TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

SUBMIT TO:
Port of Vancouver, USA
3103 Lower River Road
Vancouver, WA 98660

For office Use Only
DATE RECEIVED: _____

CASE NUMBER: _____

ENVIRONMENTAL CHECKLIST WAC 197-11-960

Property Owner: Port of Vancouver USA (Print or Type Name) Telephone: (360) 693-3611

Mailing Address: 3103 NW Lower River Road, Vancouver, WA 98660 (No., City, State, ZIP)

Applicant: Port of Vancouver USA, (Mary Mattix) (Print or Type Name) Telephone: (360) 693-3611

Mailing Address: 3103 NW Lower River Road, Vancouver, WA 98660 (No., City, State, ZIP)

Relationship to Owner: Same

Tax Assessor Serial Number(s): 153310000, 153313000, 153314000

Legal description: See project plans Block(s) N/A Plat name N/A
(If a Metes and Bounds description, check here ☐, and attach narrative to this application.)

Site Address (if any): 8211 NW Old Lower River Road, Vancouver 98660

Notice to Applicants: You must use the current revision of this form or your application will not be accepted. If you use our version of this form you may not alter the format. Contact port environmental to make sure you have the current version before submittal.

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use “not applicable” or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:
Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:
For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND

1. Name of proposed project, if applicable:

Port of Vancouver USA Parcel 3 Berm

2. Name of applicant:

Port of Vancouver USA

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

Port of Vancouver USA
3103 NW Lower River Road
Vancouver, WA 98660
360.693.3611
Contact: Mary Mattix

4. Date checklist prepared:

April 2018

5. Agency requesting checklist:

Port of Vancouver USA

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

Construction of the berm will occur in two phases. Phase 1 involves the eastern approximately 3,068 feet of the berm that lies outside of an existing leasehold. This portion of the berm extends from the eastern terminus of the head of the flushing channel to the edge of the tenant's existing lease. Construction of Phase 2, the remaining 508 feet at the western end of the berm, will take place in the future after the tenancy ends.

The construction of Phase 1 of the berm is anticipated to begin in the spring of 2019 or as soon as permits are issued. The completion of construction will depend on the availability of fill material, but may be as soon as year-end 2019. Because the property for the Phase 2 portion is currently under a lease agreement, Phase 2 will be constructed in the future following the expiration of the tenancy in this area.

Initial stockpiling of clean fill material for the berm will begin as soon as a permit can be secured for that activity likely in late summer or fall of 2018. Placement of material for the berm will likely begin in the spring of 2019. Installation of plants and the irrigation system is anticipated to begin in early 2020 but may be delayed or advanced for optimal growing conditions.

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

As explained above, the project will be constructed in two phases. The entire length of the berm, and improvements incidental to the berm, will be designed and permitted together; however, the western 508 feet of the berm will be constructed in the future when the existing tenant vacates the area.

The port intends to develop the remainder of Parcel 3 in the future consistent with its City of Vancouver Heavy Industrial zoning, Industrial comprehensive plan designation and the Declaration of Restrictive Covenants-Parcel 3. However, there are no specific plans to undertake such development and future activities will comply with applicable regulatory and environmental requirements at the time they are proposed.

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

The following environmental information has been or will be prepared to support this proposal:

- *Wetland and Waterbody Delineation*
- *Clark County GIS Developers Packet, Clark County Geographic Information System*
- *Joint Aquatic Resources Permit Application (JARPA)*
- *City of Vancouver Shoreline Substantial Development Permit application*
- *Mitigation Bank Use Plan*
- *Tree Plan*
- *Archaeological pre-determination*
- *Floodplain no net rise analysis*
- *Critical Areas Report*
- *Water Right Permit No. G2-30649*
- *Stormwater Pollution Prevention Plan*
- *Declaration of Restrictive Covenants-Parcel 3, Recorded Clark County, March 25, 2016.*

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.

According to the City's current project list (http://www.cityofvancouver.us/projects) there are currently no known pending applications for government approval that directly affect the property covered by this proposal.

The Columbia Land Trust is proposing to construct screening berms from 6 to 11 feet in height along SR 501 on the Cranes' Landing site located north of the project site. The City issued a SEPA Determination of Non-Significance for the project on 23 August 2017.

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

The following approvals will be required to be obtained from local, state, or federal governments:

Local (City of Vancouver)

- *Site Development (Major Grading) Permit (SDP)*
- *Shoreline Substantial Development Permit (SSDP)*
- *Tree conservation ordinance compliance*
- *Archaeological pre-determination*
- *Critical areas ordinance compliance (frequently flooded areas, fish and wildlife habitat conservation areas, wetlands, and geological hazards)*

State

- *National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit (CSWGP) (Washington State Department of Ecology[Ecology])*
- *Clean Water Act (CWA) Section 401 Water Quality Certification (Ecology) (if necessary)*
- *Well permit and water right (Ecology)*
- *Wetland Administrative Order (Ecology) (if necessary)*

Federal

- *CWA Section 404 Permit (Nationwide) (US Army Corps of Engineers) (if necessary)*

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. (Lead agencies may modify this form to include additional specific information on project description.)

The proposed berm is intended to provide a visual and sound buffer and transition from the Heavy Industrial zoned property south of the

Vancouver Lake Flushing Channel to the park, open space and wildlife conservation areas to the north that are managed for the benefit of Sandhill Cranes and other animals, consistent with the Declaration of Restrictive Covenants – Parcel 3.

Parcel 3 is designated by the Vancouver Comprehensive Plan 2011-2030 as Industrial (IND) and is zoned Heavy Industrial (IH). Lands north of the flushing channel are designated as Open Space/Public Facility and zoned Park and Greenway. The berm will be constructed on the port's Parcel 3 property immediately south of and extending east and west along the flushing channel. The berm will be at least 12 feet in height above a defined elevation of +28 feet (NGVD 1929 datum). Existing ground elevations may be lower than this elevation resulting in a berm that is higher than 12 feet as measured from the surrounding existing grade in certain locations. In order to meet the 12 feet height specification, it is anticipated that the berm will be approximately 82 feet wide. The top and sides of the berm will be planted with native trees, shrubs, and herbaceous vegetation.

The berm will be constructed entirely above the ordinary high water mark (OHWM) and landward of the top of the south bank of the flushing channel. The toe of the northern side of the berm will be set back approximately 60 feet from the OHWM of the flushing channel. An approximately 12-foot-wide maintenance access drive will be constructed on the south side of the proposed berm. A setback of approximately 12-feet will be provided between the toe of the berm and the top of bank of the flushing channel to provide access to the northern side of the berm and the flushing channel for maintenance. Fencing and gates will be installed or modified for safety, security and plant survival purposes.

It is anticipated that the berm will require approximately 120,000 cubic yards of material to construct. Material will be sourced from off-site locations and from on-site grading. One potential source of material is stockpiled clean materials currently stored at the port's Terminal 5 and Terminal 5 West. These materials were generated from other port projects. Trucks hauling material to the site from Terminal 5 and Terminal 5 West would travel on NW Old Lower River Road to the existing site access road.

The port intends to secure an early permit to begin stockpiling soil and clean fill material for the berm directly adjacent to the berm location or at the Parcel 3 dredge placement site prior to construction of the actual berm. The material would be stockpiled on an upland portion of the project site that is outside of the 100-year floodplain, and a minimum of 200 feet from the OHWM of the flushing channel and Columbia River or within the established boundaries of the Parcel 3 dredge placement site.

The berm will be planted with a combination of evergreen and deciduous native plant species and native erosion control seed mix. The new plantings will be provided with irrigation until the planted vegetation is sufficiently established and to maintain plant density and health. The port intends to construct a new groundwater well at the eastern end of the project site to provide water to the irrigation system. The port will secure approval from Ecology for the construction of the well and use of groundwater under its existing water right.

To maintain drainage once the berm is constructed the project will include an area drain located on the east side of the project site and south of the berm. This drain will connect with an existing pipe that will provide drainage from areas south of the berm to the flushing channel.

The port intends to construct the berm in two phases. Phase 1 involves the eastern approximately 3,068 feet of the berm that lies outside of an existing leasehold. This portion of the berm extends from the eastern terminus of the head of the flushing channel to the edge of the tenant's existing lease. Phase 2, the remaining 508 feet at the western end of the berm, will be constructed in the future after the tenancy ends.
Initial stockpiling of clean fill material for the berm will begin as soon as a permit can be secured for that activity.

Following construction and planting, ongoing access to the berm will be required for maintenance.

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 proposed berm will be located on a portion of the port's Parcel 3, adjacent to the site address 8211 NW Old Lower River Road, Vancouver, Washington 98660.

The primary parcel number associated with the project is 153310000; however, a portion of the project lies in parcel 153313000, which contains the flushing channel, and in parcel 153314000 in the eastern extent of the project area. The combined acreage of all parcels associated with the project is approximately 117 acres; however, the project will use only approximately 13 total acres of this land. One site address is affiliated with the project area. Parcel 153310000 has a site address of 8211 NW Old Lower River Road, Vancouver, 98660 and can be found within the SW ¼ of Section 7 Township 2 North, Range 1 East, SE ¼ of Section 12, SW ¼ of Section 12, and the NW ¼ of Section 13, Township 2 North, Range 1 West.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): (flat,) rolling, hilly, steep slopes, mountainous, other

According to Clark County GIS data the portion of the project site which would accommodate the proposed berm, maintenance access drive, and irrigation well contains little to no discernable slope. Slopes ranging from 15-25 percent are mapped along the southern side of the flushing

channel; however, no improvements are proposed in areas containing these slopes.

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

The steepest grades on the site occur outside the project limits along the flushing channel, where man-made steep slopes ranging from 15-25 percent (Clark County MapsOnline) are present from the top of the bank down to the water. The rest of the project area is generally flat, with minimal slopes.

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.

Soil at the site consist of material excavated from the adjacent flushing channel during its construction in the early 1980's. The U.S. Department of Agriculture (USDA) web soil survey data identifies the following soil types on the project site:

- *Water (W), for areas mapped below the OHWM*
- *Sauvie silty clay loam, 0 to 8 percent slopes (SpB)*
- *Newberg silt loam, 0 to 3 percent (NbA)*
- *Sauvie silt loam, 0 to 3 percent slopes (SmA)*
- *Rough broken land (Ro)*
- *Newberg silt loam, 0 to 3 percent slopes (NbB)*

The USDA designates SpB, NbA, SmA, and NbB soils as prime farmland, if they are not subject to flooding and are well drained. However, the project site does not contain any designated agricultural lands of long-term commercial significance, as the site is located in the City of Vancouver and is designated as industrial land by the City of Vancouver Comprehensive Plan 2011-2030.

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

The site has been mapped by Clark County MapsOnline to contain a moderate to high soil liquefaction potential, a severe erosion hazard, and is designated as a Site Class D-E on the National Earthquake Hazard Reduction Program ratings scale. These designations qualify as geologic hazard areas per VMC Chapter 20.740.130.

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.

Fill material will be required for construction of the berm. It is anticipated that the berm will require approximately 120,000 cubic yards of material to construct. Pre-screened/tested materials will be sourced from off-site locations and from on-site grading. One potential source of material is stockpiled materials currently stored at the Port of Vancouver's Terminal 5 and Terminal 5 West properties. These materials were generated from

other port projects. The berm and maintenance access drive will occupy approximately 7.5 acres.

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

Erosion could occur from the development as a result of ground disturbance and placing of fill material during construction. However, no impacts to soils or erosion are expected from the project because the proposed project will be subject to applicable erosion control provisions of VMC 14.24 and an NPDES Construction Stormwater General Permit, as required, and construction of the project will require grading permit approval by the City. Elements of the site development permit (SDP) are erosion control and planting plans.

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

The installation of the maintenance access drive, while surfaced with gravel, constitutes an impervious surface per VMC Section 14.25.110. Therefore, the construction of the maintenance access drive will result in approximately 13 percent impervious surfaces (as a percentage of total berm area).

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

A final erosion control plan will be prepared by a professional engineer and submitted to the City in conjunction with individual site development applications. Construction of the project will require a site development permit (SDP) approval by the City and coverage under the Construction Stormwater General Permit (CSWGP). Elements of the grading permit are erosion control and planting plans. Erosion control measures during construction will include the implementation of the best management practices (BMPs) included in the erosion control plans and monitoring and site inspection during construction consistent with the CSWGP requirements. Permanent erosion control measures include the installation of native vegetation or mulch across the entire extent of the proposed berm.

2. Air

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

During construction, emissions will consist of typical air pollutants resulting from the use of fossil fuel-powered construction equipment including greenhouse gases, sulfur dioxide, nitrogen oxides and particulate matter, as well as dust from exposed soils. Construction will be short-term and all equipment will be outfitted with required emission controls. Hauling and placement of the material during construction will be the largest generator of emissions for the project and would generate approximately 3.2 metric tons of CO_2e. Planting, hydroseeding,

construction of the well and other activities would generate a minor amount of greenhouse gas emissions above this amount.

Post construction, emissions will be generated only from maintenance activities that will employ fossil fuel-powered equipment, i.e., landscaping tools and work vehicles. Maintenance will be infrequent and will be consistent with typical emissions in the area from vehicle and farm equipment use.

The project will include the planting of numerous plants including trees and shrubs. This will serve to sequester carbon as the plants grow. This will offset some of the construction and operation emissions but the amount has not been quantified.

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

The project does not involve any uses or human occupancy that would be affected by emissions or odor.

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

For construction emissions, BMPs will be employed on the project site. These will include as required, applying water for dust suppression and requiring that all construction vehicles and equipment employ legally required emission controls.

Because the proposed project is an earthen berm, no measures to reduce or control emissions or other impacts to air during operations are proposed or necessary, as the project will not adversely affect air quality. The growth of the trees and other landscaping planted on the berm will provide some benefit to air quality through reduction in pollution and sequestration of carbon but the amount has not been quantified.

3. Water

a. Surface Water:

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

Surface waters on or in the immediate vicinity of the project site include the Columbia River to the west, Vancouver Lake flushing channel to the north, Vancouver lake to the east, and one Category IV wetland located on the project site.

According to the DNR web-based mapping system, the Columbia River, Vancouver Lake, and the flushing channel which connects the lake and river are all mapped as Type S waters.

A wetland delineation was conducted for the project site on 19 May and 24 June 2016 to determine the presence of wetlands. The delineation identified

one 0.42-acre Category IV wetland within the study area. The wetland developed after construction of the flushing channel and placement of material from the flushing channel. There is no surface water connection between the wetland and other waterbodies and it is elevated above the level of water in the flushing channel.

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

Almost all project construction will occur within 200 feet of the flushing channel, with the exception of the installation of the well for irrigation purposes. No work will occur within 200 feet of the Columbia River or Vancouver Lake. The wetland identified during the delineation of the site will be filled to accommodate the proposed berm. Please see the response to question B.3.a.3 below for more details.

The berm will be constructed entirely above the ordinary high water mark (OHWM) of the flushing channel, and will not impact the bank of the flushing channel or Columbia River. The toe of the northern side of the berm will be set back approximately 60 feet from the OHWM of the flushing channel. An approximately 12-foot-wide maintenance access drive will be constructed on the south side of the proposed berm. The berm will be planted with a combination of evergreen and deciduous native plant species.

Upon completion of construction, the only activities which may occur within 200 feet of the waters described above are infrequent landscape maintenance.

(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.

The project will fill the 0.42-acre Category IV wetland that was delineated on the site. The wetland impact is unavoidable, and the entire wetland will be filled. Prescreened/tested material to fill the wetland will be sourced from off-site locations and from on-site grading.

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

The project is not proposing any surface water withdrawals or diversions.

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

The 100-year floodplain of the Columbia River extends across approximately half of the proposed development area (Federal Emergency Management Agency [FEMA] maps # 53011C0361D and # 53011C0342D).

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

No direct discharge of waste material to surface waters is planned for the project.

b. Ground Water:

(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 ground water? Give general description, purpose, and approximate quantities, if known.

The project will require non-domestic water for irrigational purposes. The port intends to install a new groundwater well (likely 6 to 12 inches in diameter) south of the eastern terminus of the berm. Estimated irrigation needs are approximately 3.5 acre feet per year. The port has obtained a water right permit for the use of the water and will obtain a well permit from the Washington State Department of Ecology for the installation of the well. No groundwater discharge is proposed.

(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.

The project does not propose to discharge any waste material into the ground from septic tanks or other sources. The proposed project is not anticipated to result in the discharge of any waste materials to the ground.

c. Water Runoff (including stormwater):

(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.

The proposed project will not utilize City public stormwater facilities. The proposed maintenance access drive will be constructed with gravel, an impervious surface, but because of the limited traffic that will utilize the roadway it would not require water quality treatment; in addition, because the project site drains to the Columbia River the project would be exempt from flow control requirements. The project site does not currently contain any specific drainage facilities or features (such as ditches) and currently precipitation either infiltrates or sheet flows to the flushing channel. The berm will prevent sheet flow to the north. Therefore, to maintain the current drainage on the site, the project will include an area drain located on the east side of the project site and south of the berm. This drain will connect with an existing pipe that provides current drainage from Buckmire Slough (south of the berm) to the flushing channel.

A construction stormwater pollution prevention plan (SWPPP) will be included with the required grading plan. The construction SWPPP will include information required to meet City standards and the standards of the NPDES Construction Stormwater General Permit.

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

During construction there is a potential for erosion to occur and for turbid water to enter the flushing channel. The project site currently does not contain any pollution generating surfaces, and no pollution generating surfaces will be added as a result of the completion of the project; therefore, no waste materials are anticipated to enter ground or surface waters during project operations. In addition, landscape maintenance will not require regular application of fertilizers or pesticides; therefore, it is unlikely that these chemicals could enter surface waters.

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

As the project will not require installation of new stormwater facilities, and no stormwater facilities currently exist on site, the drainage patterns and discharge points will remain substantially the same as the natural conditions of the site. To help maintain adequate drainage on the site, the project will include an area drain located on the east side of the project site and south of the berm. This drain will connect with an existing pipe that provides drainage from wetland areas south of the berm to the flushing channel.

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

To maintain drainage to the flushing channel from areas south of the berm, the project will include an area drain located on the east side of the project site and south of the berm. This drain will connect with an existing pipe that provides drainage from areas south of the berm to the flushing channel. Sheet flow that is blocked by the berm from flowing to the north will flow to the area drain.

A construction stormwater pollution prevention plan (SWPPP) will be included with the required grading plan. The construction SWPPP will include information required to meet City standards and the standards of the NPDES Construction Stormwater General Permit.

Specific erosion control measures will be addressed when the port applies for a grading permit. Erosion control measures during construction will include the implementation of the best management practices (BMPs) included in the erosion control plans. Permanent erosion control measures include the installation of native vegetation across the entire extent of the proposed berm. The vegetation will have additional benefits including flow attenuation and biofiltration.

The project will utilize credits from the Columbia River Mitigation Bank to compensate for wetland impacts noted in Section B.3.a.3. The mitigation bank property shares a hydrologic connection to the Columbia River, and will provide the same types of ecologic and habitat functions at the project site, but to a much higher degree. The bank has been certified by the state, and has already restored a variety of aquatic and terrestrial habitats, meaning that there will be no temporary loss of functions from the wetland impacts.

4. Plants

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

☒ **Deciduous tree: alder, maple, aspen, other**
☐ **Evergreen tree: fir, cedar, pine, other**
☒ **Shrubs**
☒ **Grass**
☐ **Pasture**
☐ **Crop or grain**
☐ **Orchards, vineyards or other permanent crops**
☒ **Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other**
☐ **Water plants: water lily, eelgrass, milfoil, other**
☐ **Other types of vegetation**

Vegetation is primarily limited to grasses within the upland area. Species present on upland portions of the site include reed canarygrass (Phalaris arundinacea), meadow foxtail (Alopecurus pratensis), black cottonwood (Populus balsamifera), Himalayan blackberry (Rubus armeniacus), and tall fescue (Schedonorus arundinaceus), among others.

The site also includes weedy herbaceous vegetation and shrubs, both native and non-native, located between the top of the bank of the flushing channel and the water's edge. Himalayan blackberry (Rubus armeniacus) and false indigo (Amorpha fruticosa) grow densely along the bank of the flushing channel. A small stand of black cottonwood are present near the wetland in the center of the project site, and there are also scattered trees present along the banks of the flushing channel.

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

The project will require the alteration and removal of the vegetation that is within the approximately 7.5 acre footprint of the berm project, which consists primarily of the emergent grasses and forbs that are described in the response above. The construction of the berm will also require the removal of the small stand of black cottonwood trees which is present near the center of the project site.

The berm will be planted with various types of native vegetation, and will result in an increase in the quantity and diversity of native vegetation at the site.

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

According to USFWS Information for Planning and Consultation (IPaC) database, golden paint brush (Castilleja levisecta) and water howellia (Howellia aquatilis) could potentially occur on or near the project site. However, the site does not provide suitable habitat for either species, and neither of these species were documented during two field surveys conducted at the site in 2016 during the blooming period for these species. No other threatened or endangered plant species is expected to be present at the project site.

Prior SEPA reviews at the port have noted the presence of Western ladies tresses (Spiranthes porrifolia), a plant species listed as state sensitive, at Parcel 3, which was last documented in 2004. This species was not

documented during two field surveys conducted at the site in 2016 during the blooming period for this species (May – August).

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

The port intends to install and maintain native landscape plantings with a dense understory on top of, and along the length of, the berm. Trees (along with other native plantings) will be planted on approximately 70% of the north side of the berm and approximately 80% of the south side of the berm and the entire top of the berm. The plantings will be placed along the entire length of the proposed berm. Open areas will be seeded with a native seed mix. The new plantings will be a combination of evergreen and deciduous native plant species, including, but not limited to, Douglas-fir, red cedar, black cottonwood, big-leaf maple, red alder, snowberry, serviceberry, tall Oregon grape, red flowering currant, and sword fern.

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

Noxious weeds and invasive species that are known to be on or near the site include:

- *Himalayan blackberry (Rubus armeniacus)*
- *Canada thistle (Cirsium arvense)*
- *Reed canarygrass (Phalaris arundinacea)*
- *False indigo bush (Amorpha fruticosa)*

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: hawk, heron, eagle, songbirds, other: Sandhill Cranes, Osprey, streaked horned lark
Mammals: deer, bear, elk, beaver, other: Coyote, California and Steller sea lions, harbor seals
Fish: bass, salmon, trout, herring, shellfish, other: Smelt, Sturgeon

The Columbia River and Vancouver Lake, which are located in the vicinity of the project site, provide habitat for a wide variety of aquatic species. The proposed project will occur above the OHWM the flushing channel, and will not result in any effects to aquatic habitats at the site. Other terrestrial species which may occur on the site are those typical of an agricultural setting.

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

The Columbia River is near the project site and the following ESA-listed species are known to utilize the Columbia River:

Chinook salmon (*Oncorhynchus tshawytscha)*

- *Lower Columbia River Evolutionarily Significant Unit (ESU)*
- *Upper Columbia River spring-run ESU*

- *Snake River fall-run ESU*
- *Snake River spring/summer-run ESU*
- *Upper Willamette River ESU*

Chum salmon (Oncorhynchus keta)

- *Columbia River ESU*

Coho salmon (Oncorhynchus kisutch)

- *Lower Columbia River ESU*

Steelhead (Oncorhynchus mykiss)

- *Lower Columbia River Distinct Population Segment (DPS)*
- *Upper Columbia River DPS*
- *Snake River Basin DPS*
- *Middle Columbia River DPS*
- *Upper Willamette River DPS*

Sockeye salmon (Oncorhynchus nerka)

- *Snake River ESU*

Bull Trout (Salvelinus confluentus)

- *Columbia River DPS*

Pacific eulachon/smelt (Thaleichthys pacificus)

- *Southern DPS*

North American green sturgeon (Acipenser medirostris)

- *Southern DPS*

The Columbia River (and by extension, the flushing channel) is documented habitat for, and known to support the above-mentioned species of federally-listed salmon, steelhead, bull trout, green sturgeon, and Pacific eulachon. The Columbia River is also designated critical habitat for all of the above mentioned DPS/ESUs of salmon, steelhead, bull trout, green sturgeon, and Pacific eulachon. However, the project does not occur within, or propose any impacts to the Columbia River or to the flushing channel, and these species will not be affected by the project.

Streaked horned lark (Eremophila alpestris strigata) have been previously documented at the port's Parcel 3 dredge placement site and surrounding area. Streaked horned larks that use habitats on the Columbia River are known to utilize sandy islands and dredge placement sites in and adjacent to the river for nesting, foraging, and in some cases wintering. Streaked horned larks are also known to forage in adjacent habitats. Streaked horned larks prefer expansive areas of flat, open ground, particularly sites with minimal vegetation for nesting. They also tend to prefer sites with unobstructed views of the river. Vegetation at the project site is too dense to provide suitable nesting habitat for streaked horned larks, and the project site does not provide the open expansive views of the river that would be preferred by larks for nesting. The location of the berm is considered to be not suitable nesting habitat and the Parcel 3 dredge material placement site is maintained in a manner to also not be suitable habitat. Although there have been prior observations of streaked horned

lark at the Parcel 3 dredge material placement site, the project site provides limited foraging habitat.

Designated Streaked horned lark critical habitat includes several specifically identified sandy dredge deposit locations in and adjacent to the Lower Columbia River but does not include any areas of the port or Clark County. The nearest designated critical habitat is downstream of the port, near Kalama, Washington.

Columbian White-tailed deer (Odocoileus virginianus leucurus) were relocated by the USFWS to the Ridgefield National Wildlife Refuge north of the project site in 2014 and 2015. The deer relies heavily on patchy mosaic of forest-edge/woodland/prairie habitat. Columbia White-tailed deer are not known to use the project site but have been observed in the area.

Non ESA-listed species

In addition to the listed species above, the following species are notable and may occur within the port:

- *Steller sea lion (*Eumatopius jubatus*) (Eastern DPS)*
- *Sandhill crane (*Grus canadensis*)*
- *Bald eagle (*Haliaeetus leucocephalus*)*
- *Pacific pond turtle (*Actinemys marmorata*)*
- *Osprey (*Pandion haliaetus*)*

The Eastern DPS of Steller sea lion was delisted from the Endangered Species list on November 4, 2013. Prior to de-listing it was a federally threatened species under the ESA. Steller sea lions are still listed as threatened by the State of Washington. They (and all marine mammals) are also protected under the federal Marine Mammal Protection Act (MMPA). The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters without a permit authorizing such take. Other Columbia River marine mammals that fall under the protection of the MMPA that could occur within the vicinity of port include California sea lion (Zalophus californianus) and harbor seal (Phoca vitulina).

Sandhill cranes are listed as endangered by Washington, but are not federally listed under the ESA. Sandhill cranes are known to utilize the site and surrounding areas. WDFW has mapped migratory occurrence locations of sandhill cranes on agricultural land on the port's Parcel 3. North of the flushing channel and Lower River Road is an approximately 527 acre property known as Cranes' Landing (formerly known as port Parcels 4 and 5). This property is subject to a conservation easement and is specifically managed by the owner, Columbia Land Trust, for Sandhill cranes and other species that occupy the Vancouver Lake lowlands. Much of the Cranes' Landing site will be farmed to provide wintering forage, in perpetuity. Fall migration of cranes in the Vancouver Lowlands typically occurs in late September and early to mid-October. Spring migration through the Lowlands generally occurs from mid-March to mid-April. The Lowlands are used as stopover habitat during migration and for foraging by over-wintering birds. The purpose of the project is to provide a buffer and transition for habitats to the north that are managed for crane habitat.

The bald eagle is currently a species of concern (federal) and state-listed sensitive. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act and are state-listed as sensitive. The USFWS National Bald Eagle Management Guidelines recommend that potentially disturbing activities occur outside a 660-foot protective buffer around an active nest during the nesting season, which generally occurs January to August. Nesting activities by bald eagles has been identified on Parcel 3, but the location of the nests vary by year. No bald eagle nests are located within 660 feet of the project site. The nearest documented bald eagle nest is located approximately 0.25 mile south of the project site.

Osprey are neither state nor federally listed, but are considered a state monitor species by WDFW. Osprey frequently nest in riparian areas adjacent to the Columbia River and Vancouver Lake, and routinely forage in the vicinity of the project site. There are no known osprey nests within the study area or vicinity.

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

The project site and vicinity are within the Pacific Flyway, a broad migratory corridor that extends from Alaska to Central America and is used by waterfowl, eagles, hawks, falcons, songbirds, Sandhill cranes, and shorebirds (WDFW, Management Recommendations for Washington's Priority Species, Volume IV: Birds).

The project site also lies near the Columbia River, which is a known migratory route for several ESUs/DPSs of ESA-listed salmon, steelhead, and bull trout, as well as for Pacific eulachon and North American green sturgeon. The Vancouver Lake Flushing Channel is adjacent to the project site to the north, and discharges into the Columbia River to the West. The Columbia River is more than 500 feet from the project site, and the project is not proposing any impacts to the river.

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

Vegetation on the site is limited primarily to grasses and weedy herbaceous vegetation within upland areas, and primarily non-native shrub species such as Himalayan blackberry and false indigo-bush located between the top of bank and the toe of the riprap slope of the flushing channel. There is a small stand of black cottonwood trees near the center of the site, adjacent to the wetland, and there are other scattered small trees along the flushing channel.

The port intends to install and maintain native landscape plantings with a dense understory on top of, and along the length of, the berm. The new plantings will be a combination of evergreen and deciduous native plant species, including, but not limited to, Douglas-fir, red cedar, black cottonwood, big-leaf maple, red alder, snowberry, serviceberry, tall Oregon grape, red flowering currant, and sword fern. The new landscaping will provide species diversity, structural complexity, and increase habitat availability above the existing conditions at the site.

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

In general, invasive animal species in the vicinity of the port properties are limited to aquatic species in the Columbia River. Known invasive species include northern pikeminnow, New Zealand mud snails and grass carp. No terrestrial invasive animal species have been documented on the site. Bullfrogs and nutria have been observed in Vancouver Lake sloughs.

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 port intends to install a well (likely 6 to 12 inches in diameter) to provide non-domestic water to the site for irrigational purposes. In order to operate the well, electricity will be obtained via an existing power line located adjacent to the west side of NW Old Lower River Road. No other energy sources will be required.

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

The proposed project will have no effect on potential solar energy usage by adjacent properties. The nearest structure to the proposed berm is the residence located near the western end of the project site. Phase 1 of the berm construction will be installed approximately 300 feet to the east of this residence; therefore, the combined height of the proposed berm and landscaping will be located far enough away from neighboring structures to avoid conflicts with potential solar energy usage. Furthermore, Phase 2 of the berm construction will not begin until the tenant's lease expires. This will ensure that the property will be vacated before the berm construction extends closer to neighboring structures.

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:

As the anticipated energy consumption for the project is extremely limited (electricity to power a 6 to 12 inch diameter well for infrequent irrigation of the landscaping on the berm), no energy conservation features are required or specifically proposed. The selected plant materials will be native and adapted to the region which will serve to reduce irrigation needs and related energy use.

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.

The proposed project includes construction of an earthen berm that is considered an accessory to industrial land use and consistent with adjacent land uses. There are no project elements proposed which will increase the risk of environmental health hazards.

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

The site has been used as pasture, and has not been subject to past industrial use; therefore, it is unlikely that the site contains significant contamination.

(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.

As stated above, it is unlikely that the site contains significant contamination as the site has historically been used as pasture. A utility corridor containing natural gas and liquid petroleum transmission pipelines operated by the Olympic Pipeline Company and Northwest Pipeline LLC/Williams, crosses perpendicular to the far eastern extent of the subject parcels. Project construction will occur in the immediate vicinity of the utility corridor; however, disturbance to the corridor will be avoided.

(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.

During construction of the project, fossil fuels may be stored on the site for equipment fueling. Secondary containment will be required for any fuel stored on site. Once project construction is complete, infrequent application of fertilizers, herbicides, and/or pesticides may be necessary for the maintenance of the landscaping on the berm. No other toxic or hazardous chemicals will be introduced to the project site.

(4) Describe special emergency services that might be required.
The project is not proposing an increase of structures, additional population, or activities that would require increases to fire, police, ambulances, or other emergency services, including spill response services.

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

A site-specific Spill Prevention, Containment, and Control Plan (SPCC) will be developed for construction activities. If contaminated soils are encountered with construction, they will be disposed of appropriately consistent with all local, state, and federal requirements. All fill material will be screened for potential contaminants according to the port's Soil Fill Acceptance Guidelines. If any fuels or lubricants are stored on site temporarily during construction they will be located greater than 175' from the flushing channel and will include secondary containment to prevent any drips or leaks from being released to the environment.

The completed project does not propose any activities that include environmental health hazards, including handling, production, or storage of hazardous materials. If the application of pesticides, herbicides, or fertilizers is necessary, they will be applied by individuals that are qualified to conduct the work.

b. Noise

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

The project site is adjacent to the Columbia River to the west, which is a major navigable waterway for international shipping and recreational water use (pleasure crafts). Vancouver Lake is located to the east, and is a site used by boaters for recreational purposes. The land to the south of the project site is zoned Heavy Industrial (IH) but is currently used for agriculture and as a dredged material handling site. As the project includes installation of an earthen berm, which is not sensitive to noise, no noise generators near the project will adversely affect the proposed development.

(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.

During construction, temporary noise will be generated by construction equipment, such as heavy equipment (excavators, front loaders, graders, dump trucks, flat bed equipment haulers), and stationary equipment (power generators, and air compressors), among others. The levels of construction noise will vary depending on the type of equipment used, duration of the use, and site conditions. Noise from heavy and stationary equipment is generally continuous through the workday during construction.

Temporary construction noise associated with the project is exempt from the state laws for maximum environmental noise levels (WAC 173-60) as long as construction activities occur during daytime hours (7:00 AM to 10:00 PM). Because VMC 20.935 references the WAC noise laws, construction noise is also exempt at the local level.

The proposed earthen berm will not generate any noise, and the purpose of the berm is to provide a buffer and transition from property to the north that is devoted to wildlife habitat and restoration.

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

For construction noise, the project will comply with VMC 20.935 and WAC 173-60 by limiting construction to the time between 7 AM and 10 PM. Earth removal, grading, and hauling activities in the vicinity of noise sensitive receptors (if any), will be limited to weekday daytime hours.

The proposed berm is intended to provide a buffer and transition from property to the north that is devoted to wildlife habitat and restoration and property to the south that is designated for future industrial uses. Because no significant operational noise sources are proposed at this time, mitigation specific to operational noise levels is not identified.

8. Land and Shoreline Use

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

The project site is currently not used for a specific activity. The port maintains the project site by controlling vegetation. The project is located in the area known as to the port Columbia Gateway. The site is zoned Heavy Industrial (IH) with an Industrial (IND) comprehensive plan designation. There are no existing structures within the project limits.

Although a number of structures are located on parcel 153310000, including a single-family residence and agricultural outbuildings of various sizes located along the western extent of the parcel, the project will not affect these structures.

Uses surrounding the proposed project site are low intensity with little to no development of permanent structures. Nearby uses include agricultural areas to the north and south, a dredged material handling site to the south, Vancouver Lake Regional Park (Clark County) to the east across Lower River Road, the flushing channel to the north, and a residential dwelling with associated agricultural accessory buildings located in the far western extent of parcel 153310000. Parcel 153310000 also contains a small portion of NW Old Lower River Road and a gated gravel road that provides access to the dredging disposal site and the dwelling on the western portion of the parcel. The nearest residence is the aforementioned dwelling located on parcel 153310000 and approximately 100 feet south of the proposed location of the berm. North of the flushing channel and Lower River Road is an approximately 527 acre property known as Cranes' Landing. This parcel is specifically managed for Sandhill Cranes and other species that occupy the Vancouver Lake lowlands. The berm is designed to provide a buffer between future industrial activities and Cranes' Landing and recreational activities to the north of the flushing channel.

The zoning of the adjacent parcel to the south of the project site is IH. The zoning of the adjacent parcel to the east of the project site across Lower River Road is Park. The zoning of the parcel to the north, across the flushing channel, is GW-Vancouver Lake Greenway District.

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

The project site has previously been used as working farmlands but is currently not being farmed and is not designated as agricultural or forest resource lands by Vancouver Comprehensive Plan. However, the port leases the land to the south of the project area for agricultural activities, and this land is actively being farmed. The current agricultural practices to the south of the project site will remain unaffected by the proposed project, and no land currently used for agricultural practices will be converted to a different 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.

The proposed project will not be affected by or affect the working farmland to the south of the development area.

c. Describe any structures on the site.

There are no existing structures within the proposed development area. Although a number of structures are located on parcel 153310000,

including a single-family residence and agricultural outbuildings of various sizes located along the western extent of the parcel, the project will not affect these structures.

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

The project is not proposing the demolition of any structures, as there are no existing structures within the project limits.

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

The subject site is zoned Heavy Industrial (IH).

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

The subject site contains an Industrial (IND) comprehensive plan designation.

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

The subject site is located within the High Intensity shoreline environment.

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

The subject site contains the following conditions designated as critical areas by the City of Vancouver:

- *Fish and Wildlife Habitat Conservation Areas (VMC 20.740.110): The project includes Fish & Wildlife Conservation Areas associated with Columbia River and the flushing channel. The riparian boundaries are measured 150-feet landward from the OHWM of all waterbodies.*

- *Frequently Flooded Areas (VMC 20.740.120): The 100-year floodplain of the Columbia River extends across approximately half of the proposed development area (Federal Emergency Management Agency [FEMA] maps #53011C0342D and #3011C0361D).*

- *Geologic Hazard Areas (VMC 20.740.130): A small portion of the site is mapped as having a severe erosion hazard. The entire site is mapped as NEHRP Site Class D-E, and is entirely mapped as having a moderate to high susceptibility to liquefaction.*

- *Wetlands (VMC 20.740.140): the Vancouver Lake Flushing Channel is considered a Riverine wetland, and there are Freshwater Forested/Shrub wetlands mapped along the Columbia River shoreline to the west of the project site. In addition, a 0.42-acre Category IV wetland is located within the proposed development area.*

- *Special Protection Areas (VMC 14.26.115.B(2)): The entire City of Vancouver, because of its location above the Troutdale*

Aquifer, is within a critical aquifer recharge area (CARA) as defined in VMC 14.26.115, and has been designated as a sole source aquifer by EPA. However, the project site is not within 1,900 feet of a municipal water well supply and is therefore not subject to the special protection area provisions of VMC 14.26, Water Resources Protection.

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

The proposed project is an earthen berm; therefore, no one will permanently work or reside at or within the completed project. After construction, the berm will need landscape maintenance, which will require a limited number of workers on an infrequent basis.

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

No one currently works or lives on the project site; therefore, no displacement impacts will occur.

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

The project is not proposing any displacement, and therefore no measures to avoid or reduce displacement impacts are proposed.

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

Per the Parcel 3 restrictive covenant, the berm is required prior to industrial development of the adjacent property of Parcel 3. The purpose of the berm is to provide a buffer to transition from the conservation oriented lands to the north of the flushing channel from industrial designated lands to the south. The proposed project is considered accessory construction in support of future industrial activity. The proposed berm and vegetative plantings with associated irrigation meet the intent and purpose of the IH zone by constituting an accessory development which supports industrial uses on port property. The project will not affect future uses on adjacent property and supports the land use and zoning of the site.

The proposed project will comply with VMC Chapter 20.760, Shoreline Management Area and the City of Vancouver Shoreline Management Master Program, which includes standards to ensure appropriate use and protection of properties in close proximity to the shorelines of the state.

The proposed project will comply with VMC Chapter 20.935, Off-Site Impacts, which includes standards to ensure that the operations of land uses do not have a deleterious effect on neighboring land uses.

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

There are no forest or agricultural lands of long-term commercial significance designated by the City of Vancouver or Clark County comprehensive plans in the project area or surrounding area and therefore no impacts will occur. The project will be constructed

approximately 300 feet from the nearest working farmland; however, this farmland is not designated as "agricultural land 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 does not include construction of housing units.

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

The proposed project will not eliminate any housing units.

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

No measures are proposed, as the proposed project will not displace any housing units.

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?

The tallest artificial structure which is proposed for development is the earthen berm. The berm will stand at approximately 12 feet tall, above a defined elevation of +28 feet (NGVD 1929 datum). The top and sides of the berm will be planted with native trees, shrubs, and herbaceous vegetation.

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

Views in the immediate vicinity of the project site will remain largely unaltered. The berm will be located perpendicular to the Columbia River and Vancouver Lake, which will reduce the profile of the berm, and its visual obstruction of scenic resources from SR 501 in the area.

Users of the Frenchman's Bar trail to the north of the flushing channel currently have views into the Parcel 3 property and more distant landscape views including Mt. Hood. Construction of the berm and planting of vegetation will alter those views including potential obstruction of views of Mt. Hood once trees reach mature heights but will also serve to reduce visual impacts from future industrial uses allowed by current zoning.

The residence located near the western terminus of the berm will also have its viewshed modified as the berm will replace distant landscape views to the north. However, the project has been designed to construct Phase 2 (the portion of the berm which would block visual access from the residence to the flushing channel) only after the lease of the property expires and the residence permanently vacated; therefore, visual access to water bodies in the area from the residence will be maintained for the tenant.

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

The berm will contain extensive native landscaping which will serve to enhance its aesthetic appeal and blend with surrounding vegetation of the Vancouver Lake lowlands.

11. Light and Glare

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

The primary component of the project consists of a landscaped earthen berm. Neither the berm nor the associated improvements (irrigation, water well, electrical conduit, gravel maintenance access drive) will produce light or glare.

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

The project does not include any structures or illumination that will produce light or glare which may pose a safety hazard or interfere with views.

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

The project does not include activities that would be impacted by light or glare.

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

The proposed berm is intended to provide a buffer and transition from property to the north that is devoted to wildlife habitat and restoration and property to the south that is designated for future industrial uses. No light or glare impacts will result from the project; therefore, no mitigation measures are proposed.

12. Recreation

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

Recreational opportunities within the vicinity of the project include the following:

- *Boating, bird watching, hiking, swimming, and passive recreation opportunities at the Vancouver Lake wildlife area*
- *Boating, fishing, and other water recreation activities on the Columbia River*
- *Boating, bird watching, hiking, swimming, and outdoor passive recreation at Vancouver Lake*
- *Bird watching, hiking, swimming, and outdoor passive recreation at Frenchman's Bar Regional Parks*
- *Walking, cycling and bird watching on the adjacent Frenchman's Bar shared use trail*
- *Cycling on adjacent roadways and shared use trails*

Cranes' Landing is closed to public access. However, the Columbia Land Trust is evaluating the installation of viewing area and platforms as part its project.

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

The project will not displace any existing formal or informal recreational uses.

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

The project is not proposing displacement of any existing recreational resources, and therefore no measures to reduce or control impacts on recreation opportunities are proposed. The berm will provide a visual and sound buffer from future potential industrial uses on Parcel 3 and existing recreational uses of adjacent area.

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.

Adjacent to the southwestern end of the project area, the Blurock Farm is recorded by the Department of Archaeology and Historic Preservation (DAHP) as a historic resource. The current home dates to circa 1950; the circa 1920 farm buildings are present and deteriorating. None of the buildings will be impacted by the project.

The project area lies within the Vancouver Lakes Archaeological District, which was determined eligible for listing in the National Register of Historic Places (NRHP) (Burd 1982). One archaeological site is shown on DAHP's WISAARD map to be within the project area, although review of the original site record shows that the location on WISAARD is not shown correctly, and the archaeological survey conducted for this project verified the site is not likely within the project area.

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? Pleas list any professional studies conducted at the site to identify such resources.

The project area lies within the Vancouver Lakes Archaeological District, which has been determined eligible for listing in the National Register of Historic Places. The area has a high density of archaeological sites, and within approximately 1/2 mile of the project area there are twenty-one other pre-contact sites.

One archaeological site is shown on DAHP's WISAARD map as within the project area, although review of the original site record shows that this location is shown incorrectly in WISAARD; the archaeological survey conducted for this project verified the archaeological site is not likely

within the project area. Other archaeological resources are recorded in close proximity to the project area, including resources identified during monitoring of flushing channel construction.

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.

Archaeological Investigations Northwest, Inc. (AINW) completed a City Archaeological Predetermination Report including surface and subsurface investigations. Prior to completing field work a records search and literature review was completed to identify previously recorded sites and surveys in or near the project area.

A pedestrian survey and shovel/auger testing of the project area was performed in May 2016. No historic-period or pre-contact artifacts were encountered on the surface of the project area or in subsurface probes.

Geoprobe borings to identify deeply buried archaeological deposits that may be encountered during project activities were done in July 2017. No historic-period or pre-contact artifacts were encountered during the Geoprobe tests.

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 potential for unanticipated discoveries will be minimized because work will either be within fill (including the buried outfall culvert), or where native soil was tested using Geoprobes, or will be monitored during construction. No evidence of an archaeological resource was found within the fill or within native soil. Except for the proposed well, construction work is confined to the fill cap where no evidence of an archaeological resource has been observed and where intact archaeological deposits would not be encountered. The proposed well will be constructed within the area where native soil was inspected by AINW using Geoprobe borings; no evidence of a resource was found and the native soil was found to be disturbed. Well construction will be monitored by an archaeologist if it is outside of the area of the Geoprobe review.

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 site can be accessed via an existing gated gravel access road which borders the eastern portion of the project site. This access road connects directly to Lower River Road. The completed project will use this access road as the primary means of ingress and egress to the site.

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?

Public transit does not serve the site. C-TRAN (the area's public transit provider) Route #6 is the transit route closest to the site. It travels on Fourth Plain Boulevard and Fruit Valley Road, with the nearest stop located approximately 3 miles southeast of the proposed project site.

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

The project will not install or remove any parking spaces.

d. Will the proposal require any 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 gravel maintenance access drive will connect to an existing gravel access road that intersects with Lower River Road. No public road improvements are required or proposed.

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

The project will occur in the vicinity of the Columbia River, a navigable waterway used for international shipping. However, the project will not require use 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?

The completed project will not be a significant source of vehicular trips. The completed project will require infrequent maintenance; however, vehicular trips generated by maintenance activities will be negligible.

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 completed project will have no effect on the movement of agricultural or forest products, as the project will not be a significant source of vehicular trips and does not close or otherwise impact existing roadways that may be used for transport of agricultural and forest products.

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

The completed project will generate a negligible amount of trips to the site, as infrequent maintenance of the berm will be required; however, the project will not negatively impact any existing streets or roadways, therefore, no measures to reduce or control transportation impacts are proposed for the completed project.

During construction, the transport of fill material to the site will result in vehicular trips from dump trucks. It is anticipated that the majority of the trucks transporting fill to the site will originate from Terminal 5 or Terminal 5 West. These trucks will be able to access the berm site by utilizing NW

Old Lower River Road and will avoid main roadways serving to minimize the impact to traffic during construction. In addition, a construction entrance will be installed and dust control employed to reduce the potential for tracking dirt and rocks onto area roads. In addition, the port will monitor area roads serving the site and take appropriate measures such as sweeping if project related trucks result in deposition of materials on area roads.

15. Public Services

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

The project consists of construction of an earthen berm, as an accessory to the future industrial development on port property to the south of the project site. The berm is a not a structure and will not increase demand for additional police or fire protection, public transit, health care, or schools.

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

The project is not proposing any impacts on public services, and therefore no measures to reduce or control direct impacts on public services are proposed.

16. Utilities

a. Circle utilities currently available in the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Electricity *– An overhead power line, and underground conduit extending to the residence near the western end of the project site is currently located adjacent to the site. Clark Public Utilities is the utility purveyor for electricity in the area.*

Natural Gas *– An existing utility corridor crosses the subject parcel, which contains underground natural gas and liquid petroleum transmission lines operated by the Olympic Pipe Line Company and Northwest Pipeline LLC. While these utilities are located on or near to the project site, they are not sized to serve domestic use.*

Telephone *– An underground telephone wire connects the private residence near the western end of the project site to an overhead utility pole on NW Old Lower River Road.*

The project will not impact any existing utilities within the project area.

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 following utilities will be required for the maintenance of the berm:

Water *– The port intends to install a new on-site well near the eastern terminus of the berm. The well will likely be 6 to 12 inches in diameter.*

Electricity *– In order for the proposed well to operate, electricity will be required. Conduit will be extended from an existing overhead utility line adjacent to NW Old Lower River Road to the site. Clark Public Utilities will provide the electrical services to the site.*

C. SIGNATURE

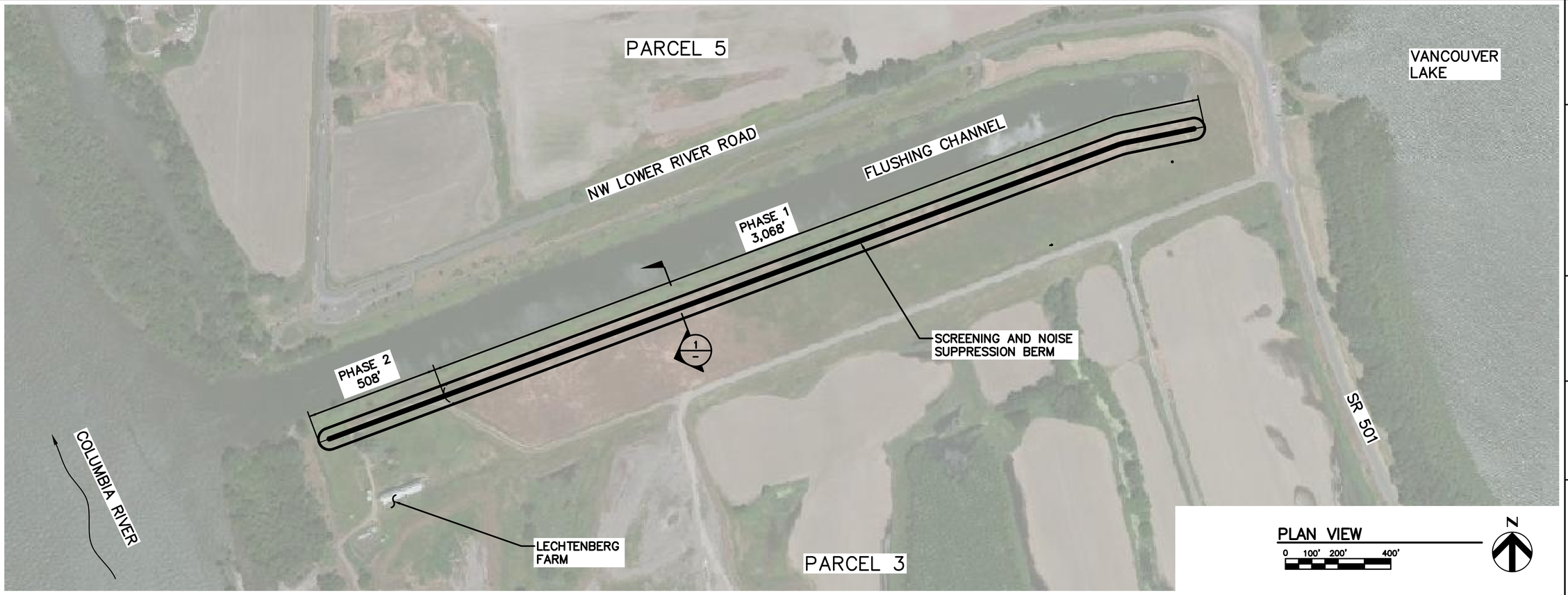
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Mary Mattix

Name of Signee: *Mary Mattix*

Position and Agency/Organization: *Environmental Program Manager / Port of Vancouver USA*

Date Submitted: *May 4, 2018*



PLAN VIEW

0 100' 200' 400'

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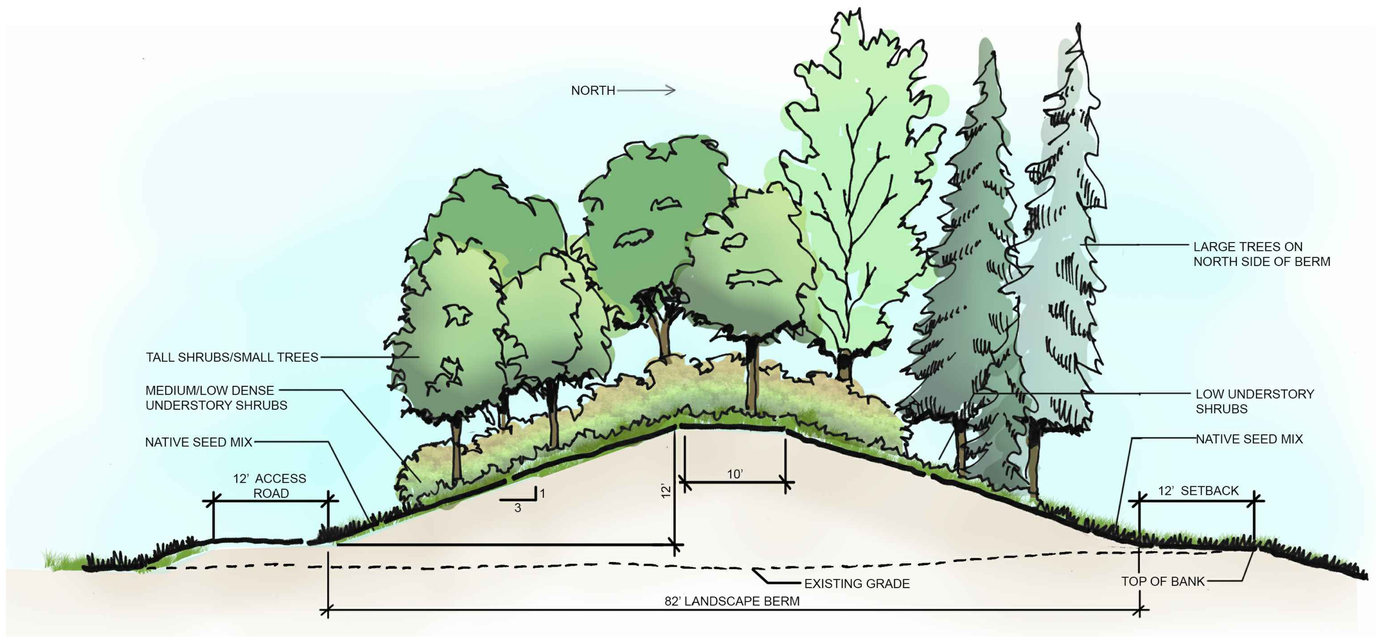

1 – TYPICAL BERM SECTION

SCALE: NOT TO SCALE

EXHIBIT - NOT FOR CONSTRUCTION

Nov 21, 2017 – 9:12am

earl.christian Q:\Portland\2016\A16.0035\05\CADD\Dwgs\Figures\Exhibit C for Agreement\Exhibit D 2017_11_21.dwg

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A/E PROJECT NUMBER: A16.0035.05

DRAWING SCALE: AS SHOWN

DRAWN BY: JTH/EJC

APPROVED BY: SEE/DJS

DATE: 11/21/2017

REVISION NO. DATE.

COLUMBIA GATEWAY

PARCEL 3 BERM

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SHEET CONTENTS

PLAN VIEW AND SECTION

DRAWING NUMBER

SHEET NUMBER 1 OF 1

POV PROJECT NO: