Drive. Park amenities includes a swing set, tennis court, gravel paths, a bench, lawn area and water access to Puget Sound. The approximately 300 feet of park shoreline is characterized by a 140-foot long concrete seawall at its north end, with the remainder of the shoreline composed of a gravel beach and vegetated backshore that was created in 1995 by removal of a 1930s-era seawall.

Major initial improvements to the park were completed by 1936 and included a comfort station (demolished in late 1980s), tennis court (remains), and stone-and-mortar seawall that extended along the entire shoreline. The north end of the original seawall failed and was replaced in 1951 with the existing concrete seawall; the southern end was removed in 1995 and replaced with a gravel beach and retaining wall that extends landward (return wall).

The remaining 1950s-era concrete seawall at Lowman Beach Park has begun to fail and requires removal and/or replacement. SPR proposes to restore the park shoreline by:

- Removing the existing seawall along the Puget Sound Shoreline that is failing and the accompanying retaining wall;
- 2. Constructing a new seawall near the northern boundary of the park;

- 3. Removing the tennis court and restoring the backshore beach with native materials, grading and planting while maintaining access and recreation;
- 4. Daylighting Pelly Creek through the park;
- 5. Constructing ADA-accessible paths and landscaping in the upland portion of the park; and

Construction would occur during typical daytime construction hours and would last for approximately 3 months during the summer. Construction access would be provided by the existing gravel paths. Construction activities include excavation and grading, demolition of the tennis court, removal of the seawall, and auguring piles for the new seawall. Construction equipment would likely include trucks, excavators, dozers, hydraulic hammer, air compressor, large mobile crane, drill rig and pile driving hammer.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The approximately 1.5-acre park is located at 7017 Beach Dr. SW, Seattle, WA 98136 within Parcel 4315701200. Figure 1 shows the project vicinity. Figure 2 shows the site plan. The project site is in the northwest quarter of Section 26, Township 24 North, Range 3 East. The legal description of the project is Lincoln Beach Add Park Reserve & Tidelands Adj.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (underline):

The city of Seattle is located within the Puget Sound Lowland, an elongated structural basin that has been influenced by glaciation and crustal deformation related to the Cascadia Subduction Zone. The ground surface within the project area of the site is flat to gently sloping downward to the west. The grade changes for the cantilever wall appear to be approximately 5 feet at the southwest corner and shallow to minimal grade changes at the eastern region of this wall alignment (Robinson Noble, 2018).

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on the site is approximately 17 percent.

c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The site is mapped as being underlain by a deposit of uplifted beach deposits. Recessional outwash is mapped in the ravine area immediately to the east, and Lawton clay is mapped on the hillside along the beach to the north of the ravine area. During site exploration, fill, recessional outwash, uplifted beach deposits and glacially associated lake deposited (glaciolacustrine) clay were encountered (Robinson Noble, 2018). No agricultural land of long-term commercial significance exists onsite.

d. Are there any surface indications or a history of unstable soils in the immediate vicinity? If so, describe.

The entire site is designated as a Liquefaction Zone (sites with loose, saturated soil that lose the strength needed to support a building during earthquakes) by the City of Seattle (SDCI, 2019b). However, the geotechnical study conducted for this project found the underlying stiff to hard clay to have very low potential for liquefaction, amplification of ground motion, or seismically induced lateral spread (Robinson Noble, 2018).

e. Describe the purpose, type, total area, and approximate quantities of total affected area of any filling or grading proposed. Indicate source of fill.

According to the 60% design plans and documents, approximately 2,000 cubic yards of material would be excavated and stockpiled on site. If the excavated material meets the required specifications, up to 950 cubic yards of the stockpile material would be reused for beach nourishment and site grading. The rest of the material will be removed from the site and taken to an approved, offsite location.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

As with all construction projects, erosion could occur as a result of construction activities, particularly earthwork. The potential for erosion would be minimized by adhering to required best management practices (BMPs) and erosion control measures (refer to Question 1.h below).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Due to the removal of the tennis court, there would be a reduction in impervious surface by approximately 7,440 square feet. As a result, only 34.3

percent (3,875 square feet) of the existing impervious surface will remain after project construction.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Temporary erosion and sedimentation control BMPs and construction water quality treatment measures would be installed to minimize erosion and to treat stormwater runoff during construction. BMPs specific to the site and project would be specified in the construction contract documents that the construction contractor would be required to implement.

The project would be designed in accordance with the City of Seattle Stormwater Control Manual (City of Seattle, 2016).

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During the approximate 3-month construction period, there would be a slight increase in exhaust emissions from construction vehicles and equipment, and a temporary increase in fugitive dust due to earthwork for the project. The most noticeable increase in emissions and fugitive dust would occur during demolition and earthwork. Exhaust emissions would also be generated from construction employee and equipment traffic to and from the site. Emissions from the use of the site would be limited to visitors driving to the site, similar to existing conditions.

On December 3, 2007, the Seattle City Council adopted Ordinance 122574, which requires City departments that perform environmental review under SEPA to evaluate greenhouse gases (GHG) while reviewing permit applications for development. Because no new structures would be constructed as a result of the project, and no increases in traffic are anticipated, GHG impacts would be limited to those resulting from construction activities. Emissions from construction equipment, as well as emissions from construction workers' vehicles, would contribute GHG to the atmosphere during the 3-month construction period. No significant GHG emission impacts are anticipated.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of emissions or odors would affect the project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any.

Emissions would result from the use of heavy-duty construction equipment, vehicle trips hauling material, and construction workers traveling to and from

the project site. Given the size of the proposed construction project, the number of vehicle trips would be small. Therefore, construction-related emissions would be below the federal general conformity *de minimis* thresholds applicable in King County of 100 tons per year of carbon monoxide (CO) or fine particulate matter (PM10). The contractor would be required to comply with applicable Puget Sound Clean Air Agency (PSCAA) regulations (PSCAA, 2019).

To reduce fugitive dust emissions from construction vehicles leaving the site, the contractor would be required to establish wheel-cleaning stations at the exits from the site. Streets would be regularly swept to remove dust and debris from construction vehicles. Watering would occur as needed to prevent visible dust from leaving the job site.

3. Water

a. Surface Water:

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project site includes portions of Pelly Creek and Puget Sound. Pelly Creek originates in the Pelly Place Natural Area to the northeast and flows southwest to Lowman Beach Park, where it drains into Puget Sound. Pelly Creek is presently piped underneath the site.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The project would require work in and adjacent to Pelly Creek and Puget Sound. Approximately 120 feet of Pelly Creek would be daylighted, starting 25 feet south of the pedestrian path and flowing into Puget Sound. For construction of the new seawall, soldier piles would need to be installed. After the soldier piles are installed, removal of the existing seawall or portions thereof could occur to allow installation of prefabricated concrete panels that are connected to the soldier piles. Once the soldier pile wall is installed, removal or addition of the soil to the appropriate grade would be completed. The cantilever concrete wall is designed, and would be constructed above the MHHW. The subgrade preparation should consist of removing the topsoil, fill or loose disturbed soil from the excavation. The geotechnical professional would need to evaluate the subgrade prior to setting up the foundation forms.

3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No excavation would occur in an area subject to surface water; however, approximately 810 cubic yards of beach material would be placed in an area that would be subject to surface water post-restoration.

Additionally, Pelly Creek will be daylighted within the project area and 105 linear feet of pipe will be removed from.

4. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

A temporary stream diversion will be install during construction. The stream diversion may be either a gravity or a pumped system. The stream is non-fish bearing and fish screens are not required. The stream diversion will be designed to convey a minimum flow of 2 cfs. Is expected that during the summer the flows may be much less.

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Portions of the proposal lie within the 100-year floodplain (see Figure 1).

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The project would not involve the discharge of waste materials to any surface waters. All waste materials would be treated in accordance with the City of Seattle Stormwater Manual (City of Seattle, 2016) prior to discharge.

Pile wall construction typically involves auguring a predetermined width hole into the below grade soils in which the beam is set. The hole is then typically filled with concrete. Uncured concrete would not be exposed to the seawater during construction. the construction would be completed before removal of the existing seawall, which would keep the pile wall construction outside of and above the shoreline area. If room allows, placement of a heavy geosynthetic liner behind the seawall may help reduce seepage under and between seawall segments. The base of the geosynthetic would need to be embedded or sandbags placed at the toe. Additionally, concrete will be placed at depth within the impermeable subsurface clay. Capping the concrete with augured clay soils may help reduce this exposure. Using a fast

curing concrete may also help reduce exposure to uncured concrete between tide changes (Robinson Noble, 2018).

b. Groundwater:

1. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

The project involves excavation, transportation, and placement of material within the intertidal range. Water management, including dewatering, diversion, and drainage, would be required throughout construction.

According to geotechnical investigations near the site, water was encountered at depths ranging from approximately 5 to 7.5 feet below ground surface. However, this water is not considered part of a regional groundwater table, but rather perched over the relatively impervious clay layer observed near the surface of our explorations. A static water bearing zone was also encountered at depths of 31 to 35.5 feet below ground surface. This groundwater is likely capped by the overlying clay unit, and must be charged to exhibit the observed hydrostatic pressure (Robinson Noble, 2018).

The pile wall will need to span a 66-inch diameter outfall pipe buried beneath the shallower exposed 18-inch stormwater pipe in the northwestern region of the existing seawall alignment. Wall designs should account for the large diameter pipe and construction should be performed to reduce risk of damage to the pipe.

Considerable groundwater intrusion into excavation would be required to expose the pipe; therefore, ground penetrating radar or other less intrusive measures to identify the exact pipe location may be more beneficial.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

For both construction and operation, no waste material would be discharged into the ground. Waste materials will be treated and discharged to the combined sewer system (City of Seattle, 2016).

c. Water Runoff (including stormwater)

1. Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

New stormwater facilities are not proposed as a part of the project. Paved surfaces would generate runoff which will infiltrate onsite, similar to current conditions. However, due to the removal of the tennis court, there would be a reduction in impervious surface by approximately 7,440 square feet.

During construction, BMPs would be implemented to ensure that sediment originating from disturbed soils would be retained within the limits of disturbance, see Question 3.d.

2. Could waste materials enter ground or surface waters? If so, generally describe.

During construction, contamination from construction equipment and disturbed on-site soils, could enter surface waters. Generally, this is limited to sedimentation loading. Measures to control contamination entering surface waters are described below in Question 3.d.

For project operation, the project would be designed in accordance with the City of Seattle Stormwater Manual and waste materials would be limited to allowable amounts (City of Seattle, 2016).

3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The project would involve daylighting a previously piped stream, removing a concrete seawall that blocked access to Puget Sound, and removing impervious surface. These improvements would result in a more natural drainage pattern and would comply with City of Seattle Stormwater Manual (City of Seattle, 2016).

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

During construction, BMPs will be implemented to ensure that sediment from disturbed soils would be retained within the limits of disturbance. BMPs will include, but not be limited to, the following

- An Erosion and Sediment Control Plan and a Construction Stormwater Control Plan will be developed for the site and implemented and maintained by a certified Erosion and Sediment Control Lead.
- All appropriate source control and sediment removal BMPs will be implemented during construction.

- Construction access routes will be swept daily or more frequently as needed.
- All potential pollutants used or stored on site during construction will have secondary containment. A spill cleanup kit will be available on site and contaminated areas will be cleaned immediately following any incident.
- Upon project completion, exposed soils will be planted and provided with erosion control mulch.
- BMPs specific to the site and project would be specified in the construction contract documents that the construction contractor will be required to implement.

For project operation the project would be designed in accordance with the City of Seattle Stormwater Manual (City of Seattle, 2016).

4. Plants

a.	Check the	types	of vegetation	found	on the	site:
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X deciduous tree: alder, maple, aspen, other
X evergreen tree: fir, cedar, pine, other
X shrubs
X grass
pasture
crop or grain
orchards, vineyards or other permanent crops.
wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
water plants: water lily, eelgrass, milfoil, other
other types of vegetation (see below)

Vegetation includes a few ornamental trees, native shrubs, and mowed grass.

b. What kind and amount of vegetation will be removed or altered?

Six existing trees would be removed, and there would be 12,000 square feet of grubbing. The majority of the grubbed area will be planted with grasses and beach vegetation.

 List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species or critical habitat are known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The two trees located east of the tennis court would be protected to the extent possible using tree protection measures such as tree protection fences. New landscaping would be planted on-site after construction. The landscaping would emphasize native plants and drought-resistant ornamentals, and be designed to have low water use and low maintenance requirements. Four Madrone and three Shore Pine would be planted, as well various types of groundcover.

e. List all noxious weeds and invasive species known to be on or near the site.

No formal plant surveys were conducted for this Checklist. Based on a site reconnaissance and the King County iMap, saltcedar (a Class B noxious weed) has been observed on or near the site (King County, 2019).

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Animals observed on the site include typical urban birds and other animals.

- Fish: None observed.
- Amphibians: None observed.
- Reptiles: None observed.
- <u>Birds:</u> Species adapted to urban areas such as gulls, American crow, rock pigeon, black-capped chickadee, American robin, and European starling.
- <u>Mammals:</u> Species adapted to urban areas such as Norway rat, Eastern gray squirrel, raccoon, opossum, and other species may use the site.

b. List any threatened or endangered species known to be on near the site.

No federally threatened or endangered species are known to be on or near the site. Western Pond Turtle (*Actinemys marmorata*), a state-listed endangered species, is noted as occurring within the vicinity of the project site (WDFW, 2019). However, these occurrences are mapped on the quarter-section scale and no suitable habitat (freshwater ponds and lake) occurs onsite. Suitable habitat for sand smelt spawning occurs approximately 0.25 mile to the south, near Lincoln Park (WDFW, 2017). The WDFW Priority Habitat and Species (PHS) Program maps the presence of geoduck approximately 0.1 mile offshore (WDFW, 2019).

Construction activities have the potential to impact these species due to the potential for increased sediment and turbidity in the water column as a result of construction activities. The implementation of mitigation measures described below would minimize the potential impacts.

c. Is the site part of a migration route? If so, explain.

The Puget Sound area is within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway extends south from Alaska to Mexico and South America. No portion of the project would interfere with or alter the Pacific Flyway.

d. Proposed measures to preserve or enhance wildlife, if any.

Some birds and animals may be disturbed during construction but would likely return following construction because they are adapted to urban areas. Additionally, an erosion and sediment control plan would be developed to ensure construction activities would not adversely affect species. The following measures would also be implemented to avoid or minimize potential direct impacts and minimize or compensate for indirect impacts that may occur to fish and wildlife.

- 1. A Spill Prevention Control and Countermeasure (SPCC) plan will be implemented.
- 2. Construction equipment will be fueled off-site and prior to use at the project site(s). No re-fueling of equipment will be allowed on the beach or in adjacent intertidal habitats.
- 3. All equipment will be inspected daily for leaks.

Implementation of construction best management practices, conducting all work in the dry, the limited extent of construction activities, and conducting work in accordance with approved work windows, the proposed action is anticipated to minimize the extent of these direct effects to result in insignificant, discountable, or no effect to species or critical habitat. If work needs to occur when the tide is in, a temporary berm will be used to isolate the site

e. List all invasive species known to be on or near the site.

No formal animal surveys were conducted for this checklist. Invasive animal species likely to be in the area include rats and eastern gray squirrel, typical of an urban area.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs?

Describe whether it will be used for heating, manufacturing, etc.

No energy would be necessary to meet the completed project's needs.

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b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

There would be few vertical elements associated with the shoreline restoration project. The shoreline restoration and associated park features would not interfere with solar energy use by others.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

The project does not include any energy use post construction. Energy conservation measures would be included as part of construction BMPs.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Accidental spills of hazardous materials from equipment and vehicles could occur during construction. However, a Spill Prevention and Control Plan would be developed and implemented to prevent the accidental release of contaminants into the environment during construction. Otherwise, the proposed use of the site would not include the use of any substantive quantities of hazardous materials or wastes.

1. Describe any known or possible contamination at the site from present or past uses.

According to the Department of Ecology Facility/Site(s) database, the project site is not known to be contaminated. There is a LUST cleanup site within a half a mile of the project. Cleanup of the site occurred in 2011, and a No Further Action status was obtained on 10/3/2011 (Ecology, 2019).

2. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no existing hazardous chemicals/conditions that might affect project development and design, and no hazardous liquid gas transmission pipelines on-site or in the vicinity.

3. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Chemicals stored and used during construction would be limited to gasoline and other petroleum-based products required for the maintenance and operation of construction equipment and vehicles.

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During operation of the shoreline restoration project, no chemicals would be stored, used, or produced.

4. Describe special emergency services that might be required.

No special emergency services would be required.

5. Proposed measures to reduce or control environmental health hazards, if any:

Site-specific Pollution Prevention Plans and Spill Prevention and Control Plans will be developed and implemented to prevent or minimize impacts from hazardous materials during construction.

The construction contractors will be required to prepare and implement a Soil Management Plan that establishes specific approaches to addressing any unanticipated contaminated soil, groundwater, and surface water during construction.

In addition, the construction contractors will be required to prepare Health and Safety Plans that address the specific construction tasks that involve working with contaminated soil or water.

b. Noise

1. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The greenspace is in an urban area, and traffic noise can be heard throughout the park. However, this would not negatively affect the project.

2. What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The proposed project would generate noise during construction and operation. Construction equipment would result in temporary noise increases during daytime construction hours. Operational noise would be similar to existing conditions, but without noise associated with use of the tennis court.

Vehicle and equipment operation during construction would be noticeable in the vicinity of the project; however, construction noise levels would be within the City standards, which provides more lenient standards for daytime construction. Construction hours and noise levels would comply with the City of Seattle noise standards.

3. Proposed measures to reduce or control noise impacts, if any:

Construction would occur during daylight hours, approximately 7:00 a.m. to 5:00 p.m. which would be within the times allowed under Seattle Municipal Code (SMC) 25.08.425: 7:00 a.m. — 10:00 p.m., weekdays, and between 9 a.m. and 10 p.m. on weekends and legal holidays. No additional measures would be needed to reduce or control construction noise. No measures would be needed during operation as the project would not generate levels of noise above that which is allowed under SMC 25.08.500.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The project site is currently developed as a park, and is bordered to the north and south by private residential properties and to the east by Beach Drive.

The project site and the surrounding areas on all sides are zoned Single Family (SF 5000). Use of or access to adjacent properties would not change as the result of the project. A park is an allowed use in the SF 5000 zoning designation. The project would not affect the land uses on nearby or adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The site is not known to have been used as working farmland or forestlands. However, it was logged during the late 1800s or early 1900s. The site has been used as a park since the early 1900s. There would be no conversion of farmland or forestland of commercial significance to another use.

1. Proposed measures to reduce or control noise impacts, if any: Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No working farm or forest lands are located near the proposed project, so the project would not affect or be affected by farm or forest land operations.

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c. Describe any structures on the site.

Structures on the site include the seawall, fencing, a bench, a swing set, and a tennis court.

d. Will any structures be demolished? If so, what?

The tennis court would be demolished and the bench would be moved.

e. What is the current zoning classification of the site?

The current zoning classification of the area where the site is located is Seattle Single Family (SF) 5000.

f. What is the current comprehensive plan designation of the site?

The City of Seattle Comprehensive Plan designation of the project site is "Cityowned Open Space" (City of Seattle, 2019).

g. If applicable, what is the current shoreline master program designation of the site?

The project site is within the Conservancy Recreation shoreline designation (SDCI, 2019b).

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The majority of the site is mapped as a Liquefaction Prone Area (Environmental Critical Area 5). The portion of the site located near the shoreline is mapped as a Flood Prone Area (Environmental Critical Area 6). The area surrounding Pelly Creek (the northern half of the site) is mapped as Riparian Corridor (Environmental Critical Area 3) (SDCI, 2019b).

i. Approximately how many people would reside or work in the completed project?

No people would work or reside in the completed project. SPR staff would perform maintenance and operations duties as needed.

j. Approximately how many people would the completed project displace?

The completed project would not displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any:

No displacement would occur; therefore, no mitigation measures are needed or proposed.

Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project is compatible with the existing land use in that the project site would continue to be used as a park. The project meets and follows SPR's Design and Construction Standards (City of Seattle, 2019a).

Project demolition, construction, and erection of the new seawall would occur within a riparian corridor (Environmentally Critical Area 3), a liquefaction zone (Environmentally Critical Area 5), and a flood zone (Environmentally Critical Area 5). An Environmentally Critical Areas Review would be required prior to project approval.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

The project would not affect any agricultural or forest lands, so no measures to ensure compatibility are required.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No housing units would be provided as part of the project.

Approximately how many units, if any, would be eliminated?
 Indicate whether high, middle, or low-income housing.

No housing units would be eliminated.

 Describe proposed measures to reduce or control housing impacts, if any.

The project would not cause housing impacts; therefore, mitigation measures to control housing impacts would not be required.

10. Aesthetics

a. What is the tallest height of any of the proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The structures in the proposed park would be pedestrian scale features, such as benches, and would be shorter than four feet tall. No buildings are proposed as part of the project. The new concrete seawall would be approximately 4 inches taller than the existing wall. However, the proposed seawall would be shorter in distance than the existing structure (only 35 feet long, as opposed to 140 feet), and would blend more with the existing topography due to grade changes associated with the project.

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b. What views in the immediate vicinity would be altered or obstructed?

Views of the shoreline and Puget Sound would not be negatively altered as a result of the project. Two new viewpoints would be created within the park, and removal of the tennis court and seawall would open up views that were previously slightly obstructed. The overall visual appearance of the park would be relatively unchanged; however, the park would have a more natural appearance due to daylighting of Pelly Creek, reduction of the seawalls visual prominence, and removal of the tennis court.

c. Proposed measures to control or reduce aesthetic impacts, if any:

The project would not cause aesthetic impacts; therefore, mitigation measures to control aesthetic impacts would not be required.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No new lighting is proposed as part of the project. Proposed structures, such as new benches, would not result in increased potential for glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No new lighting is proposed as part of the project; therefore, the project would not generate off-site light and glare that would cause a safety hazard or interfere with views.

c. What existing off-site sources of light or glare may affect your proposal?

No off-site sources of light or glare would affect this proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

No light and glare impacts are anticipated; therefore, no mitigation measures are proposed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The park currently supports a range of active and passive recreation activities including tennis, beach exploring, sunset watching, picnicking, walking, swimming, windsurfing, nature viewing, stand up paddle boarding, and kayaking among others.

b. Would the proposed project displace any existing recreational uses? If so, describe.

During construction, access to the beach and other park activities would be reduced. However, reduced access would only occur during the 3-month construction period and would be intermittent. The south side of the beach would remain open throughout the construction period. There would be permanent displacement of tennis players who currently use the tennis court.

c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any:

The area around the seawall and tennis court that are part of the active demolition and restoration project will be closed to the public during construction. Other areas of the park will remain open to park visitors. SPR is looking to replace the tennis function either in another area of the park or in the vicinity. Given constraints on Lowman Beach Park associated with the King County CSO facility, there may not be enough room for a full-size court but other options for a smaller court exist.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

The Project Area contains a concrete slab tennis court measuring approximately 120 feet (north/south) by 66 feet (east/west). The court was constructed in 1936 as a Works Progress Administration (WPA) project. The court has been recommended Eligible for listing on the National Register of Historic Places.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Today's Lowman Beach Park is located within the ceded lands of the Dkhw'Duw'Absh (Duwamish) people. During the 1920s, ethnographer T.T. Waterman interviewed Native people to record place names within the Puget Sound region. This work identified eight locations along the shoreline between Duwamish Head and Brace Point (Hilbert et al. 2001; Thrush 2007; Waterman 1922). Among these locations is Lowman Beach Park, where Pelly Creek formerly joined the Puget Sound. This outlet is known in Lushootseed as g^wal or "capsized/to capsize", which is thought to be related to the conditions off shore and potential for canoes overturning (Hilbert et al. 2001:68; Thrush 2007:232; Waterman 1922:189).

Four previous cultural resources studies have been conducted within one mile of the Project Area (Dellert 2014; Kiers 2006; Nelson et al. 2011; Schultze et al. 2013). There are two known archaeological sites within one mile of Lowman Beach Park. The first is archaeological site 45-KI-1190, which is 140 feet east of the park., and contained charcoal, square nails, ceramic tile, and glass bottles dating to circa 1920-1940 (Dellert 2014; Raff-Tierney 2014). The second is a burial site approximately one mile south and in the vicinity of the Fauntleroy Ferry Dock (45-KI-1028). Although the Project Area does not contain any recorded archaeological sites, it is classified as Very High Risk for containing intact archaeological resources, according to the Washington State Department of Archaeology and Historic Preservation's Statewide Predictive Model (DAHP 2010). A fifth cultural study was conducted specifically for this project (ESA, 2019), and involved excavation of three mechanical trenches, which yielded no precontact or diagnostic historic artifacts.

Today's Lowman Beach Park was originally established as Lincoln Beach Park in 1909. The area was remote during the first decade of the 20th century, but by 1912 a modest number of beachside single-family residences had been built to the north of the park and on the hill to the southeast. In April of 1925, the name was changed from Lincoln Beach Park to Lowman Beach Park to avoid confusion with the newly developed Lincoln Park, located just south at Point Williams.

In 1927, a 30-foot by 14-foot comfort station (restroom building) was designed by L. Glenn Hall, landscape architect (Seattle Department of Parks 1927a, 1927b). It was located above the beach at the park's center point and has since been removed.

In 1936, the SPR built a tennis court, and stone and mortar seawall using federal grant funds from the Works Progress Administration (WPA). The 1936 seawall originally extended across the entire shoreline of the park and featured a pair of steps connected to a platform at the seawall's center point (Seattle Department of Parks 1933). In 1950, the north portion of the original seawall began to fail, and in 1951 the portion of the seawall north of the steps was replaced and the portion to the south of the steps was reinforced with a concrete support along its base (Seattle Department of Parks 1951). In 1973, a combined sewer overflow outfall was constructed in the Park, necessitating closure of the tennis courts for several months (Seattle Times 1973). In 1994, the south portion of the 1936 seawall failed, and in 1995 a portion of the remaining seawall was replaced with a new concrete return wall and gravel beach restoration (Pascoe & Talley, Inc. 1995). It appears that the original seawall steps were also removed at this time. The tennis court remains intact.

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c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

ESA reviewed prior archaeological survey reports, recorded cultural resources, ethnographic studies, historical maps, government landowner records, aerial photographs, regional histories, geological maps, soils surveys, and environmental reports held variously by DAHP, online, and ESA's research library. ESA also conducted fieldwork consisting of pedestrian survey and excavation of three mechanical trenches.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Because project design cannot avoid removal of the historic tennis court, SPR is developing mitigation alternatives that may include: documentation according to HABS requirements, incorporation of portions of the slab into park design, signage regarding history of Lowman Beach Park, public education programs/talks. A professional archaeologist will inspect the ground beneath the tennis court once it has been removed. The project will have an inadvertent discovery plan in effect during construction.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Access to Lowman Beach Park is provided by Beach Drive SW, Murray Avenue SW, and 48th Avenue SW. Regional access to the park is provided via Fauntleroy Way SW and the West Seattle Bridge, which connect to State Route 99 and Interstate 5 (see Figure 1).

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The site is currently served by Metro Transit Route 37, which runs along Beach Drive SW and 48th Avenue SW.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

No additional parking is associated with the project, and no parking would be eliminated. This is a neighborhood park rather than a destination park, and no parking is provided.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

The project would not require new roads or improvements to existing roads, sidewalks, or existing bicycle facilities.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project would not use water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The project is not expected to generate vehicular trips (no parking is provided for the park). For the most part, park users are expected to walk or bike to the park and be primarily users from the neighborhood. Some individuals may drive to the park; however, this is not expected to affect traffic or generate additional vehicular trips beyond existing conditions.

g. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No; the project is not near agricultural or forestry, nor would it generate associated traffic.

h. Proposed measures to reduce or control transportation impacts, if any:

Additional vehicular trips to the site are not anticipated from the project; thus, no measures to control transportation impacts are proposed.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The project site is currently used as a park, and would continue to be used as a park. The need for public services would be similar to services provided under existing conditions.

b. Proposed measures to reduce or control direct impacts on public services, if any.

No impacts to public services are anticipated; therefore, no mitigation measures are proposed.

16. Utilities

a. Circle utilities currently available at the site:

<u>Electricity</u>, natural gas, <u>water</u>, refuse service, telephone, <u>sanitary sewer</u>, septic system, other

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No new utilities are proposed for the project.

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C. SIGNATURE

The above answers are true a	ind complete to the best of my knowledge. I understand that the
lead agency is relying on ther	n to make its decision.
Signature: ^C	Date of the second
Name of signee:	Barrell Farrell
Position and Agency/Organization:	SEATHE PARKS Project Mowager
Date Submitted:	8/20/19

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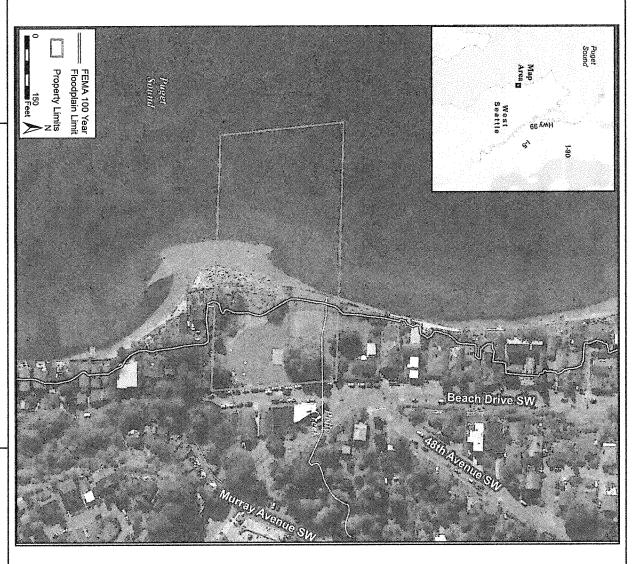
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FIGURES

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PROPOSED PROJECT: Seattle Parks & Recreation Lowman Beach Park Restoration Project

APPLICANT: Seattle Parks & Recreation
100 Dexter Ave N, Seattle, WA 98109

REFERENCE: TBD

LOCATION ADDRESS: 7017 Beach Dr SW, S26 T24N R3E

IN: City of Seattle

COUNTY: King

LAT/LONG: 47.540373, -122.397441

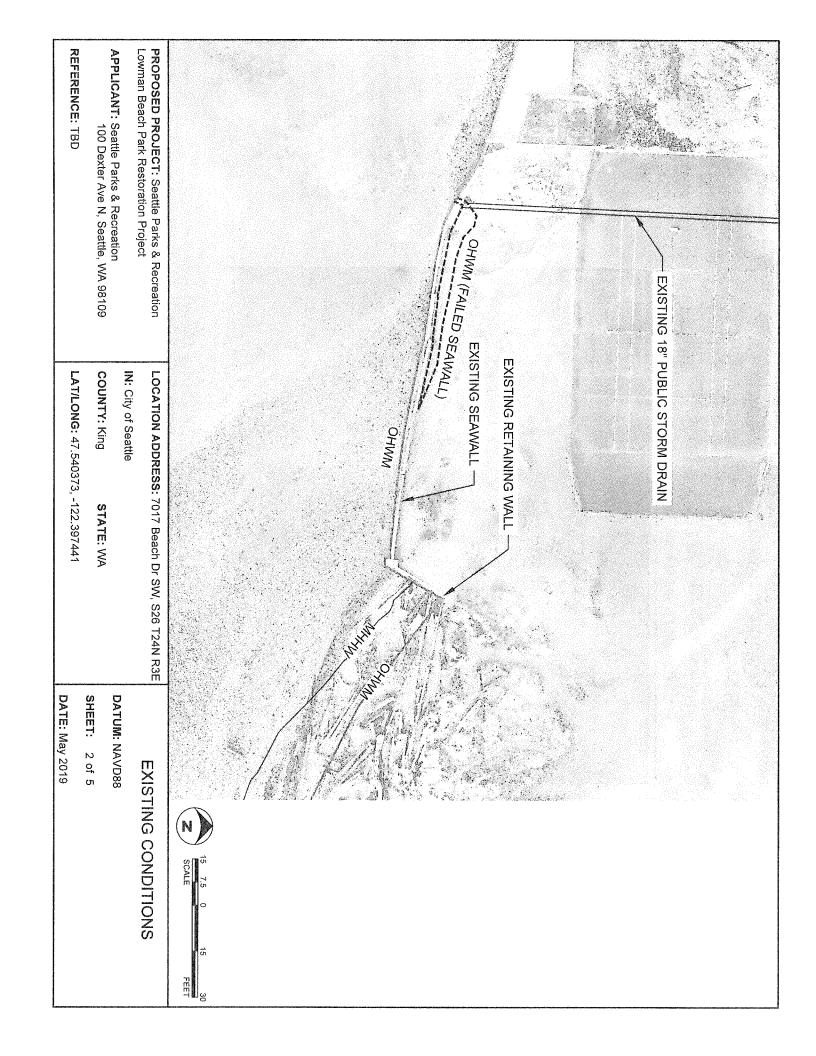
STATE: WA

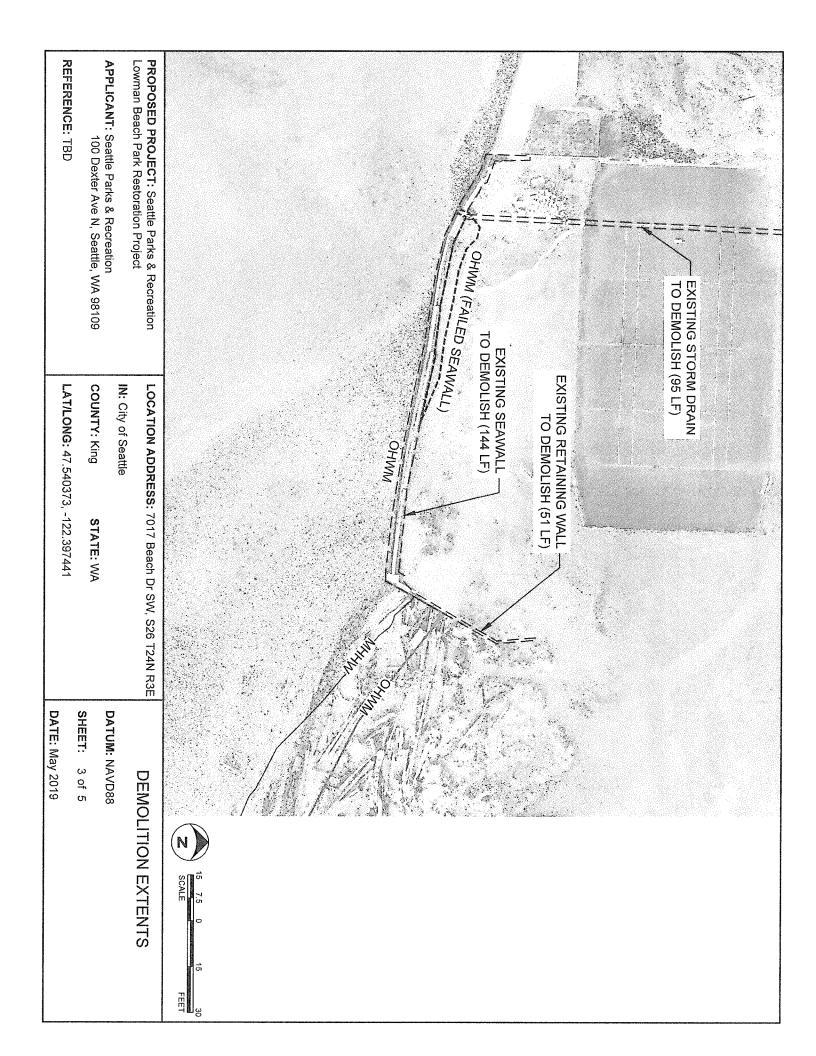
DATUM: NAVD88

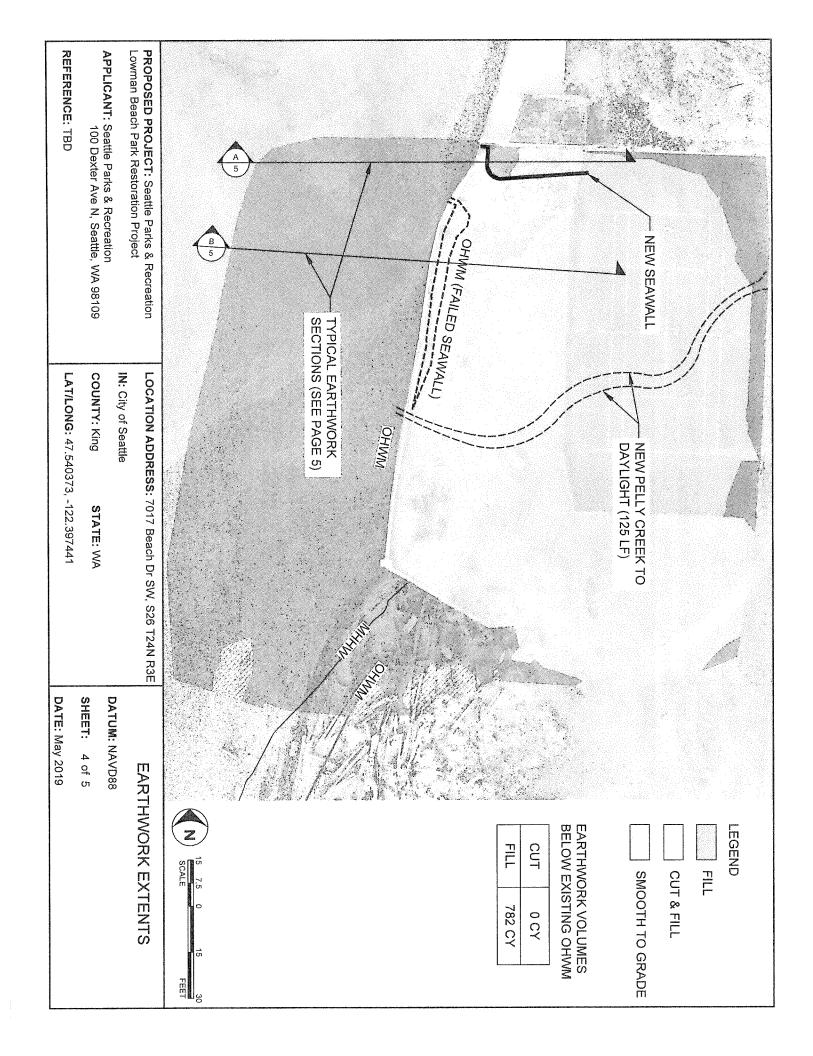
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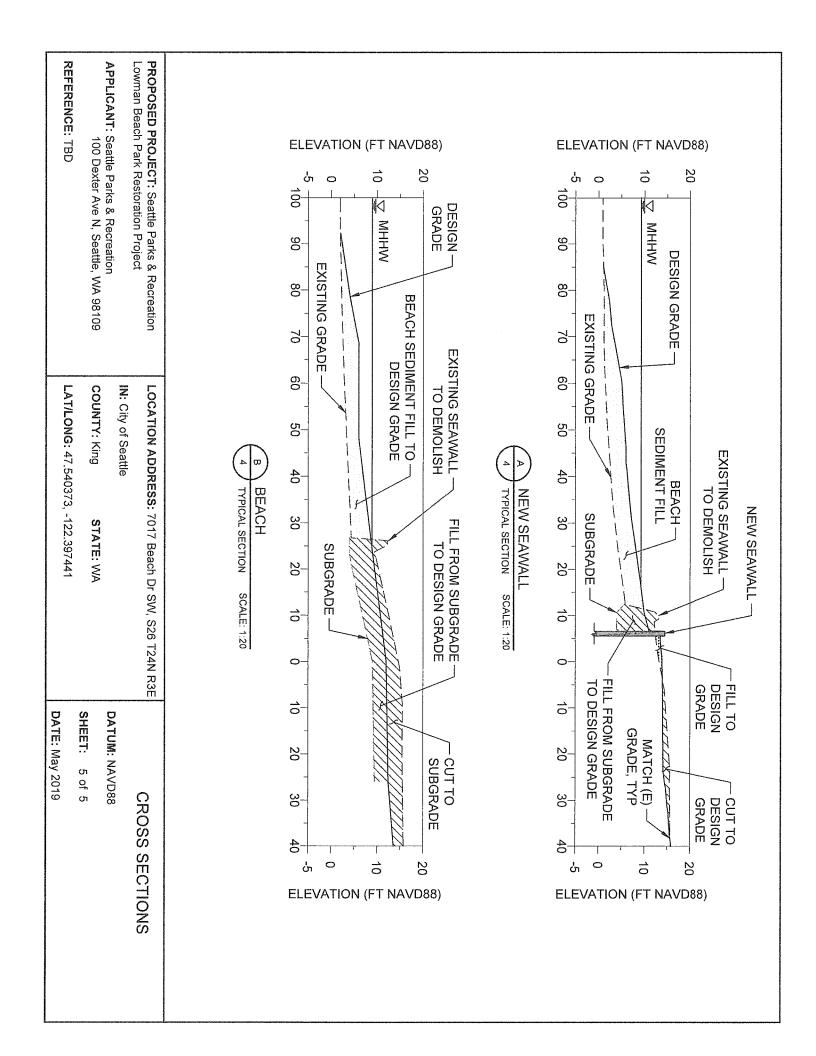
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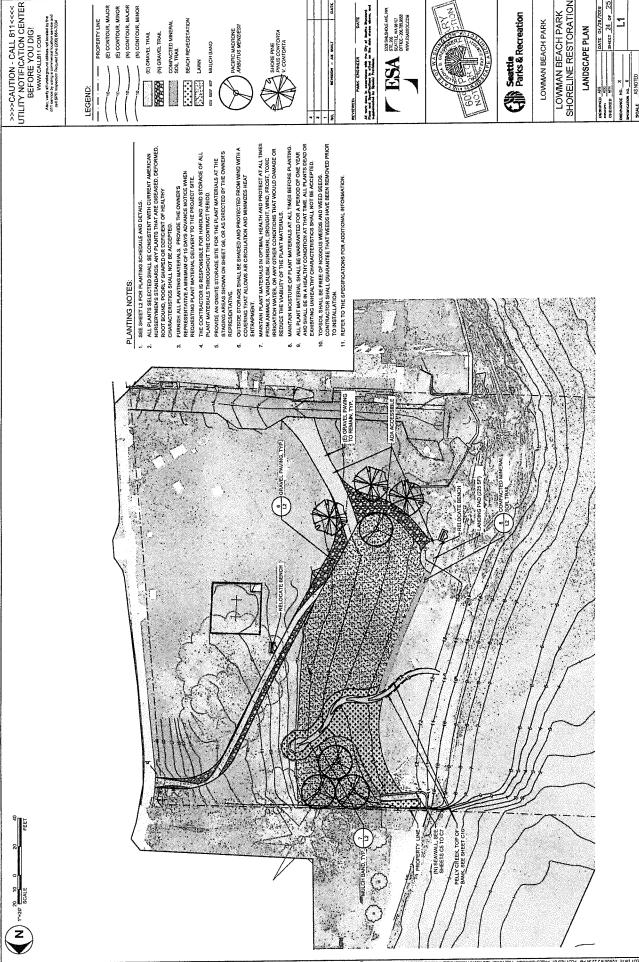
DATE: May 2019











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(E) GRAVEL TRAIL (N) GRAVEL TRAIL

BEACH REVEGETATION

MULCH BAND

PACIFIC MADRONE ARBUTUS MENZIESI

529 SHESHOLE AVE NW. STE, 200 SEATTLE WA 89107 OFFICE - 206,785,9658 WWW.ESASSOC.COM









LOWMAN BEACH PARK

LOWMAN BEACH PARK SHORELINE RESTORATION

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APPENDIX A: HISTORIC AND CULTURAL RESOURCES MEMO



Cultural Resources Short Report

Title:

Lowman Beach Park Shoreline Restoration Project, Cultural Resources Assessment,

Seattle, King County, WA

Author(s):

Katie Wilson, M.A., Alicia Valentino, Ph.D., Chris Lockwood, Ph.D., and Joel

Darnell, M.S.

Date:

February 27, 2019

DAHP Project No. 2019-01-00564

Acreage:

1.5 Acres

ESA Project No. D160292.02

Agency:

U.S. Army Corps of Engineers

Project Proponent:

City of Seattle, Parks

and Recreation Department

Regulatory:

Section 106 NHPA

USGS Quad:

Seattle South, WA (7.5')

Township /Range/Section: T24N, R03E, Sec 26

Address:

7005 Beach Drive SW, Seattle, WA,

County: King, WA

98136

Parcel(s):

4315701200

Study Area:

1.00 mile radius of the Area of Potential Effects (APE)

Field Methods Used:

□ No fieldwork was conducted.

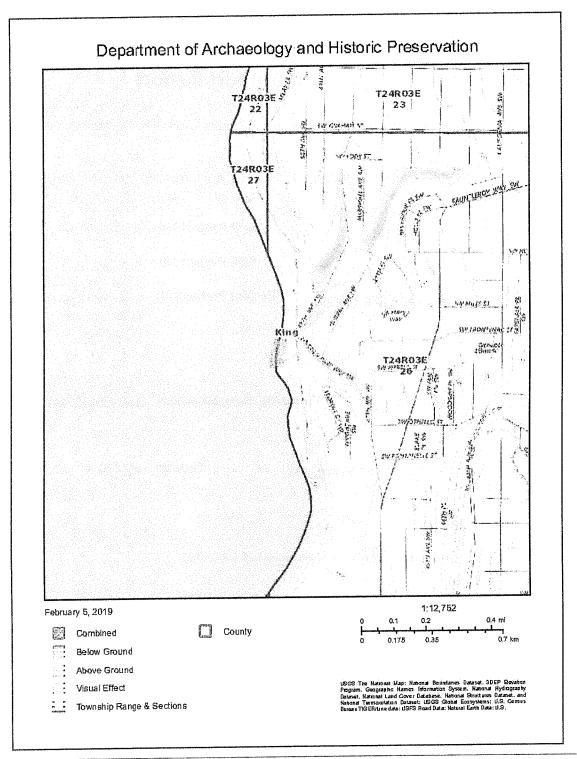
☐ Shovel Probes

⊠Mechanical Trenches ⊠Pedestrian Survey

⊠Historic Property Survey

Project Understanding:

The City of Seattle Department of Parks and Recreation is proposing to the remove a failing seawall at Lowman Beach Park (Figure 1); construct a new seawall and retaining wall; remove an existing tennis court and establish a backshore beach, lawn and riparian plantings; daylight Pelly Creek within the park; construct a pedestrian bridge crossing the daylighted section of Pelly Creek; and construct ADAaccessible paths and landscaping in the upland portion of the park. The Project will require a permit from the US Army Corps of Engineer and, therefore, must comply with Section 106 of the National Historic Preservation Act.



SOURCE: DAHP 2019

Figure 1
Location of the Lowman Beach Park Shoreline Restoration
Project

Project Area:

The Project Area consists of the 1.5-acre Lowman Beach Park at 7005 Beach Drive SW, located between Beach Drive SW and the Puget Sound shoreline, in Seattle, WA.

ENVIRONMENTAL AND CULTURAL SETTING

Environment:

Review of topographic maps (T-Sheets) from 1877 indicate that project site historically formed the mouth of Pelly Creek and its associated deltaic shoal, beaches, and vegetation along the shoreline. Historical photographs and maps from the 1920's imply a relatively low bank shoreline to either side of the creek mouth, but no detailed data were discovered that depict the pre-development condition of the shoreline and tidelands in great detail. Typical for beach processes in Puget Sound, sand and small gravel is transported primarily by waves and wave-driven currents (Finlayson 2006), and less so by other factors. Historically, the Pelly Creek delta would have composed an accretion shoreform, evidence of which remains today in the shallow deltaic shoreform offshore of the park. Low lying feeder bluffs would have fed the beaches to the north of the site, historically. Beaches fronting the Lowman Beach Park are composed primarily of gravel and pebbles at the surface. Some minor surface sand lenses are present here and there on the beach face but appear to be transient features.

Cultural:

Today's Lowman Beach Park is located within the ceded lands of the *Dkhw'Duw'Absh* (Duwamish) people. The Duwamish were signatories of the 1855 Point Elliott Treaty with the United States. Today's Duwamish people are enrolled in the Duwamish, Suquamish and Muckleshoot Tribes. Oral history and archaeological evidence demonstrates Native American people have lived in this region of the Puget Sound for thousands of years.

In 1851, non-Native settlement of Puget Sound began with the arrival of the Denny Party at Alki Point. At this time numerous Duwamish villages were located on the shores of Puget Sound and the riverbanks of the Duwamish. Duwamish people and non-Native settlers lived in close proximity during this time. Following the Treaty Wars of the mid-1850s, Native people were forcibly removed from their traditional lands to reservations established by the United States government. Some Duwamish people stayed in West Seattle but their homes were subject to arson as development by non-Native people increased (Thrush 2007:84-85).

During the 1920s ethnographer T.T. Waterman interviewed Native people to record place names within the Puget Sound region. This work identified eight locations along the shoreline between Duwamish Head and Brace Point alone (Hilbert et al. 2001; Thrush 2007; Waterman 1922). These include places with religious associations, outlets of streams, a prairie, an inundated area where cranberries and cattails were gathered, and a fishing location. In addition, several places within 0.25 mile are associated with oral tradition myths.

Among these locations is Lowman Beach Park, where Pelly Creek formerly joined the Puget Sound. This outlet is known in Lushootseed as *g****al* or "capsized/to capsize", which is thought to be related to the conditions off shore and potential for canoes overturning (Hilbert et al. 2001:68; Thrush 2007:232; Waterman 1922:189). Having a name associated to this location suggests Lowman Beach Park is an area that has significance to the Duwamish people.

Only four cultural resources studies have been conducted within one mile of the Project Area (Dellert 2014; Kiers 2006; Nelson et al. 2011; Schultz et al. 2013). Three (Dellert 2014; Nelson et al. 2011; Schultz et al. 2013) were conducted adjacent to or within Lowman Beach Park; however, the fieldwork areas excluded the tennis courts and seawall. There are two known archaeological sites within one mile of Lowman Beach Park. The first is archaeological site 45-KI-1190, which is 140 feet east of the park. This site was dated to circa 1900-1920s and contained charcoal, square nails, ceramic tile, and glass bottles (Dellert 2014; Raff-Tierney 2014). The second is a burial site approximately one mile south and in the vicinity of the Fauntleroy Ferry Dock (45-KI-1028). Although the Project Area does not contain any recorded archaeological sites, it is classified as Very High Risk for containing intact archaeological resources, according to the Washington State Department of Archaeology and Historic Preservation's Statewide Predictive Model (DAHP 2010). Further, it is located within the ceded lands of the Duwamish people and at the outlet of a small freshwater stream with associated Lushootseed name. Archaeological sites are commonly found along the beaches of Puget Sound and, in particular, at the outlets of streams (DAHP 2017).

Today's Lowman Beach Park was originally established as Lincoln Beach Park. Located within the 1904 Lincoln Beach plat, it is sited on lands reserved for a park (Figure 2). The Lincoln Beach subdivision was platted by the Yesler Logging Company, who logged the area prior to platting (USGS 1897). The park was established in December of 1909. The area was remote during the first decade of the 20th century, but by 1912 a modest number of beachside single-family residences had been built to the north of the park and on the hill to the southeast. In April of 1925, the name was changed from Lincoln Beach Park to Lowman Beach Park to avoid confusion with the newly developed Lincoln Park, located just south at Point Williams. The park's new namesake was J.D. Lowman, who was an employee the Yesler Logging Company.

In 1927, a 30-foot by 14-foot comfort station (restroom building) was designed by L. Glenn Hall, landscape architect (Seattle Department of Parks 1927a). It was located above the beach at the park's center point and has since been removed.

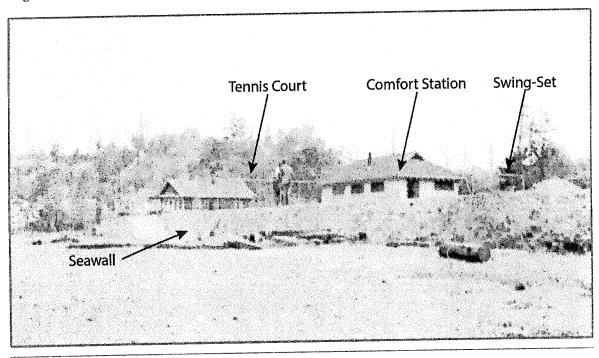


Figure 2
1904 Lincoln Park Plat. Today's Lowman Beach Park in red.

In 1936 the SPR built a stone and mortar seawall using federal grant funds from the Works Progress Administration (WPA) (Figure 3). That same year the tennis courts were also constructed as a WPA-funded project. Between 1935 and 1939, Seattle undertook many infrastructure improvement projects using funding made available by the WPA. Projects were carried out across the SPR and local laborers were hired whenever possible (Phelps 1976:182-185). Other WPA projects in West Seattle were seeding the Highland Park playground, earthwork at the Duwamish Head Park (now Hamilton Viewpoint Park), and constructing the West Seattle Golf Course (Eals 1987:200). The WPA was a national program created

during the Great Depression to provide employment opportunities across the nation. Many of the projects completed by the WPA have been recognized as historically significant due to their association with this national program and its role in addressing the unemployment crisis of the 1930s. The tennis court has not previously been evaluated regarding eligibility for listing on national, state, or local historic registers.

The 1936 seawall originally extended across the entire shoreline of the park and featured a pair of steps connected to a platform at the seawall's center point (Seattle Department of Parks 1936). In 1950 the north portion of the original seawall began to fail, and in 1951 the portion of the seawall north of the steps was replaced and the portion to the south of the steps was reinforced with a concrete support along its base (Seattle Department of Parks 1951). In 1973, a combined sewer overflow outfall was constructed in the Park, necessitating closure of the tennis courts for several months (Seattle Times 1973). In 1994, the south portion of the 1936 seawall failed, and in 1995 a portion of the remaining seawall was replaced with a new concrete return wall and gravel beach restoration (Pascoe & Talley, Inc. 1995). It appears that the original seawall steps were also removed at this time.



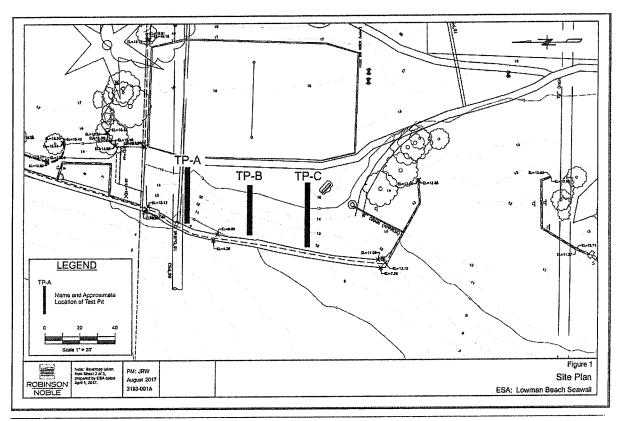
SOURCE: Seattle Municipal Archives, Don Sherwood Parks History Collection, Item Number 29784

Figure 3 Lowman Beach Par, circa 1936

FIELD INVESTIGATIONS

Archaeological:

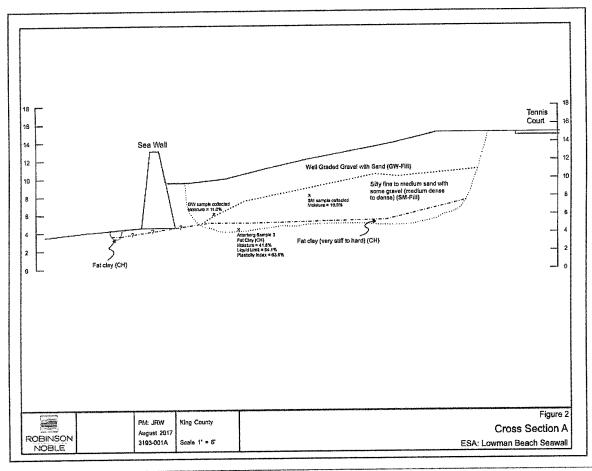
On May 3, 2017, ESA and Robinson Noble conducted archaeological and geotechnical and field investigations consisting of three mechanical test pits between the seawall and the tennis court (Figure 4). Dr. Chris Lockwood, ESA Senior Archaeologist and Geoarchaeologist, observed the test pits and stratigraphy, examined spoils piles, and recorded historic and recent debris. No precontact artifacts or features were encountered.



SOURCE: Robinson Noble 2018

Figure 4
August 2017 Trenching Plan

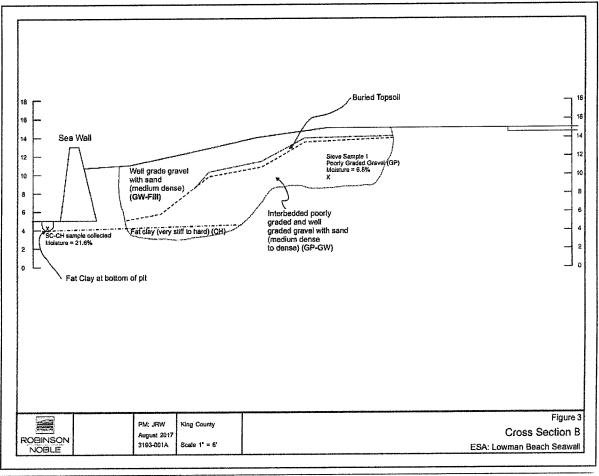
Test Pit A (Figure 5), the northernmost test pit, contained well graded gravel with sand (fill) overlying gravelly sand (fill) overlying very stiff clay (likely Pleistocene-aged Lawton clay). Given the proximity of the test pit to two existing storm pipes, the fill is interpreted to have been placed during pipe installation. The fill contained an approximately 6-foot long length of dock or anchor chain and several fragments of lumber.



SOURCE: Robinson Noble 2018

Figure 5
Trench A Cross-section

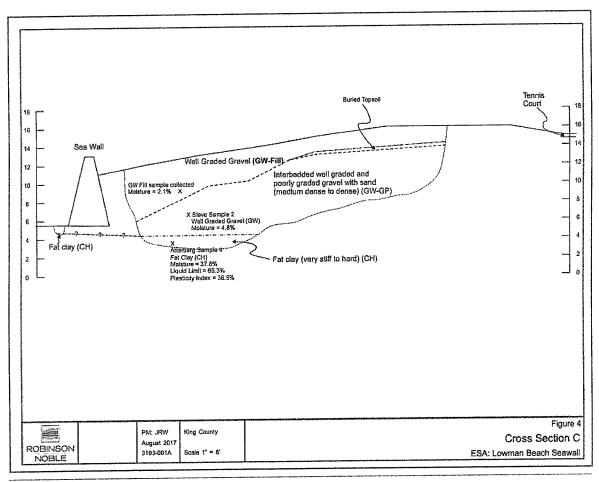
Test Pit B (Figure 6), the center pit, contained well graded gravel with sand (fill) overlying interbedded gravel with sand (uplifted beach) overlying very stiff clay (likely Pleistocene-aged Lawton clay). The top of the uplifted beach deposit contained a partially intact topsoil, marking the original "pre-fill" ground surface. The extreme west end of the test pit contained abundant, highly-corroded, ferrous cable, possibly the remains of kind of structural tieback, as well as concrete fragments. Test Pit B also contained trace amounts of highly-fragmented, clear, green, and brown bottle glass.



SOURCE: Robinson Noble 2018

Figure 6
Trench B Cross-section

Test Pit C (Figure 7), the southernmost pit, contained well graded gravel (fill) overlying interbedded gravel with sand (uplifted beach) overlying very stiff clay (likely Pleistocene-aged Lawton clay). Similar to Test Pit B, the top of the uplifted beach deposit in Test Pit C contained a partially intact topsoil. The extreme west end of Test Pit C contained a moderate amount of highly-corroded, ferrous cable, as well as concrete fragments. Test Pit C also contained trace amounts of highly-fragmented, clear, green, and brown bottle glass.



SOURCE: Robinson Noble 2018

Figure 7
Trench C Cross-section

Given the historic construction sequence near this portion of the seawall, with original construction in 1936, wall replacement in 1951, and placement and maintenance of storm pipes and other utilities, it is to be expected that some demolition debris remains on site within fill deposits. After more than a century of public recreational use, it is expected that additional fragments of beverage bottles, jars, cans, and other personal items have accumulated across the parcel through occasional, opportunistic disposal of these items. While such artifacts would reflect decades of public use of the park, it would be difficult if not impossible to establish a chronological date for many of the objects. Further, even if dates can be established, it is highly unlikely that specific items could be attributed to specific visitors or even to broad groups of visitors, and thus appear unlikely to contribute important historical information.

Historic Properties:

Works Progress Administration Tennis Court

Evaluation of the tennis court and completion of a Washington Historic Property Inventory was completed by Dr. Alicia Valentino, ESA Historical/Industrial Archaeologist, on January 27, 2019.

Physical Description

The tennis court (Figures 8 to 10) is a concrete slab (in six segments) measuring approximately 120 feet (north/south) by 66 feet (east/west). The court is partially enclosed by a chain-link fence, and the grass abutting the concrete pad is at a slight, west-facing slope down to the water. The landform appears to have been slightly graded when the court was built. No changes or improvements to the tennis court appear to have taken place since its construction in 1936. In 1973, a combined sewer overflow outfall was constructed in the Park, necessitating closure of the tennis courts for several months (Seattle Times 1973).

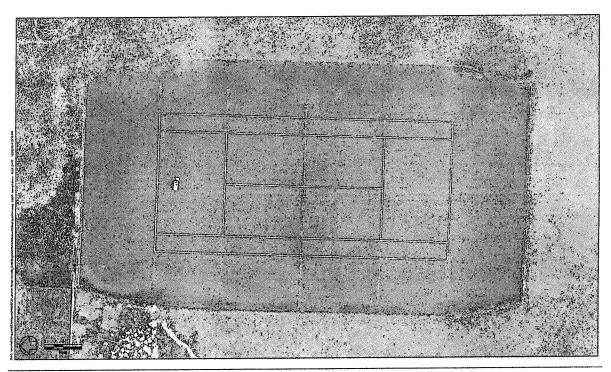
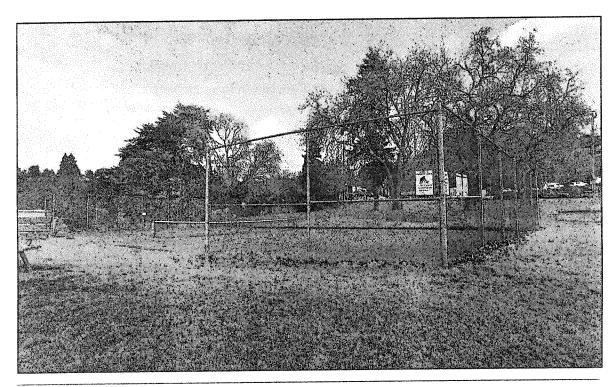
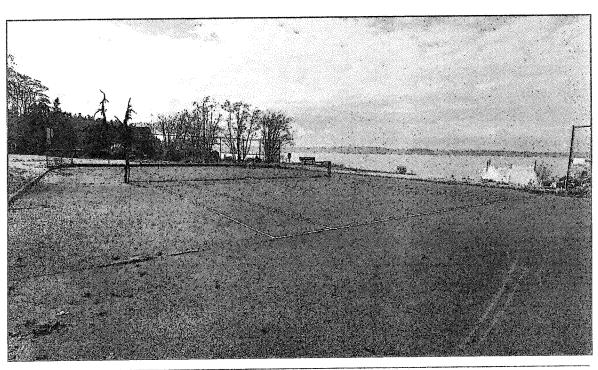


Figure 8 2019 Aerial Photo of Lowman Beach Park Tennis Court



SOURCE: ESA 2019

Figure 9
Lowman Beach Park Tennis Court. View to east.



SOURCE: ESA 2019

Figure 10 Lowman Beach Park Tennis Court. View to southwest.

Significance Statement

Land designated for a park is visible on a 1904 plat map of the Lincoln Beach neighborhood, but the first known amenities at the park were a comfort station and swing-set built in 1927. In 1936, the City built a seawall using federal grant funds from the Works Progress Administration (WPA). That same year, tennis courts were also constructed with WPA-funding. The seawall and tennis court were some of the many infrastructure improvement projects carried out in the Seattle area using WPA funding (Phelps 1976:182-185). Other examples include seeding the Highland Park playground in West Seattle, earthwork at the Duwamish Head Park (now Hamilton Viewpoint Park), and constructing the West Seattle Golf Course (Eals 1987:200).

National Register of Historic Places (NRHP) Criteria for Evaluation

"The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of significant persons in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in history or prehistory."

NRHP Eligibility Recommendation

- Criterion A: The Lowman Beach Park Tennis Court may be Eligible for listing in the NRHP due to its construction as a product of the WPA. The WPA was a national program created during the Great Depression to provide employment opportunities across the nation. Many of the projects completed by the WPA have been recognized as historically significant due to their association with this national program and its role in addressing the unemployment crisis of the 1930s. Local laborers were hired whenever possible.
- Criterion B: No known significant people are associated with the construction of the tennis courts; therefore, is it recommended Not Eligible under Criterion B.
- Criterion C: There are no significant architectural or design-elements used in the design or construction of the tennis court; therefore, it is recommended Not Eligible under Criterion C.
- Criterion D: There is no known significant data to be learned from the construction and design of the tennis court; therefore, it is recommended Not Eligible under Criterion D.

The tennis court is therefore recommended Eligible for listing on the National Register of Historic Places under Criterion A.

RECOMMENDATIONS

Based on the fact that the tennis court may be Eligible for listing on the National Register of Historic Places under Criterion A and the proposed removal of the tennis court, ESA further notes that the Lowman Beach Seawall Project, as designed, may result in an ADVERSE EFFECT TO HISTORIC PROPERTIES; namely, removal of the tennis court. If the tennis court cannot be avoided, and USACE concurs with ESA's recommendation, the project will require a Memorandum of Agreement to resolve the adverse effects under Section 106.

Regarding below-ground resources, ESA's trenching program did not encounter precontact or significant historic archaeological resource, and, therefore, recommends no further cultural resources at this time. However, subsurface conditions beneath the tennis court are unknown. If the tennis court is removed during project construction, a professional archaeologist should conduct a brief inspection once the tennis court has been removed, but prior to removal of subgrade. The inspection should include subsurface probing, if needed in the opinion of the archaeologist. Depending on results of the inspection, earthwork within the footprint may or may not require archaeological monitoring

As a best management practice, construction should proceed only with an Archaeological Resources Inadvertent Discovery Plan (IDP) in place. The IDP will provide guidance and protocols to be followed in the event of an archaeological resources discovery during construction. The contractor and construction crews should receive a brief orientation to the requirements of the IDP prior to engaging in ground disturbing activities.

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