



King County

Department of Natural Resources and Parks

Wastewater Treatment Division

King Street Center, KSC-NR-0505

201 South Jackson Street

Seattle, WA 98104

Environmental Checklist

for

West Duwamish Combined Sewer Overflow (CSO) Control Project

January 7, 2022

Prepared in compliance with the State Environmental Policy Act (SEPA) (RCW 43.21C), the SEPA Rules (WAC 197-11), and Chapter 20.44 King County Code, implementing SEPA in King County procedures.

This information is available in accessible formats upon request at (206) 477-5371 (voice) or 711 (TTY).

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of proposed project, if applicable:

West Duwamish Combined Sewer Overflow (CSO) Control Project

2. Name of applicant:

King County Department of Natural Resources and Parks
Wastewater Treatment Division

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

King County Department of Natural Resources and Parks
Wastewater Treatment Division
Environmental Services Unit
KSC-NR-5500
201 S Jackson Street
Seattle, WA 98104

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4. Date checklist prepared:

January 7, 2022

5. Agency requesting checklist:

King County Department of Natural Resources and Parks
Wastewater Treatment Division

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

Construction of the project is anticipated to begin in August of 2024 with an approximate construction duration of three years. The project will not be phased.

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

No.

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

Environmental Conditions Assessment – Cultural Resources, West Duwamish CSO Control Project, Environmental Science Associates, April 21, 2017

Environmentally Critical Areas Report, West Duwamish CSO Project, HDR, Inc., September 7, 2018

Groundwater Assessment for Green Stormwater Infrastructure Alternatives Analysis, West Duwamish CSO Control Project, Richard Martin Groundwater, LLC, April 21, 2017

Geotechnical Considerations for Combined Sewer Overflow Infrastructure Alternatives Analysis, West Duwamish CSO Control Project, Aspect Consulting, LLC, June 30, 2016

Geotechnical Considerations for Combined Sewer Overflow Infrastructure Alternatives Analysis, West Duwamish CSO Control Project, Aspect Consulting, LLC, April 21, 2017

Geotechnical Data Report, West Duwamish CSO Control Project, Seattle, Washington, Aspect Consulting, LLC September 11, 2018

Hazardous Materials Corridor Assessment, West Duwamish CSO Control Project, Aspect Consulting, LLC, May 8, 2017

Hazardous Materials Investigation Summary, West Duwamish CSO Control Project, Aspect Consulting, LLC, September 7, 2018

Phase I Environmental Site Assessment, West Duwamish CSO Control Project, Aspect Consulting, LLC, September 13, 2018

Remedial Investigation Report (Draft), West Duwamish CSO Control Project, Aspect Consulting, LLC, July 30, 2019

Traffic Study Technical Memorandum, West Duwamish CSO Project, HDR, Inc., September 4, 2018

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.

The proposed project site, which is currently owned by the Port of Seattle (Port) as part of the Port's Terminal 115 property, is subject to an Agreed Order with the Washington Department of Ecology (Ecology), Order No. DE 18064. The Agreed Order requires the Port and the Boeing Company to investigate environmental contamination and propose a cleanup plan for the Port's Terminal 115. The County is pursuing the purchase of the project site and determining, in collaboration with Ecology, the extent of cleanup that may be required. As a condition of purchasing the property, the County will enter into an agreement with Ecology that will constitute a government approval directly affecting the project site.

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

The following is a list of anticipated permits/approvals that may be required for the project:

Seattle Department of Construction and Inspections

- Land Use / Master Use - Environmentally Critical Areas (ECA) Exception
- Construction Permit
- Grading Permit

Seattle Department of Transportation

- Street Improvement Permit

Seattle Parks Department

- Revocable Use Permit

King County

- Industrial Waste Discharge Authorization

Washington State Department of Ecology

- NPDES Construction Stormwater General Permit Authorization

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.

The West Duwamish CSO Control Project will reduce combined sewer overflows into local water bodies and protect public health and the environment. The older parts of King County's sewer system use a single set of pipes to carry sewage and stormwater to a treatment plant. During wet weather, the pipes can fill up with stormwater, leading to overflows of polluted runoff and raw sewage into nearby rivers, lakes, streams, and Puget Sound. Although these combined sewer overflows (CSOs) prevent sewage backups into homes and streets, they also pose public health concerns.

The objective of the West Duwamish CSO Control Project is to control the West Michigan Street Regulator Station (RS) Outfall and Terminal 115 (T115) Outfall, each of which conveys CSOs to the Lower Duwamish Waterway (LDW), to the Washington State standard of one CSO discharge per year on a rolling 20-year average. Currently, the West Michigan Street RS Outfall discharges 4.6 times per year on average, and the T115 Outfall discharges 1.7 times per year on average. The County is subject to a consent decree with Ecology and the Environmental Protection Agency to control each of these outfalls. See Figure 1 for the approximate location of each outfall.

Currently, wastewater and stormwater flows enter the sewer system in the project area via the County's West Duwamish Interceptor (WDI), which collects and conveys flows to the County's West Point Treatment Plant; and the West Michigan Street RS, which regulates flows into the WDI from the Highland Park sewer basin. During wet weather, the West Michigan Street RS routes excess flows into the West Michigan Street RS Outfall, which flows to the LDW. Approximately 0.5 miles north of the West Michigan Street RS, an overflow structure on the WDI routes excess flows to the T115 Outfall pipe during wet weather. See Figure 1 for an illustration of the major components of the existing sewer system in the project area.

The proposed project will include a combined sewage storage facility and associated improvements, and modification to the County's existing WDI pipe system. The project will include the following elements:

Combined Sewage Storage Facility

The County will construct a new facility in the industrial area near the intersection of SW Michigan Street and 2nd Avenue SW, on an approximately 60,600-square-foot portion of the Port of Seattle's Terminal 115 property (see Figure 1). The facility will include the following components:

- A below-grade, approximately 1.25-million-gallon combined sewage storage tank, approximately 140 feet by 110 feet, 26 feet deep
- A new approximately 100-foot-long, 36-inch diameter pipe from the existing West Michigan Street RS Outfall pipe on 2nd Avenue SW to the new storage tank
- A new 36-inch-diameter, approximately 60-foot-long pipe to convey excess flows out of the storage tank to the lower segment of the existing West Michigan Street RS Outfall pipe if the tank becomes full
- A new 8- to 10-inch diameter, approximately 140-foot-long pipe to convey flows stored in the tank to an existing 15-inch-diameter sewer pipe owned by Seattle Public Utilities (SPU), which will convey flows to the WDI
- An above-grade facility building and outdoor odor control area (approximately 5,300 square feet) constructed on top of the storage tank, consisting of odor control, electrical and instrumentation and control (I&C) systems, a utility water system and associated mechanical equipment, and a standby generator
- Parking and loading areas adjacent to the facility building
- Landscaping on the remainder of the property, including a stormwater bioretention facility

Modifications to the existing T115 overflow structure

The T115 overflow structure includes a weir within one of the maintenance holes along the WDI, located within the right-of-way of West Marginal Way SW approximately 0.5 miles north of the proposed storage facility site (Figure 1). When flows in the WDI exceed the level of this weir, excess flow enters a 24-inch-diameter overflow pipe to the 48-inch-diameter T115 Outfall pipe. Modifications to the T115 overflow structure will consist of raising the overflow weir by approximately six inches. All construction work will be within the existing structure.

New WDI diversion structure

A new flow diversion structure will be installed on the WDI near the intersection of West Marginal Way SW and Highland Park Way SW (Figure 1). The diversion structure will convey excess flows from the WDI directly to the West Michigan Street RS Outfall pipe. These flows will combine with excess flows diverted from the West Michigan Street RS.

Bubbler tube and conduit

An approximately 300-foot-long, one-inch conduit with a bubbler tube will be installed in a shallow trench from the existing West Michigan Street RS located in the West Duwamish Greenbelt to the new WDI diversion structure located near the intersection of West Marginal Way SW and Highland Park Way SW (Figure 1). The new bubbler tube will provide real time operating levels in the existing WDI that will be used to indicate how much flow is being diverted to the new storage facility, and to indicate when capacity is available in the existing King County system to drain the storage facility.

Facility operations

Once the project is complete, the new WDI diversion structure will route excess flows during wet weather to the new storage tank. Once flows in the WDI are sufficiently low, for example after the wet weather event has passed, the stormwater and wastewater in the storage tank will be conveyed back to the WDI, which ultimately flows to the County's West Point Treatment Plant. If the storage tank becomes full, excess stormwater and wastewater will be conveyed to the LDW as a CSO, through the lower segment of the existing West Michigan Street RS Outfall pipe. The tank will be sized appropriately to control such overflow events to no more than one per year on a moving 20-year average.

- 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.**

All project components are located within the city of Seattle, Washington, in Section 30, Township 24 North, Range 4 East. The existing T115 Overflow Structure is located near West Marginal Way SW, near the northwest corner of the T115 property. The new WDI diversion structure will be located near the intersection of West Marginal Way SW and Highland Park Way SW. The storage facility will be located on an approximately 60,600-square-foot portion of King County Parcel 5367202505. This parcel is bounded by Highland Park Way SW to the south, 2nd Avenue SW to the west, SW Michigan Street to the north, and the 1st Avenue Bridge to the east. The bubbler tube and conduit will be located along West Marginal Way SW, between

Highland Parkway SW to the south and the West Michigan Regulator Station to the north, on King County Parcel 3024049175 in the West Duwamish Greenbelt. See Figure 1 for a vicinity map of the project area.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____.

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

The majority of the project site is flat, with the steepest slopes on the site less than one percent. There are steep slopes near the new bubbler tube and conduit.

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 LDW occupies a sub-glacially incised valley (Duwamish River Valley) bordered by glaciated hills that form the valley walls and uplands. At the storage facility site, up to about 13 feet of fill is present below the ground surface. Fill is underlain by Quaternary alluvium deposits, including unconsolidated or semiconsolidated clay, silt, sand, gravel, and cobbles.

Neither the project site nor its surroundings contain agricultural land of long-term commercial significance.

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

According to Seattle Department of Constructions and Inspections (SDCI) geographic information system (GIS) data, the entire project area is mapped as a liquefaction prone area (see Figures 3 and 4). The project site, along with much of the surrounding area, is classified as moderate to high liquefaction susceptibility. A conceptual phase geotechnical report for the project confirmed that soils at the project locations are likely to liquefy in the event of a major earthquake.

According to the SDCI GIS map, the area along West Marginal Way west of the T115 overflow structure is listed as a potential slide area (see Figure 3). Portions of the proposed bubbler tube and conduit are mapped as steep slope erosion hazard areas.

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

The project will affect approximately 60,600 square feet. The following approximate amounts of excavation and backfill are anticipated for project construction. No excavation or back fill is needed for the T115 overflow structure modifications.

Approximate excavation quantities:

- Storage tank and control structure: 25,500 cubic yards
- Site utilities including bubbler tube and conduit: 3,900 cubic yards
- Diversion structure: 400 cubic yards
- *Total excavation: 29,800 cubic yards*

Approximate backfill quantities:

- Storage tank and control structure: 6,800 cubic yards
- Site utilities: 3,800 cubic yards
- Diversion structure: 200 cubic yards
- *Total backfill: 10,800 cubic yards*

Clean fill will be sourced from a permitted site.

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

Some localized erosion could occur during clearing and construction. However, erosion control measures will be used to minimize the potential for this to occur. See Section B.1.h below for typical Best Management Practices (BMPs) and other measures that could be utilized to minimize the potential for erosion. Erosion is not expected to occur as a result of the completed facility.

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

The storage facility site is currently unpaved, with no impervious surfaces. Approximately 33 percent of the 60,600-square-foot storage facility site will be covered with impervious surface following construction. Impervious surfaces will consist of the approximately 5,300-square-foot facility building and 14,620 square feet of concrete paved area.

The new WDI diversion structure, bubbler tube and conduit, and T115 overflow structure will not add any new impervious surfaces.

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

Temporary erosion and sedimentation control measures and a stormwater pollution prevention plan will be employed throughout project construction, including prior to all clearing, excavation, filling, grading, and other soil-disturbing activities in the project area. These control measures will be identified in the project plans and construction specifications and will be implemented as required by the City of Seattle, Ecology, and other permitting agencies.

Typical measures that may be used include installing filter fabric fences and other sediment barriers, placing silt traps in storm drain inlets, covering soil stockpiles and exposed soils, and using settling facilities to prevent sediment from leaving the site.

Additional best management practices (BMPs) and other measures could include the following:

- Designation of personnel to inspect and maintain temporary erosion and sediment control measures
- Use of appropriate means such as stabilized entrances and wheel washes to minimize tracking of sediment onto roadways by construction vehicles
- Regular street cleaning for mud and dust control
- Disposing of excess excavated soil at an approved disposal site as soon as practical
- Restoration of disturbed areas by repaving or replanting as soon as practical after construction is completed
- Spoils placed onsite to be compacted, seeded, and temporarily covered with plastic or blankets where needed to prevent erosion

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.

Construction of the project may result in short-term fugitive dust emissions from exposed soils and earth moving activities, and emissions from construction equipment. Given the diffused nature of such emissions in space and time for the activities associated with construction, there are not expected to be any concentrated impact areas, and any impact on air quality from construction will be temporary. Project emissions are not expected to significantly impact air quality locally or regionally.

The completed storage facility will operate intermittently and only during storm events. Although the facility will include odor control equipment, intermittent odors associated with the operation of the storage facility may still be occasionally noticeable in the immediate project vicinity.

Diesel emissions will occur from use of the standby diesel generator that will provide back-up power in case of a power outage when the facility is operating. The generator will be located in the facility building. It is anticipated that the generator will be operated for maintenance purposes once a month for approximately one hour. It is anticipated that the generator will be operated during emergency circumstances one or two times per year for a maximum of 24 hours.

See Attachment 1 for a King County Greenhouse Gas Emissions Worksheet prepared for the project.

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 air emissions or odors that may affect the project.

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

During construction, BMPs will be implemented to control fugitive dust. Types of BMPs that will be used may include street sweeping, watering exposed soil surfaces, and covering soil stockpiles to help minimize the amount of fugitive dust and particulate pollution to the surrounding areas.

Construction equipment-related emissions will be reduced by requiring proper maintenance of equipment, using electrically-powered equipment where practical, and avoiding prolonged idling of vehicles and equipment.

The standby power generator at the proposed facility will use a diesel engine designed to minimize the discharge of gaseous pollutants to the atmosphere. The engine will meet a minimum of Environmental Protection Agency Non-Road Tier One diesel engine emissions requirements.

Odors associated with facility operation will be treated using an odor control system. The new storage tank will be connected to an odor control treatment system that will pull foul air from the air space to provide a negative pressure under typical operating conditions (particularly during non-storm events when stagnant sewage may be present) and reduce odor leaks from the system. The foul air will be treated through a carbon adsorption scrubber before discharge to the atmosphere. The carbon in the adsorption scrubber will be replaced when necessary or mechanical maintenance on the equipment will be performed as necessary to keep it in good working condition. The maximum concentration of hydrogen sulfide from the treated scrubber discharge is anticipated to be approximately 0.1 parts per million. The treated air will be discharged through a vent located on the roof of the facility building. After storage is no longer needed, the storage tank will be flushed and cleaned to remove odor-causing materials.

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, or wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

One wetland mosaic, which is an area comprised of patches of wetlands and uplands located in close proximity to each other (Wetland 1 Mosaic); one stream (Stream 1); and one ditch (Ditch 1) are located in the immediate vicinity of the bubbler tube and conduit. One wetland (Wetland 2) and one stream (Stream 2) are present in the vicinity of the storage facility. No surface water bodies are located near the T115 overflow structure or the proposed WDI diversion structure locations.

Wetland 1 is an approximately 0.52-acre mosaic wetland located in the West Duwamish Greenbelt, north of Highland Park Way SW, and west of West Marginal Way SW. Wetland 1 is a palustrine scrub-shrub depressional wetland. Wetland 1 is preliminarily rated as Category III with moderate habitat functions with a regulatory buffer width of 110 feet.

Wetland 2 is an approximately 0.01-acre, Category III palustrine emergent and scrub-shrub depressional wetland located north of Highland Park Way SW and south of SW Michigan Street, immediately west of a gravel parking area below the 1st Avenue Bridge (See attached Figure 4). Wetland 2 is a ditch-like wetland that is approximately 145 feet long running north and south and approximately 5 feet wide.

Stream 1 is located in the West Duwamish Greenbelt (See attached Figure 3). Within the project vicinity, it flows south along the west side of an existing trail for approximately 40 feet before it goes through a corrugated metal pipe (CMP) culvert. The stream then drains into a catch basin with a debris barrier that connects to an underground 24-inch-diameter stormwater pipe. The stormwater pipe then runs east through the West Duwamish Greenbelt, connects to a 48-inch-diameter pipe at the intersection of West Marginal Way SW and Highland Park Way SW, and eventually drains into the LDW outside of the project area through a series of underground conveyance pipes.

Within the project vicinity, the stream channel is approximately 5 feet wide, and the bank is approximately 3 feet high. The stream appears to be perennial based on the presence of a continuous bed and bank. Stream 1 is preliminarily typed as an Np stream due to lack of a connection to an existing Type S, F, or Np waters.

Stream 2 is a Type F tributary to the LDW and drains into the river north of Highland Park Way SW, approximately 130 feet southeast of the storage facility site. This stream is directly connected to the LDW, approximately 400 feet downstream from Highland Park Way SW (See attached Figure 4). Stream 2 is not a designated Shoreline of the State by the City of Seattle.

Ditch 1 is located at the north end of Wetland 1 and west of West Marginal Way SW (See attached Figure 3). The manmade ditch originates from Wetland 1 and generally flows north and northeast for approximately 65 feet before it drains into a catch basin. According to City of Seattle drainage and sewer maps, this catch basin is connected to an underground 24-inch stormwater pipe that runs under West Marginal Way SW. Ditch 1 is approximately 3 feet wide and 3.5 feet high. Due to lack of substrates, continuous flow, and a connection to an above-ground channel system to Type S, F, or Np waters, the ditch is not considered as a riparian watercourse per the City of Seattle definitions.

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.

Construction of the project will not result in direct impacts to Wetland 1 mosaic or Wetland 2. Because Wetland 2 is located approximately 135 feet away from the bioswale for the storage facility site, no permanent or temporary wetland impacts are anticipated to occur as a result of the project. The 60-foot buffer for Wetland 2 does not extend into the project construction area; therefore, no permanent or temporary wetland buffer impacts will occur for this project.

Project work will occur within the 110-foot buffer for Wetland 1. Temporary impacts to the wetland buffers and biodiversity area and corridor will be minimized by reducing the temporary construction footprint. No trees will be removed from the bubbler tube and conduit location.

There will be no in-water work on Streams 1 or 2, and no tree removal associated with the proposed project near these water bodies. As a result, no direct impacts to the streams are expected to occur. Although the storage facility site is located in close proximity to Stream 2, the site is located outside of the riparian management area. The proposed storage facility location is a vacant lot with sparse vegetation and provides very little habitat for wildlife species.

- 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 fill or dredge material will be placed in or removed from surface waters or wetlands.

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

No surface water withdrawals or diversions are anticipated as part of the project.

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

Per FEMA FIRM Maps 53033C0640G and 53033C0636G (effective date 8/18/2020), project elements are not located within the 100-year floodplain.

- 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.**

No waste materials will be discharged to surface waters.

b. Ground Water:

- 1) **Will ground water 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 ground water? Give general description, purpose, and approximate quantities if known.**

Geotechnical exploration data show groundwater levels between 5 and 10 feet below ground surface at the location of the proposed storage facility. Excavation for the storage tank will occur below the groundwater table, and watertight shoring with construction dewatering will be necessary to complete the work. The dewatering system for the tank will maintain groundwater levels in the excavation below the bottom of the excavation over the duration of construction. The quantity of water withdrawn by the system is expected to be greater early in the dewatering process (estimated at up to 250 gallons per minute) and gradually reducing under long-term conditions (estimated at up to 150 gallons per minute). Dewatering is anticipated to take place for up to one year. Dewatering will be also required for construction of new utility conveyance pipes to connect the new storage tank to the existing utilities. The dewatering rate may be up to

250 gallons per minute for pipe installation, for an approximately two-month period.

No water will be discharged directly to groundwater as a result of the project.

Disposal and discharge of groundwater from dewatering activities is discussed in Section 7, Environmental Health.

- 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 related to the project will be discharged into the ground from septic tanks or other sources.

c. Water Runoff (including storm water):

- 1) **Describe 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.**

During construction, the primary source of water runoff onto and off of work areas will be rainfall. Stormwater BMPs such as those described below in Section B.3.d will be implemented to manage stormwater runoff during construction.

The storage facility site is currently a gravel lot. When the project is completed, stormwater will run off from the building roof and other impervious areas such as pavement and will be collected and routed to a new bioretention cell located on the east side of the facility building on the storage facility site before eventual discharge to the LDW.

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

During construction, the County will implement BMPs to prevent introduction of contaminants into ground and surface waters, which could include:

- Storing fuels and other potential contaminants in secured containment areas
- Containing equipment, materials, and wash water associated with construction

- Conducting regular inspections, maintenance, and repairs of fuel hoses, hydraulically operated equipment, lubrication equipment, and chemical/petroleum storage containers
- Maintaining spill containment and clean up material at construction sites
- Establishing a communication protocol for handling potential spills

After construction of the storage facility is complete, runoff from new parking areas has the potential to contain small amounts of motor oil, diesel fuel, hydraulic fluid, or other materials typical of parking areas and roadways. The completed storage facility's stormwater management system will effectively prevent pollution from entering the LDW.

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

The storage facility site is currently a gravel parking lot. Drainage patterns on the site itself will be altered from the addition of impervious surfaces and conveyance of stormwater runoff to a bioretention cell for treatment. As a result of on-site stormwater management, the proposed project will not affect drainage patterns in the vicinity of the site.

Other project components including the bubbler tube and conduit, T115 overflow structure and the WDI diversion structure will not change drainage patterns in the area.

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

Stormwater management during and after construction will comply with all applicable permits and government approvals, including requirements and guidelines from the City of Seattle, King County, and Ecology. In particular, King County will meet performance standards included within the 2021 City of Seattle Stormwater Manual and Seattle Municipal Code (SMC 22.80). Stormwater management BMPs will be used during construction to control stormwater runoff. Examples of typical BMPs that could be used during construction are presented in Section B.1.h above.

The completed storage facility will include a detention system that will capture stormwater runoff from the parking and other pollution-generating surface areas of the site.

4. Plants

a. Check or circle types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other: ash, sweet gum, crabapple, pear, cottonwood, dogwood

evergreen tree: fir, cedar, pine, other

shrubs: salal, Oregon grape, other: Himalayan blackberry

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 types of vegetation

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

Most of the approximately 60,600-square-foot site of the storage facility is graveled, with sparse amounts of grass, blackberry, and shrubs located on-site. This site will undergo clearing and grading prior to construction. Street trees located along 2nd Avenue SW may need to be removed for construction of the storage facility. No trees will be removed for the bubbler tube and conduit.

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

Based on a review of existing information and site conditions, no federally or state-listed threatened or endangered plants are known to occur in the project area.

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

Construction activities will follow vegetation protection BMPs including:

- Clearly marking the extent of clearing before construction begins
- Installing and maintaining tree protection fencing to protect the critical root zone of all trees to be retained.
- Replanting vegetated areas as soon as practicable after construction activities are complete

Detailed landscape design at the storage site will likely focus on use of native plant species and increasing tree canopy where appropriate on the site.

In general, the following approaches may be utilized in selecting landscaping for the site:

- Lower water use plant species that are ornamental or northwest native and that have lower maintenance and irrigation needs

- Plant species that convey the character of adjacent shoreline and tidal slough landscapes, including both evergreen and deciduous species
- Plant species that maintain sight lines to and from the LDW, as well as adjacent streets and public spaces.
- Plant species and orientation of plantings around the site to maintain site lines and visibility framed on the principles of Crime Prevention through Environmental Design (CPTED).
- If possible, protect and maintain existing trees bordering the site throughout construction in accordance with applicable codes.

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

No noxious weeds are known to be located on the project site.

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.

Examples include:

birds: , , , , other:

mammals: deer, bear, elk, beaver, other:

fish: bass, , , herring, shellfish, other

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

The LDW is documented to provide rearing and migration habitat for Chinook salmon (*Oncorhynchus tshawytscha*), steelhead trout (*O. mykiss*), and bull trout (*Salvelinus confluentus*), which are federally threatened species. Other aquatic species documented to occur in the LDW include coho (*O. kisutch*) and chum (*O. keta*) salmon. Pink (*O. gorbuscha*) and sockeye (*O. nerka*) salmon and sea-run cutthroat trout (*O. clarki clarki*) are also documented to be present but are considered rare. All these species may be present in Stream 2 because of its direct connection to the LDW. No fish were documented to be present in the Stream 1 and Ditch 1, and no fish were observed in either system during field investigations.

The bald eagle (*Haliaeetus leucocephalus*) is protected under the Federal Bald and Golden Eagle Protection Act and prefers to nest along marine and freshwater shorelines. No bald eagle nests or mature trees were observed during the field investigation. Great blue heron (*Ardea herodias*) is a state monitored species that forages in wetlands and shallow water. There is a large great blue heron nesting colony on the north end of the West Duwamish Greenbelt, approximately 1.5 miles north of the project area. No heron colonies have been

documented to occur within the project area. Great blue herons forage on the intertidal mudflats along the LDW, and they have been observed on the mudflats at the 1st Avenue Bridge, the downstream end of Stream 2.

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

The proposed project is located within the Pacific Flyway migration route, which extends from Alaska to Patagonia, and which is used by waterfowl, eagles, hawks, falcons, songbirds, sandhill cranes, and shorebirds.

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

Construction of the proposed project will reduce the number of CSO events to the LDW, reducing the potential for adverse impacts to wildlife.

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

None known.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, woodstove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity and diesel will be used for equipment during construction of the project. The completed project will use electricity for lighting, instrumentation and control equipment, and odor control equipment. Natural gas will be used for heating the facility. Diesel will also be used in the standby generator during operations. An approximately 300-gallon, double-walled steel tank for the generator will be located in the standby generator room at the storage facility.

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

The completed project will not affect the potential use of solar energy by adjacent properties.

c. What kind 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 following conservation measures are planned for the project:

- Light emitting diode (LED) lights
- Variable frequency drives (VFDs) on odor control fan to optimize the operation of the odor control system
- Light colored roof
- Controllable heat pumps in occupied spaces

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.**

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

Environmental investigations of the storage facility site have indicated that dredge fill soils on the site are “impacted,” which is defined as soil that contains contaminants greater than background levels but less than Washington State Department of Ecology’s Model Toxics Controls Act (MTCA) cleanup levels.

Total metals, consisting of arsenic, chromium, and lead, were detected in one or more of the groundwater samples collected at the storage facility site at concentrations above the MTCA Method A cleanup levels. The concentrations of metals in groundwater were likely elevated due to turbidity (suspended solids) in grab samples

The site is currently subject to an Agreed Order with Ecology, which covers the entirety of the Port of Seattle’s Terminal 115, to characterize and clean up any contamination that has the potential to enter the LDW.

- 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.**

No hazardous liquid or gas transmission pipelines are located within the project area or the vicinity.

Environmental investigations noted surrounding properties with known contamination: the LDW Superfund site, Foss Environmental and Infrastructure, Seafreeze Cold Storage, and Douglas Management Dock/Alaska Marine Line Shipyard.

- 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-related materials such as fuel and hydraulic fluid will be stored and used on-site during construction. BMPs will be implemented during construction to minimize the potential for spills or mechanical failures to occur, and to minimize the potential for adverse effects from hazardous chemicals to workers or nearby residents.

Dewatering activities will take place at the location of the storage facility and new WDI diversion structure. Groundwater will be collected for temporary storage and testing for water quality parameters and chemical concentrations. If dewatering water meets water quality requirements, discharge of dewatering water will likely be to the LDW. If dewatering water does not meet water quality requirements for discharge into the LDW, it will be disposed of in accordance with appropriate Washington State regulations.

At the completed storage facility, an approximately 300-gallon, double-walled steel tank for the generator will be located in the standby generator room at the storage facility.

4) Describe special emergency services that might be required.

None

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

As described in items B.1.h and B.3.d. above, BMPs and other measures will be used to avoid or contain and control any accidental spills or releases of hazardous materials during project construction. Project plans and construction specifications will include measures to safely handle and dispose of contaminated materials.

The Phase I ESA prepared for the storage facility location noted that groundwater at the site contains concentrations of metals above the MTC A Method A cleanup levels; however, these may be due to the elevated turbidity of the samples. During construction, groundwater will be collected in large Baker tanks for temporary storage and testing of water quality and chemical concentrations to ensure compliance with applicable criteria prior to discharging.

The contractor will prepare a health and safety plan as a deliverable for the proposed project prior to the start of construction. This plan will comply with all applicable health regulations and will detail measures to control environmental health hazards.

Once operational, facility staff will adhere to environmental safety requirements and guidelines as prescribed by King County. These requirements and guidelines include BMPs for the proper storage, handling, disposal, and clean-up of hazardous materials.

Ecology, the Port of Seattle, and Boeing are parties to the Agreed Order covering the Port's Terminal 115 facility including the project site. The County is in ongoing discussions with the parties to determine the County's responsibilities for the cleanup of any contamination discovered

on the project site. Additional cleanup actions, such as excavation and removal of contaminated soils and groundwater management, may be required.

b. Noise

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

Noise in the project area will 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.

Short-term construction related noise will likely exceed existing background noise levels. The following equipment and approximate noise levels are anticipated for the project.

Anticipated Equipment	Approximate Sound Pressure Level (SPL) at 50 feet from Source (A-weighted Decibels)
Crane	82
Drill rig	82
Dump truck	81
Generator	79
Loader/excavator	77
Transport truck	81
Pile installation	100

Noise associated with pile installation (use of sheet pile drivers) depends on the method of installation. An impact pile driver can generate noise measuring up to approximately 100 dBA at a distance of 50 feet. Other pile installation tools, such as vibratory hammer or drilling, would generate less noise. The project will be required to comply with thresholds for impact types of equipment under SMC 25.08.425.

Construction-related noises will be limited to construction hours allowable by the City of Seattle noise control code. An application for a variance will be submitted to the City of Seattle for any work that occurs outside of approved hours.

The completed storage facility will operate intermittently and only during storm events. During facility operation, noise will occur from operating mechanical equipment, including HVAC, odor control, pumps, and the standby generator in the event of a power outage.

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

To reduce potential construction noise on noise-sensitive receivers, contractors will be required to implement a construction noise management plan with best-management practices and noise control measures to comply with noise limits.

Examples of practices and measures that the contractor could implement during construction to comply with noise limits include the following:

- Choosing lower-noise construction activities such as using a hydraulic cutter instead of a circular saw
- Ensuring all construction equipment has been properly maintained and is in good working order, and where necessary, using additional noise control measures
- Constructing noise barriers between noisy activities and noise-sensitive receivers. Examples of such barriers include piles of excavated material or temporary walls.
- Conducting noise monitoring during construction to verify compliance with the limits and warn workers when noise begins approaching limits
- Planning corrective actions when noise exceeds limits, and planning corrective actions to avoid exceedances when noise begins to approach limits
- Scheduling the construction activities strategically so the noisiest activities occur during the most noise-tolerant periods least likely to trigger complaints from anyone who is affected.
- Locating stationary construction equipment strategically to put distance or obstructions between the equipment and noise-sensitive receivers
- Conducting daily noise briefings to identify activities with potential to trigger complaints from stakeholders and maintain worker awareness of noise issues
- Coordinating with local agencies in the project area and communicating with stakeholders on the planned construction activities for each day

During project operations, equipment will be located within a building to minimize radiated noise from operation (the interior of the facility could reach > 80 dBA when equipment is running). Inlets and outlets for fans will be addressed with silencers and acoustical louvers designed to minimize radiated noise to the exterior of the facility. The standby generator system will also include acoustical louvers/inlet plenum and discharge silencers to protect the surrounding community. In addition,

odor control ductwork exterior to the facility that may radiate mechanical noise through the duct wall will be covered with acoustical wraps. The facility will be designed to meet noise code for the City of Seattle.

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 storage facility site is currently used as a gravel parking lot for truck storage by the Port of Seattle. A portion of the Duwamish Trail is located adjacent to the storage facility location (See Section 12a for discussion of the Duwamish Trail). The existing T115 overflow structure is a weir located below ground within a maintenance hole in the right-of-way of West Marginal Way SW. The new WDI diversion structure will be located below ground on the existing WDI within the West Marginal Way SW right-of-way. Adjacent properties include commercial and industrial sites. The existing West Michigan Regulator Station, where the bubbler tube and conduit will begin, is located in the West Duwamish Greenbelt. The bubbler tube and conduit will then run parallel to West Marginal Way SW to its terminus at the WDI diversion structure.

The proposed project will not affect current land uses on adjacent or nearby 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?**

No; historical aerial photographs suggest the storage facility site was undeveloped until 1953 when it was used as a parking lot.

The project will not result in conversion of farm or forest land to a nonfarm or nonforest use.

- 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:**

No; no working farms or forest lands are located near the project area.

c. Describe any structures on the site.

No structures are located on the storage facility site or WDI diversion structure site. The T115 overflow structure consists of a weir within one of the maintenance holes along the WDI.

The West Michigan Street Regulator Station is an active control structure that regulates flow from the Highland Park drainage area into the WDI.

The bubbler tube and conduit will tie into the regulator station.

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

No structures will be demolished for the project.

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

The City of Seattle zoning classification for the locations of the storage facility, T115 overflow structure, and WDI diversion structure is General Industrial 1 (IG1). The location of the bubbler tube and conduit is zoned as Industrial Buffer near the West Michigan Street Regulator Station and as IG1 where it will parallel West Marginal Way SW.

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

The Comprehensive Plan designation for the storage facility, T115 diversion structure and WDI diversion structure is Duwamish Manufacturing/Industrial Center. The location of the bubbler tube and conduit where it connects to the Michigan Street Regulator Station is City-owned open space. The remaining portion of the bubbler tube and conduit location is designated as Industrial.

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

The proposed project will occur outside of the designated shoreline area and associated buffers.

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

According to the SDCI GIS Map, the entire project area is mapped as a liquefaction prone area. Areas along the LDW, including the project area, are classified as moderate to high liquefaction susceptibility.

The bubbler tube and conduit is located below ground within the 110-foot buffer for Wetland 1.

In addition, the location of the bubbler tube and conduit has been mapped as Wildlife Habitat by SDCI and is considered priority habitat and species area by the WDFW.

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

No people will work or reside in the completed project. It is estimated that King County staff will visit the completed project monthly for operation and maintenance activities.

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

None

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

None

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

The project will be located on property zoned as IG1 and is compatible with existing land uses.

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

None

9. Housing

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

None

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

None

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

None

10. Aesthetics

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

The anticipated maximum height for the storage facility is up to 31 feet with 25 feet at the top of roof and up to an additional 6 feet for the odor control discharge stack adjoining the roof. It is anticipated that the building materials will be primarily concrete, brick veneer, and steel. The T115 overflow structure modifications and the new WDI diversion structure will be located underground.

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

The storage facility location will be altered from its current use as a gravel parking lot. However, due to the industrial nature of the surrounding area, no views will be altered or blocked.

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

The following design criteria may be implemented to reduce aesthetic impacts of the storage facility.

- Locate above-grade building and above-grade features such that their visual impact is minimized from neighbors as much as possible.
- Provide landscaping over below-grade tank structure where feasible.
- Provide architectural design that minimizes the visual impact of the structure.
- Design building to be a focus on the site and contextual to the surroundings in the industrial area.
- Integrate the above-grade structure with the landscaping as much as possible.
- Select metal and masonry for wall materials.
- Apply colors to be consistent with industrial and site context.
- Limit height of the new facility building's above-grade structure as much as possible.

The improvements to the T115 overflow structure improvements, the new WDI diversion structure, and the bubbler tube and conduit will be located underground and will not be visible to the public.

11. Light and Glare

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

Project construction will take place largely during daylight hours. Temporary site lighting may be used at the beginning and end of work days during construction when daylight hours are short.

The storage facility will have exterior security lighting that will be visible from the facility. Security lighting will mainly be utilized during nighttime hours. No light or glare will be associated with the T115 overflow structure, bubbler tube and conduit, or the new WDI diversion structure.

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

No. The site is surrounded by industrial areas.

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

None

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

All exterior lights will be focused or shielded as necessary to cast light only in areas that require it and to minimize light spilling onto neighboring properties.

12. Recreation

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

The approximately 2.5-mile-long Duwamish Trail is a multi-use paved trail that runs along the west side of the LDW from the lower Spokane Street Bridge southward toward the First Avenue Bridge. A portion of the trail is adjacent to the storage facility location.

The LDW is used for recreational boating and fishing. The waterway is located approximately 500 feet from the storage facility location.

The West Duwamish Greenbelt is located west of West Marginal Way S near Highland Park Way SW. The greenbelt spans approximately 550 acres and includes several trails.

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

During construction of the storage facility, the Duwamish Trail may be temporarily closed or relocated near the intersection of 2nd Avenue SW and Highland Park Way SW. No displacement will occur at or near the West Duwamish Greenbelt.

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

If a portion of the Duwamish Trail is closed, King County will work with the City of Seattle to relocate the trail during construction.

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.**

No buildings, structures, or sites that are listed in or eligible for listing in preservation registers have been identified on or near the project sites.

- 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.**

Archaeological monitoring took place on the proposed storage facility location in 2017. The archaeological rationale for the work was to examine the parcel for the presence of buried archaeological remains or at least old stable ground surfaces with the potential for such resources. No evidence for buried ground surfaces was observed, and no potential cultural indicators of past culture, such as fragments of shell and bone, charcoal, ash or burned soils, were observed in any of the archaeological borings.

- 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.**

The project was screened by the King County Historic Preservation Program for the presence of cultural and historic resources within the project area and the probability of an inadvertent discovery of cultural resources during project construction. This screening included a review of historic registers, databases, historic maps and reports, and predictive GIS modeling.

A separate literature review for the project was conducted extending one mile in every direction from the footprint of the project area. Information reviewed included previous archaeological survey reports, ethnographic studies, historical maps, government landowner records, aerial photographs, regional histories, geological maps, geotechnical reports, and environmental reports. These records were reviewed in order to determine the presence of any potentially significant cultural resources, including Traditional Cultural Properties, within the project

area. Relevant documents were examined at the Washington State Department of Archaeology and Historic Preservation (DAHP), the University of Washington Libraries, online, and Environmental Science Associates' research library.

- 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 project area is considered to have a very high potential for precontact/ethnographic archaeological sites. There is a potential for such sites to have been buried by dredge spoils from straightening of the Duwamish River, and by other fill associated with industrialization of the LDW.

The County will prepare an inadvertent discovery plan (IDP) for project construction. The IDP will provide guidance to contractors for identifying potential cultural resources, as well as establish procedures to follow in the event of the unanticipated discovery of potential cultural resources in order to protect the discovery until it can be assessed by a professional archaeologist. Portions of the construction work may also be monitored by an archaeologist.

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 storage facility site is bordered by SW Michigan Street to the north, 2nd Avenue SW to the west, and Highland Park Way SW to the south. The T115 overflow structure and the West Michigan Regulator Station are located along West Marginal Way SW. The new WDI diversion structure will be located near the intersection of West Marginal Way SW and Highland Park Way SW. The bubbler tube and conduit will be located between the West Michigan Regulator Station and the new WDI diversion structure, running approximately parallel to West Marginal Way SW. Figure 1 shows the street system in the project area.

Access to the existing street system is available from the south via State Route 99 and from the north via Interstate 5.

- 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?**

King County Metro operates six bus transit routes within the vicinity. These routes comprise one all-day route (131) and five peak-period-only routes (113, 121, 122, 123, and 154). Of these six routes, only the 131 bus routes through the area, along Highland Park Way SW near the storage facility and the new WDI diversion structure locations.

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

The storage facility will include parking spaces for two standard maintenance service trucks. No parking spaces will be provided at the T115 overflow structure, the bubbler tube and conduit, or the WDI diversion structure. The storage facility site is currently used as a gravel parking lot for the Port of Seattle. The gravel parking area will no longer be available for parking following construction of the storage facility, with the exception of the two parking spaces for two standard maintenance service trucks.

- 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).**

No such improvements are included as part of the proposed project.

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

The project will not use water, rail, or air transportation. The LDW is located approximately 500 feet from the storage facility site. The nearest airport is Boeing Field, located approximately 1 mile east of the storage facility site. A rail line runs parallel to West Marginal Way SW near the location of the T115 overflow structure improvements.

- 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?**

During construction, excavation and backfill hauling and delivery of concrete will require up to approximately 6,400 one-way truck trips. Most of these truck trips will occur during a one to two-year period. Additional vehicular trips associated with construction workers and delivery of other materials will also occur. The number of truck trips will depend on contractor planning and construction sequencing. The completed project will result in approximately one vehicular trip monthly for maintenance activities.

Expected temporary road closures during construction include a full closure of 2nd Avenue SW between SW Michigan Street and Highland Park Way SW, and a one-lane closure of the right-most lane of southbound West Marginal Way SW just north of the Highland Park Way SW intersection.

Potential impacts to traffic operations in the area due to construction activities were evaluated. The level of service (LOS) results showed that the added traffic and road closures during construction will bring minimal changes in the

intersection control delays during the AM and PM peak hours, and all study intersections will maintain an acceptable LOS per the City of Seattle's standard.

- 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 proposed project will not affect or be affected by the movement of agricultural and forest products.

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

During construction, the contractor will be required to submit a traffic control plan detailing haul routes for construction traffic. Additional traffic control measures, such as warning signs and flaggers will be required for approval of the haul route. The following design criteria will be considered for traffic control:

- Conduct traffic control in accordance with SDOT requirements and adhere to all applicable regulations for in-street work.
- Include traffic impacts in the construction schedule.
- Provide detour routes to maintain traffic, including transit buses, school buses, and emergency vehicle access.
- Coordinate with Metro Transit and Seattle School District for bus re-routing.
- Re-evaluate haul routes regularly during project design.

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.**

No.

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

None

16. Utilities**a. Circle utilities currently available at the site:**

electricity, **natural gas**, **water**, **refuse service**, **telephone**, **sanitary sewer**,
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.

The storage facility will require the following new connections to public utilities:

- Water service for irrigation, fire systems, toilet, sink, and washdown, and cleaning - Seattle Public Utilities.
- Backflow prevention systems as required by code.
- Sanitary sewer connection for sink and toilet, floor drains – Seattle Public Utilities.
- Storm drainage – Seattle Public Utilities
- Natural gas for heating – Puget Sound Energy
- Electrical service for all connected loads including pumping system – Puget Sound Energy
- Communication service – CenturyLink

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.

DocuSigned by:
Signature: Katherine Fischer
DPECAS135D03480...
Katherine Fischer, Environmental Programs Managing Supervisor
King County WTD

Date Submitted: 1/9/2022

Figure 1. Vicinity map

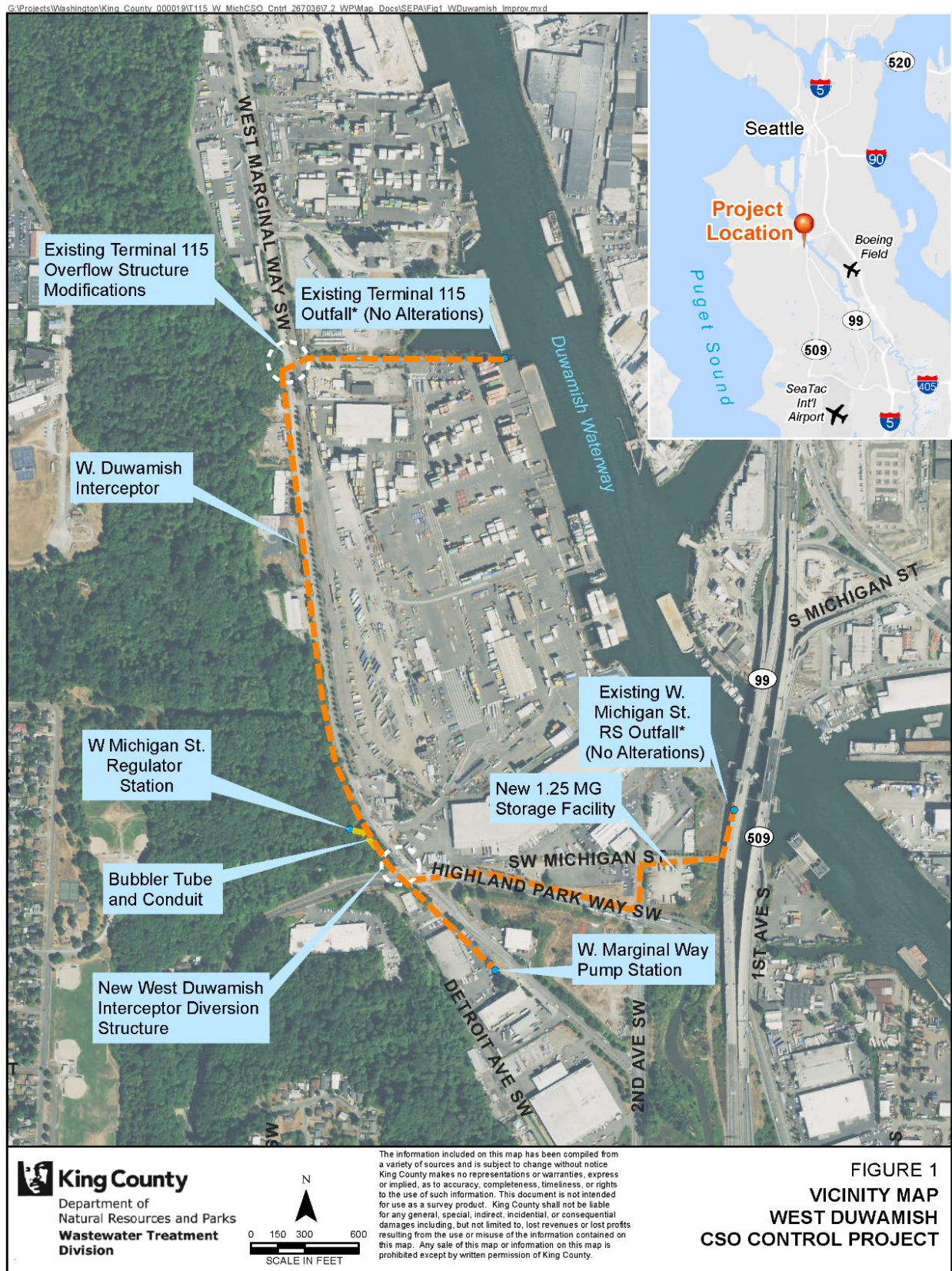


Figure 2. Facility concept

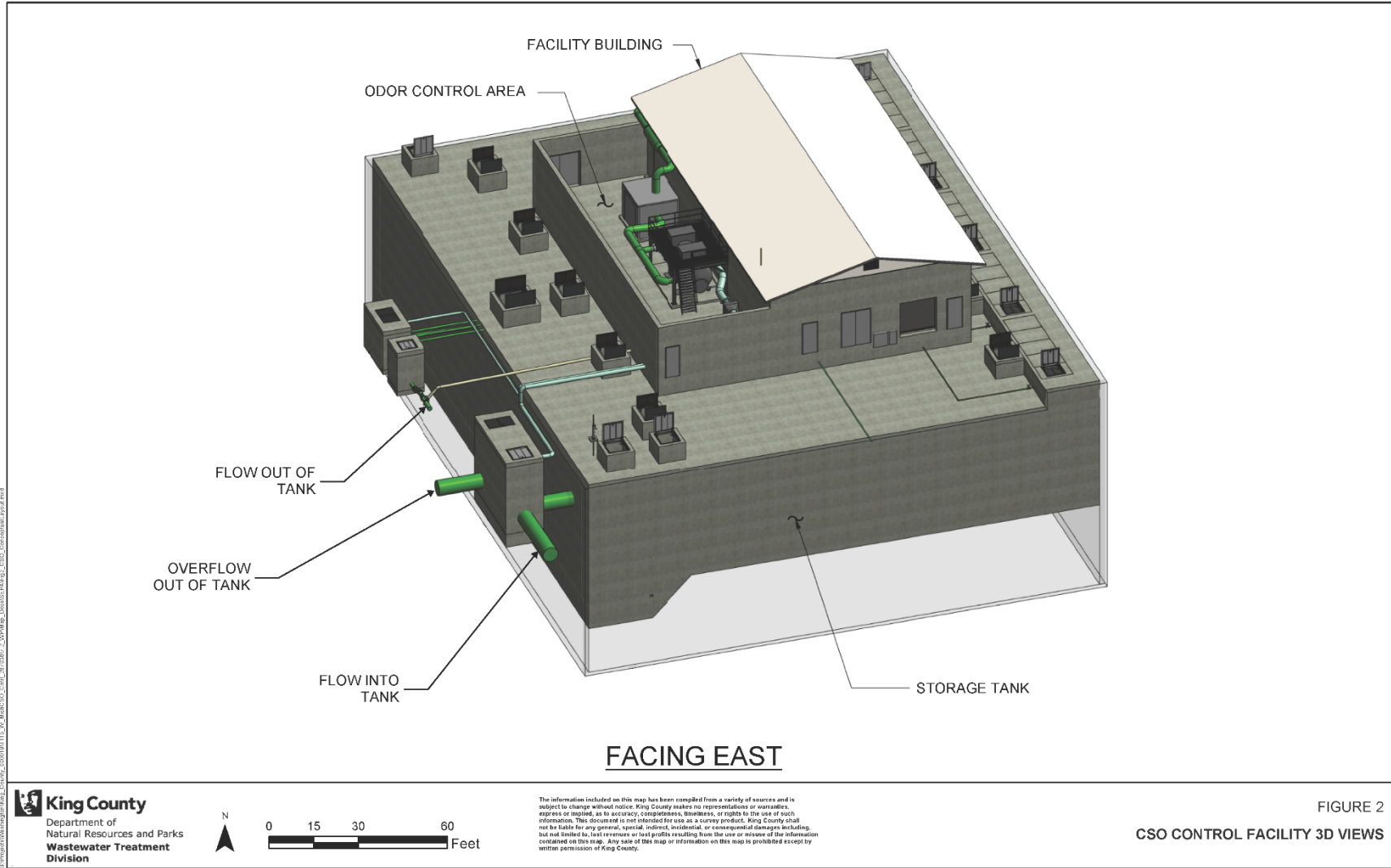
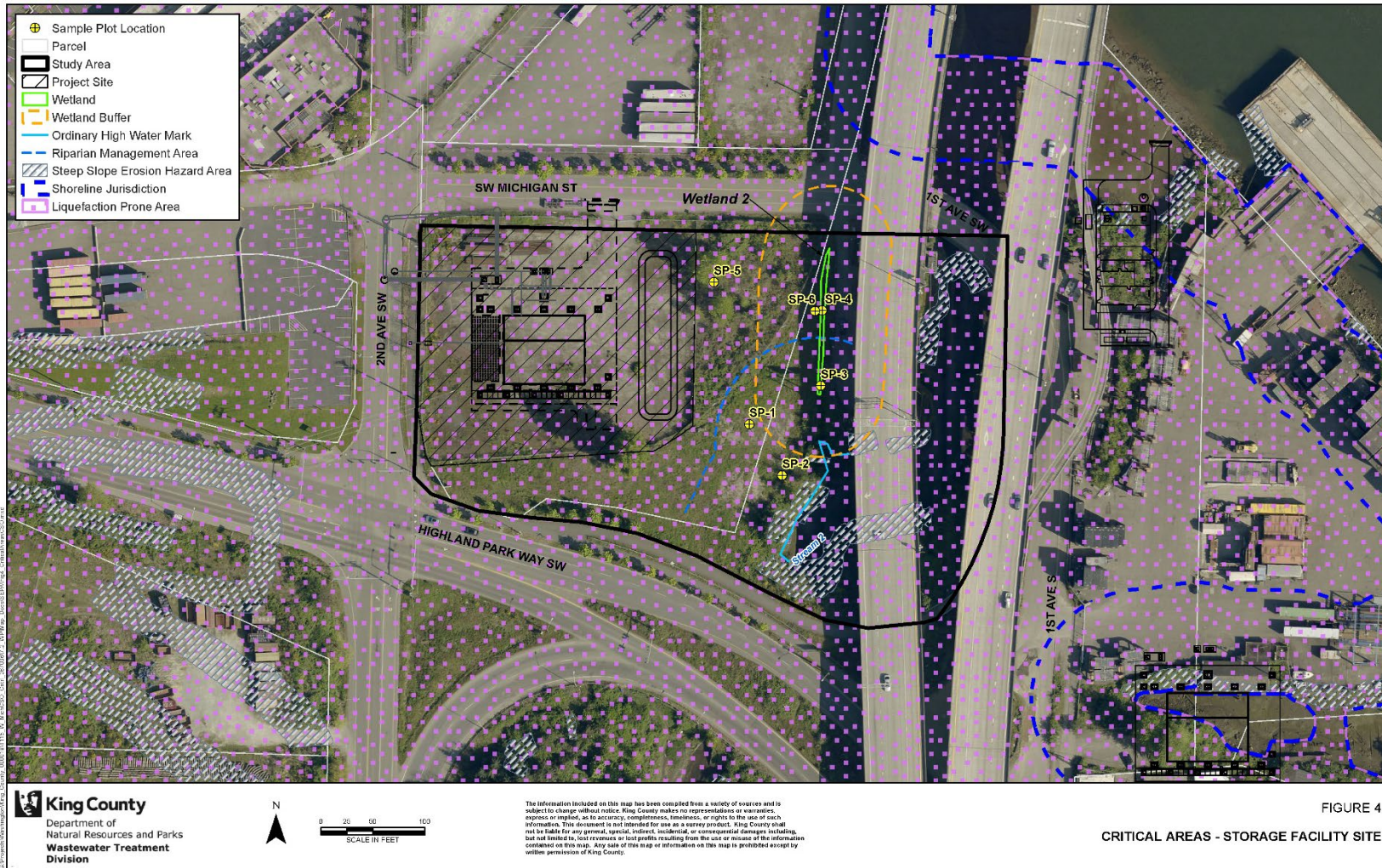


Figure 3. Critical areas within the project area



Figure 4. Critical areas within the project area



Attachment 1. King County greenhouse gas emissions worksheet

Section I: Buildings

Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Emissions Per Unit or Per Thousand Square Feet (MTCO2e)			Lifespan Emissions (MTCO2e)
			Embodied	Energy	Transportation	
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		5.3	39	162	47	1311

Section II: Pavement.....

Pavement.....		14,620.00				731000
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Total Project Emissions:

732311