

**SEATTLE PUBLIC UTILITIES  
SEPA ENVIRONMENTAL CHECKLIST**

This SEPA environmental review of Seattle Public Utilities' Washington Park Stormwater Tank Gate Retrofit Project has been conducted in accord with the Washington State Environmental Policy Act (SEPA) (RCW 43.21C), State SEPA regulations [Washington Administrative Code (WAC) Chapter 197-11], and the City of Seattle SEPA ordinance [Seattle Municipal Code (SMC) Chapter 25.05].

**A. BACKGROUND**

**1. Name of proposed project:**

Washington Park Stormwater Tank Gate Retrofit Project

**2. Name of applicant:**

Seattle Public Utilities (SPU)

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

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Project Delivery and Engineering Branch  
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**4. Date checklist prepared:**

November 14, 2019

**5. Agency requesting checklist:**

Seattle Public Utilities (SPU)

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

Project construction is scheduled to begin June 1, 2020 and conclude by September 30, 2020 depending on the outcome of the contracting process. The project is anticipated to require approximately 86 working days.

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

SPU currently has no plans for future additions or expansions related to the proposed project.

**8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

No environmental information has been prepared that is related to this proposal.

**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.**

SPU is not aware of pending government approvals of other proposals that directly affect the area covered by this proposal.

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

Implementation of this project may require some or all of the following permits and approvals:

- Request for Environmental Critical Area Exemption, City of Seattle Public Utilities (SPU)
- Construction Permit, Seattle Department of Construction and Inspections (SDCI)
- Revocable Use Permit, Seattle Parks and Recreation

**11. Give a 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.**

**Project Overview**

In some areas of the City of Seattle, sewage and stormwater runoff are collected in the same pipes, known as combined sewers. During storm events, sometimes the flow in these pipes exceeds the regional sewer system’s ability to convey all flows to West Point Treatment Plant. When this occurs, the system overflows any excess flow to a receiving water body at an outfall structure designed for this purpose. In Seattle, there are currently 84 outfalls owned and operated by the City of Seattle and 39 outfalls owned and operated by King County where combined sewer overflows (CSOs) can occur.

In Madison Valley, there is no such outfall to relieve the sewer system under periods of particularly intense rainfall. Instead, the Washington Park Stormwater Storage Tank (WPSST) provides the necessary relief to prevent the sewer system from backing up into homes and onto streets. It accomplishes this by temporarily holding stormwater (runoff from roads, roofs, and sidewalks that does not contain municipal sewage) from the City’s municipal separate stormwater system (MS4) in the storage tank until intense rainfall has passed and the stormwater can safely discharge into King County’s Arboretum Trunk sewer. Combined sewage makes its way from the Arboretum Trunk sewer through the King County system to King County’s West Point Treatment Plant for treatment before being discharged to Puget Sound.

The WPSST, as it is currently configured, retains stormwater using two float gates. During non-intense rainfall (the kind of rainfall we experience weekly, monthly and even annually), the float gates rest in the “open” position, allowing stormwater entering the WPSST to flow unimpeded to the Arboretum trunk sewer because the trunk sewer has capacity to accept the stormwater. During periods of intense rainfall (the kinds of storms we experience every 5 years, every 25 years, and even every 100 years), the float gates are pushed partially shut by the elevated flow level in the Arboretum Trunk sewer, which reduces the amount of stormwater entering the sewer. This controls the flow level in the trunk sewer to keep area residents and businesses safe.

While the Arboretum Trunk sewer has capacity to convey high flows out of Madison Valley, a bottleneck occurs where the trunk sewer goes beneath the Montlake Cut. This section of the regional sewer system has a CSO outfall that relieves the sewer system (using the Montlake Regulator Station) during rainfall if needed. This outfall is used approximately 7.7 times per year, indicating that the sewer system can only pass storms of a magnitude that occurs every 2 months. In summary, while the regional sewer system can carry high flows of sewage away from Madison Valley, there is a high likelihood that a CSO will occur downstream as a function of those high flows.

**Proposed Project**

The Washington Park Stormwater Tank Gate Retrofit Project would replace the WPSST's existing float gates with supervisory control and data acquisition (SCADA) controlled automated sluice gates. The SCADA system would then use an algorithm to control the movement of the gates to accomplish two goals. First, the control algorithm would operate the sluice gates in a manner similar to the existing float gates during intense rainfall to protect the regional sewer system of Madison Valley. However, during non-intense rainfall, the algorithm would control the gates to detain more water than would ordinarily be detained by the float gates in order to reduce the frequency and volume of CSOs from the Montlake Regulator Station. In effect, this project expands the control objectives of this facility beyond its current objective (to protect area business and residents from sewer backups during rare, particularly intense rainfall) to also protect the environment from CSOs when conditions are safe to do so.

Installation of automatically controlled sluice gates involves the addition of three above-ground enclosures to the existing WPSST as well as an electrical cabinet adjacent to the existing cabinet. A new trench would be excavated through the grass area east of the WPSST to an existing maintenance hole to install sensory equipment that indicates whether the rainfall condition is intense or non-intense. The trench would be located within areas disturbed when the tank was originally built. The trench would be filled, and the surface restored upon the completion of the work.

Three new gates would be operated by actuators connected to a SCADA control panel, which would be programmed to open or close any of the gates based on current conditions. There are three modes of operation, named "CSO Mode" (non-intense rainfall), "Flood Control Mode" (intense rainfall), and "Fail-Safe Mode" (in case of an emergency).

CSO Mode would be the default operating mode, allowing the gates to close under non-intense storm conditions to limit flows into the King County trunk. This would result in more frequent usage of the storage available within the existing storage tank to dampen flows entering King County's system and avoid overflows downstream at the Montlake Regulator Station.

Based on level measurements in the existing tank and a nearby downstream maintenance hole, a Flood Control mode may be activated to preserve storage capacity in the WPSST for intense storm conditions and to mimic the operation of the existing float gates. These same level measurements would be used to revert operation to CSO Mode if conditions warrant.

Fail-Safe mode would be enabled only during unusual conditions where equipment faults or monitoring signals have failed. This mode would move the gates to a fixed position to provide flood control.

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 project is located at the southwest portion of Washington Park and is bounded by park property to the north, E Madison Street to the east, and 29<sup>th</sup> Avenue E to the west. The project is located in the Madison Valley neighborhood in the northeast corner of Section 28, Township 25N, and Range 4E.

## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

a. **General description of the site:**

Flat  Rolling  Hilly  Steep Slopes  Mountainous  Other: gently sloping

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

According to Seattle Department of Construction and Inspections GIS (accessed at: [http://www.seattle.gov/sdci/codes/codes-we-enforce-\(a-z\)/environmentally-critical-areas-\(eca\)-code](http://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/environmentally-critical-areas-(eca)-code)), the project site is surrounded by steep slopes with a 40 percent average. However, the project would not affect steep slopes as project work would be contained in existing structures and previously disturbed areas on flat or gently sloping terrain.

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 these soils.**

The site was previously disturbed (approximately 2008 to 2010) to construct the Washington Park Stormwater Tank and associated above-ground stormwater storage facility. Soils at the site now include a sterile fill, overlaying an historic landfill and fill layer, overlaying native soils. The upper soil layer is made up of a sterile fill. A report prepared following construction of the Washington Park stormwater facilities indicates that the north end of the project site contains sterile fill extending up to 5 feet in depth; at the south end of the valley, the landfill is located immediately below the grass and mulch surface. The landfill waste and fill layer contains sand, silt, clay, and debris such as glass and wood. Recessional lacustrine deposits consisting primarily of hard silt and clay underlie the landfill waste and fill layer.

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

The project area is located above a potential liquefaction area and peat settlement prone area according to SDCI's GIS map.

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

Approximately 95 cubic yards of material would be excavated and filled during conduit trench work and structural modifications on top of the existing vault. The total area to be excavated is approximately 860 square feet. The excavated soil could be used as a source of fill depending on the integrity of the native soil, which would be determined through a geotechnical investigation.

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

Erosion could occur after the conduit trench and existing vault are excavated and bare soil is exposed within the project area. All areas are contained within the overflow basin adjacent to the stormwater tank. Erosion or sedimentation carried off-site would be very unlikely to occur. All areas of disturbance would be restored prior to project completion.

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

The project would include the addition of an electrical box, which would create an additional 16 square feet of impervious surfaces in the project area. This represents a negligible increase in the total percent impervious surfaces within the project area. Most pervious surfaces within the project area, such as the permeable paver area above the storage tank, would be retained.

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

A Construction Stormwater and Erosion Control Plan (CSECP) would be prepared and implemented. Best Management Practices (BMP) as identified in the City of Seattle's Stormwater Code SMC Title 22, Subtitle VIII, City of Seattle Director's Rule SDCI 17-2017/SPU DWW-200, SDOT Right of Way Opening and Restoration Rules (ROWORR) Director's Rule 01-2017, and Volume 2 Construction Stormwater Control Manual would be used to manage stormwater runoff, construction disturbance, and erosion during construction. Measures would include barriers such as sand bags and catch basin inserts to prevent sediments from entering and leaving the construction area. Once construction is complete, temporary erosion control measures would be removed.

**2. Air**

**a. What types of emissions to the air would result from the proposal [e.g., dust, automobile, odors, industrial wood smoke, greenhouse gases (GHG)] during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.**

**Construction**

Construction of the project would include excavating and filling the trench, installing modifications in the vault, and replacing the concrete pad for the uninterruptable power supply. Construction equipment may include a crane, dump truck, back hoe, and light duty trucks. Equipment would generate emissions due to the combustion of gasoline and diesel fuels (such as oxides of nitrogen, carbon monoxide, particulate matter and smoke, un-combusted hydrocarbons, hydrogen sulfide, carbon dioxide, and water vapor).

Emissions during construction would also include normal amounts of dust from ground-disturbing activities and exhaust (that is, carbon monoxide, sulfur, and particulates) from construction equipment and are expected to be minimal, localized, and temporary (see Attachment D for detailed emission calculations).

**Operation**

SPU does not anticipate an increase in greenhouse gas or dust emissions as a result of the operation of this project (see Attachment D).

**Maintenance**

Long-term maintenance of the project improvements would not result in increases in greenhouse gas or dust emissions above current levels (see Attachment D). The project would be constructed at an existing, operational stormwater facility, and would not result in increases to the frequency or duration of facility maintenance visits and activities.

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

There are no known off-site sources of emissions that may affect this proposal.

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

During construction, impacts to air quality would be reduced and controlled through implementation of standard federal, state, and local emission control criteria and City of Seattle construction practices. These would include requiring contractors to use best available control technologies, proper vehicle maintenance, and minimizing vehicle and equipment idling.

**3. Water**

**a. Surface:**

**(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 so, describe type and provide names. If appropriate, state what stream or river it flows into.**

The project site is not located near any surface water bodies. The project area partially overlaps and is surrounded by a biodiversity area and corridor designated by Washington Department of Fish and Wildlife, <http://apps.wdfw.wa.gov/phsontheweb/>. The biodiversity area and corridor, which covers most of Washington Park, is said to contain some wetlands. According to the National Wetlands Inventory Mapper, <https://www.fws.gov/wetlands/>, there are no wetlands present in the southernmost portion of the park near the project area.

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

No proposed activities would occur within 200 feet of any surface water body, as there are no surface waters within the vicinity of the project area.

- (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 material would be placed in or removed from surface water or wetlands.

- (4) Will the proposal require surface water withdrawals or diversions? If so, give general description, purpose, and approximate quantities if known.**

Proposed activities are to occur within an area of existing utility infrastructure, including areas of pavement, concrete, and vegetation. Existing runoff patterns will be maintained and no surface water withdrawals or diversions are proposed. Following construction, the completed project would dampen stormwater runoff flows entering King County's stormwater system and help to avoid overflows at the Montlake Regulator Station.

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

No portion of the project lies within a 100-year floodplain based on Federal Emergency Management Agency preliminary 100-year floodplain maps as shown on King County iMap.

- (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 proposed project would not produce or discharge waste materials to surface waters. The completed project would reduce the volume and frequency of combined sewage overflows to the King County Montlake Regulator Station.

**b. Ground:**

- (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.**

There will be no groundwater withdrawals from a well for drinking water or other purposes.

Based on historical groundwater monitoring wells, groundwater in the project area is expected to be between 88 and 80 feet in elevation. The water table likely fluctuates based on seasonal changes. Shallow excavations (approximately 2-3 feet) would be necessary to construct the proposed project, primarily for constructing the conduit trench and for structural modifications on top of the existing vault. These excavations would be located between approximately 105 feet and 90 feet in elevation.

Groundwater is not likely to be encountered as construction would occur in the summer months when the groundwater table is lower. Thus, the project would not otherwise withdraw, discharge, or surcharge groundwater.

- (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.

No waste material would be discharged to groundwater for this project.

**c. Water Runoff (including storm water):**

- (1) Describe the source of runoff (including storm water) 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.

Project area stormwater runoff from paved surfaces is collected via existing stormwater catch basins and directed into a 48-inch diameter pipe connected to the WPSST via the City's MS4 system. Under normal conditions, stormwater flows into SPU's sewer system; however, in heavy precipitation events, stormwater is temporarily stored in the storage tank, and the adjacent above-ground storage area if necessary, until the sewer system has capacity to transfer the surface runoff. The storage tank and above-ground storage system can hold 1.3 million gallons and 0.9 million gallons of water respectively. The purpose of this project is to increase the utilization of the existing WPSST to reduce combined sewer overflows at King County's Montlake Regulator Station.

During project construction, stormwater runoff may need to be managed to prevent sediment from entering and leaving the construction site. Precipitation that lands on the construction site would be directed to the existing stormwater collection system or contained on-site and allowed to infiltrate. Barriers such as sandbags and catch basin inserts would be used to prevent sediments from entering and leaving the construction area. Once construction is complete, temporary erosion control measures would be removed. Following installation of improvements, disturbed areas of pavement and concrete would be restored. Generally, the completed project would not create a need to manage additional stormwater runoff beyond current existing conditions. Stormwater runoff on and adjacent to the project site would follow pre-construction drainage pathways.

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

No part of the proposed work involves any discharges of waste materials to ground waters.

Several construction activities such as jackhammering, concrete pouring and handling, etc., would generate pollutants that could potentially enter local combined sewage conveyance systems downstream. Non-sediment pollutants that may be present during construction include:

- Petroleum products including fuel, lubricants, hydraulic fluids, and form oils
- Paints, glues, solvents, and adhesives
- Concrete and concrete washwater
- Chemicals associated with portable toilets.



Procedures to prevent and control pollutants, including hazardous materials such as hydrocarbons and pH-modifying substances, would be described in a spill prevention, control, and countermeasures plan that would be prepared for the project and approved by the City of Seattle prior to the start of project construction activities.

The completed project would reduce the volume and frequency of combined sewage overflows to King County's Montlake Regulator Station.

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

The completed project would restore disturbed areas to near-original condition (e.g. planting grass) and would not create a need to manage additional stormwater runoff beyond currently existing conditions. Stormwater would follow pre-construction drainage pathways. See Section B.3.c.1 for additional discussion regarding how the project would affect the drainage path for stormwater after it has been collected and directed to the combined sewer system.

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

Best Management Practices (BMPs), as identified in the City of Seattle's Stormwater Code SMC Title 22, Subtitle VIII, City of Seattle Director's Rule SDCI 17-2017/SPU DWW-200, and Volume 2 Construction Stormwater Control Manual, would be used as needed to control erosion and sediment transport from and to the project site during construction.

**4. Plants**

**a. Types of vegetation found on the site: [check the applicable boxes]**

<input checked="" type="checkbox"/> Deciduous trees:	<input type="checkbox"/> Alder	<input checked="" type="checkbox"/> Maple	<input type="checkbox"/> Aspen	<input checked="" type="checkbox"/> Other:
birch, dogwood, hazelnut, cherry, oak				
<input checked="" type="checkbox"/> Evergreen trees:	<input checked="" type="checkbox"/> Fir	<input checked="" type="checkbox"/> Cedar	<input checked="" type="checkbox"/> Pine	<input type="checkbox"/>
Other: hemlock				
<input checked="" type="checkbox"/> Shrubs				
<input checked="" type="checkbox"/> Grass				
<input type="checkbox"/> Pasture				
<input type="checkbox"/> Crop or grain				
<input type="checkbox"/> Orchards, vineyards, or other permanent crops				
<input checked="" type="checkbox"/> Wet soil plants:	<input type="checkbox"/> Cattail	<input type="checkbox"/> Buttercup	<input checked="" type="checkbox"/> Bulrush	<input type="checkbox"/> Skunk cabbage
<input checked="" type="checkbox"/> Other: camas, sedge, iris, rush, and hairgrass				
<input type="checkbox"/> Water plants:	<input type="checkbox"/> water lily	<input type="checkbox"/> eelgrass	<input type="checkbox"/> milfoil	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Other types of vegetation: fern, salal, Oregon grape, snowberry, thimbleberry, kinnikinnick, strawberry, and onion				

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

Vegetation would be removed as needed for the installation of flow control modifications and conduit routing. Vegetation would be restored per plans developed by the landscape architect. Existing vegetation found directly adjacent to the primary work area would be preserved and protected through standard best management practices. All staging and vehicle parking would occur outside of areas of existing vegetation.

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

According to a review of the Washington Department of Natural Resources Natural Heritage Program’s document called “Sections that Contain Natural Heritage Features, Current as of July 11, 2018” (accessed at <https://www.dnr.wa.gov/NHPdata>), there are no documented occurrences of sensitive, threatened, or endangered plant species at or near the project site. No federally-listed endangered or threatened plant species or state-listed sensitive plant species are known to occur within Seattle’s municipal limits. The project site has been intensively disturbed by development of the park or occupied by utility and other constructed features. There is no habitat for threatened or endangered plants in the project area.

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

Vegetation outside of the project area would be preserved and protected. In-kind restoration would occur in disturbed areas following installation of the project.

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

A review of information maintained by the King County Noxious Weed Program (available at King County iMap interactive online mapping program, <http://gismaps.kingcounty.gov/iMap/>) did not identify documented occurrence of any noxious weeds within 200 feet of the project site. However, site visits have revealed that there is an overgrowth of Himalayan blackberry (*Rubus armeniacus*) in the project area.

**5. Animals**

**a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site: [check the applicable boxes]**

<b>Birds:</b>	<input checked="" type="checkbox"/> Hawk	<input type="checkbox"/> Heron	<input checked="" type="checkbox"/> Eagle	<input checked="" type="checkbox"/> Songbirds
	<input checked="" type="checkbox"/> Other: crow, pigeon, gull			
<b>Mammals:</b>	<input checked="" type="checkbox"/> Deer	<input type="checkbox"/> Bear	<input type="checkbox"/> Elk	<input type="checkbox"/> Beaver
	<input checked="" type="checkbox"/> Other: coyote, possum, raccoon, squirrel			
<b>Fish:</b>	<input type="checkbox"/> Bass	<input type="checkbox"/> Salmon	<input type="checkbox"/> Trout	<input type="checkbox"/> Herring
	<input type="checkbox"/> Shellfish	<input type="checkbox"/> Other:		

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

According to Information for Planning and Consultation (IPaC) online database, listed species with the potential to occur in the project area include the gray wolf (*Canis lupus*), North American wolverine (*Gulo luscus*), marbled murrelet (*Brachyramphus marmoratus*), streaked horn lark (*Eremophila alpestris strigata*), yellow-billed cuckoo (*Coccyzus americanus*), and bull trout (*Salvelinus confluentus*). However, there is no suitable habitat present for any of these species.

A check of the Washington Department of Fish and Wildlife's "Priority Habitat Species on the Web" database on August 7, 2019, revealed that the western pond turtle (*Actinemys marmorata*) has occurred in the vicinity of the project area and that the project area partially overlaps and is surrounded by a biodiversity area and corridor designated by Washington Department of Fish and Wildlife, <http://apps.wdfw.wa.gov/phsontheweb/>. This area has been designated as a biodiversity area and corridor because it contains conifer, deciduous, and mixed conifer-deciduous tree stands, landscaped grasslands and forests, wetlands, downed logs, and snags. The larger park area of which the project is a part supports nesting bald eagles (*Haliaeetus leucocephalus*), great blue heron (*Ardea herodias*), western pond turtles, and painted turtles (*Chrysemys picta*).

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

Seattle is located within the migratory route of many birds and other animal species and is part of the Pacific Flyway, a major north-south route of travel for migratory birds in the Americas extending from Alaska to Patagonia, South America.

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

The proposed project involves no in-water or over-water work in any waterbodies. A negligible increase in impervious surfaces would occur. Vegetation restoration would occur within the project area following project implementation. Existing trees adjacent to the project area would be retained.

**e. List any invasive animal species known to be on or near the site.**

King County lists the European starling, house sparrow, Eastern gray squirrel, and fox squirrel as potential terrestrial invasive species for this area (<http://www.kingcounty.gov/services/environment/animals-and-plants/biodiversity/threats/Invasives.aspx>).

**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.**

The completed project would use electrical energy during normal operation and a portable diesel motor driven generator to provide electrical energy for emergency operation in the event of a power outage affecting the local electrical grid. New equipment installed as part of the project would also be electrically powered.

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

Proposed project components are to be installed underground or just above the ground surface. Existing features that are taller in height, including trees, power poles, and adjacent houses, would remain. Thus, the project is not expected to affect the potential use of solar energy by adjacent properties.

**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 would meet the applicable requirements of the Washington State and City of Seattle Energy Codes. No additional energy conservation measures are proposed.

**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:**

Small amounts of materials likely to be present during construction include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints, and other chemical products. A spill of one of these chemicals could potentially occur during construction due to equipment failure or worker error. Though unlikely, contaminated soils, sediments, or groundwater could also be exposed during excavation. If disturbed, contaminated substances could expose construction workers and potentially other individuals in the vicinity through blowing dust, stormwater runoff, or vapors.

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

The basin in which the project is located was constructed in a former landfill. Environmental laboratory testing completed in 2009 detected metals (arsenic, lead, and mercury) and polycyclic aromatic hydrocarbons at concentrations above applicable soil cleanup levels in historical landfill debris. In addition, chlorinated solvents were detected in soil and groundwater above applicable cleanup levels. Reported concentrations of other constituents (total petroleum hydrocarbons, other volatile organic compounds, polychlorinated biphenyls) were not above applicable cleanup levels and soil leachability analysis indicates the detected metals are not leachable at concentrations of concern.

**(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 known hazardous chemicals or conditions that might affect project development and design.

**(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.**

Construction activities such as sawcutting, concrete pouring and handling, would generate pollutants that could potentially enter local drainage conveyance systems.

Non-sediment pollutants that may be present during construction include:

- Petroleum products, including fuel, lubricants, hydraulic fluids, and form oils
- Paints, glues, solvents, and adhesives
- Concrete and concrete washwater
- Chemicals associated with portable toilets.

During normal operation of the project improvements, no toxic or hazardous chemicals would be stored at any time at the project site, however SPU workers may use small quantities of the above items as part of routine operation and maintenance activities.

**(4) Describe special emergency services that might be required.**

No special emergency services would be required during construction or operation of the project. Possible fire or medic services could be required during project construction, as well as possibly during operation of the completed project. However, the completed project would not demand higher levels of special emergency services than already exist at the project location.

**(5) Proposed measures to reduce or control environmental health hazards, if any:**

The construction contractor would be required to develop and implement a Spill Plan to control and manage spills during construction. During construction, the contractor would use standard operating procedures and BMPs identified in the City of Seattle's Stormwater Code SMC Title 22, Subtitle VIII, City of Seattle Director's Rule SDCI 17-2017/SPU DWW-200, and Volume 2 Construction Stormwater Control Manual to reduce or control any possible environmental health hazards. In addition, a spill response kit will be maintained at the site during construction work, and all project site workers would be trained in spill prevention and containment consistent with the City of Seattle's Standard Specifications for Road, Bridge, and Municipal Construction.

Any soil discovered to be contaminated by previous land uses or by spills during construction would be excavated and disposed of in a manner consistent with the level and type of contamination, in accordance with federal, state and local regulations, by qualified contractor(s) and/or City staff.

Workers would be required to follow the Washington State safety standards for entry and work in confined spaces (Chapter 296-809 of the Washington Administrative Code), which include requirements for atmospheric testing in a confined space structure prior to entry and work within the structure. Following the completion of construction, SPU workers performing routine storage tank operation and maintenance activities would be required to follow the requirements of SPU's Confined Space Safety Program, which implements the requirements of WAC 296-809.

**b. Noise**

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

Noise that exists in the area (traffic, pedestrians, normal residential uses) would not affect the project.

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

Noise levels would temporarily increase during construction. However, short-term noise from construction equipment would be limited to the allowable maximum levels of applicable laws, including the City of Seattle's Noise Control Ordinance [SMC Chapter 25.08.425—Construction and Equipment Operations]. Within the allowable maximum levels, SMC 25.08 permits noise from construction equipment between the hours of 7 a.m. and 7 p.m. weekdays, and 9 a.m. and 7 p.m. weekends and legal holidays. It is expected that construction would take approximately 86 working days to complete.

Operation and maintenance of the completed project would not generate additional noise over current conditions.

**(3) Proposed measures to reduce or control noise impacts, if any:**

Construction equipment would be muffled in accordance with applicable laws. SMC Chapter 25.08 (which prescribes limits to noise and construction activities) would be enforced while the project is being constructed and during operations, except for emergencies. Operation of the project improvements would comply with applicable City of Seattle Noise Ordinance (SMC 25.08) and Washington State Maximum Environmental Noise Levels (Chapter 173-60 WAC).

**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 proposed project is located in a park adjacent to a recreation playfield. Adjacent property uses are single family residential, multi-family residential, and commercial.

**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?**

There is no documented history that the site was ever used for agricultural purposes.

- (1) 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?**

There are no working farm or forest land business operations at or near the project site.

- c. Describe any structures on the site.**

The primary structures and components associated with the project site are a 1.3 million-gallon storage tank and 0.9 million gallon infiltration pond, just south of the playfield; a flow control structure with float and slide gates, located southeast and next to the storage tank; an overflow maintenance hole with a birdcage style trash rack, located north east of the storage tank; an energy dissipation vault with weir wall and slide gate, located south east of the storage tank; and maintenance hole that connects the combined sewer system to the King County sewer system located northeast of the storage tank.

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

The proposed project would not demolish any structure.

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

Residential Single Family 7200; however, the project area is wholly contained within a City of Seattle park.

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

City-Owned Open Space.

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

The project site is not located near a shoreline and is not a part of the shoreline master program.

- h. Has any part of the site been classified as an “environmentally critical” area? If so, specify.**

According to Seattle Department of Construction and Inspections GIS (accessed at: [http://www.seattle.gov/sdci/codes/codes-we-enforce-\(a-z\)/environmentally-critical-areas-\(eca\)-code](http://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/environmentally-critical-areas-(eca)-code)), the project site is within the Peat Settlement Prone Area – Category 2, Wildlife Habitat Area, Liquefaction Prone Area, Historical Landfill, and is surrounded by steep slopes with a 40 percent average.

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

No people would reside or work in the completed project.

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

The project would not displace any people.

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

There would be no displacement impacts.

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

The project would be compatible with existing and projected land uses and plans.

**m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:**

There are no nearby agricultural and forest lands of long-term commercial significance.

**9. Housing**

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

The proposed project would not construct any housing units.

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

The proposed project would not eliminate any housing units.

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

No measures are proposed because there would be no housing impacts.

**10. Aesthetics**

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

Proposed project components are to be installed underground or just above the ground surface. The three aboveground electrical cabinets are approximately five feet in height. Such features would likely be constructed of concrete and/or metal components. In addition, all areas of pavement or concrete removal would be restored in-place. Existing features that are taller in height, including trees, power poles, and adjacent houses, would remain.

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

Views are not expected to be altered as a result of the proposed project. Only minor new project elements would be visible above-ground (approximately five feet in height). These elements would be located within an area that includes trees and shrubs and would not alter or obstruct views.

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

No additional measures are proposed.



**11. Light and Glare**

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

The constructed project would not produce light or glare. No new street lights are proposed or required. During construction, if an emergency situation calls for after-dark work, the construction contractor may deploy portable lights that temporarily produce light and glare.

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

The completed project would not create light or glare.

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

There are no existing off-site sources of light and glare that would affect the proposal.

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

No measures are needed to reduce or control light and glare impacts because no impacts would occur. If an emergency requires after-dark work during construction, portable lighting would be adjusted as feasible to minimize glare.

**12. Recreation**

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

The proposed project is located within the southern portion of Washington Park Playfield and adjacent to a trail between East Roy Street and 29<sup>th</sup> Avenue that leads to the playfield and East Madison Street. Informal recreational opportunities in the immediate vicinity include strolling, running, bicycling, skateboarding, and dog walking along the trail. Washington Park Playfield has a playground and fields for soccer, baseball, and softball.

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

The proposed work would not permanently displace any existing recreational uses. Project construction activities would result in short-term temporary trail closure and detour impacts to the use of the trail by walkers, runners, and bicyclists. Following construction, the trail would function as it currently does.

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

Project notifications through website updates, emails, and mailings would provide affected residents with advance notice regarding the temporary trail closure. In addition, temporary project signs would be placed near the project area to notify trail users of the temporary trail closure.

**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? If so, specifically describe.**

The existing stormwater storage facilities were constructed on a historic landfill that operated between 1907 and 1929. During the construction of the stormwater storage facilities in 2010, artifacts were collected and inventoried from the data recovery and monitoring work at the site. Based on the results of the data recovery investigation, Washington Department of Archeology and Historic Preservation (DAHP) concurred with the recommendation that the site is eligible for listing on the National Register of Historic Places. Sufficient data have been preserved to mitigate adverse effects of the previous excavation and construction on the site.

There are numerous residential buildings over 45 years old located in the vicinity of the site, none of which have presumably been evaluated for cultural/historic significance. Aside from the project storage tank and associated facilities, no buildings or structures would be disturbed by the project.

- 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.**

During the construction of the stormwater storage facilities in 2010, artifacts were collected and inventoried from the data recovery and monitoring work at the site. According to professional studies conducted at the site, the artifacts collected from the landfill site consisted of a variety of materials including glass, ceramics, fauna, metal, cloth/leather, plastic, rubber, shell, wood, paper, botanical remains, and composite materials. The site was determined to be significant for its contribution to Seattle's history as it represents the consumer culture of a specific community. DAHP concurred with the recommendation that the site is eligible for listing on the National Register of Historic Places (NRHP).

- 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 Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.**

To assess the potential impacts to cultural and historic resources on or near the project site, cultural studies conducted for the existing stormwater storage facilities on the project site were reviewed. Additionally, the Washington Information System for Architectural & Archeological Records Data (WISAARD) database (<https://fortress.wa.gov/dahp/wisaardp3/>), which documents components of the built environment (i.e. buildings and structures) was reviewed. According to the WISAARD database, no properties within the project area are determined to be eligible for the NRHP. The Lake Washington Boulevard, which travels east and north of the project area, has been nominated and currently has no determination. The project would not affect this resource.

**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.**

The proposed project would not affect buildings or known cultural resources. Only portions of SPU's municipal utility system would be affected. The proposed work is located on previously disturbed and filled areas (in 2010). The work's location on previously disturbed and filled ground significantly reduces the chance of encountering contextually significant archaeological materials. Work crews would be trained to recognize archaeological materials should they be discovered. Should evidence of cultural artifacts or human remains, either historic or prehistoric, be encountered during excavation, work in that immediate area would be suspended and the find would be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action would be made at that time.

**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.**

The project would occur in the existing storage tank area south of Washington Play Field. Access to the construction site for the proposed project would use 29<sup>th</sup> Avenue at East Roy Street.

**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 proposed project is not expected to impact public transit service. The proposed project site is served by public transit; the nearest bus stop serves the King County Metro routes 11 and 988 and is located on East Madison Street, approximately 320 feet northwest of the project's construction area.

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

The proposed project does not include demolition or addition of parking spaces.

**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 proposed project is located entirely within Washington Play Field owned by Seattle Parks and Recreation and would not have an effect on existing roads, streets, pedestrian, bicycle, or state transportation facilities. No new permanent roads or streets would be constructed as part of the project.

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

The proposed project would not use or occur in the vicinity of 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?**

Project construction would generate approximately 86 vehicle trips maximum due to workers and materials being transported to and from the site during the estimated total 86-working-day construction period based on normal Northwest weather conditions. Most of those trips would occur during business hours (between 7 a.m. and 6 p.m.) on weekdays (Mondays through Fridays) but trips may occur at other times including weekend days. The completed project would not generate any additional vehicle trips beyond that which would normally occur for the on-going and routine operation, maintenance, and monitoring of the stormwater system in this area.

- 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.**

The proposal would not interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area.

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

The following measures would be used to reduce or control transportation impacts:

- Access for emergency-response personnel would be maintained at all times.
- Alternative routes for pedestrians, bicyclists, and those with disabilities would be identified and clearly signed, as needed.

**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 proposed project is not expected to create an increased need for public services. In the unlikely event that an accident (spill, fire, other exposure) occurs involving toxic chemicals or hazardous wastes, the local Fire Department's Hazardous Materials Team would respond. And if necessary, local medical services might also be required. However, the full range of safety and accident response supplies would be on-site to treat any emergency during construction. Upon project completion, no public services, beyond those required for the existing project site, would be needed.

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

The project would include measures to avoid impacting known underground stormwater lines. The full range of safety and accident response supplies would be on-site to treat any emergency during construction. No additional measures are proposed.

16. Utilities

a. Check utilities available at the site, if any:

- None  
 Electricity     Natural gas     Water     Refuse service  
 Telephone     Sanitary sewer     Septic system  
 Other: cable, fiber optics

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.

During construction, a temporary bypass would be created to ensure continued flow of stormwater during construction. Upon completion of the project, the storage tank and its associated structures would continue to be operated by SPU and powered with electricity provided by Seattle City Light. Utility services to adjacent residences would not be impacted.

C. SIGNATURE

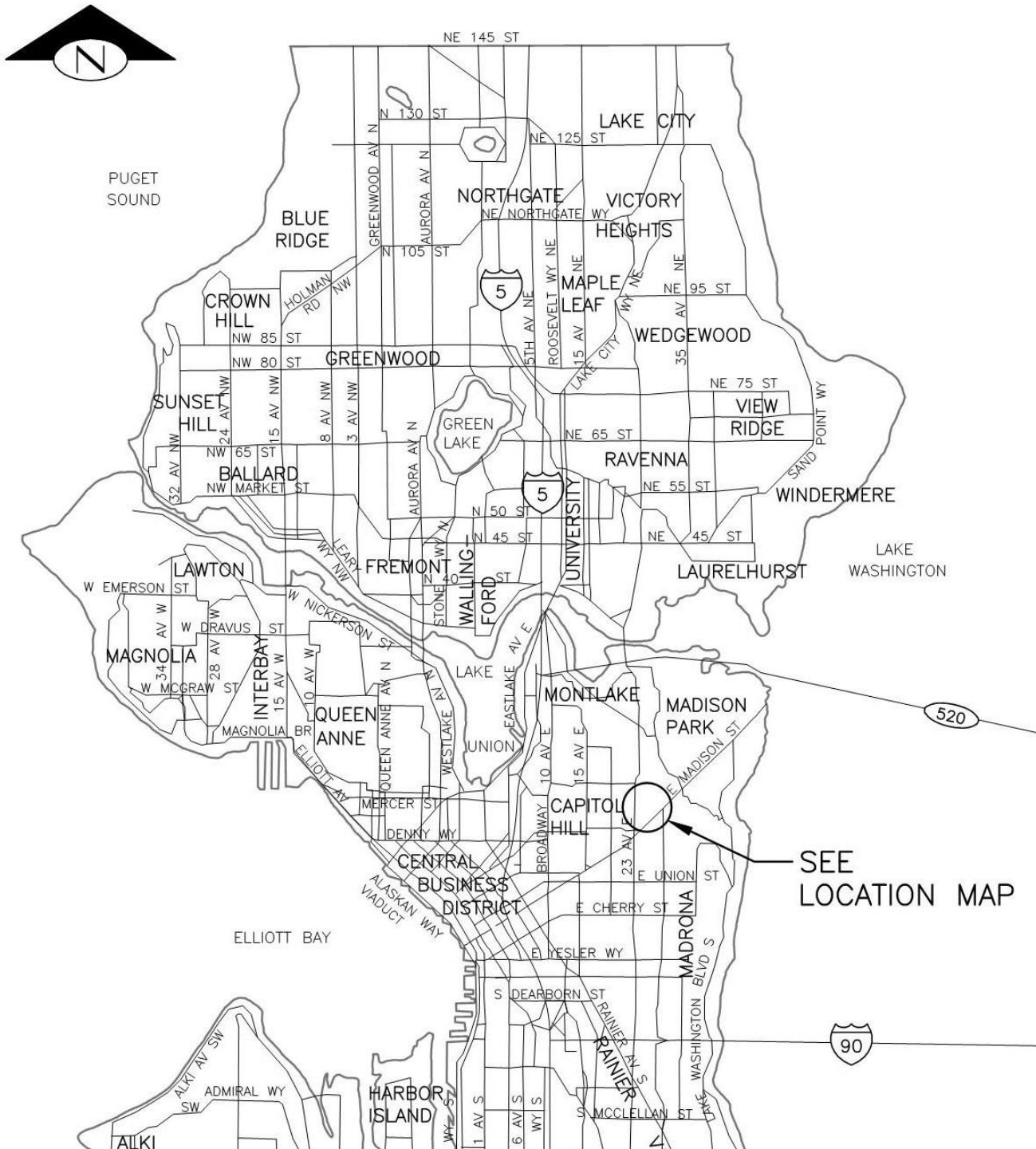
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Josh Campbell  
Josh Campbell  
Project Manager

Date: 11/14/2019

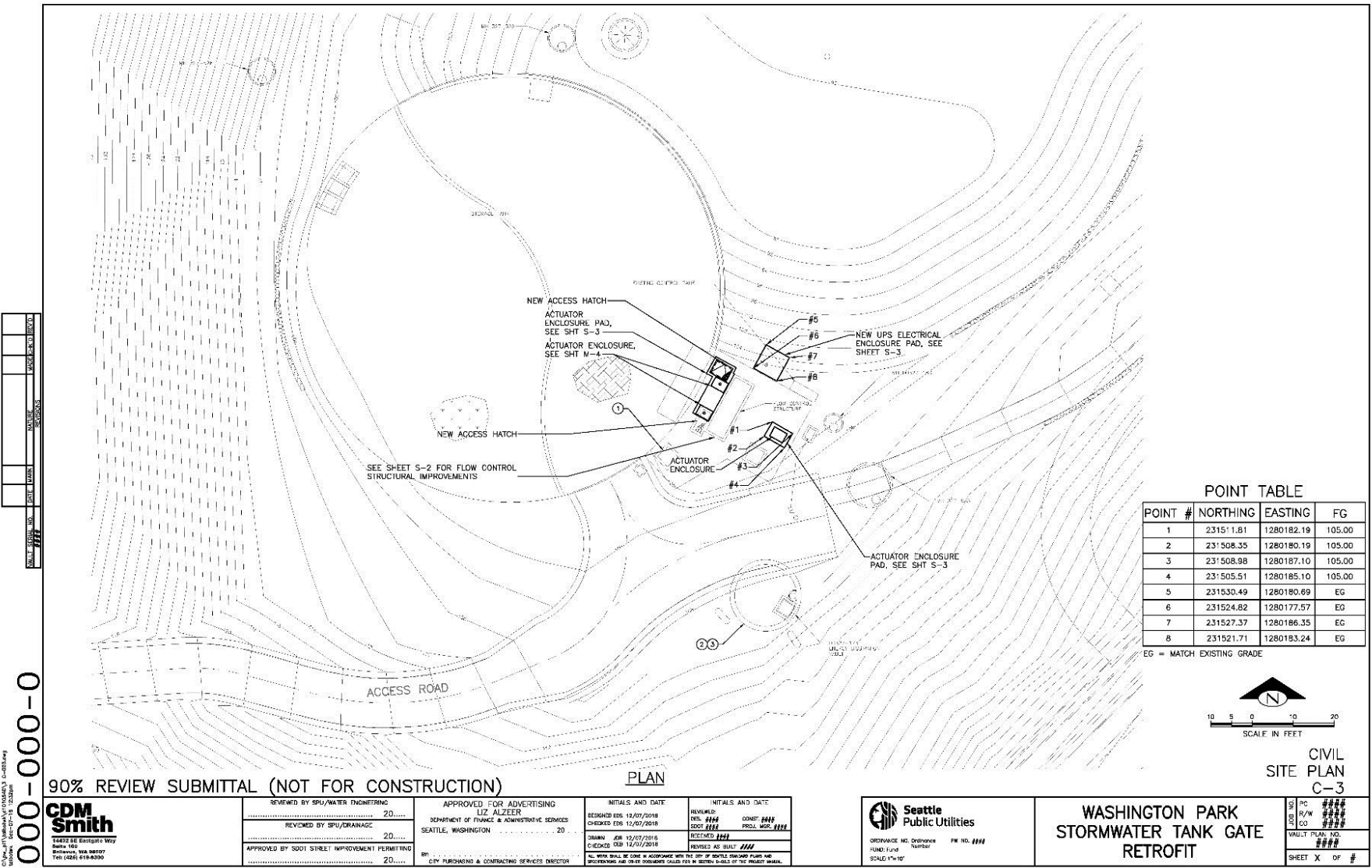
- Attachment A – Vicinity Map
- Attachment B – Site Map
- Attachment C – Staging Area and Site Access Plan
- Attachment D – Greenhouse Gas Emissions Worksheet

**Washington Park Stormwater Tank Gate Retrofit Project  
SEPA Environmental Checklist**



**Attachment A -Vicinity Map**

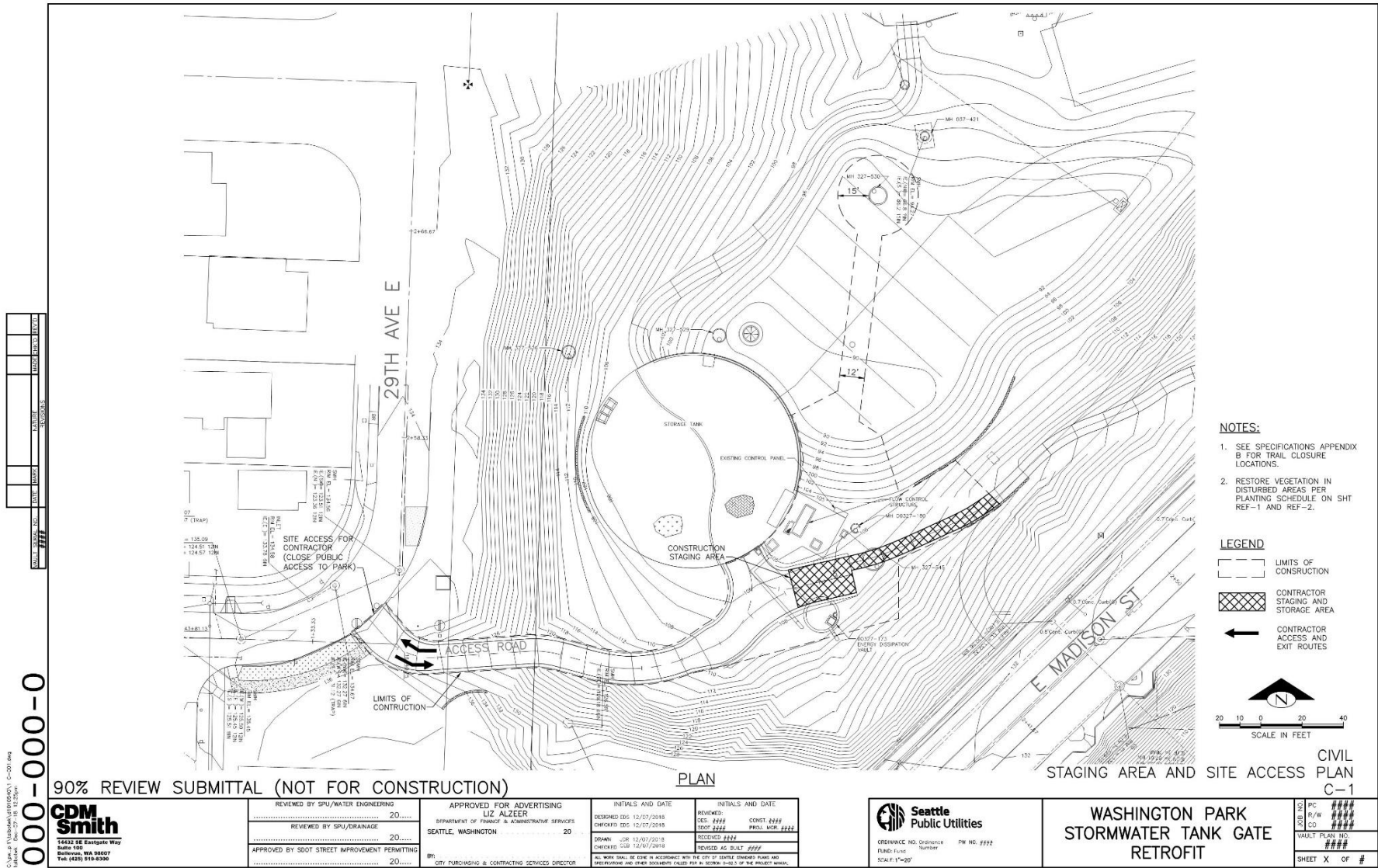
Washington Park Stormwater Tank Gate Retrofit Project  
SEPA Environmental Checklist



Attachment B – Tank Retrofit Elements



**Washington Park Stormwater Tank Gate Retrofit Project  
SEPA Environmental Checklist**



**Attachment C - Staging Area and Site Access Plan**



**Attachment D – Greenhouse Gas Emissions Worksheet**

54.8 Section I: Buildings						
			Emissions <b>Per Unit</b> or <b>Per Thousand Square Feet</b> (MTCO <sub>2</sub> e)			
Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Embodied	Energy	Transportation	Lifespan Emissions (MTCO <sub>2</sub> e)
Single-Family Home	0		98	672	792	0
Multi-Family Unit in Large Building	0		33	357	766	0
Multi-Family Unit in Small Building	0		54	681	766	0
Mobile Home	0		41	475	709	0
Education		0.0	39	646	361	0
Food Sales		0.0	39	1,541	282	0
Food Service		0.0	39	1,994	561	0
Health Care Inpatient		0.0	39	1,938	582	0
Health Care Outpatient		0.0	39	737	571	0
Lodging		0.0	39	777	117	0
Retail (Other than Mall)		0.0	39	577	247	0
Office		0.0	39	723	588	0
Public Assembly		0.0	39	733	150	0
Public Order and Safety		0.0	39	899	374	0
Religious Worship		0.0	39	339	129	0
Service		0.0	39	599	266	0
Warehouse and Storage		0.0	39	352	181	0
Other		0.0	39	1,278	257	0
Vacant		0.0	39	162	47	0
<b>TOTAL Section I Buildings</b>						<b>0</b>

Section II: Pavement						
						Emissions (MTCO <sub>2</sub> e)
Pavement (sidewalk, asphalt patch)						
Concrete Pad (50 MTCO <sub>2</sub> e/1,000 sq ft of pavement at a depth of 6 inches or 18.5 CY)		(64 sq ft)				3.2
<b>TOTAL Section II Pavement</b>						

Section III: Construction						
						Emissions (MTCO <sub>2</sub> e)
(See detailed calculations below)						
<b>TOTAL Section III Construction</b>						<b>7.81</b>

Section IV: Operations and Maintenance						
						Emissions (MTCO <sub>2</sub> e)
(See detailed calculations below)						
<b>TOTAL Section IV Operations and Maintenance</b>						<b>0</b>

<b>TOTAL GREENHOUSE GAS (GHG) EMISSIONS FOR PROJECT (MTCO<sub>2</sub>e)</b>						<b>11.01</b>
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### Attachment D – Greenhouse Gas Emissions Worksheet, continued

Section III Construction Details		
Construction: Diesel		
Equipment	Diesel (gallons)	Assumptions
Front-end Loader	210	30 x 7 gallons/hour (345 hp engine)
Dump Truck	120	10 round trips x 60 miles/round trip ÷ 5 mpg
Flat-bed Truck	120	10 round trips x 60 miles/round trip ÷ 5 mpg
Concrete Truck (10 CY capacity)	120	10 round trips x 60 miles/round trip ÷ 5 mpg
<b>Subtotal Diesel Gallons</b>	570	
<b>GHG Emissions in lbs CO<sub>2</sub>e</b>	15,134	26.55 lbs CO <sub>2</sub> e per gallon of diesel
<b>GHG Emissions in metric tons CO<sub>2</sub>e</b>	6.86	1,000 lbs = 0.45359237 metric tons

Construction: Gasoline		
Equipment	Gasoline (gallons)	Assumptions
Pick-up Trucks or Crew Vans	86	86 working days x 1 trucks x 1 round-trip/day x 20 miles/ round trip ÷ 20 mpg
<b>Subtotal Gasoline Gallons</b>	86	
<b>GHG Emissions in lbs CO<sub>2</sub>e</b>	2,089.8	24.3 lbs CO <sub>2</sub> e per gallon of gasoline
<b>GHG Emissions in metric tons CO<sub>2</sub>e</b>	0.95	1,000 lbs = 0.45359237 metric tons

Construction Summary		
Activity	CO <sub>2</sub> e in pounds	CO <sub>2</sub> e in metric tons
Diesel	15,134	6.86
Gasoline	2,089.8	0.95
<b>Total for Construction</b>	17,223.8	<b>7.81</b>

Section IV Long-Term Operations and Maintenance Details		
Operations and Maintenance: Diesel		
Equipment	Diesel (gallons)	Assumptions
<b>Subtotal Diesel Gallons</b>	0	
<b>GHG Emissions in lbs CO<sub>2</sub>e</b>	0	26.55 lbs CO <sub>2</sub> e per gallon of diesel
<b>GHG Emissions in metric tons CO<sub>2</sub>e</b>	0	1,000 lbs = 0.45359237 metric tons

Operations and Maintenance: Gasoline		
Equipment	Gasoline (gallons)	Assumptions
<b>Subtotal Gasoline Gallons</b>	0	
<b>GHG Emissions in lbs CO<sub>2</sub>e</b>	0	24.3 lbs CO <sub>2</sub> e per gallon of gasoline
<b>GHG Emissions in metric tons CO<sub>2</sub>e</b>	0	1,000 lbs = 0.45359237 metric tons

Operations and Maintenance Summary		
Activity	CO <sub>2</sub> e in pounds	CO <sub>2</sub> e in metric tons
Diesel	0	0
Gasoline	0	0
<b>Total Operations and Maintenance</b>	0	<b>0</b>